



USAID | **INDONESIA**
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HIGHER EDUCATION LEADERSHIP AND MANAGEMENT

DELIVERABLE 6
**ANALYSIS OF SUCCESSFULLY EMPLOYED APPROACHES TO
IMPROVED QUALITY AND RELEVANCE FOR ACADEMIC PROGRAMS
IN HEI IN INDONESIA AND SOUTHEAST ASIA.**

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Contract No. AID-497-C-12-00001

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

ABET:	Accreditation Board of Engineering & Technology, U.S.
ADB:	Asian Development Bank
ASEAN:	Association of Southeast Asian Nations
AusAid:	Australian Agency for International Development
BAN-PT:	Badan Akreditasi Nasional-Perguruan Tinggi (National Accreditation Agency for Higher Education)
BAPPENAS:	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
BLU:	Badan Layanan Umum (A Semi-Autonomous Higher Education Institution).
BHMN:	Badan Hukum Milik Negara (State Own - University).
BHP:	Badan Hukum Pendidikan (an autonomous legal entity)
BidikMis:	Financial Aid (for disadvantaged students)
BPK:	Badan Pemeriksa Keuangan: Supreme Audit Board
BPMA:	Badan Penjamin Mutu Akademik (Academic Quality Assurance Board)
BPS:	Biro Pusat Statistik (Central Bureau of Statistics)
BSNP:	Badan Standard Nasional Pendidikan (Board of National Education Standards)
CHED:	Commission on Higher Education, Philippines
CPR:	Continuous Performance Review
COE:	Center of Excellence
COD:	Center of Development
DEPAG:	Department Agama (Ministry of Religious Affairs)
DEPDIKBUD:	Department Pendidikan dan Kebudayaan (Department of Education and Culture)
DEPKEU:	Department Keuangan (Department of Finance)
DIKBUD:	Kementerian Pendidikan dan Kebudayaan (Ministry of Education and Culture)
DIKTI:	Direktorat Jenderal Pendidikan Tinggi (Directorate General of Higher Education (DGHE))
DIPA:	Daftar Isian Pelaksanaan Anggaran (Budget Line Item)
DPR:	Dewan Perwakilan Rakyat (Parliament)
ESC:	External Stakeholder Collaboration
FM:	Financial Management
GAAP:	Generally Accepted Accounting Principle
GDP:	Gross Domestic Product
GER:	Gross Enrollment Ratio
GRA:	Gross Enrollment Rate
HEI:	Higher Education Institution
HEMIS:	Higher Education Management Information System
IKK:	Indikator Kinerja Khusus (Specific Performance Indicator)
IKU:	Indikator Kinerja Umum (General Performance Indicator)
IPB:	Institut Pertanian Bogor (Bogor Agricultural University)
KAP:	Kantor Akuntan Publik (Public Accounting Office)
KOPERTIS:	Koordinator PerguruanTinggi Swasta (Coordinator of Private Higher Education)
LAKIP:	Laporan Kinerja Instansi Pemerintah (Government Unit Performance Report)
MOHE:	Ministry of Higher Education, Malaysia
MWA:	Majelis Wali Amanat (Board of Trustees)
PDPT:	Pangkalan Data PerguruanTinggi (Higher Education Database System)
PRODI:	Program Studi (Study Program)

PT:	Perguruan Tinggi (Higher Education)
PTN:	PerguruanTinggi Negeri(State Higher Education Institution)
PTS:	PerguruanTinggi Swasta (Private Higher Education Institution)
QA:	Quality Assurance
QS Rankings:	World university rankings of top 700 universities
R&D:	Research and development
RENSTRA:	Rencana Strategis (Strategic Plan)
RIP:	Rancangan Induk Pengembangan (Master Development Plan)
RPJP:	Rancangan Pembangunan Jangka Panjang (Long-term Development Plan)
RPJM:	Rancangan Pembangunan Jangka Menengah (Medium-Term Development Plan)
S-2:	Strata 2 (Master's Degree)
S-3:	Strata 3 (PhD equivalent)
SAP:	Standard Auditing Principle
SATKER:	Satuan Kerja (Working Unit)
SEAMEO:	South East Asian Ministers of Education Organization
SEAsia:	South East Asia
SIMAK:	Sistem Informasi Manajemen (Management Information System)
SNMPTN:	Seleski Nasional Mahasiswa Perguruan Tinggi Negeri (Student National Selection)
SPM:	Standar Pelayanan Minimal (Minimum Service Standard, MSS)
SPMI:	Sistem Penjamin Mutu Internal (Internal Quality Assurance System)
Swasti:	Private
TPA:	Tes Potensi Akademik (Academic Competency Test)
TUP:	Tambahan Uang Persediaan (Emergency Funding)
UUPT:	Undang-Undang Perguruan Tinggi (Higher Education Law)
WB:	World Bank

EXECUTIVE SUMMARY

This report offers an overview of the pressures on higher education in Indonesia from the standpoint of enrollment trends, autonomy status, and workforce needs within the broader context of Southeast Asia. In many respects, these countries face the same challenges: demand is increasing faster than capacity, at the same time that employers express dissatisfaction with the quality and relevance of the curriculum in many second- and third-tier institutions (both public and private). As summarized by the ADB report 2011, the resource-based challenges shared across the region include: “(a) maintaining and improving education quality, even in the face of serious financial constraints; (b) improving the relevance of curriculum and instruction at a time of rapid change in labor market needs; (c) increasing and better utilizing the financial resources available to higher education; and (d) balancing the continued expansion of access to higher education with greater attention to equity and to the need to raise quality.”¹

One notable difference between Indonesia and its Southeast Asia neighbors is the low percentage of research and development (R&D) expenditures that originate in universities (4.6%, compared to 14%-31% in other countries of Southeast Asia). This disparity is correlated to the very high percentage of R&D that is government-generated in Indonesia (81%, compared to 11%-23% in other Southeast Asia countries), and to Indonesia’s relatively low rank in the Innovative Capacity Index, where it holds the penultimate place in Southeast Asia (ahead of only Cambodia). Indonesia is also distinguished from other Southeast Asian countries in the high percentage of HE graduates who are unemployed (31%, compared to 3%-12% in neighboring countries).² These data argue for the development of Indonesian curricula that are more innovative, that address industry demands, and that are responsive to the needs of the surrounding communities. As the newly formed university engagement network, AsiaEngage, points out, while not all higher education institutions can immediately transform themselves into world-class universities, they can focus on becoming regional knowledge hubs.³

In this regard, HEIs across the region can profitably learn from the exemplar programs within their own and neighboring countries. We define “exemplar programs” as areas where the institution has chosen to invest faculty and administrative time, funding, and planning, in order to combine academics with regional responsiveness. Often these programs are interdisciplinary in nature, serving as relevant and innovative knowledge hubs that play a key role in addressing local, national, regional, and global needs. Such programs can only exist through the strategic integration of the four areas at the core of the HELM project: sound leadership and management, transparent financial responsibility at the service of academic priorities, attention to quality assurance and the use of data, and responsiveness to the needs of external stakeholders.

The second section of this report identifies such exemplar programs in a range of HEIs in Singapore, Thailand, Philippines, and Malaysia, in addition to selected programs in Indonesia’s top universities. The third and final section outlines the rationale and design for Action Research

¹ Asian Development Bank. “Higher Education across Asia: An Overview of Issues and Strategies” (November 2011), viii.

² World Bank. “Putting Higher Education to Work: Skills and Research for Growth in East Asia.” World Bank East Asia and Pacific Regional Report. 2012, page 12.

³ Yojana Sharma, “Universities Need to Serve Regional Economy, Society” (17 July 2012).

Projects, through which HELM partner institutions can develop or expand a particular academic program with attention to the four core HELM areas. These projects will be developed first through a five-day study tour of two HEIs in SE Asian countries, and then through a six-month action research project, guided by University of Kentucky facilitators and HELM staff.

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HELM PROJECT OVERVIEW

The five-year USAID/Indonesia Higher Education Leadership and Management Project (HELM), Contract number AID-497-C-12-00001, is a Cost plus Fixed Fee contract awarded to Chemonics International Inc. on November 28, 2011 to be completed on November 30, 2016. Chemonics International Inc. is the prime contractor for HELM and will implement the project with the assistance of its subcontract consortium partners: JBS International Inc., Aguirre Division, University of Kentucky, and the Indiana University Alliance. HELM works in close collaboration with the Directorate General of Higher Education (DIKTI) and Indonesian Higher Education Institution (HEI) partners, and under guidance from USAID.

HELM aims to support and sustain reforms in the Indonesian higher education sector which will result in, as stated by the sub IR “increased management capacity of Indonesian Higher Education Institutions (HEI).” Through collaboration with DIKTI, HELM will target increased capacity in four core management areas:

1. General administration and leadership;
2. Financial management;
3. Quality assurances; and,
4. Collaboration with external stakeholders.

HELM is designed to promote the reform process within the Ministry of Education and Culture (MOEC) as the Higher Education (HE) system moves toward implementation of the newly passed HE law. Implementation of the Strategic Plan for 2010-2014 is well underway and DIKTI has requested both assistance on improving their strategic plan as well as support for improved implementation of the plan at the HEI level as the new law is operationalized.

HELM is committed to programming that responds to needs identified by DIKTI as well as informing and advancing the reform process at the national level and among partner institutions. HELM goals will be achieved through a three-phase process.

1. The first phase will consist of an intense, collaborative effort to assess the current context across the higher education sector, including challenges and constraints, as well as opportunities posed by the implementation of the strategic plan and new law. Integral to this is responding to needs identified by the DIKTI as well as informing and advancing the successful design of the implementation phase of the HELM project.
2. The implementation phase will be the second phase of HELM; efforts will focus on improved implementation of reform efforts both within DIKTI and within partner HEIs.
3. The final phase is considered the institutionalization phase. Institutionalization will be a focus throughout the program but in the final program years an intensified effort will sustain best practices and improve channels for dissemination of reform efforts.

HELM phase one assessment activities are intended to better identify, define, and focus the program implementation that will form the foundation of the HELM project out-year activities, while simultaneously providing research to DIKTI. As such, HELM will apply approaches and

methodologies deemed as global best practices while remaining mindful of the unique character of the contextual specificity in Indonesia.

HELM will coordinate closely with other donors and implementers working in the HE sector, and strive to learn from their experiences to build upon the successes of prior and existing projects. HELM will seek to complement existing work and create synergies with other programs working in the HE sector. Successes and lessons learned will be shared widely and will remain in the public domain in an effort to disseminate best practices for systemic improvements and to build support for reform within DIKTI and at across the HE sector as well as across a wider range of stakeholders. Recommendations will link the initial assessment report to future program implementation activities.

The deliverables for the HELM program, as outlined in the contract, are organized under the following five key components:

- A. Provide analytical support for strategic planning and policy analysis at DIKTI;
- B. Design technical assistance approaches to achieve effective implementation of key reforms across system, coordinating with DIKTI and maximizing opportunities to internalize best practice within HE system;
- C. Provide technical assistance to increase management capacity and improve performance at HEI—and disseminate best practices;
- D. Strengthen graduate level programs in Higher Education Leadership and Management;
- E. Support special initiatives by providing assistance to advance reforms and innovation within management of HEIs.

Much HELM's year one work is focused under Component A and will provide the analytical foundation to inform implementation in future HELM activities. The assessment described below is one among the group of assessments, this one focused on successfully employed approaches to improved quality and relevance for academic programs in HEI in Indonesia and Southeast Asia which will provide the foundation and theoretical background for the planned action research study tours and program activity that is anticipated to start during the 2012-2013 academic year.

INTRODUCTION

Universities throughout the world must constantly adapt their academic programming to remain relevant and responsive to an increasingly knowledge and innovation-based economy. They are under increasing pressure to position themselves as engines of economic growth as incubators of innovation – preparing students as innovators and entrepreneurs, conducting research to address problems faced by businesses, governments, communities, and consumers that can lead to meaningful change to benefit society. These benefits range from the commercial—assisting in the commercialization of innovative products and services—to citizenship issues such as engagement, sustainability, and stewardship of resources. As in other developed and developing countries, Indonesian higher education institutions (HEIs) need to be important partners in this new economy, but their constraints are more daunting than those of HEIs in many other countries. The challenges are intimately linked not only to their unique history of development under colonialism and independence, but also to economic factors, in terms of the nation’s capacity to invest in its tertiary education system. Most fundamentally, real per capita gross domestic product (GDP) in Indonesia is only \$3,495 (in 2011); this is over \$40 less than Thailand’s GDP, a little more than one-third of Malaysia’s GDP, and less than 10% of Singapore’s GDP.⁴

Under the pressures of simultaneous capacity building in both size and quality/relevance, and within the funding constraints, Indonesian universities can benefit from exemplar models of programs that focus on both quality and relevance, within their own country and across Southeast Asia. In the current report, we identify an array of academic programs that appear to have successfully interwoven the four areas identified by the Higher Education Leadership and Management (HELM) project as essential to HE capacity-building: effective leadership and management, data-driven quality assurance, strategic financial responsibility, and responsiveness to the needs of external stakeholders. Successful and sustainable academic programming cannot thrive without a strong foundation in all four areas. The following report offers an overview of the higher education systems across Southeast Asia, in terms of demographic, economic, and regulatory contexts, and then identifies programs that appear to have blended regional responsiveness and innovation with sound strategic planning across the four core HELM areas. The transferable lessons from these programs can help Indonesian universities identify or maximize revenue streams by positioning themselves as drivers of the local or national economy, thus solidifying their valuable role in national and global development.

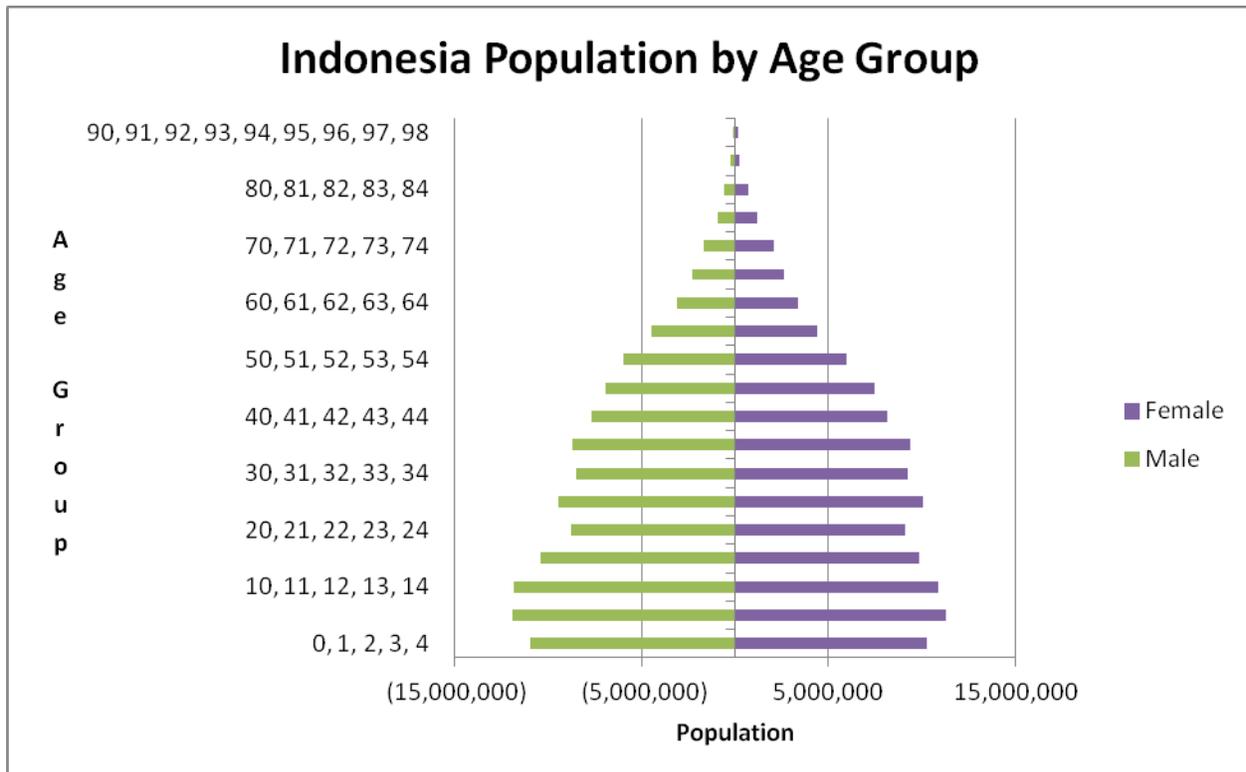
INDONESIAN CONTEXT: QUALITY AND RELEVANCE OF ACADEMIC PROGRAMMING

The Indonesian higher education system has been increasing the number of students it serves and improving its gross enrollment ratio (GER) over time. The system now has more than 4 million tertiary students, and the GER has increased from 14.9% in 2000 to 23% in 2010.⁵ Still, the higher education system in Indonesia faces a number of capacity challenges for the future. The Ministry of Education and Culture states that in the most recent year 853,901 students took the

⁴ Data from World Bank Development Indicators Database.

⁵ This figure is based on the population of 19- to 24-year-olds, the definition used by the Indonesian Ministry of Education.

national entrance exam (SNMPTN) and only 204,907 were accepted at public universities.⁶ A look at national demographics shows that the population that is about to enter college-age will grow in the coming years, so the demand for tertiary education will increase concomitantly. The short-term solution has been the expansion of private HEIs, as well as for some public institutions to charge higher tuition rates for those students who do not pass the national exam, in order to control access. There is concern that the private HEIs are not regulated as closely by the Directorate of Higher Education (DIKTI) as the public institutions, so that Indonesia is suffering a quality trade-off because of the loosely controlled expansion in private HEIs. Overall, research such as the extensive study done by the Asian Development Bank⁷ demonstrates that it is true that access has improved at the expense of quality.



Source: SUSENAS (2009)

The ADB Technological and Professional Skills Development Sector Project⁸ found that Indonesia faces the same issues as other countries in Southeast Asia:⁹ “weak linkages to labor markets, poor learning environment, obsolete equipment, under qualified teachers, and inefficient university management.” There is no indication that labor market linkages or

⁶ www.kemdiknas.go.id

⁷ Asian Development Bank. “Higher Education across Asia: An Overview of Issues and Strategies” (November 2011), 6-7.

⁸ Asian Development Bank. “Indonesia: Technological and Professional Skills Development Sector Project” (September 2008), 1.

⁹ For purposes of this report, “Southeast Asia” will be defined as the seven Member States included in the organization of Southeast Asian Ministers of Education Organization (SEAMEO): Indonesia, Cambodia, Laos, Malaysia, Singapore, Thailand, and Vietnam. See www.seameo.org.

university management has improved since that ADB project ended in 2007. Similarly, the World Bank (WB) found that university-business linkages in Indonesia were weak, both absolutely and relative to other Southeast Asian countries, especially Malaysia and Singapore.¹⁰ This disconnect is borne out by the fact that Indonesia has a higher unemployment rate among its tertiary graduates than do other Southeast Asian countries. Sakellariou (2010) found that an astounding 30.8% of Indonesian university graduates between the age of 24 and 35 were unemployed while all other Southeast Asian countries reported unemployment rates below 12% (Thailand has the lowest, at only 2.7%).¹¹ Similarly, 30-40% of the firms surveyed report that they find significant skill gaps in graduates from Indonesian HEIs.¹² Indonesian HEIs obviously must do a better job of matching their curriculum with skills needed by the private sector. Nonetheless, Sakellariou (2010) found that wage premiums for Indonesian university graduates (the difference between wages of those with a university degree and those without) varied from 5% for sales positions to 65% for managers.¹³

Indonesian universities are not highly integrated into the nation's research and development system. Indonesian HEIs account for only 4.6% of R&D expenditures, and businesses account for only 14.3%. Both of those percentages are much lower than those of neighboring countries in East and Southeast Asia. In terms of innovation capacity, Indonesian businesses are ranked lower than those of other Southeast Asian countries, other than Cambodia and Laos.¹⁴ This presents a challenge to Indonesian HEIs when they are called to be engines of growth, to undertake engaged, innovative research to provide new products and ideas, and to be suppliers of a talented workforce that can help the business sector compete in this knowledge-based innovation economy. Thus, while Indonesian higher education strategies appear to focus on improving the research and innovation dimensions of its universities, and their responsiveness to regional development needs on the industry and community level, the universities have not been successful in assuming a leadership role as knowledge hubs or economic engines. The export profile of Indonesia is consistent with this portrait from R&D spending. Indonesia exports a much higher percentage of primary, unprocessed products than do other middle-income Southeast Asian countries.¹⁵ Businesses are not innovative and are not employing people in high-wage industries. Instead, they are focusing on resource-based products that require fewer technical skills (and command lower wages). Indonesia needs to break out of this low-wage, resource-based economy if it is to succeed in this new world economy. Indonesia spends 1.2% of its GDP on HE; 0.3% by the public HE system and 0.9% by the private system; the percentage of the HE sector that is private, 75%, is the highest in the region.

¹⁰ World Bank. "Putting Higher Education to Work: Skills and Research for Growth in East Asia." World Bank East Asia and Pacific Regional Report (2012), 77 and 78.

¹¹ Chris Sakellariou, "Labor Market Outcomes of Higher Education in East Asia." Department of Economics, Nanyang Technological University, Singapore (February 2010), 2.

¹² World Bank. "Putting Higher Education to Work: Skills and Research for Growth in East Asia." World Bank East Asia and Pacific Regional Report. 2012, page 12.

¹³ Sakellariou 7. "Wage premium" refers to the difference between the average wages of college graduates and of non-graduates.

¹⁴ Augusto Lopez-Claros and Yasmina N. Mata. "The Innovation Capacity Index: Factors, Policies and Institutions Driving Country Innovation." In *The Innovation for Development Report 2009-2010* (New York: Palgrave Macmillan 2009), 25.

¹⁵ Indonesia, Malaysia, Philippines, and Thailand are considered by the World Bank as middle income countries.

Spending per student is \$1,200 in private universities and \$2,200 in public universities.¹⁶ This spending pattern (and the resulting reliance on private spending) generates great disparities in access by income. Indonesia's GERs for the three lowest income quintiles are 1.1%, 2.72%, and 5.64% compared to the overall GER of 26.6%. Students in the lower income groups do not have access to HE at nearly the same percentage as higher income groups. There are many causes for this pattern; and while DIKTI has stated that 20% of all students at public universities should be from the disadvantaged socioeconomic sector, obviously this regulation is not working. Financial aid only covers 3% of the costs of tertiary education in Indonesia, so it is not doing its part to make HE access easier for students with limited means (WB, 2010).¹⁷

Earlier analysis from the HELM project has involved university self-assessments and site visits to 11 pilot universities. Those assessments found that university leaders have very little access to formal training and that there is no clear career path for them to follow. They do not learn from their predecessors and must learn on the job. The quality assurance system is often not integrated beyond the faculty level and there is a lack of data within the system for making informed decisions and resource allocations. This often forces finances to drive academic decisions, rather than having relevant and high-quality academics as the driving factor. Furthermore, most universities found that among the four major thrusts of HELM, external stakeholder collaboration was the area where they were the weakest. They viewed themselves as particularly ill-equipped to establish collaborations with local entities, such as businesses and local government. These connections could potentially provide revenue streams, student employment opportunities, and higher societal value for the institutions, thus addressing the perceived mismatch between national needs and the quality and relevance of academic programming.

SOUTHEAST ASIA CONTEXT: QUALITY AND RELEVANCE OF ACADEMIC PROGRAMMING

While Indonesian HE strategies continue to focus on improving the research and innovation dimensions of its universities, including their responsiveness to regional development needs of industry and community, most universities have not yet assumed leadership roles as knowledge hubs or economic engines. The HELM project may support establishing stronger international collaborations between the partner universities and their Southeast Asia counterparts, not only to guide the Indonesian institutions in designing and implementing transferable models for research and development with external stakeholders, but also to allow Indonesian universities to assume a stronger leadership role in the Southeast Asia region.

As the Indonesian higher education system addresses these challenges within the context of the larger socioeconomic and political ecosystem, it can benefit from cross-fertilization with other

¹⁶ World Bank. "Indonesia: Higher Education Financing." Human Development; East Asia and Pacific Region. (April 2010) 22. At the upper end of the comparative spectrum, Malaysia spends almost \$9,000 per student, while per student spending in the Philippines is \$1,670.

