



Myanmar

Philippines

Singapore

Thailand

Vietnam

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Allurentis is delighted to have been involved in partnership with ASEAN on this, the third publication and would like to thank all sponsoring organisations for their kind contributions. We are confident that it will raise awareness with all readers and prove to be an invaluable resource, especially for those wishing to become involved in the extraordinary business opportunities and growth prospects within the Region.

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Introduction: ASEAN is on track for economic integration



ASEAN's economic performance continues to outpace the rest of the world with the Asian Development Bank predicting that GDP in ASEAN countries will grow 5.3% in 2013 and 5.6% in 2014. This impressive performance and the even greater prospects that will emerge following the introduction of a single market resulting from the introduction of the ASEAN Economic Community (AEC) at the end of 2015, are shaping the Region as a key investment opportunity.

Member states are already making good progress towards economic integration. ASEAN Secretary General, H.E. Le Luong Minh, has said that almost 80% of the measures in the ASEAN Economic Community Blueprint agreed in 2007, have now been implemented.

An important landmark has been reached in 2013, with the ASEAN Agreement on Movement of Natural Persons which eases entry by citizens of member states to other Southeast Asia countries and provides agreement on their length of stay.

Of equal significance is the completion in 2013, of pilot tests of the online ASEAN Single Window customs data transfer system, following agreement on its final design in 2011. The Single Window connects individual countries' computerised systems and supports the exchange

of intra-ASEAN certificates of origin and customs declarations documents. The system is now being expanded to include other types of data and will do much to end cross-border delays.

Over the next 20 years, Southeast Asia will be one of the world's fastest growing consumer markets with ASEAN members' GDP forecast to rise more than fourfold to US\$10 trillion by 2030. The combined GDP of member nations is already significantly larger than India's economic output and by 2018, it will exceed that of Japan according to US industry analyst IHS Global Insight.

The AEC will unleash a new era of growth by creating a competitive market of more than 600 million people in the ten member countries comprising Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.

Economic integration through a range of measures including tariff reductions and streamlining of administrative procedures, aims to enable an easier movement of goods, services, investment, capital and people across the Region. This will open up new markets for companies in member states and new ways to operate supply chains. Intra-ASEAN trade is steadily improving and is likely to gather pace in the next few years. The Region is already Thailand's largest market, for example, absorbing 23% of the country's exports.

According to former ASEAN Secretary General, Dr Surin Pitsuwan, the movement of goods and services among ASEAN countries represented 25% of the total US\$2.8 trillion trading volume in the Region during 2012. After the implementation of the AEC in 2015, he expects that intra-ASEAN trade will increase to 30% and touch 35% five years later.

The momentum is seen in the growing number of cross-border investments as well as merger and acquisition activity seen in banking, manufacturing, transport and communications sectors.

For international as well as regional investors there are many opportunities opening in an area that will be able to be addressed as a single market. Integration of the diverse economies promises to make ASEAN much more competitive in attracting global investment and as a location for establishing manufacturing operations.

The Region's increasing focus on infrastructure including major telecoms developments, roads, railway and ports projects also promised to nurture a much improved environment for export industries.

Astute pathfinder investors from the mining sector, manufacturers and technology industries are already flowing into the area. In 2012, the Region was the only part of the world to experience an increase in Foreign Direct Investment (FDI). This followed a record inward flow of FDI in 2011.

This is a time of positive and accelerating change, as new growth and development strategies are implemented to sustain economic and

social progress. ASEAN countries are as a result, likely to play a far more significant role in the global economy as the 21st century unfolds.

Myanmar's geographic position, for example, could in the long term prove as important a factor as the opening of its economy to greater foreign investment. The country provides the only land bridge between South Asia and Southeast Asia via its borders with India, Bangladesh and China, Thailand and Lao PDR.

ASEAN, longer term, is looking to become an even more dynamic and mainstream global supplier. It wants to ensure that its internal market will remain attractive to foreign investment. In view of this need, member states are already looking beyond the bounds of the forthcoming AEC.

In addition to its focus on economic integration, ASEAN member states, Brunei Darussalam, Malaysia, Singapore and Vietnam are negotiating a Trans-Pacific Partnership (TPP) Free Trade Agreement with seven countries comprising the US, Canada, Chile, Peru, Mexico, Australia and New Zealand.

Negotiations are also continuing to set up the Regional Comprehensive Economic Partnership (RCEP). This is designed to link ASEAN's ten member countries with New Zealand, Australia, South Korea, India, Japan and China into one regional Free Trade Agreement. Together, these countries account for almost half the global population and about a third of global output.

The TPP and RCEP are very ambitious regional trade arrangements that will involve complex negotiations. Alongside the inauguration of the ASEAN Economic Community, a successful conclusion to these additional negotiations will propel ASEAN countries into an era of growing prosperity and opportunity.



H.E. Le Luong Minh: Secretary General of ASEAN



H.E. Le Luong Minh, Secretary-General, ASEAN

ASEAN is, indeed, on track towards the ASEAN Economic Community (AEC). Solid economic, trade and investment figures show the Region growing by 5.7% in 2012, against the backdrop of weak global growth performance. For 2013, ASEAN is expected to continue with its resilient and robust economic growth.

This can be further seen in our Foreign Direct Investments (FDI). ASEAN figures reached a record US\$108.1 billion in 2011 and continued to maintain its FDI level in 2012, bucking against the trend of declining global FDI inflows, particularly in developing economies. Intra-ASEAN FDI net inflows also soared significantly, reaching US\$20 billion in 2012.

All these achievements are the results of the individual and collective efforts of our ASEAN Member States, reflecting our commitment and resolve to achieve the AEC in 2015.

For many years now, ASEAN has been undertaking various initiatives to promote ASEAN as a single investment destination. With the ASEAN Comprehensive Investment Agreement (ACIA), covering the four pillars of liberalisation, protection, facilitation and promotion, we aim to increase ASEAN's

stature to attract more investments in the Region. To have greater awareness and ensure broad stakeholder support, we are also actively undertaking key promotional measures, which include: a website, an updated compendium of investment rules and regulations of Member States and three publications namely the ASEAN Investment Report 2013, ACIA Guidebook for Investors and the Handbook on ACIA for the Investment Promotion Agencies.

Forming part of ASEAN's grand plan to create a single market and production base and a single investment area, our initiatives, especially under ACIA, are all designed to provide greater transparency, instil confidence and support greater industrial complementation and specialisation among ASEAN Member States. These should, in turn, not only generate more opportunities and redound to the benefit of the ASEAN business sector, but also to the rest of our Community as well.

Working more closely and together with the private sector, ASEAN will pursue the enhancement of the investment climate of the Region, building an ASEAN Community that is competitive, fully integrated and networked into the global economy.



US-ASEAN Business Council



Alexander Feldman, President, US-ASEAN Business Council

The US-ASEAN Business Council has worked for nearly 30 years to advance the business relationship between the United States and Southeast Asia, and I can honestly say the relationship has never been stronger than it is right now. Every year, trade and opportunities continue to grow. US-ASEAN bilateral trade in goods and services continues to expand, passing the US\$200 billion mark in 2012. The ASEAN Nations together make up America's fourth largest export market, supporting over 437,000 jobs here in the US

US companies continue to grow their business in ASEAN. ASEAN hosts over US\$150 billion in US Foreign Direct Investment, the largest US commitment in Asia. As the business environment evolves, more opportunities will continue to be discovered.

The ASEAN nations are strongly focused on creating investment friendly business environments, and responding to the needs of investors both large and small. The Council just completed our annual participation in the ASEAN Economic Ministers Meeting, where the Ministers take the time to engage with companies, exchange ideas, and form real partnerships aimed at improving the economic environment. Numerous engagements throughout the year in each ASEAN country help create a mutually beneficial climate of cooperation in the Region.

ASEAN and its members have thought deeply about their economic future, and put into place plans designed to sustain and support this environment of growth. The ASEAN Economic Community, an ambitious effort slated to take effect in 2015, will create a single market of over 600 million consumers, linked by the ASEAN Free Trade Area and the ASEAN Single Window to create a free flow of goods and services. The ASEAN Connectivity Masterplan will create and develop cross-border linkages, helping to bring regions and countries together and narrow the gaps in economic development.

As ASEAN grows and comes together, opportunities exist across a broad variety of sectors. ASEAN needs billions of dollars in infrastructure investment; not just traditional roads and bridges but broadband access, education, and healthcare networks. ASEAN is building its financial framework and creating a greater system of business to business linkages. Growing incomes create opportunities for export. I encourage you to take the time to learn what ASEAN can offer you. * * * * *

EU-ASEAN Business Council



Stefano Poli, Chairman, EU-ASEAN Business Council

ASEAN is no longer seen as a Region plagued with distress but rather one of promises and tenacity. It's synergistic and diverse market has crafted a favourable business environment for foreign investors. The optimistic profit outlook in the Region has seen an upward trend of EU trade and investment gravitating towards ASEAN to tap onto the multiplicity of resources the Region has to offer.

In 2011, the EU was ASEAN's third largest trading partner, accounting for 10.5% of ASEAN's trade. This percentage is set to grow as markets quietly rebound from a sluggish global economy. The affirmative business relations between ASEAN and the EU bring forth the transactions of business concepts and technology transfer. Just a year shy of the ASEAN Economic Community 2015, ASEAN will soon become a hub of centralised opportunities for EU businesses to flourish with a consumer base of 600 million.

The EU-ASEAN Business Council (EABC) continues to be the point of anchor for commercial and economic collaborations between ASEAN and the EU. Following the success of the third ASEAN-EU Business Summit 2013 in Hanoi, Vietnam, the Council has proven effective in facilitating public-private dialogues between senior level representatives and officials. Recommendations issued included the development of the regional Automotive sector, ASEAN Connectivity, Information, Communications and Technology (ICT), Agri-Business and Financial Services. It is our firm belief that the information made available from the business summit would be useful for EU and ASEAN enterprises.

As the formation of partnerships continues to grow, the EABC will carry on its efforts to enhance the transparency of business practices in ASEAN. Pragmatic and principled approaches would be adopted and tailored to the needs of the Region to tackle complex challenges. The business parameters of ASEAN are dynamic and with a clearer frame of business standards, there will be greater development between ASEAN and the EU trade and investment ties.

To build resilience against economic unpredictability and fluctuations, the EABC is ready to prepare the right tools to capitalise on the strengths of ASEAN. It will continue to spearhead economic and commercial strategies for the prosperity of investment in the Region. 2014 will certainly be a very exciting and auspicious year for the next phase of EU-ASEAN business relations.



UK-ASEAN Business Council



Lord Davies, Chairman, UK-ASEAN Business Council

The ten ASEAN member states currently have a combined GDP similar to the UK's, and by 2030, the ASEAN economy is predicted to be the fourth largest single market after the EU, US and China. UK-ASEAN trade already exceeds US\$30 billion and with a large and young population, ASEAN is the next great market. There are an increasing number of Free Trade Agreements (FTAs) being negotiated between the EU and ASEAN, with the EU-ASEAN Free Trade Agreement and its associated benefits a key goal to strive for.

US\$30 billion in UK-ASEAN trade is a solid foundation. However, the UK's market share across the Region remains low compared with other countries and this was why the UK-ASEAN Business Council (UKABC) was established. The UKABC's role is a simple one: to help drive up the US\$30 billion two-way trade figure by raising awareness of the vast array of commercial opportunities across ASEAN; and provide practical assistance on how to do business in this diverse market to UK companies.

In the past year, the UKABC has worked with over 500 UK businesses looking to win business in ASEAN. It has received business delegations headed by senior political figures from almost every market in ASEAN and linked them with interested UK companies. For UK companies, from Manchester to Manila and from Birmingham to Bangkok, the UKABC is there to help to provide practical advice, information and links to the key delivery partners including, UK Trade & Investment and British Business Groups overseas.

ASEAN is an exciting market, alive with opportunities for UK companies. The UKABC is the business partner for UK companies considering entering the ASEAN market or expanding their presence, and so there has never been a better time for UK companies to do business in ASEAN.



In the future, there will be no markets waiting to emerge.

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*Source: HSBC "The World in 2050". Jan 2011.



ASEAN: An opportunity for treasury

The Association of Southeast Asian Nations (ASEAN) is scheduled to establish the ASEAN Economic Community (AEC) by 2015. This will represent not only a major step forward for ASEAN, but also a considerable opportunity for businesses both inside and outside the bloc. Nick Gandolfo, Head of International for HSBC Bank in Indonesia, outlines the parallel opportunity it presents to corporate treasuries.

As ASEAN has continued to develop, a growing number of companies around the globe have begun to appreciate its importance to their business plans, which has led to a change in their thinking. As a result, it is now increasingly common for companies of all sizes to have a strategy for ASEAN, as opposed to multiple individual strategies for its members.

While the forthcoming AEC is obviously a factor in this thinking, there is the more general consideration that it is now increasingly possible for all or the majority of a company's business cycle to be entirely contained within ASEAN, because of the complementary characteristics of its members. This thinking has important implications for treasury; if a company has a business strategy for ASEAN, its treasury should have its own supporting strategy in parallel.

ASEAN: the business opportunity

In aggregate, ASEAN countries represent the eighth largest economy in the world, with 2011 GDP of US\$2.1 trillion and recent collective growth second only to China and India.