¹⁷ World Bank. "Indonesia: Higher Education Financing." Human Development; East Asia and Pacific Region (April 2010) 37.

countries of Southeast Asia. In this regard, the ADB study “Education and Skills: Strategies for Accelerated Development in Asia and the Pacific” (2008) points out that

[t]he experience of countries in the region in developing their higher education systems is a promising source of knowledge worth sharing.... Knowledge drawn from wider international experience can offer substantial benefit to DMCs [developing member countries]. It introduces models, management strategies, evaluations, and systematic approaches to curriculum development that have been successful in a broader range of efforts to reform higher education.¹⁸

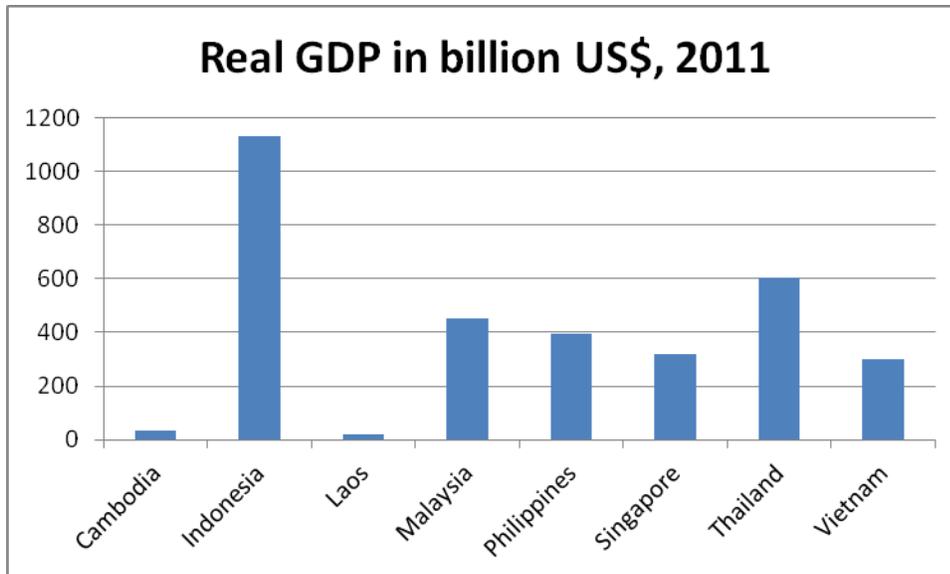
An examination of the data on economic expansion and the increase in higher-skills employment, growth of the middle class, demographic changes for the HE sector of the population, and GERs support the fact that the countries of Southeast Asia operate within a similar higher education ecosystem. At the same time, the data from ADB convincingly demonstrates that, in the neighboring countries, many universities have more successfully moved up on the value chain, as economic drivers and generators of R&D. It is therefore useful to seek models from some of the successful institutions across Southeast Asia that integrate the four core HELM areas as they create regionally relevant and globally competitive programs.

Southeast Asia has a number of countries with very dynamic economies at present. Countries in the region are generally divided into three groups based on per capita income: the high income group (Singapore with a per capita GDP of \$46,241), the middle income group (Malaysia, with per capita GDP of \$9,656; Thailand, with per capita GDP of \$4,972; Indonesia with per capita GDP of \$3,495; and Philippines with per capita GDP of \$2,370), and low income group (Vietnam, with per capita GDP of \$1,411; Laos with GDP per capita of \$1,320; and Cambodia with GDP per capita of \$900).¹⁹ Singapore has more company when the analysis is for East Asia, joined in the high income group by Hong Kong, Korea, Japan, and Taiwan.

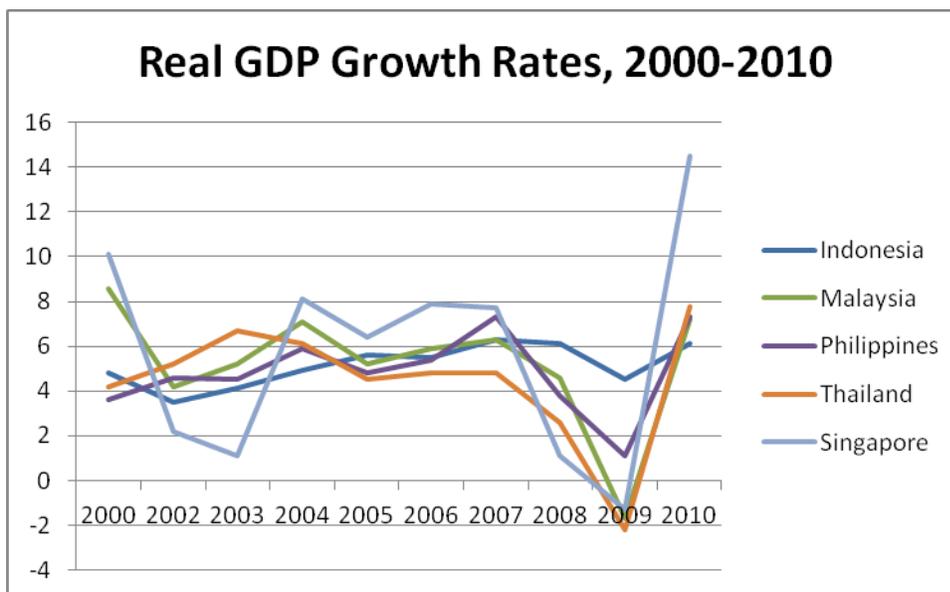
All the countries have rapid income growth rates relative to most other countries of the world. In 2010, Singapore’s GDP growth rate was 14.5%, a very high rate, while all the other countries had growth rates between 6% and 8%. Growth rates vary by year, and Indonesia had the fastest growing economy in 2007-2009 because of high commodity prices. This should be balanced against the fact that sometimes the size of the economy is more important than the growth rate or per capita statistics. By this measure, Indonesia has the largest economy in the region because of its large population. Its GDP at purchasing power parity (PPP) was \$1,131 billion in 2011, while Thailand’s was \$605 billion. Malaysia, Philippines, Singapore, and Vietnam all rank even lower, with economies in the \$275-\$420 billion region.

¹⁸Asian Development Bank, “Education and Skills: Strategies for Accelerated Development in Asia and the Pacific (June 2008), 50.

¹⁹Data are from the World Bank Development Indicators Database.



Source: World Bank Development Indicators Database



Source: World Bank Development Indicators

Most of these economies are growing fast, but this growth may be based on lower relative wages rather than on the basis of dynamic firms that draw investment from all over the world. Singapore certainly abounds in the presence of dynamic firms, and it is ranked #2 in the World Economic Forum’s global competitiveness index for 2010/11. Malaysia is at #21, which is still relatively high. Thailand and Indonesia are ranked #39 and #46 respectively; these rankings are high, but not high enough to justify their fast growth rates. The largest export category for Singapore and all of the middle income countries in the region except Indonesia is manufactured electronic goods.²⁰ The largest export category for Indonesia is primary and agricultural

²⁰ World Bank. “Putting Higher Education to Work: Skills and Research for Growth in East Asia.” World Bank East Asia and Pacific Regional Report (2012), 177.

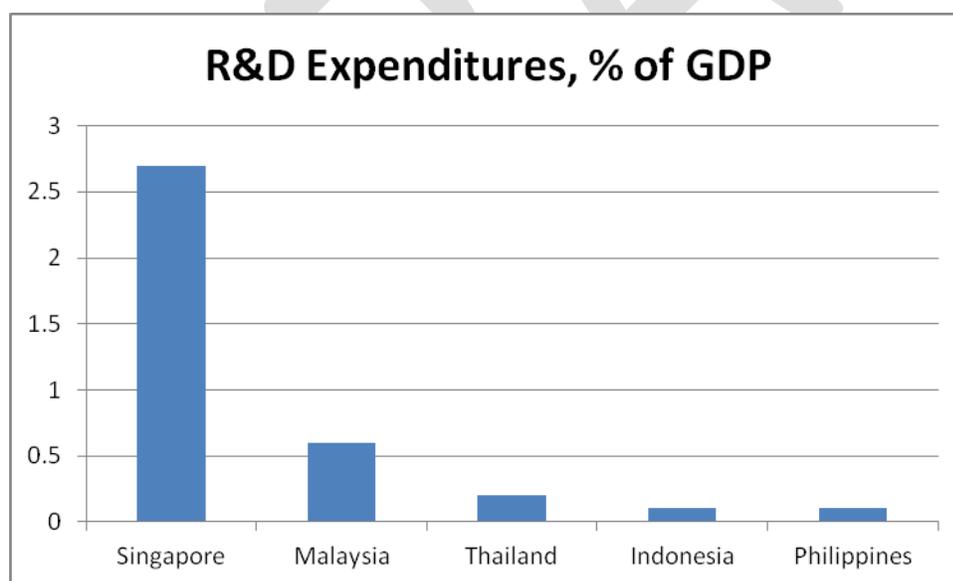
products. The value-added in electronics production is much higher than in primary and agricultural products, so firms in that industry are able to pay their workers a higher wage. Yet multinational companies are always looking for low-cost destinations to host their manufacturing processes for mature, low-technology production. The middle-income countries in Southeast Asia do not want to be in a position where they must compete with other countries for those lower-wage jobs.

Global Competitiveness Index Ranking, 2010/11

Singapore	Malaysia	Thailand	Indonesia	Vietnam	Philippines	Cambodia
2	21	39	46	65	75	97

Source: World Economic Forum

Firms that are creative and produce differentiated products are able to compete on the basis of product quality, rather than product price. They are able to pay their workers high wages because they are employed in very productive jobs associated with highly-valued goods. These firms are usually innovative and stay ahead of their competitors because of the new ideas they incorporate into their products. A key ingredient to product innovation and improvement is research and development, generally stemming from three sectors—universities, government, and industry. Overall, most countries in Southeast Asia spend very little on research and development. The most recent figures from the World Development Indicators database show that only Malaysia and Singapore spend more than 0.5% of GDP on R&D.²¹ Singapore's percentage, at 2.7%, is in line with other developed countries, but Malaysia's R&D expenditure at 0.6% of GDP is quite low, and the other Southeast Asia countries spend even less.

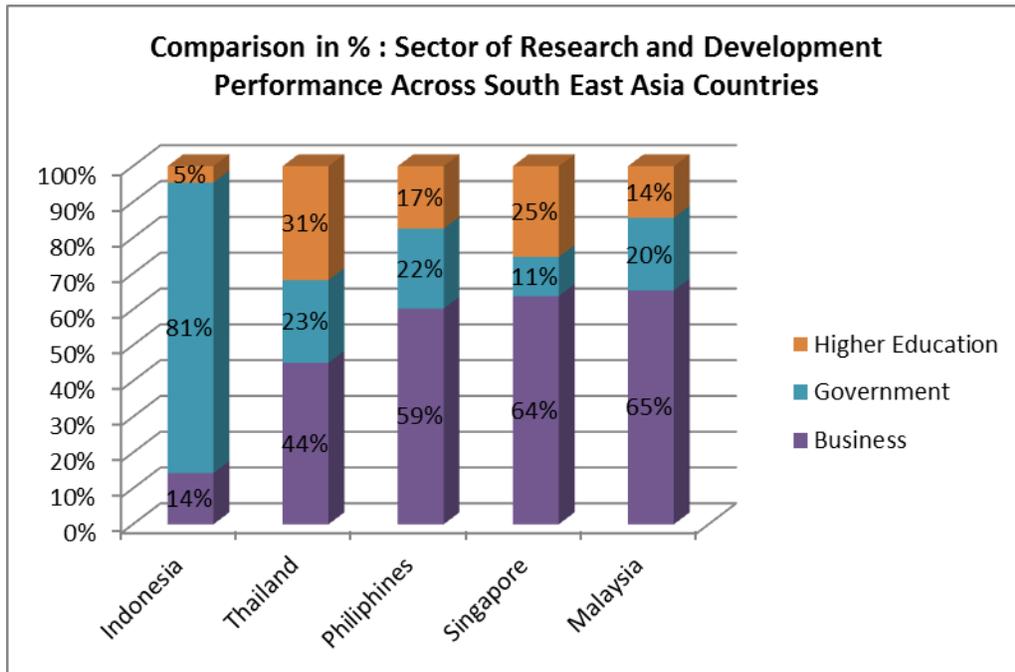


Source: World Bank Development Indicators Database

The structure of R&D varies widely by country. Indonesia relies on the government for 81% of its R&D, whereas other Southeast Asian countries rely much more on businesses for their R&D.

²¹ <http://data.worldbank.org/topic/education>

This suggests that businesses in Indonesia are not very high-technology oriented, and are less competitively innovative than in neighboring countries. It also suggests that universities are playing a disproportionately small role in the innovation economy. Indonesian universities account for only 4.6% of the R&D expenditure, whereas Singapore and every other middle income Southeast Asian country has universities accounting for more than 14% of expenditures; in Thailand, at the high end of the spectrum, universities account for over 30% of R&D.



Source: World Bank (2010)

The Innovative Capacity Index is a tool that measures “a broad array of factors, policies, and institutions that have a bearing on strengthening innovation ... including their institutional environment, their human capital endowment, the presence of social inclusion, the regulatory and legal framework, the infrastructure for research and development, and the adoption and use of information and communication technologies.”²² Each country in Southeast Asia is ranked lower on the Innovative Capacity Index than they are on the Competitiveness Index, suggesting that lower wages in Southeast Asia might be a reason behind their diminished competitiveness.

Indonesia’s ranking in innovation falls more relative to the competitiveness index than does that of any other Southeast Asian country (from 46th to 88th). Most Southeast Asian governments would like to increase their numbers of science and engineering graduates from universities. The WB (2012) estimates that over 50% of the graduates from Thai universities specialize in science and engineering, while less than 25% of the graduates in Indonesia and Philippines are from those disciplines.²³ The World Bank suggests that, for an economy to rapidly assimilate technology, at least 33% of the university graduates should be in the fields of science or engineering.

²² Lopez-Claros and Mata, 1.

²³ World Bank, “Putting Higher Education to Work,” 49.

Innovative Capacity Index Rankings

Singapore	Malaysia	Thailand	Philippines	Vietnam	Indonesia	Cambodia	Laos
6	34	43	75	78	85	112	116

Source: Lopez-Claros and Mata (2009)

Governments across Southeast Asia are very interested in improving their education systems because human capital development is vital for rapid economic progress now and in the future. They have worked hard to improve the quality of their primary, secondary, and tertiary education systems. Yet it is only recently that observers have concluded that the universities need to serve as high-impact engines for economic development. They must educate the primary and secondary teachers as well as the high-level technical and managerial employees, and they must serve as incubators for discovery and innovation.²⁴ Global university rankings, an obsession across Asia as a quality indicator, correlate to this high position on the economic value chain. Generally, Southeast Asian universities outside of Singapore are not highly ranked (Singapore has two universities in the top 175 in the QS ranking for 2012).²⁵ The much larger ASEAN neighbors fare far worse: Malaysia has five universities in the QS top 400,²⁶ Indonesia has three²⁷ and Thailand²⁸ and the Philippines²⁹ each have two. While rankings alone should not be used as an indicator of the excellence of particular academic programs, the QS world and Asia rankings will be considered as an important criterion in selecting the host universities for HELM study tours or workshop facilitators.

Reflecting this view of HE’s relevance to developing economies, the ADB (2011) has stated that the resource-based challenges for HE across Asia (including Southeast Asia) are “(a) maintaining and improving education quality, even in the face of serious financial constraints; (b) improving the relevance of curriculum and instruction at a time of rapid change in labor market needs; (c) increasing and better utilizing the financial resources available to higher education; and (d) balancing the continued expansion of access to higher education with greater attention to equity and to the need to raise quality.”³⁰ Most Southeast Asian countries have been making progress, but even though government revenues are expanding, the demands for public expenditures seem to increase even more rapidly, straining education budgets.

GERs have been increasing in all countries of Southeast Asia since the 1970s.³¹ The latest GERs were 46% for Thailand, 40% for Malaysia, 29% for Philippines, 23% for Indonesia, 20% for Vietnam, 17% for Laos, and 8% for Cambodia. This definition of GER has the denominator as

²⁴ Asian Development Bank, “Higher Education across Asia,” 4.

²⁵ National University of Singapore and Nanyang Technological Institute.

²⁶ Universiti Malaya, Universiti Sains Malaysia, Universiti Putra Malaysia, Universiti Kebangsaan Malaysia, Universiti Teknologi Malaysia.

²⁷ Universitas Indonesia, Universitas Gadjah Mada, Institut Teknologi Bandung.

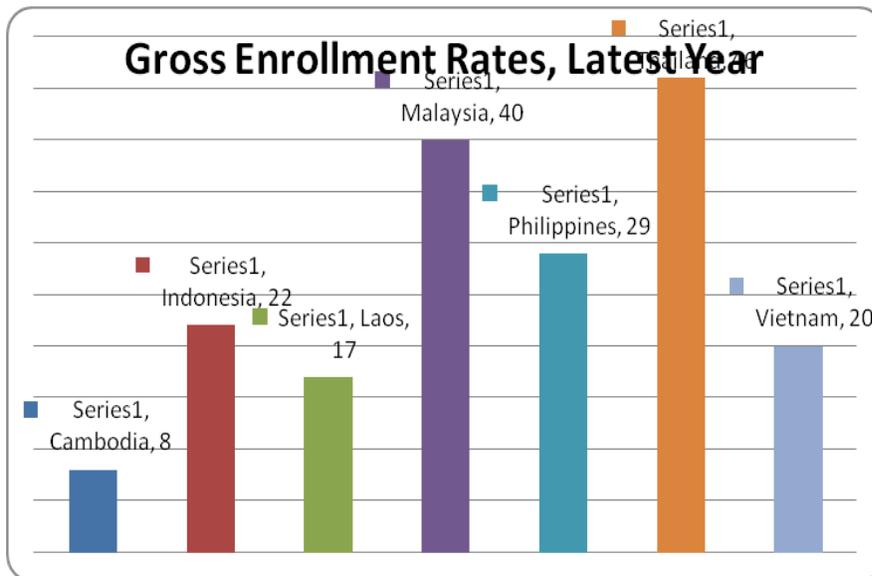
²⁸ Chulalongkorn University and Mahidol University.

²⁹ University of the Philippines and Ateneo de Manila.

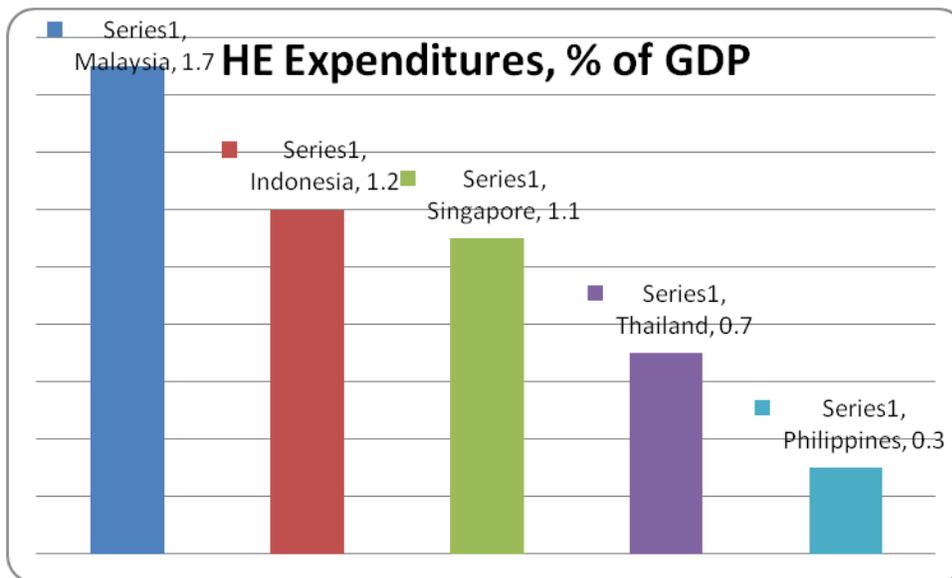
³⁰ Asian Development Bank, “Higher Education across Asia,” 6.

³¹ World Bank, “Putting Higher Education to Work,” 20.

the population in the age group that is within five years of secondary school completion (generally 19-24 years of age).³² Those countries with rates below 25% would likely want to increase access for students, but financing is a problem. All countries in the region spend 0.3 to 1.7% of GDP on tertiary education; Malaysia is at the upper end of the spectrum and Philippines at the lowest (data were not found for the low-income countries). Virtually all of the expenditures for HE in Malaysia come from the public sector, as do 70% of the expenditures in Thailand, but only 25% of HE expenditures in Indonesia come from the public sector.



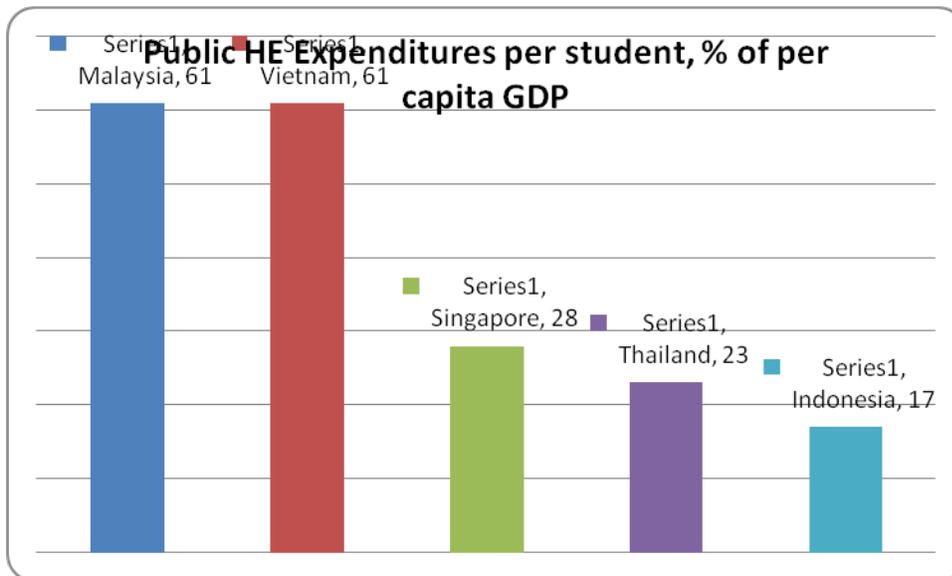
Source: World Databank Education Statistics (WDES)



Source: World Databank Education Statistics (WDES)

³² This is the definition used by the World Bank Development Indicators database (<http://data.worldbank.org/topic/education>). This denominator is used for a consistent comparison among countries.

When these expenditures on tertiary education are calculated on a per student basis, spending differs markedly by country. Public expenditures on HE per pupil as a percentage of per capita GDP varies from 61% in Malaysia and Vietnam, to only 17% in Indonesia. Because Malaysia's per capita income is the second highest in the region, its public expenditures on HE can afford to be quite high. In contrast, with Indonesia's relatively low per capita income, its public expenditures on HE are low. Thus, while Malaysia spends almost \$9,000 in public money per university student, Indonesia spends only \$350.³³

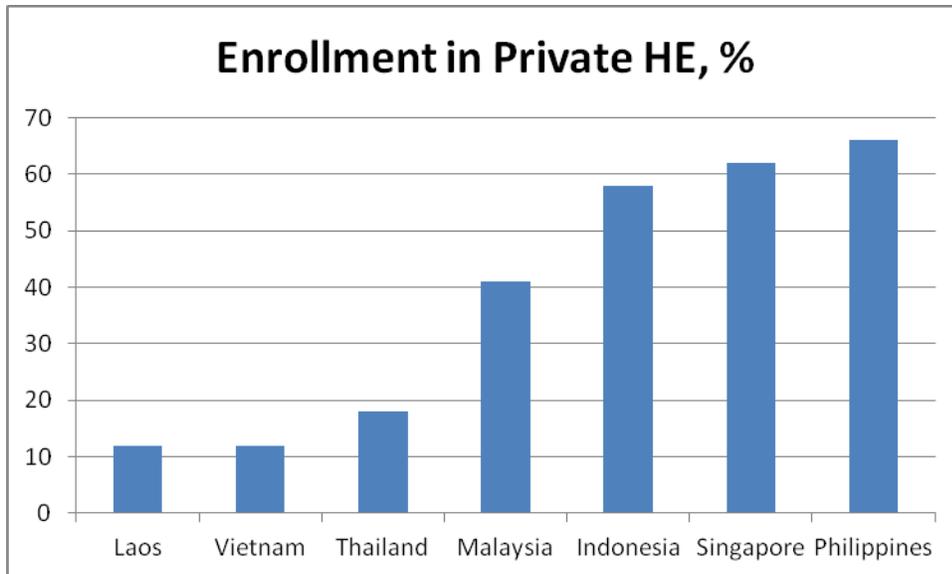


Source: World Databank Education Statistics (WDES)

Public spending per pupil is highly dependent on enrollments in public versus private universities. Southeast Asian countries have depended on private HEIs to varying degrees. Only 18% of Thai tertiary students are enrolled in private HEIs, and in Laos and Vietnam the percentage is only 12%. Malaysia's percentage is much higher, at 41%, but Indonesia's is at the top of the spectrum, along with Singapore and Philippines, at around 60%. Generally, government support of private universities per pupil is much less than in public universities. In Indonesia, the average government support for a student in a public HEI is \$920, but only \$56 for a student in a private university.³⁴

³³ World Bank, "Indonesia: Higher Education Financing," 12-14.

³⁴ World Bank, "Indonesia: Higher Education Financing," 12.

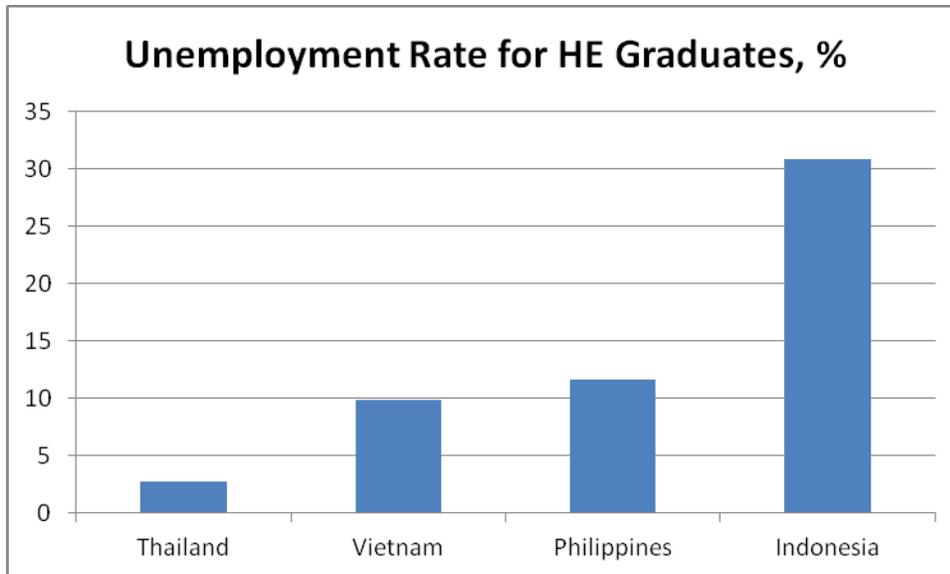


Source: World Databank Education Statistics (WDES)

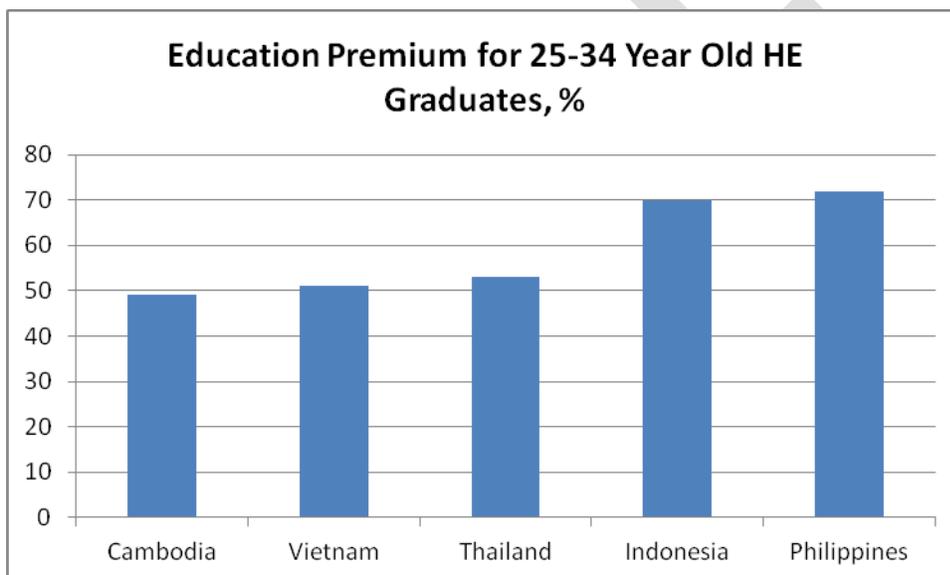
Even though many students must find much of the money for HE on their own, a university degree generally pays off. Sakellariou (2010) did a study of the labor market for university graduates in various occupations.³⁵ He found that the wage premium³⁶ for young professionals (25-34 years of age) varied from 49% in Cambodia to 72% in Philippines. Indonesia's premium was 70%. These high wage premiums are interesting because unemployment among university graduates varies tremendously among Southeast Asian countries. Thailand has a very low unemployment rate for its recent graduates (aged 24-35), 2.7%, but Vietnam's rate is 9.9%, Philippines' is 11.6%, and Indonesia's is a stunning 30.8%. If employers can find the right university graduates, they are willing to pay them a good premium, but either labor demand is constrained in some Southeast Asian countries or the skill sets vary markedly among university graduates.

³⁵ Sakellariou 10.

³⁶ As mentioned above, "wage premium" refers to the differential between the average wages of college graduates vs. non-college graduates.



Source: Sakellariou (2010)



Source: Sakellariou (2010)

No matter what type of institution the tertiary students attend, firms are demanding more skills from them. The World Bank (2012) surveyed employers in Indonesia, Philippines, and Thailand about skills that they emphasize when they look for university graduates.³⁷ They found that employers are “giving particular emphasis to some job-specific skills and several thinking and behavioral skills, reflecting a change in skill demand. Job-specific technical skills – both theoretical and practical – are important in most countries, with an edge for experience and practical job-related knowledge.... Problem solving and creativity receive significant emphasis in most countries, as do communication and leadership skills.” They found that skills required of tertiary graduates in middle-income Southeast Asian countries are particularly being upgraded.

³⁷ World Bank, “Putting Higher Education to Work,” 26.

Some of these skills require different teaching frameworks, which force Southeast Asian universities to adjust both their curricula and their teaching methods.

Because HEIs differ so much in their student body makeup, placement demographics, and disciplinary specialties (and because of the need for HEIs to rely less on public monies for their activities), governments have moved toward giving universities more autonomy in their operations. This trend in the region began in the mid-1990s with one education bill in Philippines (the Higher Education Act of 1994 [RA 7772]) and two education bills in Malaysia (the Education Act of 1996 and the National Council on Higher Education Act of 1996).³⁸ These were followed by bills in Indonesia (Government Regulation 61/1999, Law 20/2003 Education Law, and Law on Education Legal Entity 2009) and Thailand (National Education Act of 1999). All of these laws decentralized some aspects of university operations, in theory allowing them to become more responsive to their individual constituencies (both students and external stakeholders). Across all of these legal processes, the key has been to balance autonomy with accountability, because as we have seen, universities in all Southeast Asian countries rely on public funds for a significant part of their budget.

Each country has different policies regarding the independence of their universities. In Thailand, autonomous universities have full authority to decide student enrollments, student fees, and the curriculum. However, not all major universities in Thailand are autonomous. In contrast, in Malaysia, the 17 autonomous universities (which include all the major public universities), have limited authority over student enrollments, student fees, and the curriculum. The ADB (2010) argues that Malaysia still has a very centralized system. The three national universities in Singapore can set student fees, but have only limited control over the curriculum and the student numbers. Autonomous universities in Philippines have full authority over all three categories.³⁹ In both Thailand and Philippines, the autonomous universities have fully separated their management from their HE ministries, meaning that they control the hiring and dismissal of their own teaching staff and the allocations of their own budgets.

These data demonstrate that the universities across the region have had to seek different solutions, at different paces, in order to adapt to their changing political and economic circumstances. While development in most countries remains uneven across the tertiary education sector, many academic programs have responded to the challenges of accelerated demand in ways that offer transferable lessons. In particular, regional responsiveness and the innovation that results from interdisciplinary are the hallmarks of the leading programs that position the institution well on the value chain. For these programs to succeed, the institutions have had to find ways, within their regulatory frameworks, to balance the four core HELM areas of leadership and management, financial responsibility, quality assurance, and external stakeholder collaboration.

³⁸ Reehana Raza, "Higher Education Governance in East Asia." World Bank Report (<http://siteresources.worldbank.org/INTEASTASIAPACIFIC/Resources/HigherEducationGovernance.pdf>) April 2010.

³⁹ Asian Development Bank, "Higher Education across Asia" 25.

UNIVERSITY COLLABORATIONS BETWEEN INDONESIA AND SOUTHEAST ASIA

The work of SEAMEO (established in 1965), as well as several studies of comparative higher education,⁴⁰ has demonstrated the usefulness of cross-fertilization across the higher education systems of Southeast Asia, because they operate within similar ecosystems. The ADB (2008) has identified six “cross-cutting issues”—including resource issues but also broader challenges—that the network of higher education throughout the region must confront in order to establish the world-class tertiary education systems to which they aspire. Higher education institutions will need to:

- (i) Seek a new balance in their relationship with government;
- (ii) Cope with autonomy;
- (iii) Manage expansion while preserving equity, raising quality, and controlling costs;
- (iv) Tackle new pressures for accountability;
- (v) Support academic staff in new roles; and
- (vi) Diversify financial resources.

An examination of progress in these six areas results in the division of Southeast Asia’s higher education system into three tiers. The criteria for these tiers stem not only from the above six factors that are specific to the higher education systems, but also to ecosystem characteristics such as GDP, income level distributions, and other development indicators. The first tier, offering fewer examples of world-class universities and the greatest challenges to higher education development, consists of Cambodia, Vietnam, and Laos. In the middle tier, offering a broad spectrum of universities in varying stages of academic, financial, and research advancement, includes Indonesia, Malaysia, Thailand, and the Philippines. In the third tier, due to its distinct advantages of smaller size and greater economic development, is Singapore, whose higher education system and broader ecosystem are more comparable to the West than to other countries of Southeast Asia.

The usefulness of closer cooperation and information-sharing across the region has been convincingly demonstrated, as articulated in the 2006 UNESCO/SEAMEO report:

Amidst such challenges, and changes, there is general consensus within the South-East Asian higher education community that closer cooperation is beneficial and, indeed,

⁴⁰ See, for example, the *Journal of Southeast Asian Education*, the UNESCO/SEAMEO report *Higher Education in South-East Asia* (2006; <http://unesdoc.unesco.org/images/0014/001465/146541e.pdf>), Chapter 5 of Altbach and Salmi’s *The Road to Academic Excellence: The Making of World-Class Universities* (2011), and Welch’s *Higher Education in South-East Asia* (2011); http://books.google.co.id/books?id=C0tN9m0u3HYC&pg=PA167&lpg=PA167&dq=bibliography+higher+education+south+east+asia&source=bl&ots=Y8cXon-ivs&sig=T1sjMkQauQyHD_IVTgExQ1AXMow&hl=en&sa=X&ei=KLPzT8faEsuxrAeFm9jiBg&redir_esc=y#v=onepage&q=bibliography%20higher%20education%20southeast%20asia&f=false).

necessary to produce highly qualified graduates who can contribute to sustainable development and increase their competitiveness throughout the world. For constructive and productive cooperation, policy makers and practitioners must be well-informed about higher education development and trends in other countries so that they can convert such information into useful policies and practices within the confines of their national needs and circumstances.

The recently formed organization AsiaEngage offers a model platform for this kind of information-sharing.⁴¹ Involving an explicit focus on regionally responsive knowledge generation across the ASEAN countries, AsiaEngage is described as “an inclusive umbrella for engaging communities and mutually transferring our knowledge and expertise for community development.”⁴² Organizers of AsiaEngage point out that while not all higher education institutions can immediately transform themselves into world-class universities, they can focus on becoming regional knowledge hubs.

This approach carries three distinct but interconnected benefits. First, the institutions can stimulate research productivity among their teaching staff by addressing real and relevant problems within their communities, with the corollary benefit of improving their national and global rankings. Second, the institutions can “move up the value chain” by generating solutions or approaches to addressing the needs of their regional industries.⁴³ And third, the universities can position themselves to attract new funding from government or industry sources, by narrowing the gap between what institutions teach and what the industries or communities need.

In particular across the Southeast Asia countries identified above as Tier 2, while there is significant unevenness of development within the higher education systems of each country, many successful programs exist that demonstrate high-level integration of the four core HELM areas. Responsiveness to the needs of external stakeholders means that many of these programs are interdisciplinary in nature, serving as relevant and innovative knowledge hubs that play a key role in addressing local, national, regional, and global needs. For this reason, HELM will engage in a series of action research projects with present and future leaders of Indonesian universities that involve the development or enhancement of programming in Indonesia using exemplar models from across Southeast Asia.

The countries of initial focus for these exemplar models should be Philippines, Thailand, and Malaysia. Top-tier Indonesian universities (the ones that have benefited from BHMN status such as UI, UGM, ITB and IPB) can also offer strong models for academic programming that is responsive to regional economies and the drive for innovation. However, these universities are seen within Indonesia as operating within a distinct budgetary and regulatory framework. For

⁴¹ <http://www.asiaengage.org/press-release/inaugural-task-force-brief/>. This is a new initiative, officially formed in November 2011 and holding its first conference in May 2012.

⁴² UKM Vice-chancellor Sharifah Hapsah Syed Hasan Shahabudin, at conference launch of AsiaEngage; see <http://www.universityworldnews.com/article.php?story=20120507170321328>. At the time of this writing, the only two Indonesian members of AsiaEngage are, in fact, two of the strongest opinion leaders in Indonesian higher education: University of Indonesia (UI) and Gadjah Mada University (UGM).

⁴³ Jaana Puukka, analyst for the OECD, uses this term in discussing regionally engaged universities, at the AsiaEngage conference in May 2012; see Sharma, “Universities Need to Serve Regional Economy, Society” (17 July 2012).

this reason, Tier 2 universities may not see the BHMN universities as offering transferable models. As detailed later in this report, the adoption of innovation requires that the adopters see the exemplar programs as inspirational and applicable models, but also that they see the examples with fresh eyes, rather than through the lens of the familiar. They should thus study programs that are distinct enough to be perceived as new. This alignment is clearly present in the countries of Philippines, Thailand, and Malaysia. In the neighboring countries, the Indonesian study-tour participants will be able to discuss their own institutional and national politics in a more neutral setting and without the historical and political preconceptions that would be at play among Indonesian HEIs.

On the other hand, for purposes of HELM seminars conducted within Indonesia, exemplar programs from the BHMN institutions would be very useful models of the effective integration of the four core HELM areas. Key players in the development of particular academic programs that have paid attention to financial, assessment, and externally responsive issues could be invited as seminar speakers, to explicate the genesis and development of those programs, including matters of governance, buy-in, and communication as evidence of skilled leadership and management. The BHMN institutions can thus serve as effective mentors, without underscoring to the Indonesian participants the serious disparities of resources and development that impact HEI development nationally and that an immersive study tour would have to address.

The application of the action research projects to the situation of polytechnics in Indonesia merits special attention. The initial assessments by the HELM team demonstrate that the enhancement of quality has to do less with external stakeholder collaboration, since the polytechnics have established solid ties with workforce employers. Rather, primary attention should be given to improving their national accreditation status (defined by the National Accreditation Agency, BAN-PT) from level C to level B. This is a reachable goal, and with appropriate action research projects as a foundation, the institutions could be well positioned to compete for future funding (ADB or AusAID) designated specifically for capacity-building of polytechnics.

In the sections that follow, we offer an overview of the higher education systems of Thailand, Philippines, Malaysia, and Singapore, as well as selected exemplar programs from a cadre of research universities that offer transferable models for the HELM partner universities.

COUNTRY AND INSTITUTION/PROGRAM PROFILES

A. DATA COLLECTION METHODS

This review is designed as a regional map for the planning of site visits by selected teams from the HELM Indonesian partner universities. Based on the theoretical, economic, and contextual paradigms outlined above, it becomes clear that, while Vietnam and Cambodia offer fewer transferable models for the Indonesian universities, other ASEAN countries, such as Philippines, Thailand, Malaysia, and Singapore, offer academic programs that can serve as effective models for the HELM partner institutions. These programs have been identified by their national governments as exemplar, primarily because of their responsiveness to external stakeholders (one of the four core HELM areas) and the ability to find funds to support the programs. Because of their focus on solving complex trans-disciplinary problems, they also integrate the other three

core HELM areas of leadership/management (in particular as regards strategic planning and implementation), quality assurance (in order to sustain improvement over time), and financial responsibility (without which effective implementation is impossible).

Exemplar higher education programs from the selected countries were identified via desk review, as indicated by HELM and USAID for the development of HELM Deliverable 6. The desk review was effective in assessing international, regional, and national rankings, all of which are included in the institutional summaries below. Researchers were also able to identify the areas of recent investment within each institution, thus reflecting integration of the core HELM areas (particularly the integration of academic and financial planning identified as a pressing need in the HELM Deliverable 4 report, July 2012).

It should be noted that, while international and regional rankings were considered, they were not the only parameters used in identifying model programs. The review demonstrated that sound models of regionally responsive programming can be found even in institutions that do not rank among the world's top 400. Such programmatic models are immediately transferable to Indonesian universities, in order to improve regional responsiveness and leadership/management of academic programs within the short as well as longer term.

Based on the desk review, particular universities were selected for closer examination. Site visits by the researchers resulted in more detailed assessments regarding the potential learning opportunities for the October study tours. One researcher visited two universities in Thailand (Mahidol University and King Mongkut's University of Technology). A second researcher visited four universities in Philippines (Ateneo de Manila, Mapúa Institute of Technology, University of Santo Tomás, and De la Salle University).

The Philippine and Thai host universities were selected before the list of Indonesian participants was finalized. But unless the participants' fields and interests differ markedly from the programs detailed below, the universities visited by the researchers are the top candidates as host universities for the fall 2012 study tours. Thus their programs are evaluated in greater detail, in the review that follows.

B. PHILIPPINES: OVERVIEW OF HIGHER EDUCATION CONTEXT

The Philippines boasts a quantity of HEIs similar to Indonesia's 3,000+; according to the Philippine Commission on Higher Education, there are currently 2,247 HEIs, of which 643 are called public and 1,604 private.⁴⁴ Of the public institutions, 110 are designated as State Universities/Colleges (SUC). All of the SUC and 44 of the private institutions are described as autonomous.

The overall educational system of the Philippines (K-16 rather than just postsecondary) ranks low among the countries of Southeast Asia; in the 2010-2011 Global Competitiveness Report of the World Economic Forum, the Philippines was ranked seventh out of eight countries in the fields of education, science, and technology/innovation.⁴⁵ At the tertiary education level, the primary call for reform has been directed at the "mismatch" between what universities teach and

⁴⁴ <http://www.ched.gov.ph/chedwww/index.php/eng/Information>

⁴⁵ <http://www.abs-cbnnews.com/business/06/14/11/philippine-education-ranked-poor>

what industry needs. According to Guillermo Luz, co-chair of the Philippines National Competitive Council, “the research being done in schools is merely for thesis purposes. The output of the research should be given to the industries so they can be converted into something that is useful.”⁴⁶ As evidence of this mismatch between many universities and industry, one study shows that less than 10% of graduates in the field of Information Technology / Business Process Outsourcing (IT-BPO) achieve full-time employment in their field of study.⁴⁷

The result of this situation has been both a significant investment in higher education programs that address the articulation between universities and employers (on the part of the government as well as the ADB and other sources) and increased attention by the nation’s leading universities to issues of regional responsiveness. Significant recent investments propose to recast universities as regional “knowledge hubs” that will “ensure our schools teach the skills industries actually need.”⁴⁸ As stated earlier, this paradigm of “knowledge hubs” can be instructive to higher education systems across Southeast Asia. Even before this latest investment, several Philippine universities have offered excellent models for cutting-edge programs that comprehensively address the needs of external stakeholders (corporate and community) as well as the need for high educational and pedagogical standards. One significant step in that direction was the national Commission on Higher Education (CHED) initiative to name Centers of Excellence (COEs) and Centers of Development (CODs), to recognize specific programs that should be seen as models in the areas of instruction, research, and extension, and that are sites worthy of further investment. CHED has named 252 such programs; thus far, however, all of those programs lie within traditional departmental boundaries, rather than being interdisciplinary centers. These programs receive CHED funding for “student scholarships, faculty development, library or laboratory upgrading, research and extension services, instructional materials development, and networking of existing COEs and CODs.”⁴⁹

In addition, the 2011 ADB report “Higher Education Across Asia: An Overview of Issues and Strategies” points out that the Philippine public university system has achieved a greater degree of autonomy than have the Indonesian universities, in the areas of course content, financial management of income and expense, and career paths for senior leadership.⁵⁰ It thus offers many useful models for program development at the cutting edge of interdisciplinary program development and regional responsiveness, some of which are detailed below.

Institutional and program accreditation is complex in the Philippines, as there exist multiple accrediting bodies. Originally, the Philippine Association for Accreditation of Schools, Colleges, and Universities (PAASCU) focused on Catholic universities; Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) accredited private non-sectarian schools; public institutions were overseen by the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP), and private Protestant-affiliated schools

⁴⁶ <http://www.abs-cbnnews.com/business/06/14/11/philippine-education-ranked-poor>

⁴⁷ http://www.senate.gov.ph/press_release/2012/0519_angara1.asp

⁴⁸ http://www.senate.gov.ph/press_release/2012/0519_angara1.asp

⁴⁹ <http://www.ched.gov.ph/chedwww/index.php/eng/Projects-and-Programs/Centers-of-Excellence-Development-COE-COD>. This site also contains a full listing of the 252 COEs and CODs. Based on progress, the COD programs can apply for an “upgrade” to become COEs.

⁵⁰ ADB, “Higher Education Across Asia,” 25.

were accredited by the Association of Christian Schools and Colleges (ACSC), all under the umbrella of the Federation of Accrediting Agencies of the Philippines (FAAP), which works alongside CHED. However, over time, each of these accreditation entities spread beyond its original boundaries, creating an inextricable web. The Philippines was the first Asian country to implement accreditation in 1957, but in the opinion of some, this Balkanization of accreditation agencies reflects the need for a new beginning.

In addition to CHED, a separate ministry oversees technical and vocational institutions the Technical Education and Skills Development Authority (TESDA).⁵¹ Their attention to competency standards development and assessment may provide a useful framework for discussing the Indonesian polytechnics' goal of improving their accreditation status from C to B. They also have a strong focus on "ladderized educational programs" (LEP).⁵² In addition, many certificate and vocational programs are housed within four-year institutions, in the Philippines, and this is also an avenue for exploration vis-à-vis Indonesian polytechnics.

As a result of this review combined with the initial visits made by HELM subcontractors to some of the universities mentioned below, we recommend that the Philippine universities be included in the first year of site visits. These programs offer strong examples of regional responsiveness, leadership/management, and could not be sustained without sound financial responsibility and quality assurance; thus they offer examples of the integration of the four core HELM areas.

C. PHILIPPINES: EXEMPLAR PROGRAMS AND INSTITUTIONAL CONTEXT

The **University of the Philippines**, a public university system established in 1908, is widely accepted to be the premier higher education institution in the country. It is now comprised of seven universities and one autonomous college, involving 15 campuses and 52,000 students. Under the single name "University of the Philippines" it is ranked as #332 in the world and 68th in Asia by the QS University Rankings. Its flagship campus, enrolling 50% of the total student body, is UP Diliman, whose main campus is in Quezon City near Manila. (UP Manila is the primary health sciences campus, UP Los Baños focuses on environmental management, other campuses focus on marine, business, or digital technologies.)

UP Diliman houses 26 colleges, institutes, or schools; of these, nine have earned designations as COEs. UP Diliman also has fourteen research centers, many of which offer examples of integrated, innovative, and regionally responsive programming. They are, of course, the result of significant investment and the preeminent position enjoyed by this national university. Thus, while they are excellent inspirational models, they would be difficult to replicate in settings that are less well resourced. Among the models that stand out in terms of the HELM priorities are

⁵¹ <http://www.tesda.gov.ph/>

⁵² Ladderized education is described as follows: "Ladderized education will provide TVET trainees and workers with the opportunities for career and educational progression; as well as facilitate the establishment of a seamless and borderless education and training system that allows mobility in terms of flexible entry and exit into the education system.... Through LEP...a TVET student may obtain college units and eventually earn a diploma after progressing through TESDA's training programs and college classes." (http://lcc.deped.gov.ph/lcc/index.php?option=com_content&view=article&id=250:ladderized-education&catid=35:news&Itemid=64)

the National Engineering Center⁵³ and the University Center for Integrative and Development Studies.⁵⁴

The National Engineering Center (NEC) represents a convergence of university strengths and national interests. Established by a presidential decree in 1978, it is described as follows:

A response to the country's continuing efforts at national development, which require progressive and adequate utilization and diffusion of technology, as well as a steady and expanding supply of technical manpower with expertise in the various fields of technology and engineering. The NEC was envisioned to provide a venue for continuing interaction among government, industry, and the university which will be beneficial to all concerned and, at the same time, serve the interests of national development.⁵⁵

The Center has built strong international collaborations as it becomes not only a national but a global knowledge hub for issues related to various engineering fields. While staffed by the professors of the College of Engineering, it is nonetheless "a distinct and separate unit under the University of the Philippines." Those who attend the many training programs all pay a fee, which provides at least a portion of the Center's financial sustainability.

The University Center for Integrative and Development Studies (UCIDS) combines instruction, research, and community development as it addresses both global and national issues of development. It is described as follows:

UCIDS encourages interdisciplinary and integrative studies of critical issues bearing on development policies. It also provides needed support for research into new and challenging areas within disciplines that deserves priority. The Center's secondary function is to conduct training, workshops, seminars, conferences and colloquia related to its primary functions.⁵⁶

Its four main foci are Economic Emancipation, Education, Employment, and the Environment, and it offers interdisciplinary seminars that focus on governance at the nexus of these four arenas.

The above areas offer some potential for contribution to the Indonesian HELM partners. However, the privileged situation of the University of the Philippines makes it a less attractive host institution than the others outlined below. The Catholic university system has historically been very strong in Philippines, which means that UP has far and away become the site of government investment. This has moved UP much closer to the level of Indonesia's top universities (UI and Gadjah Mada) in terms of capacity.⁵⁷ Because of its strong revenue sources and central position, it does not offer transferable models that are as strong as those outlined

⁵³ <http://www.upnec.com/>

⁵⁴ <http://cids.up.edu.ph/>

⁵⁵ <http://www.upnec.com/>

⁵⁶ <http://www.upd.edu.ph/research.htm>

⁵⁷ The 2011 QS rankings show the University of Indonesia at #217 and Gadjah Mada at #342; the University of the Philippines falls between them at #332.

below. Thus, while a site visit might include a targeted meeting there, it would not involve the kind of close programmatic review that the others offer.