For companies outside Asia that are seeking to compensate for depressed domestic demand, the growth rates which are potentially achievable in these markets are understandably appealing. Low labour rates in some ASEAN markets and high skill levels in others are also a source of interest. ASEAN countries are also developing distinct specialisations, ranging from call centres in the Philippines, to shoe manufacture in Vietnam, to R&D and finance in Singapore. This facilitates companies taking a strategic approach to ASEAN and splitting design, manufacture, sales and service across countries in the bloc.

The proximity and activity of China and India is also likely to boost activity and growth in ASEAN, as well as potentially allowing companies from other countries to benefit indirectly from Chinese and Indian investment in infrastructure. ASEAN is attractive to Chinese investors because of its rich commodity resources, which as China's activity elsewhere (such as Africa) illustrates, often triggers infrastructure investment. Furthermore, as Chinese domestic labour costs rise and China attempts to move away from low cost to added value manufacturing, the low cost and high availability of labour in certain ASEAN countries (such as Vietnam and Cambodia) look particularly interesting.

Furthermore, while the current situation in ASEAN is already appealing from a business perspective, the longer term view is potentially even more attractive because of the AEC. If this single market and production base is to be become a reality by 2015, "four pillars" will have to be satisfied:

- 1. The emergence of a single market and production base
- 2. The creation of a sound, affluent and competitive economic region
- 3. Even handed economic development

4.An enhanced level of integration with the global economy via Free Trade Agreements and comprehensive economic partnerships, as well as increased participation in global supply chains.

However, the overriding objective is to promote the free flow of goods, services, skilled workers and capital within the Region. To this end a set of detailed integration projects, known as the AEC Scorecard, is being monitored. For a more tangible example of the benefits of ASEAN one

As ASEAN has continued to develop, a growing number of companies around the globe have begun to appreciate its importance to their business plans, which has led to a change in their thinking.

only has to look at the situation regarding trade tariffs. Since the early 1990s there have been substantial trade tariff reductions throughout ASEAN, with general tariffs declining from an average of 13% to approximately 1%, with positive implications for export volume growth.

The ASEAN treasury environment

While the formation of the AEC is clearly beneficial in terms of consistency that will assist business development, ASEAN is still relatively fragmented from a treasury perspective. Any treasury operating across ASEAN member countries has to be able to cope with a variety of regulations, currencies, clearing systems and business practices.

In terms of currency controls and ease of regional/global treasury operation, the ASEAN countries broadly fall into four descending groups in terms of openness of currency and regulatory framework:

1. Singapore

2. Indonesia, the Philippines, Malaysia, Thailand and Brunei

- 3. Vietnam
- 4. Lao PDR, Cambodia, Myanmar

Singapore's ease of operation from a treasury perspective has made it almost the de facto location as a treasury management hub for the Region. Although this status pre-dates the financial crisis, it has been reinforced since 2008, as Multinationals have focused increasingly on risk and cash flow management, as well as seeking a venue to tap long term funds and hedge portfolios. While Singapore has been the natural choice for these activities, it is equally suited to companies looking for a treasury centre for any new ASEAN operations because of its advanced financial infrastructure, strong service sector and stable legal system. It is also positioning itself as ASEAN's regional hub for Renminbi cross-border trade settlement and investment with China.

"The importance of Singapore is emphasised by the fact that corporate treasurers want to be close to the opportunities and risks that their business activities face in the Region. Centralising treasury operations in one place simplifies monitoring of all types of risks, including foreign exchange, interest rate and counterparty risks to name but a few. In turn this makes it easier to gain visibility and control over liquidity, which otherwise may end up lying idle in different markets around ASEAN", says John Laurens, Regional Head of Global Payments and Cash Management at HSBC.

Neighbouring Malaysia however, is also vying to become a centre of excellence for treasury management activities, as a step up from its recognised pedigree in Shared Services centralisation. The government, with support from its investment arms, Central Bank and global financial services firms, have launched public initiatives to create greater awareness on this initiative, as part of Malaysia's larger Economic Transformation Programme (ETP). The collaboration between multiple stakeholders is aimed at creating a cohesive Treasury ecosystem, to attract Multinationals to perform more strategic financial functions, such as Treasury, Liquidity and Working Capital management in Malaysia.

ASEAN financial infrastructure hurdles...

It seems inevitable that the financial infrastructure in ASEAN will change appreciably over the next few years. The underlying growth in ASEAN payment traffic is already significant. According to SWIFT figures, all ASEAN countries (with the sole exception of Lao PDR) saw growth in SWIFT message volumes between both 2010-11 and 2011-12. Even in markets such as Indonesia and Thailand that already had multimillion message volumes, growth exceeded 10% over both periods.

John Laurens continues to explain, "Although correspondent banking networks satisfy the traditional need for cross-border fund transfers, new payment systems will develop regionally across ASEAN as it deepens its financial integration in the longer term. Among other things this will enable corporates to unlock the potential of technological advances. For example, the diffusion and use of more sophisticated retail payment schemes, such as cashless payments, will make the Region as a whole more competitive".

Nevertheless, the evolution of more regionalised payment structures for ASEAN will require surmounting a number of obstacles. The creation of cross-border and multi-currency payment systems could potentially proceed by interlinking existing ASEAN real-time gross settlement systems and then enlarging these later. Another consideration is that legal harmonisation would need to keep pace with rapid technological



and regulatory changes. As global foreign exchange activity increases in line with ASEAN trade growth, the need to manage foreign exchange settlement risk will become more acute, necessitating the development of risk-reduction features in payment systems. A more general issue is the growing need for regional oversight frameworks as systems become increasingly interconnected and interdependent.

... and how to avoid them

In the long term, all these components will fall into place, but in the meantime treasuries have to deal with ASEAN environment as it stands today and as it changes over the intervening period. Fortunately, many of the issues that may arise can be addressed through the right choice of banking partner. For example, a bank with comprehensive network coverage in ASEAN can effectively act as a middleware layer that

insulates corporate treasury from many of the complexities and variations that otherwise increase costs and reduce efficiency.

A similar scenario applies in the case of liquidity management. While the corporation may have a treasury centre in Singapore, the extent to which it can actually directly control and optimise local corporate liquidity varies widely from country to country across ASEAN. The ideal remedy is a banking partner that can offer the most effective liquidity solution at both a country and regional level. This may result in a mixture of techniques including interest optimisation, physical pooling and notional pooling. The key is whether they can be delivered as a complete solution that maximises visibility and return for corporate treasury while minimising complexity and cost.

The bigger picture

However, while these technical capabilities are undoubtedly important for treasuries' ASEAN strategies, there is a bigger picture that is equally if not more important. The ASEAN treasury environment is continually shifting and evolving. Regulations are changing, payment infrastructures are being upgraded, new hedging tools are emerging, and so on. Treasuries already have to keep pace with the evolution of their corporation's ASEAN strategy, without having the additional burden of tracking and responding to myriad environmental changes as well.

Again, this is where a suitable banking partner can reduce the workload, not just in notifying changes, but also in explaining their

likely implications for the corporate business model and how best to respond. The value of such guidance is appreciably enhanced if the bank has an in depth understanding of the client's business and can therefore put any upcoming changes into relevant context. Having access to this sort of meaningful dialogue puts treasury in a strong position when it comes to advising the business and maximising its opportunity in ASEAN.

Conclusion

ASEAN's development represents an attractive prospect for corporations of all sizes. Nevertheless, the highly varied financial landscape in ASEAN means that the net return these corporations can actually achieve will be even more dependent than usual upon the performance of their treasuries. That in turn depends upon a number of other factors. Corporate treasury's own strategy for ASEAN will be heavily influenced by the technical capabilities of its banking partners and more specifically how effectively those capabilities can be deployed to maximise financial efficiency across the enterprise.

But the dynamic nature of ASEAN as it progresses towards the launch of the AEC, means that any such treasury strategy is likely to need frequent revisions. An important influence on the success of those revisions and the results achieved, will be awareness of pending changes and their implications for the corporation. Obtaining and processing the market intelligence relating to those changes is an area where the right choice of bank can hugely influence the chances of success.

Integration will widen the reach of banking

Southeast Asia is a vast area with wide variations of development and levels of prosperity. These variations have the potential to be narrowed through regional economic integration. However, finding ways to provide funds for sustained investment and development will be the key element in providing the growth necessary to benefit the entire Region.

This task is demanding major regulatory changes to the restricted ways in which ASEAN country's banks have previously operated in order to stimulate competition and encourage institutions to expand beyond their domestic markets.

The Region's banks are already heavily involved in wealth creation but need to expand services and extend their operations in order to be a dynamo of future development to compete against bigger international institutions.

There is certainly no shortage of money within Southeast Asia. The question is how to mobilise and retain this wealth within the Region. In a region of more than 600 million people, a growing middle class element is seeking sophisticated financial services. Individuals earning US\$10 million, or more, already outnumber those in Europe and are expected to exceed those in the US within the next ten years.

According to Swiss banking group Julius Baer, Southeast Asia is expected to have nearly 500,000 dollar millionaires by 2015. As wealth grows, companies are also growing in size and ambition and are seeking to expand beyond home markets.

It is not surprising that given rising corporate and personal wealth, ASEAN countries have for the most part defied a global slowdown in investment banking. The Region's steady economic growth has been underlined by record bank revenues and a series of successful Initial Public Offerings (IPOs) in addition to mergers and acquisitions transactions.

The fast moving commercial environment continues to fuel appetite for loans as well as a rising demand for wealth and insurance products, factors that are encouraging domestic and foreign banks to expand their business operations in the area.

Thomson Reuters Data forecasts that mergers and acquisition bank deals alone in Southeast Asia in 2013 could be worth more than US\$21 billion, overtaking the previous record of US\$16.9 billion recorded in 2001.

Moody's Investment Services and Fitch ratings now rank debt in Indonesia, the largest ASEAN economy, as investment grade. This is allowing corporate issuers considerably greater access to international financial markets than before.

The Philippines has also recently been awarded a similar rating. This has helped stimulate activity in the country's stock market which has risen 20% in the first half of 2013, following strong growth in 2012.

Equity capital market deals in Southeast Asia overall rose 54% to US\$22.5 billion in the first half of 2013 while stock offerings in Singapore, the Philippines and Indonesia more than doubled.

The trend is also witnessed in less developed parts of the Region. Cambodia's Acleda Bank, which saw profits rise from US\$50 million to US\$66 million in 2012 also launched its first IPO on Cambodia's stock exchange.

Three of the five biggest IPOs in the Asia-Pacific region in 2013 have come from Southeast Asia. These include a US\$2.1 billion listing for BTS Rail Mass Transit Growth Infrastructure Fund in Thailand and a US\$2.6 billion IPO for Mapletree Greater China Commercial Trust which represents Singapore's largest ever real estate investment trust listing.

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Another prominent deal has been the US\$1.4 billion sale of shares in Matahari Department Store, Indonesia's largest department store chain.

2012 also saw a boom in Malaysia where a series of IPOs saw Bursa Malaysia (formerly the Kuala Lumpur Stock Exchange) become one of the most active bourses in the whole of Asia.

One of the largest flotations was Astro Malaysia Holdings' US\$5.1 billion listing. Others included a US\$3.2 billion listing for Malaysia's palm oil producer Felda Global Ventures Holdings and a US\$2 billion IPO for hospital operator IHH Healthcare on the Kuala Lumpur and Singapore exchanges.

There was also a multibillion battle for Singapore conglomerate Fraser & Neave with the winning US\$11.2 billion bid financed by Singapore lenders United Overseas Bank and DBS Bank.

While the Region's banks are playing a greater role in corporate finance, there is still room for growth. In spite of ownership restrictions, foreign banks still have a significant role in the Region. While non-Malaysia interests are prevented from taking over the country's banks (with exceptions for Islamic institutions) foreign institutions still handle around 22% of the country's bank assets.

Neither have foreign investment banks been prevented from building up their teams in the Region. JP Morgan, for example, in 2012, created a new team of bankers based in Singapore to handle its Southeast Asia debt capital markets business.

At the end of 2012, Vietnam's Commercial Bank for Industry & Trade (VietinBank) sold a 20% stake to Bank of Tokyo Mitsubishi UFG Financial Group, Japan's largest bank, for US\$740 million. The deal represented the largest ever mergers and acquisition transaction in Vietnam's banking industry.

Other major banks from Asia, Europe and the Middle East are looking for investment opportunities in a sector that is showing substantial growth throughout the Region.

Most of Indonesia's main banks have reported healthy increases in profits and portfolio size in the last year. Bank Central Asia increased its mortgage lending by nearly 50% in 2012 and saw its transaction business increase more than 19%.

Bank of Philippines Islands (BPI) also posted rising profits which increased 27% to US\$400 million in 2012. The bank also saw its

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Siam Commercial Bank, which is Thailand's main retail bank and has the biggest lending portfolio, set record results for the third consecutive time with net profit up 29% US\$1.4 billion.

internet and mobile banking services expand rapidly with the latter expanding 290%.

Singapore's main banks – DBS, United Overseas Bank and Overseas-Chinese Banking Corporation (OCBC) also experienced solid growth with OCBC recording a profit increase of 24%.

Siam Commercial Bank, which is Thailand's main retail bank and has the biggest lending portfolio, set record results for the third consecutive time with net profit up 29% to US\$1.4 billion.

However, most of ASEAN's banks need to expand substantially to be able to compete internationally. The Region as yet has no domestic global brands or globally recognised multinationals.

This consideration and a lack of regional financial integration has led to national savings and foreign exchange reserves being parked in US and European government securities, rather than being retained within the Region. According to a recent Asian Development Bank (ADB) report, there is a growing awareness that the Region's banks and its corporations are too small to be competitive outside their borders.

Southeast Asian companies also borrow heavily from overseas. As a result, international investors are taking hold of an increasing portion of local currency debt with 40% of Indonesian bonds and 30% of Malaysian bonds estimated to be in foreign hands already.

The integration of ASEAN banking institutions will create an environment conducive to the emergence of larger and stronger banks in the Region. It will build up a customer base large enough to support the growth of sizable competitive banks with a foothold in global banking through mergers and the acquisition of small banks, ADB believes.

The proportion of working age individuals with bank accounts in Southeast Asia is little more than 20% in Indonesia and Vietnam and 10% in Cambodia says the US Agency for International Development. This compares with almost 100% for example in Western Europe or Australia.

Access to bank credit services varies considerably across Southeast Asia. Most of Myanmar's population is not served at all, whereas in Thailand a majority of the population has access to banking services and Singapore provides 100% access. Only around an estimated 20% of Indonesia's adult population is served by formal financial services according to the Organisation for Economic Cooperation and Development (OECD) estimates.

Rural areas are particularly ill served in the Region but the situation is changing. Acleda Bank, is a specialist in providing micro-finance and is using cellular phone technology to widen its reach. The bank, in which the World Bank's International Finance Corporation has an interest, is playing an innovative role to widen the country's financial accessibility through mobile only bank accounts. These allow customers to pay bills, conduct person-to-person payments as well as buy phone credit via their mobile phones.

The bank has extended its services to Lao PDR where 25 branches have opened and has also started up an office in Myanmar where it is seeking to develop micro-credit services.

Cross-border development is a growing priority for many of the Region's banks seeking room to expand business beyond their own borders.

As the 2015 date for ASEAN integration draws near, a number of Malaysian institutions are among those poised for regional expansion,

with a crowded and mature domestic market leaving the country's banks little choice but to develop business abroad.

As a consequence, Maybank and CIMB are developing into regional players through a range of acquisitions. Maybank which ranks as the third largest global underwriter of Islamic bonds, posted record profits of US\$1.8 billion in 2012 and is steadily increasing its presence in other parts of the Region. The bank has recently entered Lao PDR and Cambodia and has also developed investment business in the Philippines.

CIMB also has a presence in Myanmar and Singapore and also owns majority shares in Indonesia's Bank Naga and Bank Thai in Thailand as well as 10% of the Philippines Bank of Commerce.

There is still some way to go before local banks catch up with global commercial banks in the Region. Standard Chartered, Citibank and HSBC, for example, each operate subsidiaries in seven of the ASEAN states.

The Region's banks will be in a much better position to compete through an enlargement of the market base which will bring opportunities for economies of scale and reduction of costs.

While financial integration remains a challenge the potential rewards are huge. The stability of the Region's banking industry will be enhanced as a result of larger, competitive banks emerging in Southeast Asia. This will promote closer cooperation among individual member states which will in turn be better served to strengthen the Region's financial stability.



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* As of May 14 2013.



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Protecting & investing in ASEAN's bright future



Donald Kanak, Chairman, Prudential Corporation Asia

2013 marks the 165th year in Prudential's history and its 89th year in Asia. From its first Asian operation in Malaysia in 1924 to this year's commencement of Prudential Cambodia, Prudential has witnessed and participated in Asia's rise, and today Asia represents the largest share of the Group's new business profits. In Asia today, more than 18,000 Prudential employees and 400,000 agents bring insurance and asset management services to over 15 million customers. Our Asia asset management firm, Eastspring Investments, manages about US\$94 billion, over 90% of which is invested in Asia. Today we are as much an Asian company as a British one. The seven ASEAN countries in which we operate represent the majority of that Asian miracle for Prudential, with a leading presence in life insurance in five markets (Indonesia, Vietnam, Singapore, Philippines, and Malaysia). Our commitment to the ASEAN Region was further demonstrated in 2013, when we launched Prudential in Cambodia, and with the acquisition of Thanachart Life in Thailand, which increases our business scale and expands our distribution for further growth in Thailand's insurance market. In short, we see our future as intertwined with the future of ASEAN. With our optimism comes a corresponding commitment to protecting and investing in ASEAN's future.

We believe that the insurance and asset management industry has a key role to play in building the future of ASEAN in five ways:

- By providing security for work, consumption, and commerce;
- As an employer and income provider to thousands of employees, agents and other distribution partners;
- By providing long term savings and investment products and services for families and institutions;
- As long term capital investors in ASEAN's growth, in government bonds, debt and equity for businesses, and in infrastructure; and
- As good citizens and volunteers serving the communities and the countries in which we work.

As we look into the next 10 or 20 years, we see two issues which could undermine the success of the ASEAN Region. The first big issue is the need for long term capital investment, and the second is the Region's extraordinarily rapid aging. ASEAN has huge opportunities: a growing middle class, with large increases in working population, a favourable regulatory climate for business, and competitive economies. To mobilise all of these advantages will require a stunning amount of long term capital to invest in infrastructure, debt and equity. According to the Asian Development Bank more than US\$8 trillion of infrastructure investment will be required in Asia between 2010 and 2020 and over US\$800 million of that for ASEAN. While banks are typically the source of short and medium term lending, it is the insurance, pension and asset management sectors that are the providers of long term capital. Fostering a favourable climate for the growth of insurance and pensions in ASEAN will mobilise pools of capital that will be reinvested in the ASEAN countries to build infrastructure, form new businesses, and grow the economic base.

ASEAN's second major issue is yet still under appreciated. Improvements in healthcare, medicine and nutrition are leading to longer life expectancy throughout the Region. At the same time, birth rates are falling dramatically. Birth rates today in ASEAN are surprisingly lower than in many parts of Europe (See Figure 1). This combination of rising life expectancy and falling birth rates is resulting in Asia aging about three times faster than in the West. It took the United States 54 years to go from 10% of the population to 20% of the population over 65, but Singapore will achieve the same fate in only 18 years. Surprisingly, Vietnam and Indonesia will travel the same path in between 17 and 19 Figure 1. Birth rate 2012

Italy	1.40	>	Singapore	0.78
Sweden	1.67	>	Thailand	1.66
UK	1.90	>	Vietnam	1.87

Source: CIA World Factbook

years! (See Figure 2) Even the ASEAN economies that still have growing populations only have a decade or so to prepare for this rapid aging. That is a very narrow window of time to establish policies and promote the penetration of insurance, and other long term savings and pension systems, that will accumulate sufficient assets and earn sufficient returns so that the people of ASEAN will be able to live their senior years in security.

At Prudential, we are committed to strengthen our industry throughout the ASEAN Region, cooperating with governments, the private sector, and civil society. We bring products and services which provide security and build long term assets, deploying investments productively to fund ASEAN's growth. That involves working hand in hand regionally and nationally to develop deeper and more efficient capital markets, and improve financial education.

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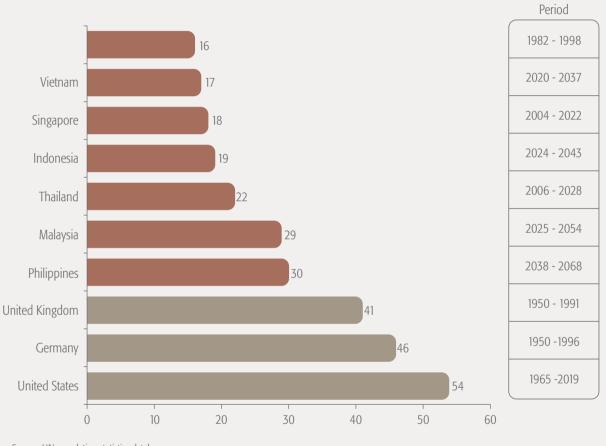


Figure 2. Number of years for older age population (+65) to go from 10% to 20% of total population

Source: UN population statistics database

Expanding into ASEAN

We can help

Foreign investment is pouring into ASEAN, keen to capture the opportunity. The ten nations that make up ASEAN are attracting record levels of Foreign Direct Investment (FDI). On a per capita basis, ASEAN is pulling in seven times more FDI than India, and almost the same amount as China.

To expand into ASEAN, it helps to be familiar with the unique business environment including the political and business systems, cultural characteristics, management practices, social structures, legal frameworks, government priorities.

Agility sets us apart

Legal uncertainty is a major concern when doing business in ASEAN. Governments change leglislation frequently.

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ASEAN or WORLDWIDE - TMF Group is a global expert

TMF Group is present in six of the ten ASEAN nations. We have dedicated specialists in our offices in Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam, to help you expand into these countries smoothly, safely and efficiently.

Our expert teams of local professionals are readily available to take care of all administrative difficulties involved with moving across borders, leaving your company free to focus on its global ambitions. They have in-depth knowledge of the requirements necessary to establish and maintain fully compliant operating, holding and finance entities.

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From specialised financial, corporate secretarial and administrative services to corporate structures, financial vehicles and investment funds, our 25 years of global experience in 75 countries can help your businesses navigate through complex local administrations and reporting requirements globally.

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ASEAN or WORLDWIDE TMF Group is here to help

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The secret to our success is our commitment to provide an independent global solution based on outstanding quality, service and value: wherever you are. **Speak to our expert** to find out more about venturing into ASEAN:

info.apac@ tmf-group.com



The article below is a summary of the management brief "Riding the ASEAN elephant: How business is responding to an unusual animal", an Economist Corporate Network (ECN) report sponsored by Baker & McKenzie and published in February 2013.

Justin Wood, the ECN Director for Southeast Asia, was the author of the report. The findings and views expressed in this report are those of the ECN alone and do not necessarily reflect the views of Baker & McKenzie. A full copy of the report is available from http://ftp01.economist.com.hk/ECN_papers/ridingASEAN.pdf

Riding the ASEAN elephant: How business is responding to an unusual animal

Introduction

The Association of Southeast Asian Nations (ASEAN) is enjoying a golden period, with high-growth and resilient economies. Foreign investment is pouring in, keen to capture the opportunity. Much of the investment is directed at specific opportunities in individual markets. But some is also being made in the belief that Southeast Asia is becoming more integrated. The ASEAN organisation aims to create an ASEAN Economic Community (AEC) by the end of 2015, a single market and production base that stitches together the bloc's ten economies into a coherent whole.

The report "Riding the ASEAN elephant: How business is responding to an unusual animal," is based on a survey of 147 large multinationals operating in Southeast Asia, asking them about their strategies in the Region against a backdrop of deepening integration. The report also incorporates interviews with a handful of business leaders working in the Region.

Key report findings

The reasons for investing in Southeast Asia vary by sector, but high on the list are impressive rates of economic growth, and a powerful consumer spending story. Southeast Asia also has a strong manufacturing story, given that China is becoming expensive, and it has a growing investment story in fixed assets such as infrastructure. Alongside these factors, companies are also being attracted by the possibilities for greater integration in ASEAN, the stitching together of ten smallish markets into one large one of 617 million people.

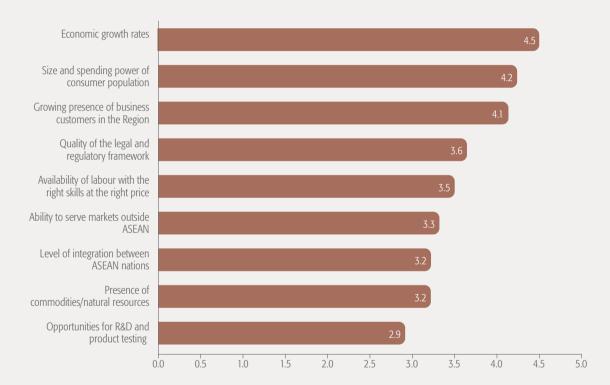
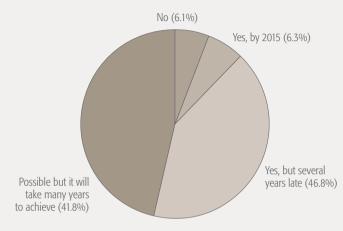


Chart 1: How attractive are the following criteria for your business in ASEAN?*

*(1 is highly unattractive, and 5 is highly attractive) Source: Economist Corporate Network

However, the ASEAN Region does face some hurdles in its aims to achieve economic integration. Nationalism and protectionism are concerns. Rivalries between ASEAN nations and lack of trust continue to be issues. And the differing levels of diversity, income levels, politics, culture, language, religion, and in economic systems continue to cause difficulties. But despite these hurdles, 95% of companies in the survey expressed confidence that ASEAN will achieve its vision of creating an economic community. What's more, companies say ASEAN's integration policies are starting to be meaningful for them. One quarter describe ASEAN's policies as "extremely important" in driving their strategy, while a further 60% describe them as "somewhat important". Regional agreements, such as the Trade in Goods Agreement and the Single Window, are helping to create a more harmonised market across the ten ASEAN countries.

Chart 2: Will ASEAN succeed in building an ASEAN Economic Community by 2015? (% of respondents)

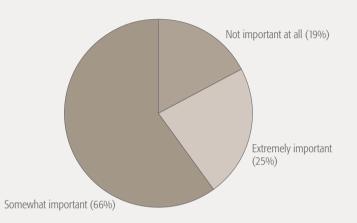


Source: Economist Corporate Network

Top-down policies from the ASEAN Secretariat are only part of the integration story. Just as important, are the bottom-up integration dynamics. Local companies are pushing into their neighbouring markets. Investment flows across ASEAN borders are picking up. And people are moving across the Region in ever greater numbers. In banking, for example, even though the ASEAN Banking Integration Framework is yet to be ratified, some banks in Singapore and Malaysia are already building a pan-ASEAN presence. Companies know they will benefit from ASEAN integration agreements, but they aren't waiting for them to arrive before they act.