Ateneo de Manila University⁵⁸ was founded in 1859 as a public school, and it became a private school during the American occupation of the Philippines in the early 20th century. It received its university charter in 1959, and moved to its current location of Quezon City, just outside Manila, in phases from 1952 through 1976. The smallest of the institutions here reviewed, it has some 7,500 undergraduates and 4,000 graduate students. Ateneo de Manila and De la Salle University are the only two universities in the Philippines to have been awarded the highest level of accreditation (Level IV) from the private-university accrediting entity, Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU).⁵⁹ Ranked 86th in Asia in the QS World University Rankings, and as the second highest-ranked university in the Philippines (behind University of the Philippines), it is also a member of AsiaEngage, a sign of the institution's commitment to serve as a regional knowledge hub.

Ateneo de Manila has six COEs and two CODs, concentrated in the science and education fields, as well as six research centers focused on education, business, and cultural preservation and development.⁶⁰ Of significance to the present review are programs in service learning that do not all involve academics but that do involve significant faculty and student outreach to the community: the Pathways to Higher Education program⁶¹ and the ACED program.⁶² Both of these programs reflect areas of strength within the institution, both are interdisciplinary and holistic in focus, and both are regionally responsive, appearing to have measurable impact on the surrounding community.

The Pathways to Higher Education program involves outreach to marginalized students, in order to impact the quality of the pipeline of students to higher education. The program “identifies deserving but financially-underprivileged public high school students and equips them with necessary skills, academic and non-academic, to ensure that they get a fair chance at quality college education and a brighter future ahead.” This program focuses on having university students teach after-school or summer classes that help high school students improve their testing and technology skills, thus bridging the gap to college academics, while also reaching out to students' families. Such a program might be relevant to Indonesian institutions that have a legacy of strength in teacher education, since the K-12 outreach will have the multiple advantages of creating regionally responsive programming, expanding the university's role as a knowledge hub for the future workforce of the region, and having a multiplier effect on improving the academic standards for the institution's future students.

⁵⁸ “Ateneo” is a term that has come to designate a Jesuit university in the Philippines. There are thus several universities called “Ateneos,” that are only connected to each other through their Jesuit affiliation and heritage.

⁵⁹ In addition, 21 of its programs were accredited at Level IV.

⁶⁰ In particular the Center for Organizational Research and Development has programs dedicated to change management, people management, and work management, as well as online outreach programs in these areas; facilitators for HELM training might be found within these programs. See <http://www.admu.edu.ph/index.php?p=71> for an overview of the research centers.

⁶¹ <http://www.admu.edu.ph/index.php?p=87>

⁶² <http://www.admu.edu.ph/aced>

The ACED (Ateneo Center for Educational Development) involves outreach to some 400 public elementary and high schools. In addition to addressing academic improvement in those schools, it involves seeking corporate support for facilities improvements, feeding programs, and health programs for public school students. The program is faculty-led but also involves students, due to the national NSTP (National Service Training Program) requirement of volunteerism for all college students.⁶³

These programs offer strong examples of regional responsiveness for institutions in Indonesia that are transitioning from teacher preparation to a comprehensive focus. The HELM Deliverable 4 report identified the need for applied learning opportunities in such institutions. Historic strengths in the K-12 teaching arena should provide a strong platform for the development of programs such as the ones outlined above.

The **Mapúa Institute of Technology** is the largest engineering institution in the Philippines. Founded in 1925, it offers 15 undergraduate and 18 graduate programs in engineering, as well as programs in related areas of business, design, and health. Current enrollment is around 16,000 students. Its accreditation is through the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA), like the University of Santo Tomás, rather than PAASCU, which accredits De la Salle University and Ateneo de Manila.⁶⁴ Within PACUCOA, it has one engineering program ranked at the highest level (Level IV), and several ranked at Level III. It has eight COD programs, but no COE programs. They also work closely with the Philippine government to develop new technologies, particularly in the area of robotics.

MIT has a narrower academic focus than the other institutions in this report; however, it carries the distinction of earning the first ABET accreditation in the entire East Asia region.⁶⁵ Within Indonesia, only Institut Teknologi Bandung (ITB) carries this distinction.⁶⁶ While some in the Philippines say that the national accreditation system is equally rigorous, the ABET standard is often cited as an aspiration in Indonesian institutions, and demonstrates that the academic unit has sound integration of the four core HELM areas. The long-term planning and strategy of MIT's accomplishment is evident in their institutional documents, and should prove to be a useful model of transferable planning skills for the Indonesian context. In the area of outcomes-based education, Mapúa has been cited as a national leader, and has conducted workshops across the country; thus they would be well equipped to deliver HELM trainings in Jakarta or in Manila.

⁶³ One complicating factor for HELM is that Ateneo de Manila does not have undergraduate programs in teacher education; they have a graduate Department of Education, but the students who participate in these volunteer programs are not, in many cases, future teachers themselves.

⁶⁴ Within the private sector there are four accreditation agencies: Philippine Accrediting Association of Schools, Colleges and Universities (PAASCU), Philippine Association of Colleges and Universities' Commission on Accreditation (PACUCOA), and the Association of Christian Schools, Colleges and Universities Accrediting Association Inc. (ACSCU-AAI), all of which operate under the umbrella of the Federation of Accrediting Agencies of the Philippines (FAAP), within CHED.

⁶⁵ The Accreditation Board of Engineering and Technology (ABET) is the standard of accreditation for US programs of Engineering, and requires evidence of rigorous planning and attention to student learning outcomes. For a description of the ABET achievement see <http://www.mapua.edu.ph/News/Default.aspx?newsID=611&Month=11&Year=2011>.

⁶⁶ Two universities in India also carry ABET accreditation; thus only four universities in all of Asia have earned this accreditation.

The greatest contribution that this institution can offer to HELM participants is the focus on quality assurance that is the key component of ABET accreditation. The kinds of changes that had to be implemented at Mapúa will be a useful model for fostering a stronger collection and use of assessment data in Indonesian universities, noted as a lack in the Deliverable 4 report.

The **University of Santo Tomás**, in Manila, is the oldest university in the Philippines, founded in 1611. A private Catholic university with about 31,000 undergraduates and 10,000 graduate students, it is ranked 148th among Asian universities, and #4 among Philippine institutions, according to the 2012 QS World University Rankings. (It ranks in the category of 601+ globally, in the QS rankings.) It is organized into 14 academic units (college, faculty, conservatory, or institute), including Arts and Letters, Engineering, Education, Science, and Business, as well as several healthcare-oriented colleges. It has also organized its research agenda within three Clusters and three Centers. It is accredited through PACUCOA, and its College of Science is one of the few programs in the Philippines to achieve their highest ranking, Level IV.⁶⁷

In addition to housing five CODs and eight COEs within traditional departmental boundaries, it has established several interdisciplinary centers that focus on addressing the problems of the region. Most notable are two institutes: the Center for Conservation of Cultural Property and the Environment in the Tropics,⁶⁸ and the Integrated Development Program focused on the Aeta ethnic minority.⁶⁹

The postgraduate-based Center for Conservation of Cultural Property and Environment in the Tropics, involving both science and cultural studies, is housed within the Museum of Arts and Sciences, and serves as a way of focusing the university's mission on "the protection, preservation and promotion of cultural property in the country." They work with communities who request their services, in establishing museums and heritage sites that will both preserve the culture and attract tourism. This program brings new revenue to the campus because participating communities pay for the 6-month collaboration, as well as establishes an innovative Masters program in Cultural Heritage Studies. Postgraduate research clusters also include Poverty Alleviation Studies, globalization studies, migration/diaspora studies, gender studies, etc.⁷⁰

The Integrated Development Program with the Aeta community involves more outreach than academics; it involves engaged research from four academic programs, addressing multiple facets of community needs: the Community Based Health Program, the Sustainable Upland Agriculture Program, the Organizing and Empowerment program (for sustainable development and protection of ancestral domains), and the Justice and Peace Advocacy Program, as well as the administrative Project Management and Operational Supports Program in the Office for Community Development. One innovative feature was their use of two-way radio communication as a platform for distance-learning.

⁶⁷ Many of its programs, however, are accredited at Level II. See <http://www.paascu.org.ph/resources-dir8%20t-z%20%20ust.html>.

⁶⁸ <http://www.ust.edu.ph/index.php/research-centers/738-center-for-conservation-of-cultural-property-and-environment-in-the-tropics.html> .

⁶⁹ <http://www.ust.edu.ph/index.php/aeta-integrated-development-program.html>.

⁷⁰ <http://graduateschool.ust.edu.ph/OGR/MULTI%20DISCIP%20Research%20Topics%202011.pdf>.

In particular the Center for Conservation of Cultural Property and Environment in the Tropics program addresses needs that were directly identified in the Deliverable 4 report, in terms of identifying new revenue streams and cooperating effectively with industry. In addition, this program showed proficiency in addressing the question of connecting quality assurance to research and community service, also identified as an area of need in the Deliverable 4 report.

De la Salle University was founded as a private college in 1911, becoming a comprehensive university in 1975. Located in Manila, it is identified as an urban university, with the large majority of its students coming from Manila. It has about 13,000 undergraduates and an array of graduate programs. It has the country's only engineering programs accredited at Level IV by PAASCU. It also had institutional accreditation from PAASCU at the highest level (Level IV), making it one of only two universities to hold that institution-wide distinction (the other being Ateneo de Manila; however, while Ateneo's accreditation was renewed in 2011, De la Salle's has lapsed). It has six COE programs and six COD programs.

As regards the HELM program, its strongest initiative is its well-developed practicum program, operated by their External Engagement Office. According to the university website, "Confining one's self to learning within the four walls of the University creates a superficial view of the real world."⁷¹ De la Salle students are all offered the opportunity to participate in 100+ -hour on-the-job training programs, often combined with an undergraduate thesis, and thoroughly assessed not only via student and employer surveys, but also tracer studies.⁷² This opportunity has the dual advantages of maintaining alignment between the curriculum and industry needs, and giving students a competitive advantage in the workplace following graduation. While Indonesian universities also implement internships, the HELM assessment indicated that they are often not well monitored, impact is not tracked, and often the internships become a basis for Skripsi research rather than productive on-the-job training. The De la Salle model may offer frameworks for improvement for the Indonesian partners. De la Salle has the added advantage of a fully implemented leadership and management development program for rising leaders, from senior leadership down to chairs and program directors.⁷³

In addition, De la Salle has a non-metropolitan campus, Dasmariñas, located in Cavite, one hour south of Manila.⁷⁴ This area has experienced rapid industrialization and economic growth, and according to De la Salle leaders, the Dasma campus has been a key driver. Their two flagship programs are the original medical school there which does a great deal of community outreach, and a program in Cavite Studies involving sociological heritage and preservation studies, a museum, and ties to the rising tourism industry.⁷⁵

⁷¹ <http://www.dlsu.edu.ph/students/>

⁷² The tracer studies, implemented in 2009, survey graduates about their initial job search, starting salary, and impact of their university curriculum on their early job performance; employers are also surveyed for satisfaction.

⁷³ This program is run by retired educator Robert (Bobby) Borromeo, who can participate in the host institution visit and who would also be a valuable resource for future HELM trainings held in Indonesia. Deans at De la Salle are not elected, but rather are appointed through a consultative process with the teaching staff.

⁷⁴ A visit or overnight stay at Cavite could be an element of the host university workshop.

⁷⁵ One further program of interest at De la Salle is their new Masters in Manufacturing (Engineering) and Management, the only program of its kind in the Philippines.

Indonesian participants in HELM training will benefit from the leadership/management training programs, identified as lacking during the May assessment visits by HELM staff. In addition, the programs outlined above offer the type of applied learning program that needs greater development in many Indonesian institutions.

C. THAILAND: OVERVIEW OF HIGHER EDUCATION CONTEXT

The public higher education system in Thailand is comprised of 66 selective-admission universities, two open universities, 15 autonomous universities, and 19 two-year community colleges. In addition there are 39 private universities, 25 private colleges, and seven other private institutions.⁷⁶ The country has two universities in the QS top 300 and five others in the top 600. Enrollment in private universities is relatively low (18% of tertiary enrollment) and the private institutions tend to work in specialty areas overlooked by the public universities.⁷⁷ The Thai National Education Act (1999) was the major legislation that provided the mechanism for establishing the 15 autonomous universities. All public universities that have been established since 1990 are autonomous. The degree of independence in autonomous universities varies by region, but Thai universities in general have more flexibility than in most Asian countries, including most Indonesian universities. Their employees are not civil servants, thus giving the institution control over the quality of the teaching staff, and universities can establish their own curriculum, determine student tuition and fees, and control enrollments. The way that various Thai universities have adapted and focused their programs under their own curricular and financial control will be instructive for all Indonesian universities. The investments made by these universities are varied, but the investments support the academic enterprise (in contrast to some investments made by Indonesian universities).⁷⁸

In October 2009, the Office of Higher Education Commission (OHEC), Ministry of Education, selected nine flagship public universities to upgrade them to national research universities: Chulalongkorn University, Thammasat University, Mahidol University, Kasetsart University, King Mongkut's University of Technology Thonburi, Chiang Mai University, Khon Kaen University, Suranaree University of Technology, and Prince of Songkla University.⁷⁹

The Post Graduate Education and Research Development Office⁸⁰ (an independent body under the OHEC) has established eight Centers of Excellence: chemistry, environmental health and toxicology; hazardous substance management, energy technology and environment, agricultural biotechnology, postharvest technology, mathematics, physics. For each Center of Excellence there is a list of collaborating universities and, in seven instances, a lead university. These centers are knowledge hubs for all universities involved in the research and it encourages Thai universities to work together on important fundamental problems faced by country. Indonesians could learn from the collaboration between national universities and regional universities on

⁷⁶ World Bank, "Putting Higher Education to Work," 174.

⁷⁷ World Bank, "Putting Higher Education to Work," 153.

⁷⁸ For instance, Institute Pertanian Bogor (IPB) owns most of the shopping centers in Bogor. They earn money for the university but do not directly enhance the academic enterprise.

⁷⁹ Thammasat University is not reviewed here because its website included very little information about research and service activities

⁸⁰ www.perdo.or.th

common problems, because of the type of specialization and shared responsibility that takes place among the universities to assure that the topic is covered completely.

The university system in Thailand accounts for a large percentage of its research and development expenditures. Thailand's relatively high rank in the competitiveness and innovation index indicate that the HEIs are doing a good job in making sure that the research has application to business and industry (an area mentioned as lacking in studies of Indonesian HE). In addition, Thailand seems to be matching the skills needed by employers (witnessed by the low unemployment rate among graduates). The solid collaborative linkages with the private sector and strong commitment to public service developed by the Thai universities listed below make these Universities strong candidates to host Indonesian action researchers through the HELM project. Mahidol University and King Mongkut's University of Technology are described in more detail, below, since they were the two institutions visited during the current review, and are likely host universities for the study tours planned for the fall semester of 2012.

D. THAILAND: EXEMPLAR PROGRAMS AND INSTITUTIONAL CONTEXT

Chulalongkorn University (CU),⁸¹ in Bangkok, is Thailand's oldest university (established in 1917) and is regarded as the premier university in the country. It is an autonomous university with 25,000 undergraduate students, 11,000 MS students, and 2,500 PhD students in 22 different faculties/colleges (including six faculties in health sciences). CU calls itself the "Pillar of the Kingdom," and part of this identity focuses explicitly on regional responsiveness: "by participating in developing better teaching practices, researching techniques, and academic curriculums, the university hopes to produce better human resources to cater to the needs of the country, and to discover new means of solving societal problems through researches." CU is ranked 171 in the QS ranking for 2010; it is ranked 43rd in Asia and 1st among the Thai universities listed.

There are 18 Centers of Excellence across the fields of social sciences, technology, and laboratory sciences, and 10 research institutes (including the Energy Research Institute, Aquatic Research Institute, Environment Research Institute, Institute of Thai Studies, and the Institute of Health) and multiple research centers within the faculties. They are particularly strong in engineering and the social and managerial sciences.

Despite being the highest ranked university in Thailand (from the QS ranking), CU is not recommended for a site visit by the Indonesian universities. It has strong fundamental sciences and its students are high achievers. However, CU was originally endowed with a huge amount of land in downtown Bangkok, most of which has been developed into office complexes, hotels, and other facilities that generate a huge amount of money for CU. This large income seems to allow CU to chart its own course and provide programs that rely less on external collaborations and keen financial management. The Indonesian HEIs will not relate to this situation and the academic programs generally involve less business and community involvement.

⁸¹ www.chula.ac.th

Mahidol University (MU),⁸² in Bangkok, was founded in 1969 as an expansion of the University of Medical Sciences. Designated as autonomous in 2007, it has three campuses and 17 faculties (including nine in health sciences) and seven interdisciplinary research institutes. Their mission is to “excel in health, sciences, arts, and innovation with integrity for the betterment of Thai society and the benefit of mankind.” This mission manifests itself through the university’s guiding principle (from RHR Prince Mahidol: “true success is not in the learning but in its application to the benefit of mankind”). The university currently has over 18,000 undergraduate students and 8,000 post graduate students, and is ranked 228 in the QS ranking for 2010 (38th in Asia, and 2nd among the Thai universities listed).

Mahidol University is best known in the medical and life sciences. They own and manage five different hospitals and have extensive medical education programs that focus on meeting community needs. Research centers or institutes at MU that have noteworthy engagement with the Thai government, Thai private sector, or international universities include the National Institute for Child and Family Development, Institute for Innovative Learning, Institute for Nutrition, Institute of Molecular Biosciences (IMB), and the Institute for Population and Social Research. For instance, since the late 1980s the Rubber Science and Technology Group within the IMB has worked with students, industry, and the government on ways to use natural rubber as a hydrocarbon resource. MU boasts Thai Centers of Excellence in three fields: Chemistry, Environmental Health and Toxicology, and Mathematics.

The Faculty of Tropical Medicine has developed the Mahidol-Aventis tetravalent DEN vaccine and they are in the process with clinical trials (Aventis is owned by Sanofi, a French pharmaceutical company). Results suggest that pre-existing dengue antibodies introduced by the vaccine diminish dengue illness and use of the vaccine in dengue endemic area is safe. This is a tremendous accomplishment and it has great ramifications on community health and income generation for Mahidol. The Faculty of Tropical Medicine is also working on vaccines for Japanese encephalitis and rabies. They offer many training courses on tropical pediatrics and control of tropical diseases. Students in the Faculty are able to work on research and service projects stemming from these activities. Indonesian administrators would be able to learn a great deal about managing research, students, and service (the hospitals and other outreach activities) using financial resources generated in many ways. MU has been able to use its strength in medical research and public service (hospitals) to provide a comprehensive package of activities that involve all HELM core areas: leadership, quality assurance, financial management, and external stakeholders. There are many Indonesian universities that have or are contemplating the addition of hospitals to their assets. MU provides an excellent example of hospitals and clinics that are fully integrated into the teaching, research, and service role of the university. In addition, the Deliverable 4 report states that Indonesian universities need to draw on the knowledge of HEIs with a strong commitment to community service work and established centers for community outreach. They can certainly see this work being done successfully at MU.

A Mahidol University avian researcher from the Faculty of Science has dedicated her research to the preservation of Thailand’s endangered exotic hornbills. She has received the Chevron Conservation Award in 2006 and the Rolex Award for Enterprises the same year for her dedication to hornbill preservation in the south of Thailand. Thirty-one types of hornbills are

⁸² www.mahidol.ac.th

found in Asia, with thirteen types in Thailand. Three types found in Thailand are endangered species. The hornbill plays an important economic role by dispersing seeds of wild plants and helping maintain the ecological system in Asia's tropical forests. The main threats to the hornbill are hunters and deforestation, so the project has worked on promoting eco-tourism and local economic activities that will provide an incentive for local residents to preserve the species. There is a hornbill foundation that receives money from many different sources and supports research on hornbills for conservation. The research helped reverse the decline of hornbills by encouraging economic activity of local residents. The project has involved students in many phases of research and service activities, thus serving as a useful model for Indonesian universities. This type of work can be a model for HE in Indonesia, which also has significant pressure from within and outside to protect its ecosystems and environment; this is particularly relevant for regions outside Java. This program would be excellent for Indonesian visitors to understand how universities can lead in finding solutions for problems faced by the communities, the country and its citizens.

The Faculty of Public Health has an “Area-based and Integrative Research for Well-Being and Sustainable Development of the Society” project that uses a trans-disciplinary approach for health promotion and improvement in the quality of life of people in the Thachin-Maeklong River Basin. A major goal is aimed toward strengthening the community by encouraging the development of a knowledge-based society which would help foster the necessary environment for continuous learning. The project promotes collaborative networking among the community, governmental agencies, and institute of higher education so that sufficient knowledge-sharing is in place that promotes health awareness. This initiative provides the basis of rural-to-innovation by identifying and improving upon local technology to foster sustainable development of the community. It integrates students into the project through research and service activities. Again, this broad-based collaboration among many groups to help find regionally appropriate solutions is instructive. The project also has garnered funds from many different sources, and the leadership of the project directors has been instrumental.

The Faculty of Medical Technology has developed and manages an “External Quality Assurance Program” for laboratories since 1985. This was the first quality assurance for medical laboratories in Thailand which aims to evaluate and improve the quality of the laboratories from Thailand and Asian Countries. Currently, the Faculty of Medical Technology provides eight schemes of EQA for more than 1,500 members from all over the country. The EQA programs include Clinical Chemistry, Clinical Microscopy, Clinical Microbiology, and Clinical Parasitology. This is an interesting way for Indonesians to learn ways to develop capacity in quality assurance and use it to financially support the program and other operations of the Faculty. This would be a unique opportunity for Indonesian visitors to see how the quality assurance systems that are so important to their success can be extended to the private sector in a way that provides funds for the university and improves quality assurance in the private sector.

King Mongkut’s University of Technology (KMUTT),⁸³ in the city of Thonburi, was originally established as Thonburi Technical College (in 1960), then became an institute under the Ministry of University Affairs in 1986, and finally became an autonomous university, with three campuses, in 1998. The main campus houses three faculties (Engineering, Industrial Education

⁸³ www2.kmutt.ac.th

and Technology, and Sciences), six schools, and four interdisciplinary research institutes. KMUTT's vision reflects the "knowledge hub" principles outlined above.⁸⁴ It states the institution's intention is "to play a leading role in research study, development, and selection of technology appropriate to Thai economic and social contexts, and in helping the Thai community to be peaceful and to have competitive capability." KMUTT is ranked within the 600s in the QS ranking for 2010, in the 160s among Asian universities, and #6 among the ranked Thai universities.

It has many academically strong programs, including energy and environment, biotechnology and food, materials science, and materials engineering. One of its 6+1 Flagship Achievements goals is to be a "university that conducts research in science, technology, and other related sciences in order to adopt new knowledge to support teaching and learning activities, academic services, and develop a potential for competitiveness of Thailand."

Engaged research programs with external constituents that are particularly strong include the Maintenance Technology Center, Transportation and Transport Development and Research Center, Thermal Engineering Center, and the Pilot Plant Development and Training Institute. The latter's work on waste utilization and management is particularly noteworthy. KMUTT leads one Thai Center of Excellence, in Energy Technology and the Environment. It has the first and only university-run research park in Thailand. These programs provide focus for KMUTT and help it establish its reputation as not only a premier research university, but also one that takes its role as a "knowledge hub" seriously by continuously engaging the private and government sector.

KMUTT is one of nine designated national research universities. This designation is based on their research productivity (they have the highest number of international publications per faculty member in Thailand) and it gives them more access to government research monies. They have done a good job of using their access to government grants to develop programs that serve businesses and generate income for operating expenses. They want to perform research that creates economic and social value, thus interesting to HELM in the area of regional responsiveness.

The Institute of Science and Technological Research and Services (ISTRS) has 15 different centers under its umbrella. These centers offer specialized technical services to businesses and other organizations. They help link the research that is performed at KMUTT with the needs of the private sector and local government. Many of their facilities came from Thai government or donor grant programs, but they charge for their services, so they have income streams generated from their collaborations with businesses (and government at various levels) to pay for their staff and other operating expenses. These centers offer a full package of items that can be used by industry: consulting, workshops, training, pilot processing, technical assistance, and even joint ventures. The close link between research and commercialization was demonstrated by the fact that the university's head of intellectual property was present with the HELM consultant during

⁸⁴ As detailed above, universities that do not rank highly in the QS World University Rankings can nonetheless move themselves up the value chain within their country and region—and then globally—by becoming regionally engaged knowledge hubs for research, industry, and general economic development. This is a useful model for Indonesian universities that do not already function in this capacity.

the entire visit. She was able to lend insights into how much these activities meant to the university and various ways that KMUTT was able to capitalize on income streams from the innovations, and she would be a good candidate for leading a session for visiting Indonesian HELM participants.