What sort of presence do companies have in the Region? Stripping out local companies from the survey, the results show that Singapore has attracted the greatest level of foreign interest. Some 84% of global companies in the survey have set up their own operations in the city state. Malaysia comes a close second, with 76% of companies opening their own operations there.

Chart 3: How important are the ASEAN integration policies in driving your ASEAN Strategy?



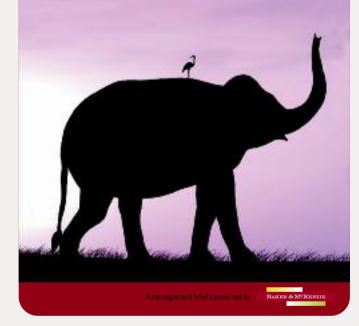
Source: Economist Corporate Network

The survey also shows a clear picture of two sub-groups of markets in Southeast Asia. Six economies, Singapore, Malaysia, Thailand, Indonesia, the Philippines and Vietnam, have attracted high levels of foreign investment. The remaining four, Cambodia, Myanmar, Brunei and Lao PDR, have attracted much lower levels of interest. In the years to come, it is quite likely that Myanmar will join the ranks of the larger six nations. And where do global multinationals put their ASEAN management teams? Some 74% of firms choose Singapore, followed by Malaysia with 17%. Only 5.4% of respondents run the ASEAN Region from a base outside ASEAN. Because ASEAN is diverse, many companies are also forced to adopt a "multi-local" strategy across the Region . Sales and go-to-market strategies are highly localised and tailored to individual markets. This means companies are unable to cluster markets into meaningful groups.

ASEAN diversity can act as a barrier to achieving scale. While 28% of companies see "big potential" for achieving scale across ASEAN markets,



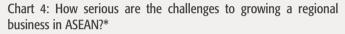
Riding the ASEAN elephant How business is responding to an unusual animal

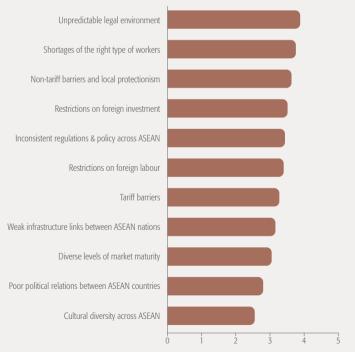


a further 56% see only "modest potential". But companies believe this picture will improve. One area where firms are more successful in achieving scale is in their back office and support functions. In the survey, 44% of companies run "highly centralised" support services in ASEAN, and 30% run "somewhat centralised" operations.

Can ASEAN diversity be turned into a positive? Can companies use varying levels of income and economic sophistication to split up their operations and run them in appropriate places across the Region? Some 56% of companies regard ASEAN diversity as positive for their business, whereas only 14% regard it as negative.

Finally, it's important to remember that ASEAN also carries some challenges. The biggest hurdle, say companies, is an uncertain legal environment. And while companies remain confident of on-going integration, many say that some markets in Southeast Asia remain protected. Companies in the survey currently consider Indonesia and Myanmar to be the most protected markets.





*On a scale of 1 (not serious) to 5 (extremely serious) Source: Economist Corporate Network

66

The Association of Southeast Asian Nations (ASEAN) is enjoying a golden period, with high-growth and resilient economies. Foreign investment is pouring in, keen to capture the opportunity.

Report conclusion

While companies are right to be excited about Southeast Asia, the Region also presents some challenges.

The title of the report is "Riding the ASEAN elephant: How business is responding to an unusual animal". The analogy of an elephant is apt, because as ASEAN comes together and deepens its ties across the Region, so it becomes a formidable size, accounting for 10% of the global population and 3.5% of the world economy. Given ASEAN's strong growth rates, that share of the global economic pie will rise to 4.5% by 2017, and keep rising thereafter.

Equally, just as an elephant is an unusual design, so too is ASEAN an unlikely combination. Given the diversity of its ten member economies, there is little that ties them together naturally. And yet, the coming together of these economies is creating a powerful combination.

Learning how to handle this unusual animal means recognising that its behaviour can at times be erratic. Bull elephants occasionally go into a period known as musth, when their behaviour becomes highly uncertain and contradictory. In the same way, major hurdles can break out in ASEAN. Some markets are prone to economic uncertainty. In Indonesia, the rupiah can be volatile. In Vietnam, inflation and a bubbly property market have caused challenges. In Thailand, politics can be difficult. In Myanmar, the opening up of the country and the programme of reform is by no means certain.

According to the survey, executives acknowledge these concerns. Another issue that companies have to contend with is protectionism. Despite on-going efforts at integration and opening up of ASEAN's internal market, resistance remains strong from local players in many markets.

For companies the opportunity comes from learning how to harness this unusual animal to their own ends. In particular, it means recognising how to combine a highly differentiated front office, with the possibilities for efficiencies in the back office. Equally, it calls for recognition that the possibilities for achieving scale and uniformity are likely to keep rising as the Region's economic integration deepens.



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Challenges facing ASEAN corporates in a globalised world

The end of the 2000s spelled the end of an age. Two separate dynamics coalesced to ensure that the world would not be the same again. First, the global economic crisis hit the Western economies. This had an immediate effect of curtailing outflows of capital from the West. Concurrently, it became obvious for the first time that economies in South and Southeast Asia had outgrown their domestic markets and are becoming new global players. These two symbiotic dynamics have fundamentally recast the world economy.

Corporates from India, Malaysia, Indonesia, Vietnam and Thailand are now competing in the same space as the old economies of North America, Europe and Japan. Indeed in many sectors, particularly infrastructure and the extractive industries, corporates from Asia are establishing themselves as world leaders. But as Asian corporates move out of their traditional homes into new and sometimes alien geographies, are there special risks that exist for them? And if there are, what mitigating steps might these companies take?

It could be argued that Asian corporates may have a more robust and bullish attitude toward risk than their Western counterparts. The Asian corporates are, relatively speaking, new and were often born out of quite recent political and socio-economic change. Some of the largest players in the Region are now in their second generation of management. As a consequence, corporates in the Region are more familiar than their Western competitors in dealing with a lack of regulation, handling corrupt officials or assertively leveraging business, family and political connections. Hence a corporate from a developed Asian country would, in many respects, have a natural advantage over a Western corporate when bidding for business within Asia - for instance, within the frontier markets of Myanmar, Papua New Guinea (PNG) or the less accessible areas of Indonesia. Singaporean, Thai and Malaysian companies would probably have a more nuanced and sophisticated reading of the local cultures in these Regions as well.

But this view is short term and ignores the true globalised nature of business in 2013. To play at the global level, Asian companies will need to pay as much attention to compliance and governance as businesses in the West. For example, consider a Thai or Malaysian company expanding into Myanmar or PNG and developing its business in the new Region in a way that ignores compliance concerns. Maybe in three vears, that company's headquarters decides that the time is right to list on AIM. In order to do so, that company will have to undergo a thorough due diligence exercise by an independent third party. Part of that exercise will certainly focus on how the business operates in frontier markets. Failure to comply will abort any potential listing. Or, consider that same example but with the chronology slightly rearranged. The Malaysian or Thai company lists in the UK or US and then expands into a frontier region. Now the company will come under the purview of the FCPA or UK Bribery Act. In a worst case scenario where the company is investigated and charged under the UKBA, that company would then be banned from participating in government contracts throughout the EU; if its business is pharmaceuticals or defence, this could be catastrophic. The principle here is that the ethos and culture of compliance that defines a company needs to be a the same high level whether operating in Kuala Lumpur, London or Port Moresby.

Outside of Asia - in frontier markets in Africa, for instance - Asian companies will be facing the same level of difficulty as their Western competitors. Nigeria's population is set to explode, and the Region is awash with natural resources and infrastructure challenges: exactly the areas in which many of Asia's largest corporates excel. Transparency in

Africa is amongst the greatest challenges. Understanding who your potential business partners are and how they operate before moving forward into a joint venture or committing to a large scale investment is critical. As with frontier markets in Asia, this cannot be done by visiting a government registry. Understanding a potential partner's connections, political leverage and status could be the difference between a successful entry into Africa or a legal, compliance and reputational disaster.

Finally, at the other end of the scale, the move of an Asian corporate into a highly regulated country in Northern Europe would also present risks of its own. Whilst corporate transparency regarding a future partner may not be a problem, risks most certainly exist within the context of other cultural aspects of Europe. For instance, the environmental and human rights lobbies in Europe have significant political leverage, particularly in Scandinavia. NGOs and advocacy groups live and die by their relationships with the media. Asian corporates considering moving into European markets need to pay very careful attention to workers' rights, environmental issues and local social issues. Failure to do so would almost certainly lead to negative media coverage and reputational damage, which could affect a company's ability to expand further.

In summary, Asian corporates' expansion to join the global players marks the beginning of a new age. But challenges exist within the globalised economy, be they from global regulatory and compliance obligations, lack of transparency in frontier markets or a misreading of cultural concerns in some existing markets. Forewarned is forearmed and having access to as much well-sourced information as possible ahead of an investment in a new market is critical.



Richard Dailly Managing Director, Kroll South and Southeast Asia Tel: (+65) 6645 4521 Email: rdailly@kroll.com Richard Dailly is based in Singapore responsible for high level case management and business development in South and Southeast Asia.

With 25 years of professional experience, Richard has managed a wide range of risk mitigation engagements including numerous sophisticated investigations, intelligence gathering and complex problem solving assignments, often focusing on compliance issues, fraud and corruption. He is an experienced interviewer and is confident operating in hostile environments.

A former British diplomat with experience in counter terrorism, Richard brings in depth knowledge of operating in the Middle East, Eastern Europe, the Balkans, South and Southeast Asia. He has a deep understanding of investigative and intelligence gathering, assessment and analysis techniques in support of complex corporate investigations, political risk projects, litigation support, and sophisticated multi-jurisdictional cases.

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SICPA supporting governments in Asia to combat illicit trade and increase tax revenues

Philippe Amon, Chairman and CEO of SICPA

SICPA is delighted to be associated with the 'Investing in ASEAN' publication. As a company we have been investing in and partnering with member governments of ASEAN for many years providing solutions and services to support key economic objectives and fiscal policies and enable regional cooperation. We have operating centres in a number of countries in the Region and our Government Security Solutions Division recently established a regional HQ and demonstration centre in Singapore in order to be as close as possible to our current and future government partners in the Region.

SICPATRACE[®] projects have resulted in significantly increased tax revenues

SICPA has a long history starting 86 years ago in Lausanne, Switzerland. Innovation has always been at the heart of our business. In the late 1940's we developed unique expertise in security inks becoming the leading global provider of security inks and security features for banknotes and value documents. More recently SICPA has diversified, combining this strong basis in material based security with sophisticated IT to develop integrated security solutions based on secure track and trace technology. These solutions provide the tools to combat illicit trade and enhance tax revenue collection, notably for excise goods. Systems based on the company's SICPATRACE® platform are operating in countries across the world, protecting almost 80 billion products annually and securing over US\$40 billion per year in excise tax and VAT revenue. SICPA's Government Security Solutions Division partners exclusively with governments, providing them with solutions over which they have full control and which are independent of industry.

Illicit trade is a serious problem for members of ASEAN and regional trading partners, costing governments billions of dollars in lost revenues. It damages government sovereignty by creating a parallel economy that compromises government legislation, erodes legal trading channels and sustains criminal behaviour. It undermines economic development and growth and weakens the impact of government policies in areas such as consumer protection and public health. It is a global phenomenon which exploits the mismatches between national approaches and any weakness in international connectivity - the solutions are thus both national and multi-lateral. SICPA's focus is to enable trust by providing these solutions.

SICPATRACE[®] is a platform to secure the supply chain, which can be implemented flexibly and in a modular cost effective way according to specific government needs. It is inter-operable with national and regional systems, can handle a wide range of products and adapt to changing requirements such as new international standards. The key elements are robust authentication and secure traceability, which ensure that all stakeholders can check that a product is genuine and know whether or not the correct tax has been paid.

The starting point is to securely mark each unit of product, such as a pack of cigarettes, bottle of spirits or pack of medicines, in a way that is very difficult to counterfeit. The mark ideally combines material based security features using security inks (which can be visible or invisible) with digital technology, e.g. using a secure 2D matrix, linked to data confirming the product type, place of origin etc. The individual identity assigned to each unit is stored in a government owned and controlled database and



enables the product to be verified throughout its life-cycle. Importantly for governments it is possible to know exactly when and how much tax is due.

SICPATRACE[®] additionally provides powerful tools to enforcing agencies, including business intelligence and evidential level proofs, to ensure limited resources are used to best effect and enabling successful prosecutions. In countries where SICPATRACE[®] has been implemented, such as Brazil, Turkey, Morocco and the state of California, there has been a significant reduction of illicit trade and under declaration of taxes and, in see-saw like symmetry, a rise in tax revenues and citizen protection.

Regional cross-border arrangements can have a multiplier effect

Illicit trade does not recognise borders. International and regional cooperation is essential. Cross-border arrangements such as a common system adopted by ASEAN, ideally with its trading partners, will have a multiplier effect. Indeed it is key if the aim of ASEAN Economic Ministers to facilitate and expand cross-border business is to be achieved. SICPA is mindful of the need to ensure that national systems are inter-operable with future regional and international initiatives. SICPA follows closely the development of international agreements and is constantly undertaking research and development to ensure that SICPATRACE[®] can meet the evolving demands. SICPATRACE[®] is listed in the World Customs Organisation (WCO) Databank of Advanced technologies.

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Oil exploration moves to deeper waters

The waters surrounding Southeast Asia are an increasingly significant focus of oil & gas exploration and drilling. This is being driven by a strategy to decrease import dependency and to boost energy security, especially by the larger more populous manufacturing economies in the Region.

Around 190 to 200 wells are being completed each year across the Region and this is likely to increase if hydrocarbon prices continue their upward trajectory.

Once a relatively easily extractable resource from land-based fields the hydrocarbons sector is now dominated by more costly marine production. As a result, offshore capital expenditure is expected to show significant growth over the next five years as countries attempt to expand indigenous resources.

There is added urgency since the Region's oil consumption has been growing faster than its crude production for several years. The gap is most apparent in the more industrialised ASEAN economies of Thailand, Malaysia, Vietnam and Indonesia.

The latter, once a significant exporter and active member of OPEC in the 1970s, has been a net importer of oil since 2004. Malaysia and Vietnam are also both consuming more oil than they produce. While Vietnam exports a large amount of its oil, this benefit is lost through its dependence on imported refined products.

Thailand, in contrast, has a well developed downstream sector. However, little more than a third of the country's crude needs are met from

domestic fields. As a result Thailand is Southeast Asia's second largest importer of crude after Singapore.

Even though Thailand has managed to consistently boost commercial primary energy production levels in the last 20 years, particularly through its coal and gas production, the country still spent some US\$63.8 billion on energy imports in 2011, 25% on the previous year. This reflects the growing energy demands of Thailand's fast expanding manufacturing sector.

Indonesia is striving to raise oil production as its older fields continue to decline. ExxonMobil, Shell and Hess Corporation, for example, are involved in new projects that should to some extent counter previous falls in output. ExxonMobil's enhanced oil recovery project in its offshore Tapis field is due to start in 2013, involving an investment of more than US\$1 billion.

Oil & gas production has become a vital economic driver for Malaysia in more recent years. The main producing areas are off the eastern coast of Peninsula Malaysia, the coast off Sarawak and off Sabah on the island of Borneo as well as the maritime Malaysian-Thailand Joint Development Area.

New exploration has been encouraging. Malaysian hydrocarbon discoveries have accounted for more than 70% of the total in the ASEAN Region in the last two years. The country's state owned energy firm Petronas, says it plans to increase capital expenditure to US\$59 billion over the next five years to raise domestic production.

Deepwater is considered the next challenge and is expected to account for up to 40% of Malaysia's oil output by 2020. In 2002, Murphy Oil was the first to discover and develop large scale deposits in the Kikeh field, 110 kilometres off the coast of Sabah.

In order to fully exploit the reserves, new oil frontiers are being opened up in deeper and more remote waters in under explored parts such as, the Philippines and Myanmar.

New offshore developments are set to boost long term production for Vietnam, whose 4.7 billion barrels of proven crude reserves are among the highest in the Region. The extra output will certainly be needed since the country's oil demand is forecast to rise from 396,680 barrels per day (bpd) in 2013 to 581,070 bpd in 2022. Previous peak production of 400,000 bpd was reached in 2007.

Current oil production of 338,400 bpd places Vietnam as the fourth largest producer in the Asia-Pacific region behind Indonesia, Malaysia and Thailand.

While Southeast Asia's largest states are multi-faceted economies, oil & gas above all else defines Brunei's economy and accounted for almost 68% of GDP in 2011.

There are hopes that new field developments offshore by principal operators such as Brunei Shell Petroleum and the French multinational Total, will raise production and reserves. The Government has set an ambitious target to double oil & gas production to 800,000 bpd of oil equivalent, which equates to 130 million cubic metres of natural gas a day, by 2035.

This will require intensive exploration efforts involving opening up new blocks and boosting production incentives for marginal reserves and increased use of new technologies. The Government is emphasising the use of enhanced oil recovery programmes to achieve its goals.



Expansion of exploration, particularly in deeper areas and more complex geological structures will also expand the market for oil & gas industry support services and marine engineering businesses. These are steadily growing in scale and technical sophistication in Singapore and elsewhere such as Malaysia, which is keen to develop a shipbuilding role. Singapore has been particularly adept in providing a range of incentives for shipping companies. These include financial assistance for companies seeking to introduce innovative products and various tax concessions.

Southeast Asia's gas market expands

ASEAN is in a strong position to become a hub for global gas development over the next few years, with at least 30 deepwater gas fields expected to come on stream in the next four years.

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Since the first regional gas pipeline linking Malaysia to Singapore was commissioned, several regional gas pipelines have been completed and more are being designed and constructed.

Six new gas fields with combined estimated reserves of 0.2 trillion cubic metres (tcm) have been discovered in Malaysia and have been placed among the ten largest discoveries made in Southeast Asia.

State owned Petronas, Swedish oil firm Lundin Petroleum and US based Murphy Oil are among the most active prospectors. The latter's three fields off Sabah are estimated to hold some 17 billion cubic metres (bcm) of gas reserves. Malaysia has introduced a number of fiscal incentives to stimulate exploration and awarded 13 production sharing contracts in 2012.

In addition, production from the Malaysia-Thailand Joint Development Area and projects such as ExxonMobil's Bintang field in the South China Sea are likely to mean continuing growth in the country's gas production and exports.

Gas has also been identified as a major energy resource elsewhere in the Region. In Vietnam, proven gas reserves have increased from 192.5 bcm to 610 bcm.

With activities such as Chevron's Block B project expected to increase gas production by at least 5 bcm and significant discoveries in Nam Con Son, the Government hopes to increase gas production to 15 bcm a year by 2015. Most experts predict however, that future exploration will need to be carried out in more difficult areas at greater depth.

The country's most productive gas fields are located offshore in the Gulf of Thailand. New concessions due to come on stream in the next few years include the Arthit field off the coast of Songkhla in which Chevron has a 16% interest.

Chevron, and other major international oil companies such as Mitsui Oil Exploration, Hess, Total and China Petroleum & Chemical Corporation are also extensively involved in Thailand's hydrocarbon sector. Gas field development is also expected in the 7,250 square kilometre offshore Malaysia-Thailand Joint Development Area in the Gulf of Thailand.

Further regional cooperation could substantially boost prospects for gas output. A 27,000 square kilometre offshore area with overlapping claims from Thailand and Cambodia is estimated to hold 0.3 tcm of gas in addition to crude oil deposits.

Other potentially significant producers are emerging. By the end of 2013, Myanmar is expected to be pumping 400,000 bpd of crude oil and 11,200 cubic metres a day of gas by pipeline from the Bay of Bengal to China.

At present, Myanmar's gas exports are less than a third of those of Indonesia or Malaysia but they could rapidly increase as the country's huge reserves are exploited.

The extent of Myanmar's natural gas reserves has yet to be fully determined with estimates ranging from between 0.33 and 2.55 tcm.

Even in the near term, the country's gas production is forecast to double to 24 bcm a year by 2019. Myanmar is already an important supplier of gas to neighbouring Thailand with China also shaping up as a customer for its hydrocarbon resources.

A new offshore gas field near Myanmar's maritime border with Bangladesh will boost output by 75%. The gas, bound for China, is expected to earn state owned Myanmar Oil & Gas Enterprise (MOGE) a further US\$1.8 billion a year.

Integration of the Region's gas pipelines will further open up huge possibilities for Myanmar and other countries in the Region.

In 2002, member states adopted a Memorandum of Understanding on the Trans-ASEAN Gas Pipeline (TAGP). Once fully developed, the network of cross-border pipelines will potentially link almost 80% of the ASEAN Region's total gas reserves.

The TAGP is a major indicator of the growing influence of gas in ASEAN's energy calculations. Linking the gas reserves of Indonesia, Malaysia, Singapore, Vietnam, Myanmar, The Philippines, Brunei and Thailand, the project has the backing of the oil & gas majors in each of these countries and is expected to be in full operation by 2020.

Since the first regional gas pipeline linking Malaysia to Singapore was commissioned, several regional gas pipelines have been completed and more are being designed and constructed.

Around 2,540 kilometres of gas pipeline is now in place between Malaysia, Singapore, Myanmar, and Thailand, and Indonesia and Singapore. Another 640 kilometres of pipeline linking Indonesia and Singapore came on stream in 2013. Full linkage of these facilities would see the creation of an interconnected gas grid and increased gas trading throughout ASEAN's ten countries.

There are several other projects ready to be commissioned and operating by 2016. A number of others are under construction including a pipeline to connect Thailand with Indonesia's giant East Natuna gas field.

The ambitious magnitude of the TAGP and China-Myanmar pipeline projects, makes it feasible that in future the network could be extended to China as well as potentially with gas markets in India and Japan. This would make it the largest pipeline network in the world and an important building block in creating a more integrated and competitive market in energy products in the Asia-Pacific region.

ASEAN is pivotal for Asian LNG trading

In 2013, the world's first open access and multi-user liquefied natural gas (LNG) terminal will come on stream in Singapore, with a capacity to handle six million tonnes a year. The new facility cost US\$1.07 billion to develop and indicative of the island state's ambition to enhance its role as the Region's pre-eminent oil & gas industry support centre.

Both Indonesia and Thailand are also making large investments in developing their LNG infrastructure. Indonesia is the world's third largest exporter of LNG after Qatar and Malaysia.

Thailand meanwhile has also developed a LNG receiving terminal at Map Ta Phut industrial park in Rayong Province. The US\$800 million terminal opened in 2011. An additional US\$400 million is expected to be spent to double the terminal's capacity to ten million tonnes by 2016.

Analysts predict that Southeast Asian countries will drive most of Asia's LNG demand through to 2025 with Indonesia, Malaysia, Thailand and Singapore expected to account for one third of the growth in demand.

Towards a greener ASEAN Economic Community

David Doran, Partner and Chairman, DFDL & Matthew Christensen, DFDL

Fueling accelerated regional growth through reliable sources of energy remains an overriding concern for ASEAN. Energy requirements will more than double by 2030, and energy security necessitates a diversification away from fossil fuel imports to maintain stable socioeconomic growth.¹ The ASEAN Plan of Action for Energy Cooperation (APAEC), adopted as the energy component of the ASEAN Economic Community Blueprint, outlines the fundamental role envisioned for renewable energy (RE). APAEC's renewable energy programme is designed to strengthen cooperation in RE development by facilitating infrastructure investment to improve rural electrical access, promoting open trade and the sustainable production of biomass, geothermal, hydro, solar, and wind energy, while mitigating greenhouse gas emissions by focusing on energy efficiency and conservation. Specifically, the following goals have been set:

- Increase the development and utilisation of RE sources to achieve the 15% target share of RE in the ASEAN power generation mix;
- Enhance awareness and information sharing and strengthen networks;
- Promote intra-ASEAN cooperation on ASEAN made products and services;
- Promote renewable energy financing schemes;
- · Promote the commercial development and utilisation of biofuels;
- Develop ASEAN as a hub for renewable energy.

Successful implementation of the APAEC goals anticipates the redesign of national energy laws and policies in a number of ways:

- Incentivise RE projects through subsidies (primarily feed-in tariffs);
- Facilitate financing RE projects through special government funds and incentives;
- Set aggressive RE growth targets;
- Streamline administrative and licencing procedures;
- Provide easy access to expertise (human resources) from ASEAN and beyond; and
- Liberalise restrictions on Foreign Direct Investment.

Significant progress has been made to date and additional steps will be taken by ASEAN members in future years.

Feed-in Tariffs (FIT) are the most essential component of any national programme to reach renewable energy goals. Thailand has had a robust FIT system in place for many years, so robust that a number of RE sectors have been oversubscribed, and at least one (solar) required a FIT reduction. Other countries have been slower to implement a FIT system. Vietnam only provides FITs for wind energy, while Myanmar has no published plans to implement a FIT system for RE. Given the large riparian resources in Myanmar, government strategy is focused on hydropower rather than other renewables, and FITs are not necessary to

render a hydropower project economically viable (except micro-hydro). Indonesia instituted a comprehensive FIT system in 2012 and the Philippines has approved a similar programme to be rolled out in 2014. Malaysia also has a comprehensive programme in place.

On the financing side, ASEAN members have established RE investment funds that offer incentivised loans at below market interest rates; most notably Indonesia, where multiple funds target specific types of RE. They, alongside nations such as Thailand, also provide government guarantees to purchase all electricity generated during the project lifecycle. Vietnam recently moved to incentivise RE development by providing grants and subsidies with a particular focus on offshore wind energy.

A key goal of ASEAN is to remove national restrictions on investment from other ASEAN members. While foreign ownership restrictions have been eased, caps in the energy sector remain a major constraint on greater FDI cash flows into and within ASEAN. Both the Philippines and Malaysia restrict foreign ownership in RE projects to a minority share. In Lao PDR, the Government is required to hold an equity stake in private power projects, which in practice is between 5%-20%. Brunei and Indonesia allow foreign majority ownership, but they, too, fall behind countries like Cambodia, Myanmar, and Thailand, where foreign investment law and regulations in Myanmar, RE projects are not listed as one of the sectors available for promotion or investment, nor is it a prohibited sector. This means that approval for foreigners to undertake RE projects is dependent on the discretion of the relevant authorities.