The ISTRS has core capacities in energy, engineering technology, information and communication technology, and biotechnology. They have five main clusters: energy and the environment; biotechnology and food; manufacturing and automobiles; material sciences, and computational sciences. These competencies are integrated into the undergraduate and graduate programs through the integrated learning program (a cooperative education program), the industry-linked Ph.D. theses, and the M.S. level engineering practice programs. In the M.S. practice programs, students take one year of courses, spend six months working on-site with a company, and then return to KMUTT for their research project that is jointly mentored by a faculty member and a company representative. The university promotes work-integrated learning and research-based curriculum in all of their engineering disciplines. The Deliverable 4 report specifically mentions the need for Indonesian universities to provide more and better applied learning opportunities. KMUTT has many examples of successful applied learning opportunities at the undergraduate and graduate levels.

KMUTT has a number of facilities that house pilot factories that are used for research, technical assistance, training, and even joint-venture processing. These factories help integrate the teaching, research, and service role of the university in a very tangible, visible way. They have pilot industries in bio-ethanol, feed, food and nutra-ceuticals (integrating necessary human nutrients directly into products through processing), open-floor manufacturing, and biopharmaceuticals. The biopharmaceutical manufacturing facility will be approved for GMP processing for human drug trials and small-scale commercial production. It is constructed so that it can pass U.S. Food and Drug inspections so that the drugs can be sold in the U.S. and throughout the world. It is the first such biopharmaceutical manufacturing facility in Thailand. This facility was funded through a number of Thai government grants (it was only recently completed) but it will generate funds to support its activities.

KMUTT has other core capabilities are in policy studies, humanities, and the learning process, but it is within the engineering disciplines where the HELM participants can see how the university collaborates with the private sector and government to financially support a huge research and service mission. The Indonesian participants will also be able to see how the vision and leadership of various individuals throughout the university continue to adapt and transform the activities to meet the needs of their community and the greater society.

Prince of Songkla University (PSU),⁸⁵ in the city of Songkla, was established in 1967 and it is the leading university in Southern Thailand. It has five campuses with 28 faculties (including five in health sciences) and 34,000 students. Its vision is to be “a leading research-based university in Asia, fulfilling its inspiration of producing internationally recognized graduates, actively engaging in providing services to community, taking a leading role in the preservation and enhancement of national heritage in arts and culture.” It focuses on regional issues and has a goal to “create a wealth of academic resources which is essential for a sustainable development to reach the status of a leading research-intensive university; and to engage in transferring of

⁸⁵ www.psu.ac.th

knowledge and technology to community in order to strengthen and raise the community potential, and to increase the competitiveness of the country in the international level.” PSU is ranked within the 600s in the QS ranking for 2010, 145th among Asian universities, and 5th among the Thai universities in the list.

PSU is known for research on palm oil and rubber, and also its collaboration with companies in Southern Thailand. Examples of engaged research are the Oil Palm Research Center, Center of Excellence on Palm Oil Products and Technology, Center of Excellence on Natural Rubber Technology, Center of Excellence for Biodiversity of Peninsular Thailand, Nutraceutical and Functional Food Research and Development Center, Natural Products Research Center, and Molecular Pharmaceuticals Unit. Most of these centers are interdisciplinary, allowing them to tackle the unique problems faced by the various industries.

PSU is a regional university that has gained an international ranking by focusing on teaching, research, and service, all of which is appropriate for its local businesses and government. It would be a good candidate as a host university for the fall 2012 delegation, except for its distance from Bangkok. The role that faculty leaders have played in PSU’s focus on tropical agriculture and food sciences, while integrating biotechnology, would be very instructive to the Indonesian visitors. It is very important for second tier Indonesian universities to see a successful balance between meeting the scholarly challenge of being a world-class university, while addressing local problems (and adapting activities so they are funded by local entities). This did not happen overnight at PSU, so understanding the struggles and trade-offs that came from that process could be beneficial for many Indonesian participants. Perhaps administrators from PSU would be good candidates for leading a workshop for HELM or DIKTI within Indonesia.

Khon Kaen University (KKU),⁸⁶ in Khon Kaen, was established in 1966 and is the leading university in Northeast Thailand. It has 17 faculties, involving 24,000 undergraduate and 10,700 post-graduate students. KKU’s vision is to be “a leading university in the ASEAN, and is a learning-based, research-based, quality-based, and community and national development-based university with good governance.” KKU is ranked within the 600s in the QS ranking for 2010, in the 170s among Asian universities, and 7th among the Thai universities.

KKU has many multidisciplinary research centers that focus on specific topics of interest to Northeast Thailand. Centers include the Agricultural Machinery and Post-Harvest Technology Center, Applied Taxonomy Center, Center for Research and Development on Herbal Health, Center for Research on Mekong Delta Regional Tourism, Center for Geo-informatics for the Development of Northeast Thailand, Research and Diagnostic Center for Emerging Infectious Diseases, and the Tropical Feed Resources Research and Development Center. The transferable lessons here for Indonesian universities would have to do with becoming a regional knowledge hub, by focusing research, teaching, and service directly towards the needs of one’s own particular economic/natural/social context. The developers of these programs would be able to guide the development of individual projects by Indonesian participants in HELM site visits, in linking global research practices to local needs and regional responsiveness.

⁸⁶ www.kku.ac.th

KKU is another regional university that has been relatively successful in balancing basic research (which tends to generate more academic acclaim and a higher SQ ranking) with regional responsiveness. This has been promoted at KKU and other Thai universities, such as PSU, through the funding provided by the central Thai government. Yet these programs also tap into numerous other funding sources (including multilateral donors for the Mekong delta projects) that require meaningful objectives, detailed project indicators, monitoring schemes, and rigorous outcomes assessment. The Indonesian visitors can see how program leaders find ways to have financially viable programs within the constraints upheld by various local, regional, national, and international collaborators who often provide the necessary funding.

Kasetsart University, (KU), in Bangkok, (www.ku.ac.th) was established in 1943. KU is the leading agricultural university in Thailand. It has 28 faculties/colleges, four campuses (there is some overlap among faculties because of the different campuses), and 58,000 students. Its vision is to be “a university known internationally for academic excellence and work of world standard ... a prime mover in mustering intellectual resources to help the nation achieve sustainable development and negotiating power in the world community.” Among its tasks, the “university manages its resources efficiently, joins in the development of the community, and is responsible to society so as to serve as an important instrument in ensuring the well-being and security of the country.” KU is ranked within the 600s in the QS ranking for 2010, in the 190s among Asian institutions, and 7th among Thai universities.

KU leads the Thai Center of Excellence in Agricultural Biotechnology and is a contributor (there is no leader) for Postharvest Technology. Other noteworthy interdisciplinary Institutes and Centers include the Andaman Coastal Research and Development Research Station, the Center of Plant Genetic Diversity, the Rajanagarinda Institute of Linguistics and Cultural Studies, the Agro-Ecological System Research and Development Institute, the Kasetsart University Food Innovation Research and Service in Thailand. There are many research centers and laboratories in the engineering disciplines, including the Information Technology Innovation Institute, the Energy and Environmental Engineering Center, and the Soil and Foundation Research Center. KU may have exceptional programs that could help Indonesian participants see the four core HELM elements in practice, but this was not clear from the materials reviewed. It is not an autonomous university and it is not clear when it will become autonomous. This might allow it to concentrate on more fundamental issues that require less collaboration with external stakeholders. It may be that KU would be a useful site for a HELM workshop.

Suranaree University of Technology (SUT),⁸⁷ in Nakhon Ratchasima, is an autonomous university that was founded in 1990. It has five academic institutes (Agricultural Technology, Engineering, Medicine, Science, and Social Technology) and 11,000 students (over 10,000 undergraduate students; the rest are postgraduate students). SUT’s vision is to be “a learning organization with academic excellence in science and technology, which creates knowledge, moral ethos, and wisdom for the development of a happy and sustainable society.” One of its commitments is to be a “science and technology-oriented university, which aims at researching, adapting, transferring, and developing technology for the sustainable development of society.”

⁸⁷ www.sut.ac.th

SUT is an active proponent of cooperative education and collaborative research. Its Research Clusters include the Agro-Industry and Protein Technology Research Cluster, Advanced Materials Research Cluster, and Alternative Energy Development and Advanced Energy Conservation Research Cluster. It also has a Business Incubator and a One Instructor-One Product Program (where instructors strive to develop a product as part of their research).

The collaborations at SUT would be similar in scope to those at KMUTT; they both are focused on engineering and technology. It was not visited by the HELM consultant because of its distance from Bangkok. KMUTT is a better place for Indonesians to see a world-class university, since, as mentioned above, with a significant number of external collaborations that involve funding from multiple sources. However, SUT might be a target that is more reachable for HELM universities because of its proximity to the capital and its need to collaborate with local and regional partners. However the success of SUT programs was difficult to judge by simply visiting websites. SUT does not have the reputation of many other Thai universities (it is not listed in the QS ranking), yet its publication record per faculty member is quite strong (second only to KMUTT in Thailand), which is increasingly important in Indonesia. It might make a good candidate for a future HELM visit, but more information would be needed before a decision on a future visit is finalized.

Rajamangala University of Technology (RUT), in Thanyaburi, is actually a group of nine universities that began as an institute in 1975 and became a university in 2005. This system may be of interest to Indonesian polytechnics, since they focus on undergraduate education and very applied programs. Their vision is to be “a university of science and technology offering classes that produce professional at international standards.” Aligned with the vision of HE as an economic driver, its mission statement includes the intention to “undertake research and facilitate invention and innovation based on science and technology of which the results can be transferred to increase the national productivity ... and provide academic services to promote creation of jobs and competitive potential.” It has an Institute of Research and Development and its academic programs include Engineering, Science and Technology; Mass Communication Technology, and Industrial Textiles and Fashion Design.

The strong emphasis of RUT on professional training and education could provide useful insights for Indonesian polytechnics and other regional universities that focus on technology training. It is suggested that a visit to one or two RUT locations be conducted during the fall 2012 study tours, after the HELM institutions visit other Thai HEIs, in order to determine its appropriateness as a future host site for HELM activities.

E. MALAYSIA: OVERVIEW OF HIGHER EDUCATION CONTEXT

Malaysia has 20 public universities and a total of 487 private institutions (20 universities, 21 university colleges, 398 colleges, and five foreign branch campuses/open universities/virtual universities).⁸⁸ In addition, it has 24 polytechnics and 37 community colleges. The country has two universities in the QS top 300 and four others in the top 500. Private universities are important because of the limited number of available placements at public universities; privates

⁸⁸ World Bank, “Putting Higher Education to Work,” 174.

account for 41% of tertiary enrollment. As in Thailand, the privates tend to work in specialty areas overlooked by the public universities.⁸⁹

The Malaysian Education Act of 1996 and the National Council on Higher Education Act of 1996 were among four pieces of legislation that set the stage for decentralization of public universities in Malaysia, concurrently with similar developments throughout Southeast Asia.⁹⁰ These four laws established a national council on HE policy; enabled public universities to modernize management; established a student loan body; and established a national accreditation board.⁹¹ Autonomous universities in Malaysia, though, are less independent than are those in Philippines and Thailand; their employees are still civil servants, most of the curriculum is controlled by the Ministry of Higher Education (MOHE), and individual institutions do not control student enrollment or fees.

The MOHE has designated four research universities (Universiti Malaya, Universiti Sains Malaysia, Universiti Kebangsaan Malaysia, and Universiti Putra Malaysia) as top-tier HEIs. They went further and selected Universiti Sains Malaysia as the “apex” university. Yet Malaysia is expecting more from its research universities these days. It has recently released an impressive document, the Malaysian National Higher Education Strategic Plan (August 2007), which serves as a road-map for getting Malaysian universities to serve a more important role stimulating economic development in the country⁹². The Plan has nine recommendations to move Malaysia from a resource-based economy to an innovation-based economy via a National Innovation Model. The Plan includes 12 pillars, 45 strategies, 113 action plans, and 105 key performance indicators.

The Malaysian National Higher Education Strategic Plan provides financial incentives for the universities to link all of their activities to very specific actions and indicators. Generally, Malaysian universities appear to have less external collaborations than Thai universities, but their assessment procedures are more visible and tied to the national policies present in the Strategic Plan. This would set forth a useful model for Indonesian HEIs that are still developing in this area, as indicated in the Deliverable 4 report.

Malaysian universities seem to do a good job of preparing their graduates for an innovation-based economy. The previous section of the report the country has a high rank in competitiveness and innovation indices. University research and development is a key ingredient to this result and the four designated research universities in Malaysia benefit a great deal from significant government funding. The country is an excellent candidate to host a delegation of action researchers from HELM in the future. However, since its universities will not be visited during the first year, the initial exploratory visit has not yet taken place; thus, institutions are not yet reviewed with the level of detail that was possible for Thailand and Philippines.

⁸⁹ World Bank, “Putting Higher Education to Work,” 153.

⁹⁰ Raza 9.

⁹¹ Altbach and Salmi. “The Road to Academic Excellence,” 133.

⁹² [http://www.mohe.gov.my/portal/images/utama/penerbitan/MOHE\(4-1-11\)%20211111.pdf](http://www.mohe.gov.my/portal/images/utama/penerbitan/MOHE(4-1-11)%20211111.pdf)

F. MALAYSIA: EXEMPLAR PROGRAMS AND INSTITUTIONAL CONTEXT

Universiti Sains Malaysia, (USM), Penang, Malaysia (www.usm.my): is the second oldest university in Malaysia (formed in 1969) and is one of four designated research universities in Malaysia. It is autonomous. Designated as Malaysia's "apex university," USM is ranked #335 in the QS global ranking for 2010, 63rd among Asian universities, and 3rd among the listed Malaysian universities. It has three campuses, 23 schools (faculties) (including four in health sciences), and 20,000 students. Its mission is to be "a pioneering, trans-disciplinary research intensive university that empowers future talents and enables the bottom billions to transform their socio-economic well-being."⁹³

USM has ten Research Clusters: Cost Effective and High Efficient Flexible Nano Solar Cell Technology; Drug Use Disorders, HIV/AIDS and Tuberculosis: Towards a Personalized Medicine Approach; Green Composite: Inspiring Sustainable Alternative for Cost Effective Materials; Membrane Science and Technology Research Cluster; Molecular Approaches to Fundamental Studies on Biomarkers and Development of Sustainable Rapid Nano-Bio diagnostics to Enteric Disease for Low Resource Settings; Neurobiology of Learning and Memory: The Impact of Neurocognitive Decline and Cognitive Bias on the Development of the Embedded Neuroplastic Curriculum; Sustainable Energy Production Towards Low Carbon Energy; Tourism Research Cluster; Tropical Tuberculosis : Delineating Host-Environment - Pathogen Interactions; and Urban Water Cycle Processes, Management and Societal Interactions: Crossing from Crisis to Sustainability. It also has 16 Centers of Excellence in research.

Universiti Putra Malaysia (UPM),⁹⁴ in Kuala Lumpur, is the leading agricultural university in Malaysia. It was formed in 1971, is now autonomous, and is one of the four designated research universities in Malaysia. It has two campuses, 16 faculties (including a Faculty of Medicine and Health Sciences), and over 25,000 students (15,350 undergraduates and 10,266 post- graduates). Its vision is to "make meaningful contributions toward wealth creation, nation building, and university human advancement through the exploration and dissemination of knowledge" and its goals include to "elevate achievements in research and innovation to international levels and intensify community involvement for the generation and sharing of knowledge." UPM is ranked 358 in the QS ranking for 2010, 76th among Asian universities and 5th among Malaysian institutions.

UPM has six research clusters: Agriculture, Food, Forestry and Environment, Health, Social Science, and Science, Technology and Engineering. There are six specific research areas within these clusters: Food Crops, Plantation Crops, Animal and Aquaculture Production, Bio-health, Value Added Bio Products, Alternative Renewable Energy, Tropical Forest Products, and Halal Products.

⁹³ The term "transdisciplinary" refers to research that has broken out of the 20th-century discipline-specific silos that have traditionally limited universities' responsiveness to the complex and multi-disciplinary needs of the surrounding community (national, regional, or global). Transdisciplinarity allows for the envisioning and development of comprehensive solutions to constituents' complex problems.

⁹⁴ www.upm.edu.my

UPM appears to have stronger external relations than the other three Malaysian universities outlined in this report. This is likely due to its agricultural focus and the importance of agriculture (particularly plantation agriculture) to the country. Many of its agricultural research projects would be quite similar to those in Indonesia, so the context would be more familiar for those Indonesians from agricultural disciplines. Malaysian models may provide insight into becoming more regionally responsive or increasing collaborative with business and industry. Indonesian visitors would also learn how the central quality assurance program from the Malaysian National Higher Education Strategic Plan is implemented in various projects at UPM.

Universiti Kebangsaan Malaysia (UKM),⁹⁵ in Bangi, Selangor, was formed in 1970 and is one of the four designated research universities in Malaysia; it is autonomous. It has 13 faculties (including four in health sciences) and 22,300 students (17,500 undergraduate and 5,100 post graduate). UKM's vision states that it "is committed to be ahead of society and time in leading the development of a learned, dynamic and moral society." UKM is ranked 279 in the QS ranking for 2010, 58th among Asian institutions and 2nd among the Malaysian universities. It has two well-known research institutes, the Malaysia Genome Institute and the International Institute of Global Health. Its areas of research have been consolidated (and enhanced) into eight niche areas: Challenges to Nation Building, Sustainable Territorial Development, Renewable Energy, Health and Medical Technology, Climate Change, Nanotechnology and Advanced Materials, Biological Diversity in Biotechnology Development and ICT: Content Informatics.

The nature of the research and collaborations at UKM is again reflective of Malaysia's national focus on more fundamental research and development. The funding from the central government, however, allows UKM to concentrate less on applied research and collaborations with business and industry. HELM universities will not likely be able to rely on the Indonesian government for sufficient resources to follow such a strategy. Nonetheless, because this assessment is based on desk review, it may not be reflective of the current (and future) state of research and service at UKM. It would be helpful if a future exploratory visit by HELM staff is arranged at UKM and other universities around Kuala Lumpur, to see if these conclusions are valid.

Universiti Malaya (UM),⁹⁶ in Kuala Lumpur, was the first university in Malaysia (formed in 1962), and is one of four designated research universities in Malaysia; it is autonomous. It has 12 faculties (two in health sciences) and more than 26,000 students (14,380 undergraduates and 11,638 post graduates). UM's mission is "to advance knowledge and learning through quality research and education for the nation and for humanity." It "intends to undertake teaching and learning, conduct research and services of quality, generate and advance knowledge through continuous improvement efforts for the benefit of all customers." It has Malaysia's highest QS ranking, at #167 in the 2010 listings and 35th among Asian institutions.

UM has eight research clusters: Advanced Engineering and Technology, Advanced Fundamental Research, Biotechnology and Bioproducts, Health and Translational Medicine, Humanities and Ethics, ICET and Computational Sciences, Social and Behavioral Sciences, and Sustainability Science. It also has 72 Research Centers, including Center for Research in International and Comparative Education, Manufacturing Systems Integration, Research Center for Smart Urban

⁹⁵ www.ukm.my

⁹⁶ www.um.edu.my

Development, Center for Natural Products and Drugs, and Center for Poverty and Development Studies.

Universiti Teknologi Malaysia (UTM),⁹⁷ in Johor Bahru, Malaysia was changed from a technical institute to a university in 1975. It has two campuses, 14 faculties and almost 24,000 students (12,955 undergraduates and 10,888 post graduates). UTM's mission is "to be a leader in the development of human capital and innovative technologies that will contribute to the nation's wealth creation." UTM is ranked within the 400s in the QS ranking for 2010, 74th among Asian institutions, and 4th among Malaysian institutions.

One of its strategic thrusts is to "provide leadership and contribution through research and innovation; and contribute to society through community engagement and outreach." It has Research Alliances in Sustainability, Nanotechnology, Infocomm, Energy, Transportation, Water, Cybernetics, Biotechnology, Construction, Materials and Manufacturing, and K-Economy. UTM's specialty is engineering and some of its interesting Research Institutes that look toward external collaboration include Automotive Development Center, Center for Artificial Intelligence and Robotics, Gas Technology Center, Construction Technology and Management Center, and the Composite Center.

UTM has strong ties to business because of its well-respected engineering programs and its history as a technical institute. They have successfully worked with a host of partners in the areas of automotive development, construction, and material sciences. HELM universities could definitely learn how UTM balances the desire to be a world-class university with the need to provide improved technologies that have commercial applications. They have good cooperative education programs with the private sector from which Indonesian participants could learn. The Deliverable 4 report specifically mentions the need for Indonesian universities to provide more and better applied learning opportunities, and clearly UTM is doing this for its engineering students in ways that could provide a useful framework for HELM training.

G. SINGAPORE: OVERVIEW OF HIGHER EDUCATION CONTEXT

In many ways Singapore's higher education system, like its economy, is anomalous among the ASEAN countries. By nearly all measures, it has had greater economic and political stability than its Southeast Asian neighbors, and an evenness of development that has been facilitated by its small size. As mentioned earlier, its real per capita GDP is ten times greater than that of Indonesia, and in 2010 its GDP growth rate was at 14.5% while other SEAMEO countries had growth rates between 6% and 8%. These factors in the tertiary education ecosystem result in a very different network of four globally visible public universities, a small group of private universities with defined specializations, and some of the most closely watched innovations in international higher education partnerships in the world.

All four of the public universities are described as autonomous by Singapore's Ministry of Education.⁹⁸ According to Hena Mukherjee and Poh Kam Wong, in their study of public universities in Singapore and Malaysia, Singapore's "progressive increase in autonomy...has

⁹⁷ www.utm.my

⁹⁸ <http://www.moe.gov.sg/education/post-secondary/>

enabled it to respond to new opportunities more proactively and more nimbly” than can the tertiary education systems of neighboring countries.⁹⁹ Not only are two of the four public universities ranked among the best in the world (National University of Singapore at #28 in the world and #3 in Asia, Nanyang Technological University at #58 globally and #17 in Asia, according to QS University rankings), but they also have adopted many Western structures such as Oxford’s residential college system and the US model of general education breadth for all undergraduates. In addition, two of the most prestigious universities in the US—Duke and Yale—have recently implemented high-visibility partnerships with the National University of Singapore, establishing the Yale-NUS College (“Singapore’s first liberal arts college”) to open in Fall 2013,¹⁰⁰ and the Duke-NUS Graduate Medical School, which opened in 2007 and is currently hailing its breakthrough in antibodies to treat dengue fever.¹⁰¹ Indeed, a recent *Chronicle of Higher Education* article about Singapore’s newest public university (Singapore University of Technology and Design, established in collaboration with the Massachusetts Institute of Technology [MIT] in the U.S.) underscores the country’s emphasis on the role of world-class higher education, calling Singapore “a high-tech city-state that considers a globally competitive work force its key to national survival.”¹⁰²

Another arena in which Singapore does not face as many challenges as its ASEAN neighbors is in the financing of higher education, since it has a strong system of tuition grants as well as student loans. The strong level of funding, and the fact that that funding has not been diffused across a large number of institutions and regions, has given Singapore a strong competitive edge in establishing world-class universities.

In addition to the four public universities, the Ministry of Education website lists 11 private universities and five polytechnics in Singapore. However, the private universities are quite specialized in focus, and will be of less interest to this study. The Polytechnics offer a greater array of transferable models for the HELM project.

However, the number of universities is very small, and the economic context is markedly different from that of the other countries included in this report, including Indonesia. The programs detailed below demonstrate that Singapore agents of change, across the higher education spectrum, would be effective speakers or facilitators for DIKTI or HELM training activities that are to be held in Indonesia. However, the differences mean that Singapore is not the ideal choice as a training destination for the first year.

H. SINGAPORE: EXEMPLAR PROGRAMS AND INSTITUTIONAL CONTEXT

The **National University of Singapore** (NUS)¹⁰³ is comprised of 16 faculties and schools, involving some 26,000 undergraduates and multiple graduate and research institutes. It also

⁹⁹ Hena Mukherjee and Poh Kam Wong, “The National University of Singapore and the University of Malaya: Common Roots and Different Paths,” in “The Road to Academic Excellence: The Making of World-Class Research Universities,” eds. Philip G. Altbach and Jamil Salmi (Washington DC: World Bank, 2011), 142.

¹⁰⁰ <http://www.yale-nus.edu.sg/>

¹⁰¹ <http://www.duke-nus.edu.sg/>

¹⁰² Jeffrey R. Young, “Singapore’s Newest University is an Education Lab for Technology,” *Chronicle of Higher Education* 28 Nov 2010, <http://chronicle.com/article/Singapores-Newest-University/125485/>

¹⁰³ <http://www.nus.edu.sg/>

houses four national Research Centers of Excellence. As mentioned above, NUS is ranked 3rd among all Asian universities according to the QS rankings. Reflecting the complex colonial history of Singapore, the university was founded in various stages, beginning with a British-supported medical school in 1904, a college dedicated to arts and social sciences (Raffles College) in 1928, a merger between the two in 1949, the establishment of a national University of Singapore in 1962, and finally the merger between that institution and the China-supported Nanyang University in 1980 to form the current NUS. The university has 16 faculties and schools, across three campuses, and multiple prestigious international collaborations; it is also a member of AsiaEngage.

Reflecting its world-class status, NUS offers many models of innovative programming that manifest their attention to the integration of the four core HELM areas. Some of the most instructive examples include the interdisciplinary Bachelor of Environmental Studies program, the Institute of Water Policy, and the iLEAD program located under the broader umbrella of “Techno-preneurship,” an incubation program within the College of Engineering.

The Bachelor of Environmental Studies program is billed as NUS’s first-ever interdisciplinary undergraduate degree program. The website summarizes it as follows: “The four-year direct honor degree program equips students with a solid foundation on environmental issues through a broad-based curriculum in their first two years, and offers specialisation in either Environmental Biology or Environmental Geography in their third and final years of studies.” The innovative curriculum is built on a common foundation of science and policy courses, followed by an integrated combination of policy-based and case-studies modules.¹⁰⁴ This may offer a creative model for curricular design for the Indonesian partners, as it would integrate high-quality academics with case studies that directly address regional challenges.

The Institute of Water Policy¹⁰⁵ is the result of a strategic partnership with Singapore’s Public Utilities Board and the Asian Development Bank, in addition to funding from a private foundation. The program is designed to “train 700 water leaders in Asia over the next 10 years to ensure improved access to life-saving water and sanitation facilities in the continent’s emerging markets,” and thus to “contribute to the transformation of Asia.” In addition to the series of conferences and executive training courses, the Institute has created three curricular modules for students, in cooperation with the NUS school of Public Policy: Water Policy and Governance, Dynamic Modeling of Public Policy Systems, and Urban Water Governance and Management in Asia: Law, Policy and Infrastructure Financing. The Institute offers undergraduate and graduate curricula as well as organizing conferences and sponsoring publications to disseminate its research.

The iLEAD program (Innovative Local Enterprise Achiever Development)¹⁰⁶ involves placing students in 7-month internships at local start-up companies, where they are mentored by entrepreneurs. During the internship, students simultaneously enroll in “techno-preneurship” modules focusing on marketing, innovation, new product development, or a discipline-based

¹⁰⁴ <http://www.envstudies.nus.edu.sg/academic/programme-requirements/specially-designed-environmental-studies-modules.html>

¹⁰⁵ <http://www.spp.nus.edu.sg/iwp/Home.html>

¹⁰⁶ http://www.overseas.nus.edu.sg/forStudents_iLead_theProgram.htm

specialization. At the conclusion of the program, students undertake a two-week Overseas Study Mission, which “aims to expose participants to foreign start-up cultures via various networking sessions and company visits.” This program is complemented by the NUS Overseas Colleges program,¹⁰⁷ which sponsors 6- to 12-month internships at global sites, alongside coursework at one of seven international partner universities (in the US, China, Sweden, India, and Israel). This program is closely aligned to the observation made by Singapore’s director of educational technology within the Ministry of Education that since Singapore has no natural resources and no farm land its “knowledge workers” are its most important national asset.¹⁰⁸

An examination of such programs would directly address one of the cross-cutting recommendations of the Deliverable 4 report: “working with external collaborators, which included identifying potential partners, developing competitive proposals, developing strategies for internationalization, and expanding opportunities for teaching staff to gain industry experience.” It should be recognized, however, that NUS’s strong national position gives it an advantage over many Indonesian universities, in attracting strong government support that facilitates these programs—so lessons would not necessarily be transferable.

Nanyang Technological Institute,¹⁰⁹ also a member of AsiaEngage, is the other university widely acknowledged as “world-class.” Nanyang is ranked 58th in the QS rankings, 17th in the QS Asian rankings, and 4th in the world in the QS category of “Top 50 under 50” universities. Founded in 1991 by the merging of Nanyang Technological Institute and the National Institute of Education, it houses two national Research Centers of Excellence, including the “Earth Observatory of Singapore” focused on forecasting hazardous natural events. It is slightly smaller than the National University of Singapore, having approximately 23,000 undergraduates and 10,000 graduate students, but it bills itself as the world’s largest engineering college¹¹⁰ and Singapore’s largest campus. It is comprised of four colleges (Business, Engineering, Science, and Humanities/Arts/Social Sciences), in addition to a School of Medicine and an interdisciplinary Graduate School.

NTU’s 2010 strategic plan clearly identifies five “peaks of excellence,” thus offering a good model of leadership and governance: sustainability, healthcare, new media, “the best of the East and West,” and innovation. The website emphasizes the role of the university as a regional and global knowledge hub: “These peaks leverage NTU’s diverse strengths, particularly its longstanding expertise in engineering and business, and the interfaces these have with various disciplines such as with healthcare, science and the humanities. Besides supporting the new areas that will drive Singapore’s economy, these five strategic thrusts will nurture leaders who will help to address some of the challenges that Singapore and the world faces, such as in sustainability and healthcare.”¹¹¹ In addition, NTU houses 11 joint centers that represent public-private or university-government partnerships that may inform Indonesian HEIs. Among the

¹⁰⁷ <http://www.overseas.nus.edu.sg/>

¹⁰⁸ Young, “Singapore’s Newest University.”

¹⁰⁹ <http://www.ntu.edu.sg/Pages/default.aspx>

¹¹⁰ Nearly half of NTU’s undergraduates are enrolled in its College of Engineering.

¹¹¹ http://news.ntu.edu.sg/pages/newsdetail.aspx?URL=http://news.ntu.edu.sg/news/Pages/NR2010_Nov16.aspx&Guid=e455d46b-50d2-479b-8e21-a0be8f

model curricular programs at NTU, two that rise to the top are the NTU chapter of the Student in Free Enterprise program (NTU SIFE), and the Renaissance Engineering Program (REP).

The NTU SIFE program is a subset of a global NGO, Student in Free Enterprise,¹¹² and represents a broader initiative adapted to address regional needs, through the integration of student involvement and curriculum. The broader SIFE mission is to create “a better, more sustainable world through the positive power of business,” and one of NTU’s award-winning SIFE projects, entitled “Gourmet Guru Academy,”¹¹³ applies that goal to issues of gender and social equity, at the same time that it promotes teamwork and real-world business skills among students. Partnering with the local Persatuan Pemuda Islam Singapore Family Service Centre West, the initiative raises the visibility of housewives as economic contributors, by helping them to offer cooking classes and create and sell cookbooks, thus simultaneously acquiring new skills, creating new revenue, and legitimizing their status as household contributors.

The Renaissance Engineering Program (REP)¹¹⁴ is collaboration with the University of California-Berkeley and Silicon Valley industries, involving 50 top students who will earn a dual Bachelors of Engineering and Master of Science in Technology Management degree. Focused on interdisciplinary programming, with the vision that, according to the program’s website, “[w]e are engaging a world that is connected multi-dimensionally - a global system of systems. The world’s business and public sector leaders of today and tomorrow need to be equipped to cope with a rapid escalation of systems-level diversity and complexity that confront them, an unprecedented level of such complexity expected indeed to accelerate in the coming years within the global environment.” Most interesting from a QA perspective is the program’s adoption of “a new pedagogy which exposes students to different learning paradigms including supervised, unsupervised and reinforcement learning during the course of study,” with a focus on “self-awareness of organized diversity.”

Like NUS, NTU has clearly focused on its internationalization strategy. The HELM Deliverable 4 report notes that “building the capacity of their lecturers and students to take advantage of opportunities abroad was a stated priority across universities,” and programs such as those above would directly contribute to this priority. Again, however, the enhanced resources of NTU make its model more difficult to translate to the context of Indonesian non-BLU universities. Nonetheless, future facilitators from HELM programs might be drawn from programs such as the ones outlined here.

Worthy of mention from a business perspective is **Singapore Management University** (SMU),¹¹⁵ also a member of AsiaEngage, a public university with some 7,000 students, all in the areas of business, law, and social sciences. The university is particularly notable in the area of entrepreneurial outreach, housing several centers that represent partnerships with banks or businesses and that also involve student work. These centers offer workshops and consulting services, including market research and feasibility studies. A notable example is the UOB-SMU

¹¹² www.sife.org

¹¹³ <http://www.gourmetguruacademy.com/p/about.html>

¹¹⁴ <http://www.ntu.edu.sg/rep/Pages/default.aspx>

¹¹⁵ <http://www.smu.edu.sg>

Entrepreneurship Alliance Center,¹¹⁶ a partnership between SMU, the United Overseas Bank Limited, and 200 local business and individuals; the Center integrates education, outreach, and research.

Finally, a potential model for Indonesian polytechnics is one of Singapore's five polytechnics, the **Nanyang Polytechnic (NYP)**.¹¹⁷ Established in 1992, it includes among its "strategic thrusts" a focus on market-oriented planning as well as transnational cooperation partnerships.¹¹⁸ One of its innovations is an initiative called Industry Communities @ Nanyang Polytechnic, established with the governmental Singapore Economic Development Board and defined as providing "a vibrant eco-system of companies consisting of leading industry partners, together with locally-based techno-preneurs and start-ups."¹¹⁹ Housed within NYP's Center for Technology Innovation and Commercialization, it has successfully partnered with multiple companies to establish patents and licenses in the areas of electronics, robotics, healthcare, computer IT, digital media, and food technology, thus addressing an area that has been identified as a central concern for many Indonesian universities.

I. INDONESIA: OVERVIEW OF HIGHER EDUCATION CONTEXT

Examples of successful and regionally responsive academic programs, that result from a strategic and sustained integration of the four core HELM areas, abound across Indonesia, even within the challenging educational ecosystem of the autonomy debates, uneven development across the archipelago, and evolving accreditation systems that are still defining the ideal systems of quality assurance and financial responsibility for the nation's tertiary education system.

Across the wide spectrum, the universities that consistently demonstrate a longer history of attention to the four core HELM areas are the so-called BHMN (autonomous) institutions, the public universities that were promoted to autonomy under the 2002 law and that now may be transitioning to BLU (or BH) status under the recently passed HE law. Within this category, four universities that offer a wide array of interesting models are the Universitas Indonesia (UI), Universitas Gadjah Mada (UGM), Bandung Institute of Technology (ITB), and Institut Pertanian Bogor (IPB).¹²⁰ As suggested in the HELM Deliverable 4 assessment report of July 2012, leaders and key players from these institutions may be effective trainers for future phases of the HELM training program.

There is no doubt that these four BHMN institutions form a category apart, within Indonesian higher education. According to an article in the 2007 Jakarta Post, as a result of their relative autonomy these institutions "have—in financial terms—basically been privatized" and thus have become "ever more entrepreneurial." As the article correctly observes, "The Indonesian BHMN universities have transformed themselves in only a few years and have handled the radical

¹¹⁶ <http://www.smu.edu.sg/centres/usea/index.asp>

¹¹⁷ <http://www.nyp.edu.sg/>

¹¹⁸ <http://www.nyp.edu.sg/about-nyp/corporate-profile/strategic-thrusts>

¹¹⁹ <http://www.nyp.edu.sg/ctic/industry-services/industry-communities-at-nyp>

¹²⁰ In particular, according to the June 2012 assessment report by HELM, UGM is acknowledged as a center for QA training, through DIKTI funding; several of the universities interviewed in that assessment mentioned the usefulness of the training they had received at UGM. Thus by partnering with UGM and building on that record of success, HELM can enhance its relevance and potential impact for the 25 partner institutions.

changes relatively well.”¹²¹ It is no coincidence that these are also the four most established and highly ranked universities in Indonesia. The rapid growth of HEIs across the nation has exacerbated the situation of unevenness, since the pace of growth, combined with lack of adequate funding, has resulted in diminished quality assurance.

For these reasons, the leading Indonesian universities can offer excellent models of leadership training, good academic governance, quality assurance, strategic planning, entrepreneurial financial management, innovation, and responsiveness to the regional and national (and global) economies. When discussing particular academic programs, these universities can provide top-notch presenters for HELM seminars, where the process of establishing those programs can be unpacked and transferable lessons can be learned.

At the same time, an immersive study tour to these campuses, for Tier 2 participants, is more problematic. The physical and financial infrastructures of the BHMNs are far more developed than in the second-tier universities, and the politicization of inequity issues would complicate the learning process. It would be reasonable to suggest that some one-day HELM seminars could be held on the campuses of the BHMN institutions, where the specifically selected programs could be explored in context; but in terms of a week-long study tour, the situation of inferiority and the political issues around information-sharing would need to be carefully considered.

J. INDONESIA: EXEMPLAR PROGRAMS AND INSTITUTIONAL CONTEXT

Universitas Indonesia (UI)¹²² is the oldest university in Indonesia, established in 1849. It is one of the two national universities ranking in the top 500 of the QS rankings; its current ranking is #217 in the world, #59 in Asia, and #1 in Indonesia. A charter member of AsiaEngage, it enrolls about 46,000 students in its 13 faculties and 159 degree programs.

UI has a strong commitment to building collaborations both with other universities and with industries, within Indonesia and globally. One of the strongest programs identified by the HELM assessment team in June 2012 is the internship and management training with collaborations with such entities as the Bank of Indonesia, CIMB, and Telkom, as well as companies in other ASEAN countries (e.g. Japan). These partnerships have also contributed to the establishment of externally funded scholarships that link to corporate social responsibility strategies. These programs are seen by students as a “fast track” to employment after graduation. Also mentioned by the HELM assessment team is an active entrepreneurship/small business training program on campus in collaboration with Bank Mandiri, Indonesia’s largest bank. As noted by the HELM assessment team, the banking community and Indonesian businesses benefit from the program by discovering new talent, just as the students benefit from the support.

Also notable is the Directorate on Research and Community Service (DRPM), which connects faculty research to community outreach. This program is mentioned on the university website but is not fully explained; it merits closer examination as a possible integrative model for future trainings, but may not be as developed as UGM’s similar program.

¹²¹ Beerkens, “Inequality in Indonesia Higher Education a Real Threat,” *Jakarta Post*, July 21 2007.

¹²² <http://www.ui.ac.id/en>

Universitas Gadjah Mada¹²³ in Yogyakarta, ranked as #342 in the QS world rankings, #118 in Asia and #3 in Indonesia (behind UI and ITB), was formally established in 1949, the year that the Netherlands accepted Indonesia's independence. It now consists of 18 faculties and some 55,000 students; it boasts 28 active research centers, an array of international affiliations, and a strong record of collaborations with industry and government within Indonesia. It is also one of the two Indonesian charter members of AsiaEngage, an international forum for building its community outreach linkages.

As pointed out in the HELM assessment of June 2012, UGM has a broad variety of collaborative relationships, among the most impressive being activities conducted through the Research and Community Service Unit (LPPM),¹²⁴ a model for combining world-class aspirations with regional responsiveness. With its strong ties to its research agenda,¹²⁵ it can be a model for integrating QA and ESC. Organizationally, it is divided into five sections: Research Quality & Management, Research Databases and Communications, Industrial Research, International & National Networking, and Community Outreach and Empowerment. LPPM was designated by UNESCO as a Centre of Excellence in 2009.

A related initiative of significance, managed by the LPPM, is the mandatory two-month community service component of all undergraduate programs (the Community Work Course, KKM) which engages students in solving community development problems with local governments and stakeholders. Students must take the initiative to identify a community need, coordinate with local stakeholders, and reinforce their service work with an academic component.

A third initiative, which will invite further internationalization, is UGM's program offering short-term immersion experiences to international students. This program offers multiple advantages: it provides incentive for the establishment of more courses in English, thus preparing the UGM students for work in a global workforce; it may bring the international participants back to UGM to pursue graduate degrees; it contributes to the creation of a globalized campus for the Indonesian students; and it provides a new, if modest, revenue stream.

Finally, the university's Agricultural Training, Research and Development Station¹²⁶ is dedicated to connecting students and new knowledge to the addressing of regional and national needs, and again may serve as an exemplar program for future training programs.

Institut Teknologi Bandung, (ITB) in Bandung, was originally established in 1920 as "Technische Hoogeschool te Bandung" by the Dutch, and was re-established as ITB in 1959. It was granted BHMN status in 2001. ITB has seven faculties, five schools, and has around 19,000 students (13,503 undergraduates, 4,642 MS students, and 626 PhD students). Its vision is: "Being an excellent university, dignified, independent, and is recognized worldwide as well as guide the changes that can improve the welfare of the Indonesian nation and the world" and its mission is

¹²³ <http://www.ugm.ac.id/en/>

¹²⁴ <http://www.ugm.ac.id/en/?q=content/institute-research-and-community-services>

¹²⁵ The LPPM is coordinated by a Senior Vice Rector for Education, Research, and Community Services, thus integrating the three dimensions of becoming a knowledge hub.

¹²⁶ <http://www.ugm.ac.id/en/?q=content/agricultural-training-research-and-development-station>

“Creating, sharing, and applying science, technology, arts, and humanities as well as producing superior human resources and to make Indonesia a better world.” ITB is ranked within the 400s in the QS ranking for 2010.

ITB has five interdisciplinary research centers, Natural Resources and Sustainable Environment, Regional Development and Infrastructure, Information and Communication Technology, Biotechnology, and Fine Arts and Design, and many other research organizations throughout the campus. Engineering disciplines dominate ITB and their research is quite collaborative with industry in those disciplines. The Transportation Engineering Research Center collaborates with the University of Hiroshima, various companies, and Indonesian government agencies. Other centers with good external collaborations are the Microsoft Innovation Center, the International Center for Wireless Communication Technology, and the International Research Center for Telecommunications and Radar.

Institut Pertanian Bogor (IPB)¹²⁷ in Bogor is the leading agricultural university in Indonesia. It was established in 1963 and was granted BHMN status in 2000. IPB has nine faculties and nearly 25,000 students. Its vision is “to become a leading research-based university in the world with the major competence in tropical agriculture, biosciences, and possessing entrepreneurial characteristics.” One of its missions is “developing science and technology based on the current needs of the communities and the future trends.”

IPB has 21 research centers, including some very well-known ones, such as the Climate Risk and Opportunity Management in Southeast Asia, Center for Southeast Asian Food and Agricultural Science and Technology Center, and the Pacific and Center for Coastal and Marine Resources Studies. Other interdisciplinary research centers include the International Center for Agriculture and Rural Development Studies, Research Center for Biopharmaca, Applied Finance and Economics, Entrepreneurship Research and Development Center, and the Center for Environmental Research. IPB is ranked within the 600s in the QS ranking for 2010.

PROPOSAL FOR ACTION RESEARCH PROJECTS

The examples outlined above of model programs that integrate the four core HELM areas can be used as the basis for an Action Research Project, for the 25 HELM partner institutions. In designing this action research project, which involves close observation of an existing model program within a Southeast Asian host university combined with guided research on the development of a new or expanded program within the home university, we follow the principles espoused by the ADB report “Education and Skills” and pioneered from a theoretical perspective by Everett Rogers in *Diffusion of Innovations*.¹²⁸ This sociological study helps us to answer the question “Why seek models within Southeast Asia rather than in the U.S. or Europe?”

As Rogers demonstrates, the nature of the social system is one of four key elements that influence the successful diffusion and adoption of new approaches (the other three being

¹²⁷ www.ipb.ac.id

¹²⁸ Everett Rogers, *Diffusion of Innovations*, 4th ed. (New York: The Free Press, 1995), first published in 1962 and still cited frequently as the authoritative source of principles for adoption of new technologies or approaches.

innovation, communication channels, and time). Key to his framework for successful knowledge sharing is that the members of the network belong to “a similar social system.” He defines “social system” as “a set of interrelated units that are engaged in joint problem solving to accomplish a common goal.”¹²⁹ This observation is aligned with the vision of collaborative modeling across Southeast Asia, as exemplified through AsiaEngage and the other sources cited earlier in this report. It argues for the greater impact of models from closer social systems, rather than attempting to bridge the daunting divide between developing Indonesian institutions and the acknowledged global higher education leaders, whose access to resources and distinct educational ecosystems make knowledge transfer much more difficult.

The use of closer models is also supported by Rogers in his explanation of the second of the four units, the rate of adoption (time) – “the relative speed with which an innovation is adopted by members of a social system.”¹³⁰ It stands to reason that models that are seen as more closely aligned with existing external factors in Indonesia can be more quickly diffused and adopted, resulting in feasible and measurable change. Rogers thus emphasizes the influence of “near peers” on the eventual success rate of innovation adoption: “the heart of the diffusion process consists of the modeling and imitation by potential adopters of their network partners who have adopted previously.”¹³¹

A key focus of the action research, within the HELM program, will be the emphasis on the third of Rogers’ four units, innovation – the perception that the “idea, practice, or object” is perceived as new by the Indonesian participants.¹³² Clearly, the perception of “newness” would be enhanced if the models presented to the participants were housed in premier global institutions of Europe or North America. However, the distinct social systems of those high-prestige institutions would mitigate against timely implementation of those models, since while the models might be impressive and spark the imagination; they would establish distant ideals that could not easily be transferred to the current context of Indonesian universities that are in an earlier stage of development. As observed in the ADB report “Education and Skills,” the impact of the model knowledge hubs on subsequent Indonesian programs “depends heavily on whether the model is clear to observers, the extent to which observers see in the model a comparative advantage over what they are already doing, and the cost of adopting the model.” (p. 51) these are the key elements that must be addressed when presenting potential model programs to HELM participants.

In addition, according to Rogers, compatibility is a key factor in innovation adoption. He defines compatibility as the perception that the innovation is “consistent with the existing values, past experiences, and needs of potential adopters.... An idea that is incompatible with the values and

¹²⁹ Rogers, 23,

¹³⁰ Rogers, 22.

¹³¹ Rogers, 18. See also p. 19: “When they share common meanings, a mutual subcultural language, and are alike in personal and social characteristics, the communication of new ideas is likely to have greater effect in terms of knowledge gain, attitude formation and change, and overt behavior change.” While this is not to say that the populations across Southeast Asia are homophilous (sharing all of the above variables), the similar educational ecosystems and regional challenges do create a closer proximity than would models imported from the world’s elite universities in very different economic contexts.

¹³² Rogers, 11.

norms of a social system will not be adopted as rapidly as an innovation that is compatible.”¹³³ The Southeast Asia models selected throughout the HELM training program must closely heed these factors, and select compatible programs as their exemplar models, in order to strengthen the probability of the eventual implementation of change.

Rogers also defines five stages of innovation adoption: knowledge, persuasion, decision, implementation, and confirmation. These five stages are outlined in the table below:¹³⁴

¹³³ Rogers, 15-16.

¹³⁴ Rogers, 190.

Stage	Definition
Knowledge	<ol style="list-style-type: none"> 1. Recall of information. 2. Comprehension of messages. 3. Knowledge or skill for effective adoption of the innovation.
Persuasion	<ol style="list-style-type: none"> 4. Liking the innovation. 5. Discussion of the new behavior with others. 6. Acceptance of the message about the innovation. 7. Formation of a positive image of the message and the innovation. 8. Support for the innovative behavior from the system.
Decision	<ol style="list-style-type: none"> 9. Intention to seek additional information about the innovation. 10. Intention to try the innovation.
Implementation	<ol style="list-style-type: none"> 11. Acquisition of additional information about the innovation. 12. Use of the innovation on a regular basis. 13. Continued use of the innovation.
Confirmation	<ol style="list-style-type: none"> 14. Recognition of the benefits of using the innovation. 15. Integration of the innovation into one's ongoing routine. 16. Promotion of the innovation to others.

Within this framework, and for the action research project under discussion here, “knowledge” and “persuasion” will be addressed during the workshop at the Southeast Asian host institution, as the exemplar programs are analyzed in terms of the essential integration of the four core HELM areas, in order for the action research project to be both appropriate and successful for the institution and the region. These two stages will continue as the researchers investigate programs from other universities (in various ways, such as internet searches, discussions at meetings and interaction during HELM events, and other communication channels).

If this action research project is to be successful, it will be critical not to present the regional host institutions as superior to the Indonesian tertiary education system. Rather, the focus will be on individual exemplar programs, which can be found within a wide variety of institutions. The twofold goals will be to examine a mature program within a similar institutional context, and to create a productive international collaboration between the host institution and the HELM partner institution. The HELM partners’ visits to the regional host institutions will be presented as an exchange of knowledge, and a fruitful international collaboration, that can position these Indonesian universities more effectively for a regional leadership role in the future.

The six-month phase of guided action research will involve the “decision” and first part of the “implementation” phases, during which the Indonesian participants will evaluate the transferable lessons from the model program, in terms of the four core HELM areas as well as institutional strengths and challenges. Follow-up, which will include phased dissemination of the knowledge gained during the training, will involve the continuation of the “implementation” as well as the “confirmation” phase, as the Indonesian institution decides whether the envisioned program can be adopted and in what time frame. Whether or not the newly designed program is ultimately adopted, the training in the use and integration of the four core HELM areas will play an important role in how these rising leaders conceive of, design, and lead the conception of all new

programming, as the home institutions continue to expand their capacity in terms of quality and relevance, necessarily involving the integration of the four core HELM areas.

SUMMARY OF ACTION RESEARCH PROJECT: CAPACITY-BUILDING IN HIGHER EDUCATION ADMINISTRATION THROUGH ACTION RESEARCH PROJECTS

During Year 1 (October 2012), the action research project will involve eight to 10 Indonesian universities, selected from the group of 25 initial HELM partner institutions on the basis of geographic proximity to enhance the interaction among the cohort. The activity will take place in four stages:

A. Development of the project

HELM staff will request that the senior leadership of the selected universities identify a pair of promising leaders who are currently deans or vice-deans, ideally one vice-dean for finance and one for academics, in the same faculty. These two team members will develop a brief (one-page) outline of their action research project: either a new program that is regionally responsive and consistent with the institution's strengths and growth strategy, or the expansion of an existing program in order to better integrate students, research, and external stakeholders. Ideally this will be an idea that was already on the institution's radar, as an area of future investment or expansion. The outcome of the Action Research Project will be a detailed proposal for how such an expansion might be implemented.