One of the main APAEC goals is for ASEAN to become a "hub" of renewable energy, which requires the free flow of industry experts (scientists, engineers, etc.) among ASEAN member countries to build research and development facilities and energy service centres. Of the seven professions whose qualifications have been standardised, engineers are the most vital to RE development. Under the Mutual Recognition Arrangement, engineers who are ASEAN nationals are



permitted to work throughout ASEAN in collaboration with designated engineers in the host country but not as independent practitioners. Although this is a step forward, other technical professions related to RE project construction such as environmental assessment specialists, legal, and risk analysts remain restricted for the time being. To achieve this goal, additional liberalisation will be needed.

Hydropower²

Hydropower dominates RE in ASEAN as capacities have doubled in the past decade to over 25,000MW or 85% of total RE output in 2012. This is most strikingly observed in Lao PDR, where hydropower has grown at an annual rate of 30% in recent years and generates up to 98% of the total energy supply. Lao PDR is recognising its newfound role as the (hydro) battery of Southeast Asia in large part due to investments by ASEAN's top energy importer, Thailand, to whom much of the electricity is being sold.

Hydropower also has enormous prospects in Myanmar, where nearly three quarters of the population lives without electrical access.³ Home to four major river basins with a potential of more than 40,000MW, Myanmar has identified over 200 sites where small and micro hydropower projects can meet the basic energy needs of rural communities for the first time. Plans to increase from 2,594MW of current capacity to 35,578MW in the coming decades signal that hydropower is the most fundamental component of Myanmar's energy infrastructure development.⁴

Geothermal^₅

ASEAN boasts two of the world's top three geothermal energy producers, though current capacities represent a small fraction of regional geothermal potential. The Philippines, at number two, plays host to countless untapped sites along the 'Ring of Fire,' and as 40% of its primary energy supply comes from a variety of RE sources, is considered one of the most developed RE nations in ASEAN. The National Renewable Energy Programme targets a 60% increase in geothermal capacity by 2030, while the Renewable Energy Act provides a number of financial and regulatory incentives.

Ranking third, Indonesia is home to the largest number of active volcanic sites in the world. Indonesia plans to triple current RE output by 2025, acquiring 15% of its total energy from non-fossil sources. Foreign ownership in RE projects has been increased to 95%, and a "fast track plan" has been implemented that includes projects totalling nearly 4,000MW of new geothermal capacity by 2014. Indonesia has

also begun issuing a FIT to further compensate companies contributing RE to the national grid.

Biomass⁶

Rural populations in ASEAN rely on biomass, the organic waste byproducts of agricultural production, more so than any other fuel source. In Vietnam, where nearly 70% of the population lives in rural areas, approximately one third of total energy consumption comes from traditional biomass, a large percentage of which is outside the national grid.⁷ Waste-to-energy projects are underway in major cities like Hanoi to simultaneously address electrical production and waste management. Taken together, the Government plans for a ten fold increase in biomass capacity by 2030, as a way to replace a percentage of fossil fuel consumption.

Thailand's recently revised 2030 targets include generating 25% of its total energy consumption through RE, in part by doubling biomass capacity to more than 3,000MW. To achieve this goal, the government has implemented several support schemes, including one of Asia's first FIT programmes, an eight year income tax holiday, and direct RE sector subsidies.

Founded in 1994, DFDL is a leading international law firm specialised in emerging markets with pan-regional legal and tax expertise with a focus on ASEAN. DFDL has 12 offices in eight countries, including seven ASEAN member countries, with over 120 lawyers and legal advisors providing legal, tax and consulting services and solutions to local and international investors across the Region.

Sources:

- ¹⁻² ASEAN Centre for Energy
- ³ Asian Development Bank http://www.adb.org/sites/default/files/pub/2013/new-energy-architecture-mya.pdf
- ⁴⁶ Respective National Energy Ministry websites
- 7 US EIA



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ASEAN manufacturers move to advanced technology

In the last 25 years, ASEAN countries have become established as a preeminent destination for global manufacturers seeking a well resourced, cost effective manufacturing base for garments and textiles, electronics and a huge variety of branded goods that stock the shelves of retailers in Europe and North America.

ASEAN nations experienced a 2% increase in Foreign Direct Investment (FDI) inflows in 2012, the only region of the world to have seen an increase in the last year. Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam received a total of US\$111.3 billion according to the 2013 World Investment Report published by the UN Conference on Trade and Development (UNCTAD).

As a result of continuing high levels of investment, the contribution from industry and manufacturing to economies throughout the Region continues to grow. In Indonesia, the sector's contribution to GDP has reached 47%, 40.2% in Malaysia and 31.1% in the Philippines, and Singapore's services dominated economy industry still accounts for 26% of its GDP. (*CIA World Factbook*)

While Singapore has none of its own oil & gas resources, it has become the Region's main refining centre and a flourishing maritime support hub. It has also become a leading manufacturer of drilling rigs and offshore support vessels. Keppel Offshore and Marine, which has its base in Singapore, is the world's main manufacturer of jack-up rigs, essential for offshore oil exploration.

There is a developing strategy among many ASEAN states to move from low cost manufacturing and become providers of value-added products in many sectors. Indonesia in particular, is keen to progress from a primary producer of ores and to process the country's vast mineral resources through its own smelting and refining operations into finished products. In addition, an expanding ASEAN role in the global aerospace industry is seen in the UK's Rolls-Royce US\$560 million plant recently commissioned in Singapore's Seletar Aerospace Park, to assemble the company's Trent engine and wide chord fan blades.

Rolls-Royce's Director for Southeast Asia, Jonathan Asherson, says that the engine maker chose to expand its presence in Singapore because it believes the country has one of the highest skilled talent pools available globally and offers a business friendly environment conducive to high value manufacturing, research and innovation.

Government initiatives have been important in the development of Singapore's technology manufacturing.

This is seen in the Singapore Biomedical Sciences initiative launched in 2000, to develop clusters of industries to be a pillar of the country's manufacturing sector alongside electronics, engineering and chemicals.

Collaboration between Public Sector researchers and industry can help facilitate the translation of research discoveries into a flow of industry ready products, according to Singapore Health Minister, Gan Kim Yong, who notes that more than 100 global biomedical sciences firms have since set up operations in Singapore.

Establishment of the Malaysian Biotechnology Corporation as a government agency to promote investment in the country's agricultural, healthcare and industrial biotechnology sectors, is also leading to new industries, with investments totalling US\$1 billion in 2013.

One of the largest projects is due to come on stream at the end of 2013 and involves a US\$616 million joint venture between France's Arkema and South Korea's CJ Cheil Jedang. The joint venture is developing what is described as the world's first bio-methionine plant located in Malaysia's Terengganu State at Kerteh. The facility is designed to produce 80,000 tonnes of bio-methionine additives for poultry feed and 50,000 tonnes of sulphur derivatives for the petrochemicals industry. (*Arkema press release 10/8/12*)

The country's biotechnology policy is aiming to create a network of clusters of excellence throughout the country, comprising companies and institutions that specialise this field.

Biotechnology is seen as one of the key strategic areas that will support the growth of the country's economy providing 5% of GDP by 2020, when up to 280,000 direct and indirect jobs are predicted to be created.

Agro-biotechnology is focused around the Malaysian Agriculture Research and Development Institute and the Universiti Putra Malaysia at Serdang. The University Kebangsaan Malaysia at Bangi in Selangor is the designated focus for genomics and molecular biology.

Another centre for Pharmaceuticals and Nutraceuticals is also being developed, near Dengkil, 45 kilometres south of Kuala Lumpur in conjunction with Universiti Sains Malaysia.

As the Region's economies change to concentrate more on higher value added production, foreign investors are also looking at opportunities likely to follow ASEAN economic integration. Trans-national corporations from Japan and elsewhere are boosting the FDI spending because of integration and good economic prospects for these countries, UNCTAD says.



The promise of a harmonised customs system between ASEAN countries offers opportunities for the integration of supply chains and unhindered movement of goods between member states. This has positive implications for a range of industries such as garments and textiles, electronics and the automotive sector. Integration is also proving a powerful magnet for foreign investment.

India's Tata Motors has revealed plans to start sales in Indonesia and hopes eventually to establish an assembly line in the country. (*Bloomberg* 9/7/13)

Honda is investing in a new US\$337 million plant adjacent to its existing site at Karawang Industrial Park near Jakarta. It is due to open in 2014 and will triple the company's car production to 120,000 units a year.

Suzuki is also reportedly planning to increase production in Indonesia with a new assembly plant and engine plant. (*Nikkei Business news*)

Honda is investing in a new US\$337 million plant adjacent to its existing site at Karawang Industrial Park near Jakarta. It is due to open in 2014 and will triple the company's car production to 120,000 units a year. These and other investments are establishing Indonesia as a rival to Thailand, which is regarded as the main car producer. (Honda PR 4/6/12)

However, Thailand is not complacent and also continues to expand its automotive industry. Many of the world's largest car and truck manufacturers and component suppliers have established a presence including all the major Japanese producers.

Foreign investors are also being attracted to the Thai automotive sector's supporting industries. Manufacturers are able to obtain up to 80% of components locally. The manufacture of auto parts also earns the country US\$5 billion in exports according to US market research company IHS.

The latest five year plan drawn up by the Thailand Automotive Institute envisages the country becoming one of the top ten auto manufacturing nations. The plan focuses on increasing output to 3.3 million vehicles a year by 2020 from around 2.43 million projected in 2014. By 2020 a production of 4.5 million units a year is anticipated. (*Thailand Automotive Institute*) Efforts to meet this target are being helped by the investments underway by leading manufacturers. In 2012, Ford opened a new US\$450 million Thai plant in Rayong Province with an initial production capacity of 150,000 units a year. (*Ford PR may 2012*)

Nissan is also developing a second assembly line in Thailand near its existing facility in Samut Prakam Province. The new US\$358 million plant is due to commence production in 2014. The company is the largest car producer in Southeast Asia and assembles some 400,000 vehicles a year in Indonesia, Malaysia, the Philippines, Vietnam and Thailand. (*Reuters 2/11/12*)

Toyota has announced plans to invest US\$400 million in a second plant in Chachoengsao's Gateway City Industrial Estate. This will increase capacity to 300,000 vehicles a year.

Suzuki Motor also intends to produce its new Swift low carbon emission diesel car in the Gateway City Industrial Estate at a new US250 million plant that at peak capacity will turn out 200,000 cars a year. (*Reuters 2/11/12*)

As manufacturing operations in ASEAN countries steadily orientate toward more advanced activities, a growing challenge will be to maintain the Region's competitive edge and attractiveness as an investment destination. Achieving economic integration and establishing greater connectivity are likely to be key elements in achieving this.

50 years of growing within ASEAN

Four years before ASEAN was established, the industrial enterprise, Jebsen & Jessen Group of Companies began its story. Growing out of a trading partnership established in Hong Kong in 1895, the Group established itself in Singapore and Malaysia on December 24 and 27, 1963. Today it is a US\$866 million operation with entities in nine out of the ten ASEAN nations.

1963: A time of opportunity

At this moment in history the former colonies of ASEAN were gaining independence and establishing their own governments. Administratively it was a tricky time to register a business, it took several months, but economically it was perfect timing. The company began life in trading, building its role as a bridge into the markets of the Region, for global market leaders in industries including chemicals and communications. It would continue this role, working with new partners to introduce new technology into the Region as the process of industrialisation and the growing wealth changed the needs of each market.



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Jebsen & Jessen began this decade of swift growth opening operations in the Philippines, in partnership with a local firm, a model for market expansion that would also successfully bring them into Myanmar more than twenty years later.

Becoming regional

Within a couple of years Singapore and Malaysia had become separate independent nations and by 1967 they would be ready to come together with Indonesia, Thailand and the Philippines to create ASEAN.

Responding to the economic potentials of the other nations beyond the peninsula, Jebsen & Jessen expanded into Thailand and Indonesia in the early 1970s.

It was at this time that the Group moved beyond trading and into manufacturing, under license for German materials handling giant Demag. With factories in Singapore and Malaysia, this company went on to become a 50:50 joint venture called MHE-Demag in the 1980s. A business unit of the Group, MHE-Demag today has eight factories and 36 service centres across the Region.

1990s: New markets

Jebsen & Jessen began this decade of swift growth opening operations in the Philippines, in partnership with a local firm, a model for market expansion that would also successfully bring them into Myanmar more than twenty years later.

As Vietnam got ready to join ASEAN, Jebsen & Jessen was exploring the market through a rep office. Having developed a successful chemicals business other business lines were introduced. Today, packaging manufacturing operations are established alongside cables distribution.

Recession hit in 1997, having ridden through these waters before the Group was able to turn momentum inwards. They invested in SAP based regional corporate platform and rolled out a new corporate platform across the Region. As the dreaded Y2K arrived the company sailed through - ready to take on its fifth decade.

The Group continued its geographic expansion with entities in Cambodia, 2010; Myanmar, 2011 and Brunei, 2012.

Reflecting economic and civil growth

The shifting story of industrialisation is not only about wealth but also a change in corporate citizenship. Jebsen & Jessen was at the forefront of the environment, health and safety (EHS) movement in the 1990s, implementing ISO across its member companies. Then in 2012, it became one of the first industrial Southeast Asian enterprises to be carbon neutral, offsetting its emissions for all operations.

The story of this industrial group grew alongside and within ASEAN. Both are a story about the success of diversity brought together for a singular goal.



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Region's infrastructure needs take centre stage

Southeast Asia has enjoyed decades of strong growth but even with recent economic gains, its infrastructure lags behind the Asian average and is only a fraction of that of advanced economies.