The University of Kentucky (UKy) will appoint a facilitator to work with this team, and will select programs within host universities in Thailand or Philippines, to serve as model programs for the action research projects. Participants will visit the host universities in order to understand how a model program develops, how it is situated within its HEI, how it addresses the four core HELM areas, and how it works toward the future. Sites for the October study tours will be universities in or near Bangkok, Thailand, or in or near Manila, Philippines. The model programs will have been chosen to illustrate a successful process of integrating the four core HELM areas: engaged leadership, financial responsibility and management, continuous quality assurance (assessment and the use of resulting data), and responsiveness to the needs of external stakeholders (employers or community).

B. International workshop at host institution within Southeast Asia

This phase will involve workshops at the institutions in Bangkok or in Manila, spanning a five-day period. At each institution, the UKy and HELM facilitators will work in advance with the key agents of change for the model programs, who will design workshops for the Indonesian participants. The workshops will involve three phases: 1) exposition of the model program – development, implementation, outcomes – with close attention to the four core HELM areas; 2) discussion of past and present challenges in the design and implementation of the model program; 3) discussion and development of the Indonesian participants' own action research projects, with close attention to the

transferable lessons from the model programs as well as to the integration of the four core HELM areas.

In addition to the workshops, Indonesian participants, HELM staff, and UKy facilitators will have a series of meetings with other key players to understand the institutional contexts. This will include meetings with government officials, institutional senior leadership in the four core HELM areas, students, and depending on time and distance, possibly a tour of facilities or off-campus sites. Within the week of the study tours, the participants will revise their one-page project statements, to incorporate ideas generated by the site visits.

C. Six-month guided development of action research project

During the first month following the study tours, each university pair will write a summary of the transferable lessons learned in each of the four core HELM areas, following a template developed by UKy facilitators. Then, under continuous guidance from the UKy (virtually) and HELM staff on the ground, and following on the DIKTI-endorsed model of sandwich and recharging programs that involve international peer mentorship, the participants will develop their program designs and implementation plans, again with close attention to the four core HELM areas, and following an outline developed by UKy and HELM staff (see Appendix 2). The on-campus work may involve a broader workgroup that offers input into the envisioned program design, thus extending the benefits of the project to the home campus.

D. Stages of dissemination

At a HELM Core Management Seminar, to be held late in the spring semester of 2013, the teams of participants will present the results of their action research projects with their UKy facilitators. Respondents from the host institutions (Thailand and Philippines) may also participate if appropriate. This anticipated presentations has three goals: 1) to provide an opportunity to outline the sound research principles used within the project and share an end goal for the project (i.e., implementation plans for the institution); 2) to serve as the initial presentation for subsequent development into a possible presentation at an international conference depending on the project; and 3) to provide a model for the diffusion of this program design across the 25 HELM institutions—and within the institutions themselves.

Based on the outcomes of the six-month project and the participants' desire to continue their exploration of the issues in the project, UKy and HELM staff will offer advice about potential venues for international conference presentations or for revising the project for publication in an academic journal.

E. Follow-up and assessment

Six months after the seminar, participants will be asked to present a follow-up report detailing the progress on two fronts: 1) how the lessons of leadership, QA, financial

management, and ESC have been implemented by the participants across their areas of responsibility (including new programs developed or fortification of existing programs), and 2) the stage of implementation of the program developed during the action research phase.

One year later, an additional follow-up will take place, considering not only the above two elements but also an assessment of the participants' career advancement in higher education administration. An update on implementation or problems and constraints encountered might be presented at the HELM seminar in spring 2014. Thus this final assessment will include a consideration of how well the program served as a professional development stepping-stone for rising leaders.

F. Future iterations

During Year 2, pending USAID approval and modifications based on Year 1 experience, a similar action research program will be undertaken with eight to 10 more HELM partner universities; at this stage, HELM staff will take a more active role in project development and guidance. During Year 3, again pending USAID approval, the remaining universities within the 25-university partner group will participate in the action research program; this time with HELM staff assuming a lead role and UKy facilitators playing a supporting role.

DETAILED PLAN: CAPACITY-BUILDING IN HIGHER EDUCATION ADMINISTRATION THROUGH ACTION RESEARCH PROJECTS

A. DEVELOPMENT OF THE PROJECT

The participants in the action research project will be eligible to apply their work to the DIKTI credit point system, according to the 2009 DIKTI Operational Manual for Credit Point Assessment, both to incentivize participation and to ensure that this intervention aligns appropriately with the existing systems of professional development and guidance within Indonesia. For this purpose, letters of certification will be provided by UKy and/or HELM, for the overseas workshop, the action research, and the closing seminar in May 2013.

The success of this training program depends to a large extent on a thoughtful and well-structured process for initial setup, including:

- Selection of the initial eight to 10 universities;
- Selection of the two participants within those universities;
- Initial development of the action research project; and
- Identification of the appropriate exemplar programs at the host universities in Thailand and Philippines.

The selection of the 25 initial HELM partner universities was finalized by late August 2012, and representatives of those universities were convened at a HELM meeting in early September. The initial ten universities were selected by HELM, based on the materials submitted as part of the

initial HELM partner university applications, and geographic considerations. The ten selected universities for the initial study tours are the following:

- Universitas Andalas (UNAND)
- Universitas Islam Negeri Sunan Kalijaga (UIN SUKA)
- Universitas Kristen Satya Wacana (UKSW)
- Universitas Muhammadiyah Malang (UMM)
- Universitas Muhammadiyah Surakarta (UMS)
- Universitas Negeri Malang (UNM)
- Universitas Negeri Semarang (UNNES)
- Universitas Pendidikan Indonesia (UPI)
- Universitas Sebelas Maret (UNS)
- Universitas Sriwijaya (UNSRI)

HELM staff introduced this action research project at the leadership meeting in September, and explained to the partner universities that those not chosen for this initial round of action research will have an opportunity to participate in a later round, pending the assessment at the end of the first round and USAID's continued approval.

Within the selected universities, the leadership has been asked to identify the faculties that are most squarely in their sights for expansion or enhancement, based on the institution's mission to meet the needs of external stakeholders (industry or community). Within those faculties, the vice-rector for academic affairs should be asked which ones have talented leaders (people who might be potential senior leaders of the institution at some point in the future) at the dean and vice-dean level. Ultimately, the Rector should advise about the selection of participants based on three factors:

- The faculty is among the institution's strongest, and is central to institutional mission;
- The faculty is aware of and has the capacity to respond to external needs (industry or community); and
- The faculty has a talented administrative team in place, with committed deans and vice-deans who will fully engage in this six-month guided process.

Ideally, the two participants should be selected, where one member of the team is a unit specialist in academic affairs (e.g., a vice-dean for academic affairs, Vice-Dean 1), and the other is a specialist in financial management (e.g., a vice-dean for finance, Vice-Dean 2) from the same college/faculty. Both should be at least 5 years from retirement, and have good English skills (at least equivalent to TOEFL 450). Both team members should have the possibility of a future in institutional administration; and both should have the confidence of the rector and vice-rector for academic affairs, in terms of future leadership capacity. In addition, honoring one of the cross-cutting threads of the HELM project, rectors should be proactively reminded, in the invitation, that female nominees are encouraged.

The pairing of one authority on academics and one on finance is an intentional aspect of this training. During the initial HELM assessment of 11 representative universities, the evaluators observed that the planning processes currently do not integrate these two key dimensions of

higher education leadership. While in a few top institutions the academic planning does drive the budget, in others the finance dimension drives the planning, which is an impediment to strategic institutional advancement; and in still others, the finance and academic planning processes are entirely separate. As stated in the report, “Institutions need to work within their financial resources, but allowing finance to drive the academic process inhibits innovation and improvements that could be gained with more flexibility or more integrated planning processes, in which the academic staff make choices between the trade-offs to stay within budget.”¹³⁵ The pairing of finance and academic leaders during this action research training will address this gap, by allowing first for the study of a completed model program in which financial and academic concerns are integrated, and second for the development of the action research project which integrates the four core HELM areas.

Thus the building blocks of the action research project must be a) a team of talented future leaders, b) the confidence of the upper administration in both the envisioned project and the team of participants, and c) a project that integrates principles of leadership and governance, quality assurance and data-driven assessment, financial responsibility and feasibility, and collaboration with external stakeholders.

In terms of the design of the project, institutions will be advised to focus on an area that has already been identified as having potential for regional relevance, either to surrounding industry or to the community. As stated earlier, this factor will help the institution to move up the value chain and to become a driver for regional development, thus potentially attracting new funding from industry or government, as well as improving its own national, and potentially global, ranking. A study of planning processes at a model university of Southeast Asia, the National University of Singapore, describes the type of integrated strategic planning that is the ideal end goal for this action research project, that exemplifies the four core HELM areas in a holistic fashion, and that will be explored with the participants throughout the training program:

[At the National University of Singapore] University leadership has had to adjust to the now universally accepted understanding of the deep links between economic growth and education. Institutional managers and administrators, largely from a bureaucratic civil service background, have had to learn to be more entrepreneurial, to work with industry, and to collaborate in joint outputs and commercialization of products against a background of increasingly sophisticated and high-tech electronic tools. Management has had to become responsible for overseeing the updating and fine-tuning of curriculum, pedagogy, and assessment techniques to match growth and change areas. Economic growth, with its need for stimulating locally grown innovations along with the creation of new knowledge, propelled the institutions to shift from pursuing the primary role of teaching to pursuing both teaching and research.¹³⁶

The participants will develop a 1-page statement about either the expansion of an existing program, or the development of a new program, that meets those end goals, at least at the programmatic if not the institutional levels. Participants will be given a narrative prompt to guide them in defining the project (Appendix 1). The project will be submitted to the UKy team

¹³⁵ Draft Assessment Report prepared by JBS for HELM (July 2012).

¹³⁶ Mukherjee and Wong, “The National University of Singapore and the University of Malaya,” 138.

and HELM staff by the first week of October, and will be the focus of workshops at the host institution.

An array of exemplar programs in Thailand and Philippines have been identified earlier in this report. Based on the specific project designed by the eight to 10 Indonesian teams, the UKy and HELM staff will finalize the selection of exemplar programs and assign the participants to one of two cohorts: Week 1 in Philippines, or Week 2 in Thailand. Each project will also be assigned to one specific UKy facilitator; the team will also include a designated HELM staff member. Thus the project team will consist of four individuals working on each single project. At this time, in alignment with the project, the final determination of exemplar programs in Thailand and Philippines will also be completed.

B. INTERNATIONAL WORKSHOP AT HOST INSTITUTION WITHIN SOUTHEAST ASIA

For the first year of this project, host universities have been selected from the countries of Thailand and Philippines. In future rounds, host universities may again be selected from these two countries, or from Malaysia or Singapore. These four countries were identified on the basis of the criteria outlined above; as SEAMEO member countries and as regional neighbors, they are “near peers” from a cultural and development standpoint, offering many transferable models for Indonesia. A second advantage of this selection pool is that the change agents at these regional institutions may be able to serve as seminar or workshop leaders for future HELM training, or may be recommended to DIKTI as leaders of professional development workshops. Finally, these regional partnerships will continue to serve the Indonesian universities well, as they continue their capacity-building.

The recently formed network AsiaEngage, as well as the SEAMEO RIHED (Regional Institute of Higher Education and Development)¹³⁷ will serve as natural vehicles for the continuation of this collaborative relationship. In addition to the shared higher education ecosystem, the region shares particular foci for regionally responsive academic programming.¹³⁸ For purposes of this project, we have defined six broad sectors of regionally responsive focus: health, education, agriculture, business, engineering/technology, and cultural studies. The exemplar programs will align as closely as possible with the Indonesian participants’ action research focus, within one or more of these six sectors.¹³⁹

The exemplar programs will largely involve interdisciplinary programming, and the Indonesian projects will be encouraged to have the same focus. The reasons for this are threefold: 1) it is a

¹³⁷ www.rihed.seameo.org. SEAMEO is based in Bangkok, Thailand, and the RIHED division has as one of its express objectives the goal of “promoting collaboration among member states for establishing institutional linkages, and to assist them in the strengthening of institution building and development.”

¹³⁸ For example, a list of shared and regionally engaged concerns, generated by an AsiaEngage planning group, mentions the following six shared issues: climate change; community empowerment for socio-economic development; disaster risk reduction (i.e., typhoon, flood, tsunami, etc.); e-community (bridging the digital divide); safe water; and health issues (HIV/AIDS and other pandemics. See <http://www.asiaengage.org/inaugral-taskforce-meeting/>.

¹³⁹ These sectors are for UKy use only, and do not need to be communicated to the rectors as art of their selection criteria; it is likely that their nominees will fit into one of those six very general sectors.

shared belief across higher education today that real-world responsiveness to complex problems requires not the traditional academic silos but rather the application of multiple academic perspectives to a shared dilemma or situation; 2) today's graduates need the broader perspectives of multi-disciplinary study in order to enter an innovative and rapidly changing workplace; 3) new knowledge is generated at the contact zones between disciplines, thus producing cutting-edge and potentially publishable research. In the preface to Altbach and Salmi's 2011 study *The Road to Academic Excellence*, Indian Minister of Human Resource Development Kapil Sibal¹⁴⁰ identifies interdisciplinary programming as the key to innovative and relevant higher education in the 21st century:

Dividing knowledge into disciplines and fields provides depth of understanding in an increasingly complex world. However, a growing understanding has appeared that the problems of the 21st century require a holistic understanding of knowledge, in its various aspects. New knowledge today materializes at the boundaries of existing disciplines, and cross-fertilization of disciplinary understanding occurs in myriad ways. The necessity to relate research to the needs of society has also emerged as a dominant paradigm of the policy discourse in higher education. To quote Gurudev Rabindranath Tagore, a Nobel laureate and sage scholar of India, "The highest education is that which does not merely give us information but makes our life in harmony with all existence." Whether the institutional structure of the modern research university is flexible enough to accommodate learning across disciplines and to harmonize education with the needs of society is yet to be tested. The world today is ripe for another tectonic shift in our understanding of the university as an institution.¹⁴¹

The exemplar programs will thus reflect the call to innovation that is driving higher education development around the world. The study of these models will enable the Indonesian institutions to learn to create programs that allow them to position themselves as change agents within their regions: in the words of the ADB report "Knowledge and Skills," "The centers of innovation and creative thinking provided by higher education institutions are critical for the innovation upon which economic and social development increasingly depend. Universities have a potentially important role in driving innovation and development in DMCs. They can do so through their role in research and development, and by training workers for the knowledge economy."¹⁴² As several studies have noted, such programs cannot be created without integrated and consistent attention to the four core areas of HELM focus.¹⁴³

During the research visit to Thailand or Philippines, each group of participants (two from each Indonesian university) will spend five days working with their UKy facilitators, HELM staff, and

¹⁴⁰ The Ministry of Human Resource Development serves as India's Ministry of Education.

¹⁴¹ Preface, *Road to Academic Excellence* (Washington DC: World Bank, 2011), xiv.

¹⁴² <http://www2.adb.org/Documents/Studies/Education-Skills-Strategies-Development/>, 44.

¹⁴³ See for example Altbach and Salmi's *Road to Academic Excellence*: "The few scholars who have attempted to define what separates elite research institutions from the rest have identified a number of basic features—highly qualified faculty; excellence in research results; **quality** of teaching and learning; high levels of government and nongovernment sources of **funding**; international and highly talented students; academic freedom; well-defined autonomous **governance structures**; and well-equipped facilities for teaching, research, administration, and often student life (Niland 2000, 2007; Altbach 2004; Khoon et al. 2005)" (2-3, emphasis added).

selected workshop facilitators from two host institutions. At each host institution, the schedule will involve the following elements:

- A workshop with key change agents associated with a particular exemplar program:
 - Presentation of the exemplar program, with attention to the roles of the four core HELM areas;
 - Discussion of challenges, solutions, and future developments of the exemplar program; or
 - Exploration of each team's action research project, with a focus on the transferable lessons from the model program.
- Meetings with leaders at the host institution who represent the four core HELM areas, in order to discuss the development, strengths, and challenges of the exemplar program
- A meeting with students engaged with the exemplar program;
- Potentially a tour of campus facilities or the off-campus site where the program most directly engages with research or external stakeholders; and
- Meetings with other relevant stakeholders.

In addition to the visits to each host institution, participants will have three other types of meetings:

- One meeting with a Ministry or regional higher education policymaker (e.g., SEAMEO in Bangkok, a ministry of/organization for higher education, an accreditation agency such as PAASCU, Philippine Accreditation Association for Schools, Colleges and Universities);
- Daily debriefings among all team members, to discuss lessons learned and transferability of the models; and
- One additional meeting with the UKy facilitators and HELM staff, to discuss the subsequent phases of action research and the goals and specifications for the final report.

By the end of the study tour week, participants will submit to the UKy facilitators and HELM team a revised version of their one-page project statements, taking into account the lessons learned. They will share this revised project statement with senior leadership on their campuses, to ensure a good reception for the six-month action research project; ideally they will submit a letter of support from their senior leadership, along with the final version of this one-page project statement. They will also have prepared daily reflection papers summarizing the transferable ideas based on the exemplar programs they observe.

In advance of the visit, UKy staff will work closely with the key coordinator at each host university, to organize both the schedule of meetings and the workshops (cc's of all correspondence will be sent to HELM staff). In addition, an in-country facilitator (contracted by HELM via an RFP process in July) will not only handle all travel arrangements and translation issues¹⁴⁴ but will also visit the host institutions in late September to confirm all appointments. The host institutions will each receive a modest remuneration, both to recognize the investment of time involved in planning a unique workshop for these participants, and to emphasize that the

¹⁴⁴ Interpreters, contracted by the in-country facilitator, will be fluent in Indonesian, English, and the local language.

expectation is for a carefully designed training exercise rather than a series of discrete meetings. The above measures will ensure that the regional site visit serves as a solid foundation to the action research project.

C. SIX-MONTH GUIDED DEVELOPMENT OF ACTION RESEARCH PROJECT

The action research project will be aligned with the following description of education-focused action research, as described by Eileen Ferrance, of the College of Education of Brown University:¹⁴⁵

Typically, action research is undertaken in a school setting. It is a reflective process that allows for inquiry and discussion as components of the “research.” Often, action research is a collaborative activity among colleagues searching for solutions to everyday, real problems experienced in schools, or looking for ways to improve instruction and increase student achievement. Rather than dealing with the theoretical, action research allows practitioners to address those concerns that are closest to them, ones over which they can exhibit some influence and make change. Practitioners are responsible for making more and more decisions in the operations of schools, and they are being held publicly accountable for student achievement results. The process of action research assists educators in assessing needs, documenting the steps of inquiry, analyzing data, and making informed decisions that can lead to desired outcomes. ... Implicit in the term action research is the idea that teachers will begin a cycle of posing questions, gathering data, reflection, and deciding on a course of action.

In line with this conceptualization, during the six months following the site visits, the teams of participants will incorporate four elements into the development of their action research projects:

- 1) Lessons learned from the site visit to the Southeast Asian host institution;
- 2) Research into best practices in data-driven design of academic programming, with attention to the four core HELM areas; this research will be facilitated by the UKy facilitators and HELM staff;
- 3) Input and feedback from UKy and HELM staff; and
- 4) Collaborative assessment work on the home campus, including perhaps the involvement of a broader workgroup that offers input into the envisioned program design, including continuous assessment of feasibility and implementation timetables.

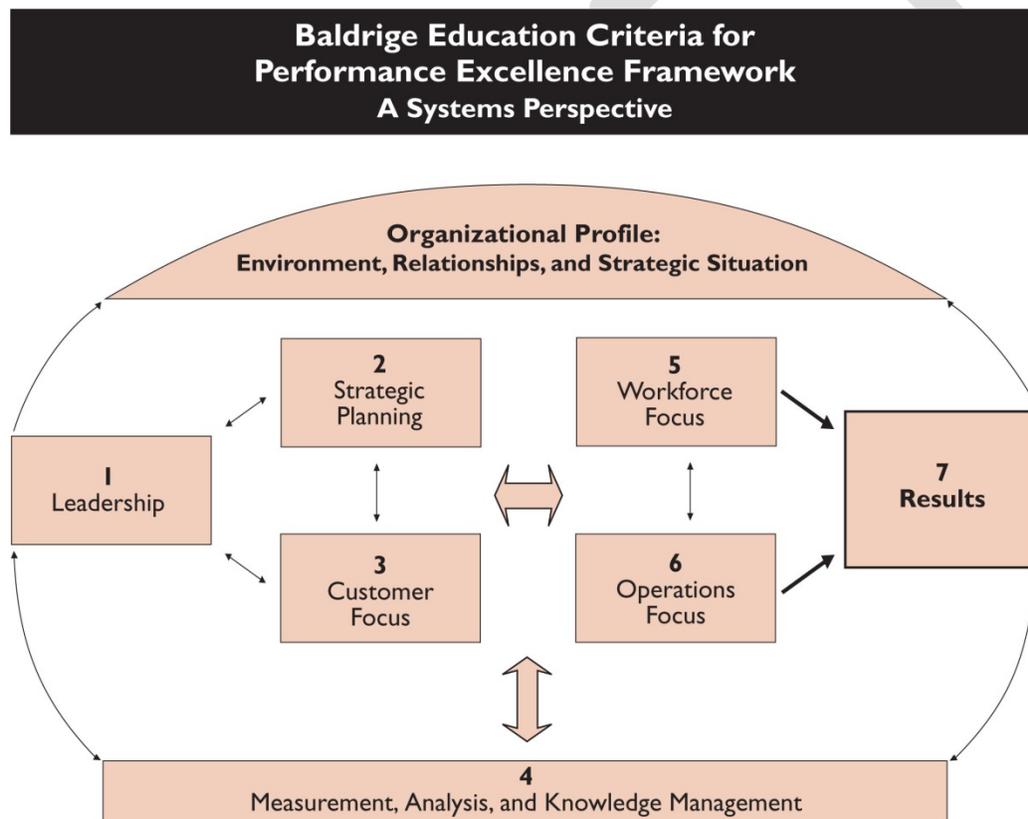
The action research project will involve weekly email contact and occasional videoconference contact where practicable, with the assigned UKy facilitator, in order to guide the teamwork and research of the two Indonesian participants from each of the eight institutions. HELM staff will also be tracking each communication, and will participate actively; either with guidance to the Indonesian participants or with information for the UKy facilitator, as well as on the ground follows up.

The end product—the action research paper—will be shaped from the outset by a framework of guiding questions (see Appendix 2). Because vice-deans can be very busy, frequent

¹⁴⁵ http://www.lab.brown.edu/pubs/themes_ed/act_research.pdf (2000), Introduction.

communication and intermediate goal-setting will be critical to the continuity of the action research project.¹⁴⁶ During the weekly contacts, bibliographic resources will be shared among the participants, the UKy facilitator and the HELM staff, so that the project development moves continuously between higher education management theory (scholarly bibliography), regional and global benchmarking (concrete models), and application within the home university (strategic and tactical planning and assessment).

The framing questions are designed around the standards of higher education excellence elaborated by Baldrige (“a systems perspective on excellence”) as an outline for measuring performance excellence in the education sector.¹⁴⁷ While many formulations of program design and evaluation are available, the Baldrige framework was selected based on the models in place at BINUS, and the advisability of being able to cite a framework currently in successful use within Indonesia. In addition, the Baldrige framework focuses on the same view of integrated higher education administration that is espoused in the HELM project’s attention to four core areas, as can be seen in the following systems map:¹⁴⁸



¹⁴⁶ UKy facilitators will write in English; participants may respond in English or Bahasa Indonesian, and UKy facilitators will use machine translation, consulting with HELM staff when necessary for clarifications.

¹⁴⁷ 2011-2012 Education Criteria for Performance Excellence, http://www.nist.gov/baldrige/publications/upload/2011_2012_Education_Criteria.pdf

¹⁴⁸ 2011-2012 Education Criteria for Performance Excellence, http://www.nist.gov/baldrige/publications/upload/2011_2012_Education_Criteria.pdf, iv.

This map will be utilized as a common framework across all eight to ten Indonesian partner institutions, as a way of demonstrating the interaction between leadership (1 and 2), quality assurance (3-5), external stakeholder collaboration (3) and financial responsibility (6), in order to achieve the type of results that will improve the institution's place in the value chain (7). The Baldrige framework will also make the expectations clear to the participants, in terms of blending research with observation of their own and peer institutions.

Participants will be encouraged to form a working group to assist in their exploration of the questions detailed in Appendix 2. This workgroup might consist of their fellow vice-deans, teaching staff within the envisioned program, and/or students. We will suggest to the participants that the inclusion of students in this conversation and research (perhaps as a focus for the students' own Skripsi projects), might enhance the action research project potential for publication at a later stage. By working within this type of collaborative group, the participants will continue to enhance their leadership skills as well as practice the integration of the four core HELM areas.

Ultimately, the action research project will result in a written document, 20-30 pages in length, addressing the type of questions outlined in draft form in Appendix 2, and providing supporting documentation, with a summary presentation and associated slideshow for use during the spring HELM core management seminar.