It is now catch up time for the Region. According to Manila based Asian Development Bank, at least US\$600 billion is to be spent by members of ASEAN over the next decade on roads, ports, railways, telecoms, and in a host of other areas such as power, water and sanitation, flood defences and airports in order to maintain the Region's competitiveness in global economic development.

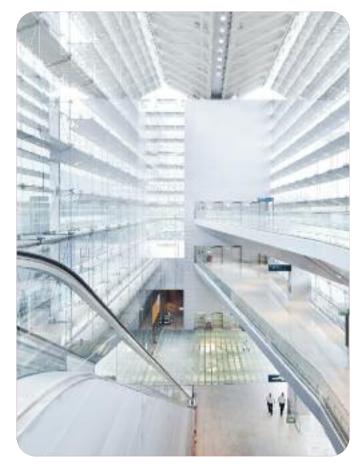
Investment whether in ports, airports, roads, railways, power, water and sanitation or ICT serve as a catalyst for expansion in the economy by lowering the costs of conducting business and as a result contributing to GDP growth.

Improved connectivity within the area and constructing physical links to China and South Asia is crucial. Some of the cross-border projects are huge, long term and challenging. They include the ASEAN Highway Network as well as a new Regional railway. This new track will extend through Myanmar and then south to Bangkok, where a spur will traverse Malaysia to Singapore. From Bangkok, the line will run east through Cambodia and north through Vietnam to Hanoi, then through Lao PDR and back to Kunming in China's southwest Yunnan Province.

The recent opening up of Myanmar to increased global investment will lead to development of additional trading connections. Proposed projects include a Bangladesh-India-Myanmar gas pipeline. This could tap into the latter's vast natural gas reserves which estimate at up to 2.55 trillion cubic metres.

In Thailand a US\$1.5 billion highway is already being built to the border with Myanmar. The two countries, in addition, have plans to develop a US\$50 billion industrial and logistics hub centred on a new deepwater port at Dawei which would further link with the Indian sub-continent.

Domestic infrastructure requirements are also high on the agenda of every ASEAN member state. Capacity constraints, for example, are increasingly being felt in Indonesia, especially in transportation. Logistics



costs in Southeast Asia's largest economy, now account for around 30% of retail prices.

Faster economic growth is stretching the capacity of roads and ports as goods flow through the world's largest archipelago which covers 5,300 kilometres across more than 17,000 islands along the equator.

At present a lack of internal connectivity also means prices of basic goods can vary substantially in different parts of the country. Much of Indonesia's existing infrastructure is concentrated in Java and Sumatra, leaving the eastern part of the country relatively isolated. As a result, it is often cheaper to source goods from outside Indonesia than transport them internally.

Indonesia has said it intends to emphasise building infrastructure projects on its eastern islands in 2013 as it seeks to spread development across the archipelago to boost economic growth.

According to President Susilo Bambang Yudhoyono, Indonesia's infrastructure development has become the main priority. Under the country's masterplan for acceleration and expansion of Indonesia's economic development 2011-2025, as many as 135 projects have begun with investments of more than US\$50 billion.

The masterplan to accelerate economic development known by its Indonesian acronym MP3E1 has three main pillars: developing six economic corridors, improving connectivity both within the country and internationally, and strengthening workforce skills and installing more technology.

The corridor developments largely overlap with the country's main island groups of Sumatra, Java, Kalimantan, Sulawesi, Bali-Busa, Tenggara and Papua-Maluku.

Thailand and the Philippines are also beginning to focus on their mega infrastructure programmes, some of which has had to be accelerated.

In response to the devastating floods in late 2011, the Thai Government announced investments including an US\$11 billion package for a three year flood prevention programme.

In 2013, the Government approved a US\$70 billion infrastructure budget over the next seven years that will allow the Ministry of Finance to issue long-dated bonds to finance investment in high-speed railways and other transportation projects including airport upgrades. The recent opening up of Myanmar to increased global investment will lead to development of additional trading connections. Proposed projects include a Bangladesh-India-Myanmar gas pipeline.

Singapore is planning to extend its urban rail system while the first phase of a US\$13.5 billion subway line is due to open in 2019. A new rapid transit system to link with Malaysia is also in the planning stage.

Malaysia has started construction of a US\$10 billion mass transit system while US\$18 billion is also being spent on new roads, railways and hospitals.

The Philippines is expected to spend US\$9.8 billion on infrastructure improvements in 2013. In 2012, the country received a boost with receipt of investment-grade credit rating from leading ratings agency Fitch. President, Benigno Aquino anticipates this will result in lower interest rates on national debt and stimulate investment.

An important source of future investment for the Philippines and other regional states will be the ASEAN Infrastructure Fund (AIF). This was established in 2012 with the support of the Asian Development Bank (ADB). Based in Malaysia, the AIF has received all first tranche equity contributions from shareholders, completion of legal exemptions and concluded administrative arrangements for full operations.

The AIF is expected to lend up to US\$4 billion by 2020, with six new infrastructure projects a year receiving help. With projected 70% cofinancing by ADB, it is expected to leverage more than US\$13 billion in infrastructure financing by 2020. Several ASEAN countries have already announced that they intend to apply for AIF financing, for projects which include Indonesian shipping and a cross-border power grid in Indonesia and Malaysia.

However, much more capital needs to be mobilised. According to Kunio Senga, Head of ADB's Southeast Asia department, the Region's needs are well beyond the funding capacities and fiscal resources of governments and multilateral development banks. "It is crucial to involve the private sector in infrastructure financing if ASEAN is to continue building and growing," he says.

ASEAN states are going to have to draw on a variety of public and private sector investment sources to realise their ambitious programmes. There is no doubt the necessary resources can be found. Prudential Corporation Asia's Chairman, Donald Kanak says "Financing most infrastructure needs with domestic savings is well within the reach of ASEAN as a Region".

Funding requirements can also be met from the Region's growing US\$700 billion foreign exchange reserves, which the AIF is expected to draw on. ASEAN countries can tap into the Region's banks and unlock billions of dollars in private savings through bank loans.

Underdeveloped capital markets can also help fill the gap. The most sustainable and viable source of long term lending is through debt



issuance, attracting both domestic and international investors through the sale of long term bonds. This would allow liquid institutions such as pension funds and insurance companies to provide the required funding.

Integration of ASEAN member states' capital markets would help to create a robust bond market. Securities regulators across the Region also need to work towards a common legal jurisdiction for securities documentations to facilitate a smooth entry for international investors.

If Public Private Partnerships (PPP) can be improved and further developed they can provide a further means for investment.

Singapore has adopted the UK's PPP structure for long term management agreements on schools, hospitals and social infrastructure including sports facilities. The Philippines is also seeking to develop a regulatory framework to attract offshore partners in PPP ventures.

ADB and International Enterprise Singapore have signed a letter of commitment to launch a PPP initiative to help stimulate infrastructure development within the ASEAN area.

This initiative will work with governments in the Region to structure PPP projects, tapping into ADB's regional operations and outreach to ASEAN member countries. It also aims to explore ASEAN's capital markets to finance or refinance projects.

In May 2013, CapAsia, a private equity fund management company announced completion of an investment in an Indonesian toll road operator PT Margatama Nusantara. The fund has also taken significant minority holdings in toll road operators in Thailand and Malaysia.

A Malaysia-Chinese joint venture including China Railway Construction Group and Beijing based Urban Construction Group, is also financing a US\$2 billion Build-Own-Transfer (BOT) road construction project in Penang.

The growing interest in large scale infrastructure projects is also illustrated in Bangkok Sky Train operator, BTS Group Holdings successful initial public offering this year which raised US\$2.13 billion. Core purchasers of the new shares were Morgan Stanley Investment Management and Schroder Investment Management.

The BST Mass Transit Growth Infrastructure Fund (BSTGIF) intends to use the proceeds from the International Public Offering (IPO) to extend the 23 kilometre downtown Bangkok rail system by building additional feeder lines.

Effective infrastructure for carrying both people and goods is critical in helping ASEAN economies move progressively into more complex and higher value manufacturing and production, with a positive situation for all concerned.

Developing water resources presents major challenge

Water management issues will become increasingly important across the Region over the next 20-50 years, as cities expand and competition for water resources from these growing communities, as well as industry and agriculture intensifies. Overall its demand for water could increase by a third over the next 20 years says the 2003 ASEAN Long Term Strategic Plan for Water Resources Management

A strategic plan of action on water resources management was subsequently drawn up with Australian government assistance by ASEAN in 2005, to advance better practices for water management in the Region. Issues include problems of food security, improving access to safe and affordable drinking water and sanitation facilities for all, and addressing the degradation of the environment in vulnerable catchments including freshwater and coastal waters.

As existing resources are depleted, expanding urban populations could face supply shortages of drinking water as surface water and groundwater resources reduce.

In some areas there is growing use of bottled water. A 2009 survey found that Indonesia was the second largest consumer of bottled water

in the Region, in a market forecast to rise to US\$2.89 billion by 2016. According to the global industry experts Frost & Sullivan Consultant, Melvin Leong, "bottled water in Indonesia is a safer alternative and the majority of the population considers it more affordable than residential water treatment equipment".

Desalination plants are already in general use throughout the Region, especially in Singapore where around 10% of the city state's demand for water is met from seawater treatment. Its first desalination plant was commissioned in 2005 with a capacity to treat 136,380 cubic metres a day (cmd) of seawater.

Hyflux, the operator, is building a second plant designed to produce 318,500 cmd. By 2030, it is estimated that up to 30% of Singapore's potable water requirement is expected to be met by desalination. (*southeastasiainfra.com/asolution-for-water-challenge*)

Singapore has also been a pioneer in constructing a system of flood defences for the city. The threat of flooding is growing throughout the Region. A third of the agricultural areas in ASEAN countries is estimated to lie in potential flood zones.



The impact of extreme climatic events and their increasing frequency, added to climate change and variability are of growing concern to governments in the Region.

Indonesia and the Philippines and others with large coastal populations are particularly vulnerable to any sea level rise, increases in heat extremes and the intensity of tropical cyclones and ocean warming. (*Turn Down the Heat Climate Extremes: Regional Impacts and the Case for Resilience World Bank 2013*) Extensive flooding occurred in Thailand in 2011 and 2012 and the severe economic impact of this on industry has raised water security considerations high on the country's agenda.

Its 2011, floods affected 13.5 million people and caused more than 800 deaths, with 66 of the country's 77 provinces declared disaster areas and more than 20,000 square kilometres of farmland damaged. The floods also halted production in the country's key electronics and automobile sectors. Parts of Bangkok were also inundated. In 2012, floods returned again to cause havoc in a quarter of Thai provinces.

The people living near the three deltas of the Mekong, Irrawaddy and Chao Phraya rivers are particularly at risk from typhoons which have become more frequent and severe, with agriculture, fisheries and tourism the most exposed economic sectors.

The Mekong Delta produces around 50% of Vietnam's total agriculture production and contributes significantly to the country's rice exports. A sea level rise of 30 centimetres, which could occur as early as 2040, could result in the loss of about 12% of rice production,

Major cities including Bangkok, Ho Chi Minh City, Manila and Yangon with their large and fast growing populations and manufacturing assets are also highly exposed to increased storm intensity, long term sea level rise and sudden onset coastal flooding.

A World Bank report observed that most countries in Asia and the Pacific are still in the early stages of making strategic investments to increase climate resilience. This effort is needed to improve early warning systems, formulate improved drought management plans, and implement upgraded data collection and monitoring systems.

Accessing reliable data will be important for future decisions concerning development of the Region's major rivers, especially the Mekong. Running from its source in China through Myanmar, Lao PDR, Thailand and Cambodia to the Mekong Delta in Vietnam, it is one of Asia's longest rivers.

The Mekong is also home to more than 800 species of freshwater fish and a source of livelihood for some 60 million people living in its proximity. However, the demand for electricity in the Region could change things. Lao PDR, Myanmar, Vietnam, China's Yunnan Province and Guangxi Zhuang Autonomous Region, account for about 94% of the hydropower resources in the Greater Mekong Sub-region. (*Asian Development Bank - ADB*)

This is leading some of the riparian nations to focus on building many more dams to fuel their economic development, in a move that some fear could ultimately damage the ecological system of the river.

There are already four dams in the Upper Mekong Basin in China. In addition, Lao PDR with the backing of the World Bank and Asian Development Bank has completed a 1,070MW hydropower plant on the Nam Theun River, which is a tributary of the Mekong.

However, what is now envisaged with the 1,265MW Xayaburi dam is a step change in hydropower development in Lao PDR. The dam is just the first of 11 similar projects envisaged on the principal downstream segment of the Mekong, with plans to build a further 77 dams in the

Mekong Basin by 2030. (Asian Development Bank Water Development outlook 2013)

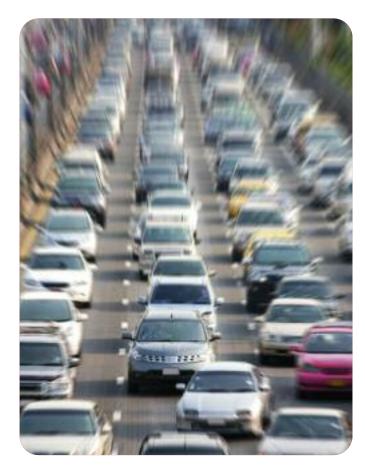
A ground breaking ceremony for the US\$3.5 billion Xayaburi dam took place in November 2012 with a reported project completion date set for 2019. As with the Nam Theun development, the electricity produced will go mainly to Thailand which is funding the planned new dam's construction.