D. STAGES OF DISSEMINATION

Both the process of engaging in guided research and the product itself (the research paper) will be of interest to the home campus and to the higher education community within and beyond Indonesia. With this in mind, we envision the following stages of dissemination of the action research project:

1) Seminar in Spring 2013

The seminar will be attended by representatives of the 25 HELM partner institutions, as well as by UKy facilitators and HELM staff. Each team of participants will present their project and the details of its reception on their campuses (including conveying the input from their senior leadership on campus), their assessments of the site visit structure and its subsequent usefulness, the type of research in which they engaged to address their core project, and the campus-based conversations and reflections that informed their work. UKy and HELM staff will offer their perspectives on the development of the project. Optionally, the workshop leader from the Southeast Asian host institution might also attend, and offer input about the final stage of the project development.

This seminar presentation will help to disseminate the reflective, data-driven and integrated process of academic capacity-building that integrates the four core HELM areas. In addition, it will serve as a professional platform for the university team members and a first opportunity for broader input, in preparation for future presentations of the work.

At this seminar, participants will receive a Certificate of Participation; their work will also be characterized in terms of its positioning within the DIKTI credit point system for professional development and performance measurement.

2) Internal dissemination

Following the input received at the seminar, participants will proceed to a broader campus discussion of their project, including feasibility studies or discussions of a timeline and process for implementation. The results of this on-campus dissemination will be assessed after two years (see below).

3) Possible international presentation and potential co-authored publication

Based on the outcomes of the six-month project, the quality of the work and the participants' desire to continue their exploration of the issues in the project, UKy and HELM staff will offer advice about potential venues for international conference presentations or for revising the project for publication in an international academic journal (either discipline-based or focused on comparative education). Once again, these platforms will offer a path for continued professional development for the participants, as well as disseminating the model of data-driven academic program development beyond the confines of the institution or the HELM community.

E. FOLLOW-UP AND ASSESSMENT

Continuous assessment will be performed focusing on both the perceived usefulness of the project and the impact of that project on subsequent program development. It should be noted that "subsequent program development" includes not only the program that forms the core of the action research project, but also other programs that involve the input of the two participants and the implementation of the lessons they have learned.

In advance of the site visits to Southeast Asian host institutions, participants will be asked what they expect to gain during the visit. Following the five-day set of workshops and meetings, the participants will be surveyed regarding a) what they learned that was transferable to their own context and b) how they will change their initial project idea, based on the lessons of the five-day workshop.

At the conclusion of the six months, UKy and HELM staff will evaluate the quality of the action research papers, in accordance with graduate-level academic standards. Participants will be asked to evaluate their own processes and products, and to assess the potential impact of a) the transferable skills learned during the project's development and b) the implementation of the action research project itself.

The spring seminar will be evaluated by all attendees, in terms of transferable lessons learned as well as input for future iterations of this program.

Finally, after two years (spring 2015), the participants will again be contacted by HELM, for impact assessment based on the following criteria:

- Current position that the two participants hold within the institution's administration;
- Continued input that the two participants have on institutional decision-making, with attention to any of the four core HELM areas, whether from the vantage point of an administrative position or from the vantage point of teaching staff;
- Stage of implementation of the action research project itself – was it reviewed, implemented, assessed? If not, what were the factors that mitigated against successful implementation? If so, what were the institutional and external stakeholder gains that resulted from the program's expansion or implementation?
- Impact of this program on the development of other academic programs or accountability processes across the institution – did the two participants have a role in any of these developments? If so, how did the action research project inform their input?
- Continued dissemination of the lessons learned – did the participants disseminate their work at any professional forums or in print/web form, either within their institution, within Indonesia, or internationally?
- Within the institution, what changes have been made in the systems that underlie each of the four core HELM areas? Did the action research program have any influence on those developments?

F. FUTURE ITERATIONS

Based on the feedback from the October study tours, the action research projects that are completed and the presentations on the projects to be made during a spring HELM core management seminar, from the eight to 10 participating institutions as well as from the broader HELM community, and pending USAID approval, it is anticipated that the program will be repeated during October 2013-May 2014 for eight to 10 more HELM partner institutions, with appropriate modifications and improvements. Assuming that both the first and second iterations of the action research program are successful, the third-year iteration will be proposed. If this program is able to run the three iterations then all the HELM partner institutions will have the opportunity to participate, at least once.

CONCLUSIONS AND RECOMMENDATIONS

Studies of higher education capacity-building, and examinations of data related to educational attainment and national economic development, have demonstrated convincingly that the development of capacity in higher education is intricately linked to the national economy. Institutions of higher education should be viewed not only as producers of a skilled workforce but also as centers for creativity and innovation, and as economic drivers for their region and their country. Indonesia faces three key challenges in comparison with its Southeast Asian neighbors: 1) the need for rapid expansion and the threat posed by loss of quality control if this expansion occurs too quickly; 2) the disconnect between universities and businesses, a gap that is greater in Indonesia than in other ASEAN countries; and 3) the diminished role of universities in national research and development, as compared to the R&D/higher education linkage in both ASEAN and global competitor nations.

These three situations point to the need for skill-building in universities, in the area of program development—specifically, the development of regionally responsive and innovative academic and research programs that are closely monitored for quality and efficacy. Such programs can only be developed through simultaneous attention to the four core HELM areas: leadership/administration, financial management, quality assurance, and external stakeholder collaboration.

- RECOMMENDATION 1: Specific program-building projects should be developed within each HELM partner institution, based on strong examples from across the Southeast Asia region.
- RECOMMENDATION 2: The program-building projects should integrate the four core HELM areas, through a mentored process of development and dissemination.
- RECOMMENDATION 3: The action research project should not only produce a draft of a viable educational program for the institution, but should also serve as a mechanism for training future university leaders. Thus the mentorship and training should focus not only on the specific program, but on the general skills of effective communication, responsiveness to all stakeholders, the acquisition and use of reliable assessment data, financial responsibility and sustainability, and other lessons of academic leadership.

The Southeast Asia data related to economies as well as higher education clearly demonstrate that Singapore’s situation is unique in the region. Smaller, wealthier, and global from the outset, its higher education system offers strong models for Indonesia, but the lessons there are not easily transferable to the very different Indonesian context. Laos, Cambodia and Vietnam offer some examples of strong programming, but in general the higher education systems are not as well developed as those in the middle Southeast Asian tier, consisting of Indonesia, Malaysia, Thailand, and Philippines. Based on the studies of innovation adoption led by scholar Everett Rogers regarding the usefulness of “near peers” rather than very distinct exemplar programs, we recommend that exemplar programs be drawn from these four countries. Additionally, Rogers points out that adoption of innovation depends in part on the perception of “newness” on the part of the trainees, and this perception will be enhanced by a visit to a distinct country, rather than to the very familiar Indonesian higher education leaders.

- RECOMMENDATION 4: One-week study tours should be undertaken, so that Indonesian participants can study not only exemplar programs across Southeast Asia, but also the strategic processes that resulted in the creation and sustaining of these programs.
- RECOMMENDATION 5: Some study tours should focus on the positive models found within Indonesia, such as those at UI, ITB, UGM, and IPB. However, it should be recognized that many middle-tier Indonesian universities will not recognize these Indonesian universities as “near peers” due to their longer histories of privileged status and prestige.
- RECOMMENDATION 6: The initial study tours should take place in Philippines and Thailand, followed by study tours in Malaysia and possibly a return to Philippines and/or Thailand. This will allow for better adoption of innovative approaches, since the exemplar programs will not be viewed through the lens of Indonesian educational politics. As a complement to the study tours to neighboring countries, particular workshop leaders should be invited to HELM trainings in Jakarta, from exemplar programs in Singapore as well as at UI, ITB, UGM, and IPB. This will allow for the

presentation of particular programs and models, and contribute towards the creation of a stronger mentorship network within Indonesia.

- RECOMMENDATION 7: At a later stage of the HELM project, targeted visits to programs at the leading Indonesian universities should be implemented, with appropriate contextual input from DIKTI and HELM regarding institutional hierarchies within Indonesia.

Action research projects are an ideal vehicle for mentoring the development of model academic programs, within the HELM partner institutions. They will offer multiple advantages: a) they will allow for institution-wide discussion of how to build sustainable and economically responsive programs of high quality and rigor; b) they will serve as a leadership training tool for the participants and their interlocutors; c) they allow for sustained conversation with HELM mentors and US mentors around a specific and relevant topic; d) they invite the integration of research and application on the part of the participants; and e) they result in transferable lessons for other HELM partner institutions, through the sharing of the results in future HELM forums or in publications.

- RECOMMENDATION 8: A six-month guided research phase should follow the site visits, to mentor the participants in developing an exemplar program within their own institutions. The six-month phase will involve weekly or bi-weekly email contact or conversation with HELM mentors as well as UKy mentors.
- RECOMMENDATION 9: Results of the action research projects should be shared via a HELM seminar in May 2013.
- RECOMMENDATION 10: Key players from the October study tour countries should be invited as respondents to the May 2013 HELM seminar.
- RECOMMENDATION 11: Based on the outcomes of the action research projects, participants should be encouraged not only to follow through with implementation of their exemplar academic program, but also with broader dissemination of their outcomes via an international conference or publication. This offers the dual advantages of sharing the lessons learned and developing the international research networks of the participants.
- RECOMMENDATION 12: Based on the outcomes of the site visits, particular change agents from Indonesia and Thailand should be invited as presenters at future HELM seminars held in Indonesia. Their familiarity with the HELM goals, and their experience with the HELM participants during the study tours, will establish a useful partnership that can be utilized in later stages of the HELM project.

Assessment of the outcomes of these trainings is a key part of the training cycle. With that in mind, the study tours for Year 2 and Year 3 should be informed by the experience of the October 2012 study tours and subsequent project development/dissemination/ implementation.

- RECOMMENDATION 13: An impact assessment of the 2012 study tours should be undertaken after two years (in May 2015), based on the questions outlined in this report.

Finally, the review of exemplar programs across the Southeast Asia region reflects similar trends to those that direct higher education expansion globally: responsive and innovative programming

tends to be interdisciplinary in nature, establishing the higher education institutions not only as trainers of a high-capacity workforce but as regional (if not global) knowledge hubs, a valuable service for economic, social, industry, and political development. By assessing current academic programs through this lens, and by creating new programs that meet these aspirations, the HELM partner institutions will be able to position themselves for a greater role in Indonesia's economic development and for increased capacity in terms of the four core HELM areas.

- **RECOMMENDATION 14:** To the extent possible, HELM training that deals with creating academic programs should focus on the integration of all four core areas. Effective leaders of higher education will need to demonstrate their mastery of the connectedness between leadership, finance, assessment, and regional responsiveness.

ANNEX A: DRAFT NARRATIVE PROMPT FOR ACTION RESEARCH PARTICIPANTS: DEVELOPMENT OF THE PRE-ACTION RESEARCH PROJECT

Congratulations on your participation in the Action Research Program sponsored by USAID’s Higher Education Leadership and Management project (HELM). You and your HEI team member—one currently working in academic leadership, one in financial management—have been identified by your institution’s leadership as people who have a vision and expertise to help shape the future of your institution. We look forward to working with you on this six-month project, which will result in a HELM core seminar presentation in spring, as well as, possibly, an international conference presentation or co-authored publication with your U.S. facilitator.

Please write a 1-page (double-spaced) summary of the project that you will explore during the upcoming workshop in Thailand or the Philippines, and in the subsequent 6-month research phase of this program. The following questions should be used as guidelines for shaping your statement. Choose one option and together with your team, respond to the associated questions:

- Option 1: What current academic program within your faculty best addresses a direct need of your community (solving a problem or involving knowledge exploration) or regional industry (workforce development or research), and is a strong candidate for future improvement? Is this a program that could grow in size in the future? How do you envision it getting better as well as bigger over the next five years?

If you select Option 1, your action research project will involve a vision for getting from where this program is today to where it might be five years from now, with attention to leadership and planning, data-focused assessment, financial responsibility, and responsiveness to regional needs. The project will include research into how each of the core areas (leadership and management, quality assurance, financial management, and external stakeholder collaboration) can work together to create a high-quality program that connects teaching, research, and community responsiveness. Please write a one-page summary of the core idea for such a program improvement/expansion.

- Option 2: Is there a regional need that your faculty might address if it had time and resources to do so? In other words, is there an area that combines your faculty’s academic strengths with a need or a problem that your community could use your help to solve? What would such a program look like? How would it involve students, research, and your community? What kind of interdisciplinary “center” might address these needs?

If you select Option 2, your research project will involve exploring how a center might be envisioned, planned, and implemented, perhaps using an already-existing program from Thailand or the Philippines as a reference. From that already-existing program, you will be able to explore the roles that leadership and planning, data-focused assessment, financial responsibility, and responsiveness to regional problems played in building and sustaining it. You will then be able to use that foundation, combined with your action research, to explore the possibility and challenges of creating this new program at your home institution, integrating the four dimensions (leadership, assessment, finance, collaboration). Please write a one-page summary of the core idea for such a center.

Annex B: Guiding Questions for Action Research Paper (DRAFT)

The Action Research Paper will be the product of your six-month process of research and consultation, and will be the basis for both a HELM Seminar presentation in spring and future dissemination of your work. Future dissemination possibilities include international conference presentation, potentially with your UKy facilitator or a publication in an international journal, in English, co-authored with your UKy facilitator. Toward that end, and with the goal that the process will be as useful to you and your institution as the product will be, we offer the following list of questions to frame your research. These questions focus on the four core HELM areas: leadership, quality assurance, financial responsibility, and external stakeholder collaboration.

- 1) **LEADERSHIP:** What lessons have you learned about leadership and the implementation of change, from each of the following sources?
 - a. Visit to Southeast Asia host institution and meetings with the change leaders there.
 - b. Bibliographic research about effective leadership.
 - c. Guidance from your UKy and HELM facilitators.
 - d. Observation of change management at your own institution, answering the following questions, which have been adapted from Baldrige frameworks:¹⁴⁹
 - i. How do senior leaders set and deploy your organization's vision and values?
 - ii. How do their personal actions reflect their commitment to these values?
 - iii. How do senior leaders personally promote legal and ethical behavior?
 - iv. How do they create a sustainable organization (for example, with attention to developing future leaders, paying attention to external stakeholders, attending to financial responsibility, promoting quality assessment)?
 - v. How do they create an environment for performance improvement, assisting you in accomplishing your mission and strategic objectives, innovation, and organizational responsiveness to changing conditions around your institution?
 - vi. How do senior leaders communicate with and engage the entire institution, including two-way communication and communicating key decisions?
 - vii. How do senior leaders create a focus on action to accomplish institutional objectives, improve performance, and help you attain your vision?
 - viii. Do senior leaders regularly review performance measures to identify needed actions?
 - ix. How do you evaluate the performance of senior leaders?
 - x. How do they use their performance reviews to further their development, improve their personal leadership effectiveness, and improve the performance of the leadership system?

- 2) **LEADERSHIP:** Who are the key agents of change with whom you need to collaborate for effective design and eventual implementation of your project? Summarize your consultations with them (dates, topics, summary of each meeting, concrete "next steps" that emerge from each meeting).

¹⁴⁹ http://www.baldrige.com/criteria_leadership/10-critical-questions-senior-leadership/

- 3) LEADERSHIP: Does this new program or expanded program have the support of:
 - a. Senior administration (Rector, Vice-Rectors)?
 - b. Director of all involved departments?
 - c. Teaching staff?

- 4) LEADERSHIP: What are the strongest lessons of leadership that you learned during your site visit to the Asian host institution? What are the strongest lessons of leadership that you have learned during your research? What concrete steps can you take to create awareness, buy-in, and broad input for the new program that you are envisioning?

- 5) STRATEGIC PLANNING: How does your project fit into the strategic vision of your institutional leadership, as expressed in your Renstra? How does it meet specific objectives of the DIKTI strategic plan? Summarize your program proposal following the format of the DIKTI strategic plan (Strategic Objective, Goals, and Policies to reach those Goals, Performance Indicators).

- 6) STRATEGIC PLANNING: From your benchmarking research, attach two strategic plans from other universities that have been useful models for you. These institutions can be within Indonesia, Southeast Asia, or the US. What have you learned from those models and how does it shape your own planning for your new or expanded academic program?

- 7) CUSTOMER FOCUS (Students): What are the student learning outcomes at the core of the new or expanded program you are envisioning? What will students be able to do when they enroll in this program that they cannot currently do? How will that ability or knowledge be useful to them in the future?

- 8) CUSTOMER FOCUS (External Stakeholders): Describe the connection between your academic program and the external stakeholder needs that your project addresses.

- 9) CUSTOMER FOCUS (Students and External Stakeholders): How will the graduates of your new or expanded academic program be better equipped to address the needs of the employers or communities that you serve?

- 10) MEASUREMENT, ANALYSIS (Quality Assurance): Who will assess what students are learning, and how will it be measured? Summarize the useful research you have studied on this topic. How will the assessment data be used for program reviews and improvements in the future? Assessment should include measurements of teacher effectiveness, student learning outcomes, institutional support and environment, and external impact.

- 11) WORKFORCE FOCUS: Does the teaching staff within your faculty have the expertise to develop and implement the academic program you envision? You should consider both the strengths and challenges of your faculty's teaching staff (and other faculties involved in this project). How will this assessment be discussed or communicated to your senior leadership?

- 12) OPERATIONS FOCUS: Summarize the lessons you learned during your visit to an Asian host institution in October, regarding the connection between a faculty area of strength and

an external need or focus. With that in mind, create a more detailed description of your project, with a focus on how the institution's priorities are determined in conjunction with external stakeholders.

- 13) OPERATIONS FOCUS: Summarize the linkage between financial responsibility and academic responsibility in the host institution you visited in October, and compare/contrast this with the linkages in your own institution.
- 14) OPERATIONS FOCUS: Outline/summarize all of the financial needs and potential revenues associated with your project. Summarize the argument that demonstrates that you have considered how the financial or budgetary issues have been carefully integrated into your planning, and summarize the challenges with potential solutions to the financial feasibility of your project.
- 15) What are the challenges your team will face in operationalizing your action plan? (For example, what stakeholder support will be required, and how have you communicated with each of these stakeholder groups in order to gain their support?)
- 16) Based on this project, what lessons have been learned about the following four areas that would apply to the development and implementation of any new program at your institution?
 - a. Leadership;
 - b. Financial responsibility;
 - c. Quality Assurance; and
 - d. External stakeholder collaboration.

Annex C: Draft Timeline for Selection and Pre-departure Processes

Group 1: October 7th (Manila) Group 2: October 14th (Bangkok)

Selection Processes

No	Action Plans	Estimated Date	Responsible Person
1	25 HEIs selected and approved	20 August	
2	Select the 10 out of 25 HEIs to be invited to participate in this program	25 August	UKy Team and HELM Staff
2	Selection announced to 10 HEI and requirement letter distributed to Rector	5 September	HELM Staff
3	Have recommendation participants and the requirement returned to HELM and PMU	10 September	HELM Staff
4	Team review for recommendation participants	14 September	HELM Staff
5	Send participants data for USAID approval	14 September	HELM Staff
6	Approval from USAID for participants	18 September	HELM Staff
7	Letter of notification for Rector	18 September	HELM Staff
8	Pre-departure process		HELM Staff

Pre Departure Processes

Days Before Departure (Due Date)	Actions that need to be Processed after the candidate has been identified (Items in bold are the names of the forms)	Responsible Person
<i>18 days</i>	<i>18 Sept</i> Sending the narrative prompt to selected participants to develop 1 page initial project. (Appendix A: action research workshop design)	UKy Team and HELM Staff
<i>18 days</i>	<i>18 Sept</i> Participants apply for passport. (Note: The name must be stated exactly as shown in the passport, not the Indonesian ID.)	Participants
<i>9 – 2 days</i>	<i>26 Sept – 5 Oct</i> The arrangement for Health and Accidental Coverage (HAC), Training Agreement, Acknowledgement of Training, and other supporting document. (ADS 253.2.5.4.)	HELM Staff
<i>8 days</i>	<i>28 Sept</i> Participant gets passport, copies to HELM	Participants
<i>6 days</i>	<i>1 Oct</i> Hotel for orientation and flight arrangement for participants and HELM staff	HELM Staff
<i>5 days</i>	<i>2 Oct</i> Participants send 1 page initial project to UKy and HELM staff	Participants, UKy Team and HELM staff

<i>5 days</i>	<i>2 Oct</i>	Finalize data in TraiNet Web	HELM/ USAID
	<i>6 Oct</i>	Group 1 Participants receives pre-departure "counseling" orientation by USAID, HELM Staff	Participants, HELM Staff
	<i>7 Oct</i>	Group 1 Participants depart for Manila	Participants, HELM Staff
	<i>13 Oct</i>	Group 2 Participants receives pre-departure "counseling" orientation by USAID, HELM Staff	Participants, HELM Staff
	<i>14 Oct</i>	Group 2 Participants departs Bangkok	Participants, HELM Staff

Post Training Meeting

Post Training Meeting (Due Date)		To ensure all participants submit 6 month action research plan prior to flight back to Jakarta.	Responsible Person
<i>1 day</i>	<i>13 Oct</i>	Group 1: Individual Meetings by HEI Finalization of Individual Action Research Plan in Manila submitted to HELM staff.	Individual participant supervision of UKy Team and HELM Staff
<i>1 day</i>	<i>20 Oct</i>	Group 1: Individual Meetings by HEI Finalization of Individual Action Research Plan in Thailand submitted to HELM staff.	Individual participant supervision by UKy Team and HELM Staff

Tentative Schedule and Team assigned for Bangkok and Manila:
Manila – 6-13 October 2012

1. Susan E. Carvalho (UKy)
2. Beth L. Goldstein (UKy)
3. Iskandar Nataamijaya (HELM)
4. Abdul Rahman (HELM)
5. In-country facilitator

Bangkok -13 -20 October 2012

1. Susan E. Carvalho (UKy)
2. Beth L. Goldstein (UKy)
3. Tutiek Rahaju (HELM)
4. Sarjono (HELM)
5. In-country facilitator

ANNEX D: SPECIAL INITIATIVES PROVIDED BY PROPOSED HEIS IN PHILIPPINES AND THAILAND, AND SPECIFIC PROGRAMS PROPOSED FOR VISITS

A. Philippines

Selected Institution	General Administration and Leadership	Quality Assurance System	Financial Management	External Stakeholder Collaboration
1. University of the Philippines Diliman	Leadership – change management in developing interdisciplinary programs <i>(University Center for Integrative and Development Studies)</i>	Quality assurance related to research and community service <i>(University Center for Integrative and Development Studies)</i>	Development of new revenue streams (fees from training of industry)	Responsiveness to industry needs <i>(National Industry Center)</i>
2. Ateneo de Manila University Quezon City	Evolution from teacher training to applied learning; strategic planning for role as regional knowledge hub (testing and technology taught in <i>Pathways to Higher Education</i> program)			Attention to research and service to address deficiencies of the regional secondary schools (service learning: <i>Pathways to Higher Education, ACED Program</i>) provides corporate support and health programs to secondary schools
3. Mapua Institute of Technology, Manila	Strategic planning – setting an ambitious goal and building consistently towards that goal	Recent ABET accreditation means strong attention to world-class QA including data collection		
4. University of Santo Thomas, Manila.		Use of assessment data to track program effectiveness	Development of new revenue streams so programs are	University center serves the regional needs for tourism development, building on skills of both

		(for research and community service)	self-sustaining (fees for regional program participation)	university and external partner communities (<i>Center for Conservation of Cultural Property and Environment in the Tropics</i> cooperation with industry, <i>Integration Development Program</i> for Aetna minority research and development, graduate studies in <i>Cultural Heritage Studies, Poverty Alleviation, globalization, migration/diaspora, gender</i>)
5. De la Salle University, Manila	Strong leadership/ <i>management training for administrators</i> already in place	Strong use of data to track impact of internships and alignment between academic programs and employer needs; also high marks by accreditors for use of <i>QA data (assesses internships, tracer studies)</i>		Practicum program operated by <i>“External Engagement Office”</i> Operates a regional campus that has led to economic growth for the region”

B. Thailand

Selected Institution	General Administration and Leadership	Quality Assurance System	Financial Management	External Stakeholder Collaboration
1. Mahidol University, Bangkok	Leadership and management that balances clinical practices and community	“External QA Program” in place for all medical	Health areas utilize multiple revenue streams to manage research, students, and service	Responsiveness to the community needs (e.g. dengue research, endangered species, etc.) (National

	service with world-class research on important topics	laboratories (program developed for Thailand)		institutes with engagement with government and private sector include: Child and Family Development; Innovative Learning; Nutrition; Molecular Biosciences; and Population and Social Research , as well as Faculties of Tropical Medicine, Science, and Public Health, and Medical Technology)
2. King Mongkut's University of Technology, Thonburi .	Vision and leadership from the top adapts activities to meet the needs of society; university vision to meet needs of all stakeholders (emphasis on science and technology)		Effective acquisition and use of government research monies to generate operating income (high research productivity, <i>packages of services to industry</i>), Pilot factories (biopharmaceuticals) will generate new revenue streams	Combining engagement with research to create economic and social value(<i>Maintenance Technology Center, Transportation and Transport Development and Research, Thermal Engineering Center, Pilot Plan Development and Training Center</i>) ISTRS centers connect research with private sector needs

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