The impact of the Xayaburi dam elsewhere, is uncertain but could be felt most in Cambodia and Vietnam. Reduced sediment and nutrient flow could adversely affect crops in these countries rice growing areas, says Ame Trandem, Southeast Asia Programme Director for environmental group, International Rivers.

According to Stuart Orr, Freshwater Manager at World Wildlife International, if all currently planned dams are developed, Mekong communities would be faced with sourcing close to 40% of lost fish protein from other sources. He says that to replace fish protein with domestic livestock protein, would require up to 63% more pasture land and up to 17% more water. (*Global Environmental Change-SciDev.Net SE Asia Desk*)

The use of hydropower resources is expanding rapidly to support the increasing energy demands in the sub-region. However, there is a need for knowledge, capacity building and dialogue based on accurate data. Balancing planned expansion with the needs of other stakeholders and protecting the environment is a considerable challenge. A successful outcome will be an important determining factor of overall water security for the Region as a whole.

ASEAN's roads and rails experience new dawn



Railway developments promise to do much for the future of ASEAN countries, even though for now the Region's roads remain the principal mode of land transport. In Indonesia, ASEAN's largest and most populous country, more than 80% of travel is by road with 70% of the country's freight carried by trucks.

Domestic truck transport accounts for a similarly high percentage of total freight transport in Vietnam, Thailand, Malaysia and the Philippines. In 2010, Thailand's Department of Business Development recorded more than 3,800 registered road freight operators with 135,996 trucks in use.

However, the condition of highways and levels of maintenance varies considerably across the Region and this is constraining economic development. According to the Organisation for Economic Cooperation and Development (OECD), only 21.7% of roads in the Philippines are paved compared to 57.6% in Indonesia and more than 90% in Thailand. (*OECD Southeast Asian Economic Outlook 2013*)

Myanmar's roads stretch over 140,000 kilometres though only 30,000 kilometres of the network is paved. Less than half the country's main roads are all weather, and outside the largest urban centres only 10% of secondary roads are usable. (*ASEAN Japan Transportation Partnership*)

Pot-holed and poorly maintained, many routes are dangerous and involve lengthy journeys. Road traffic accidents in the Region are among the highest in the world according to World Health Organisation statistics.

The impact of inadequate roads is felt especially by rural communities in less developed areas. In order to transport one tonne of rice over a

100 kilometre distance, Cambodian farmers must spend US\$15, while their counterparts in Thailand and Vietnam pay US\$4 and US\$7.50 respectively. (*The Diplomat 9/3/13*)

Not surprisingly, road development remains a large part of transport improvement plans in the Region, since the economic and social results from enhanced highway links can be transformational.

The ASEAN Highway Network (AHN) provides a framework strategy aimed at eventually creating a denser network of intra-regional highway. Some 38,400 kilometres have been identified for development to improve land transport connectivity within member states.

Much of the Region's roads, particularly cross-border routes, need to be upgraded. There are 4,069 kilometres of missing sections or sections that require repair, in Cambodia, Lao PDR, Malaysia, Myanmar, Thailand and Vietnam. (*ASEAN Masterplan on Connectivity www.mfa.go.th/asean/contents*)

Highway development programmes are seen as an essential ingredient of plans by Malaysia, Indonesia and Thailand to develop economic corridors in the Region. The aim of these is to link transport enhancements to industrial and trade development opportunities. In Indonesia, corridors overlap with major island groups in the archipelago comprising Sumatra, Java, Kalimantan, Sulawesi, Bali-Nusa Tenggara and Papua-Maluku.

Corridors are also designed to stimulate cross-border trade. Thailand plans an east-west corridor linking Mawlamyine in Myanmar through Thailand via Phitsanulok and Kohn Kaen to Savannakhet in Lao PDR and Da Nang in Vietnam.

A north-south corridor development would see transport links between China's southern Yunnan Province, Thailand and Lao PDR. A further southern economic corridor is aimed to improve connections between Bangkok, Phnom Penh and Ho Chi Minh City. China is financing a series of road improvements as part of Yunnan Province's bridgehead strategy. This includes a 250 kilometre expressway in Vietnam that will help cut journey times between Yunnan and Hanoi to six hours, a 50% reduction. Corridors are also being sought by China to connect with Thailand and Myanmar. (*China Daily 10/6/12*)

However, ASEAN countries' long term aspiration is to build an integrated railway network in the Region that would eventually stretch from Kunming in southern China to Singapore.

The Region's transport budget plans are already being weighted toward railway development. Thailand, for example, has plans for US\$72 billion of transport projects of which 64% will be railway developments and 24% for road projects. (*Thai Board of Investment*)

Some of the world's most ambitious railway projects are now underway in Southeast Asia, including the modernisation and electrification and double tracking of existing networks as well as high speed projects.

According to the Masterplan for Acceleration and Expansion of Indonesia, development of high speed railway links between Jakarta and Bandung, and from the capital to Surabaya, are regarded as key infrastructure projects that will support the corridor's economic development. (*Jetro - Japan External Trade Organisation*)

Export-Import Bank of China is discussing the provision of a US\$7.2 billion loan to Lao PDR for a long awaited high speed rail project between the two countries. If negotiations are successful, the 420 kilometre railway link will connect Kunming in southern China with the Lao PDR capital Vientiane. (*Financial Times 9/6/13*)

Another major high speed rail project has been proposed for Lao PDR which at present has virtually no rail links. The reported US\$5 billion venture would involve the construction of a 220 kilometre track connecting Lao Bao near the border with Vietnam to Savannakhet on the Thai border.

A US\$12.8 billion high speed train project has also been proposed in Thailand which would involve building a 240 kilometres track to link Bangkok with Phitsanulok, Nakhon Ratchasima and Hua-Hin. A second stage would see the proposed line connect Bangkok with Chiang Mai, Nong Khai and Hat Yai. (*www.railwaytechnology.com/news/news thailand-start-bid-high-speed-rail-project*)

Singapore and Malaysian officials have agreed to back a Public Private Partnership (PPP) project to build a high speed rail link between Kuala Lumpur and Singapore by 2020. The proposed venture would allow trains to travel up to 250 kilometres an hour, reducing journey times between the two cities on the existing 300 kilometre track from six hours to 90 minutes. (*Investvine 20/2/13, BBC*)

There is considerable work to be done, before a seamless rail network is established in the Region. The UN Economic and Social Commission for Asia and the Pacific has identified more than 2,000 kilometres of missing sections in railway connections in the Greater Mekong Sub-region between Myanmar and Thailand, Cambodia, Lao PDR and Vietnam.

The pace of railway development has now started to increase. Malaysian Group for High Technology has set up a Rail Centre of Excellence to support development of the country's public transport system. A number of international railway specialists are providing assistance including France's Thales, the Spanish Railway Foundation and Metro Madrid.

Meanwhile, a US\$5 billion railway electrification project to improve the lines running through four states in Peninsular Malaysia, is nearing completion. When completed in 2014, electrified double tracks will run 968 kilometres from south to north to Perlis State close to the Thai border. The benefits of these improvements to local services and industries are expected to have a significant long term multiplier effect on economic development, especially in the country's four northern states of Perak, Penang, Kedah and Perlis.

Indonesia's plans to accelerate the construction of a double track railway line between Jakarta and Surabaya in Java and increasing rolling stock and locomotives are expected to raise the amount of freight capacity on the line threefold, cutting logistics costs and time taken to transport goods and materials. (*ASEAN-BAC 8/8/13*)

A range of new rail projects linked directly with economic development projects are being promoted in Indonesia which is expected to rely mainly on PPPs to finance up to 70% of the proposed investments.

Another 300 kilometres of track designed to connect three coal mining centres in central Kalimantan from Puruk Cahu to Bangkuan is expected to be undertaken as a US\$2.08 billion PPP project. (*Jakarta Post 14/11/12*)

Ten PPP railway development schemes are being considered as part of a Kalimantan Railway Masterplan for completion by 2020. A number of foreign bidders have expressed interest including Russian Railways. In February 2012, they signed a Memorandum of Understanding to develop an estimated US\$2.4 billion project to build a railway between east and central Kalimantan. (*Jakarta Post 8/2/12*)

RAK Metals and Minerals Investments, a Sharjah based company, is promoting a US\$1 billion railway project in east Kalimantan to transport coal 139 kilometres to a proposed new export terminal. China Railway Group has been awarded a US\$4.8 billion contract to build and maintain 5

A range of new rail projects linked directly with economic development projects are being promoted in Indonesia which is expected to rely mainly on PPPs to finance up to 70% of the proposed investments.

a 300 kilometre line in southern Sumatra connecting coal deposits to a new port. (*Reuters News 20/1/12*)

China Railway Group is also associated with a potential project to build and maintain a 307 kilometre railway connecting Indonesia's largest open-pit mine at Tanjung Enim in southern Sumatra to a new port in the Sunda Strait.

The PPP route is also favoured in the Philippines to fund a US\$2.5 billion upgrade of the railway system on Luzon, the country's largest island. According to the Government's PPP Centre, the project covers both north and south networks operated by the state owned Philippines National Railways.

How far the PPP model will be adopted in the Region remains to be seen but its role in railway development is likely to be influential. Myanmar's extensive though outdated system is a possible candidate. Much of the 2,400 kilometre network is in poor condition. (Asian Development bank-ASEAN-Japan Transport Platform Project)

A Japanese funded study has completed a feasibility project on a proposed US\$1.07 billion upgrade of the 640 kilometre Mandalay-Yangon line. Other initiatives include the setting up of a diesel locomotive plant in Nay Pyi Taw and a wagon building centre in Mandalay.

The new dawning of the Region's railway age has encouraged China South Locomotive and Rolling Stock Corporation (CSR) to develop its first manufacturing facility outside of China, some 200 kilometres north of Kuala Lumpur in Batu Gajah in Perak State. The new US\$131 million factory due to come on stream in 2014, is to build a range of wagons for Malaysian railways and other customers in the Region.

CSR believes that demand for rail transport over the next ten years will require more than US\$10 billion of new rolling stock. An expansive note is also struck by Malaysia's Prime Minister, Najib Razak, who comments that "there is much room for growth and expansion in the largely untapped rail industry in Southeast Asia and beyond". (*Peoples Daily online 10/3/13*)

Fast expanding cities invest in mass transit solutions

The Region's cities and urban communities are expanding faster than ever before and major investment in the latest mass transit rail systems technology is seen as the only viable means to avoid gridlock.

Malaysia's Klass Valley Mass Transit Project (MTP) involves three lines totalling 150 kilometres of new track, much of which will be built underground to connect surrounding areas of Greater Kuala Lumpur with the centre of the capital.

The first of the lines is under construction and will provide 51 kilometres of track running from Sungai Buloh northwest of Kuala Lumpur to Kajong, 21 kilometres to the east of the city centre.

The MTP project is seen as underpinning the economic development of Greater Kuala Lumpur, where the population is predicted to increase from nearly seven million to ten million by 2020. The cost of the first line

has been estimated up to US\$15 billion. (Oxford Business Report Malaysia 2012)

Singapore's fourth Mass Rapid Transit (MRT) line, the 35.7 kilometre Central Circle route with 31 stations, cost US\$4.8 billion. A fifth MRT line is currently under development which will extend the system by 42 kilometres and serve another 34 stations. As with other parts of the system the track will be underground and feature driverless trains.

Thailand also wants to emulate these projects. Bangkok at present has about 79 kilometres of railway serving the urban population. The Government wants to expand track lengths to 508 kilometres, with new surface and underground lines.

New systems are already alleviating the city's chronic congestion. The Bangkok Mass Transit System, known as the Skytrain, and built as an elevated railway, recently launched a successful Initial Public Offering (IPO) to raise US\$2.13 billion. The money is to be used to expand and extend the system with new feeder lines.

Other cities have similar plans. Vietnam's transport plans include a number of new urban railway lines for Hanoi and Ho Chi Minh City including monorail and light transit systems.

Meanwhile, in the Indonesian capital, plans have been revived for a US\$1.08 billion monorail project for which Singapore's main MRT operator is a partner. (*Straits Times 30/6/13*)



Ports investment will transform ASEAN economies

ASEAN members are located at the heart of the world's most important global trading routes and it is vital for the Region's communities, and export industries, that countries in the area have sufficient port infrastructure and well managed maritime services.

In some countries, notably Singapore and Malaysia, port facilities are among the best in the world but this efficiency is not yet reflected in other countries.

Many ports in ASEAN member states need to expand their handling and logistics capacities in order to accommodate the potential growth in trade.

In addition to physical infrastructure, issues such as customs protocols and the introduction of computerised standardised systems also need addressing. As manufacturing systems become more global, delays in formality procedures will impact on the capability of countries to become a single integrated production base. (*Toward a Roadmap for Integration of the ASEAN logistics sector-ASEAN-US Technical Assistance and Training Facility*)

The Region's major ports also have to address global shipping trends that emphasise much larger vessels, able to carry 18,000 containers or

more. These ships can only be accommodated at ports that have deep draughts, longer quay lengths, the latest crane technology and sufficient logistics capacity.

Such facilities also need to be highly productive and well managed to ensure efficient turn around times. However, many in ASEAN are unable to accommodate the largest container ships.

The extent of the problem is reflected in the latest Liner Shipping Connectivity Index compiled by the UN Conference on Trade and Development (UNCTAD), which assesses how countries are connected to global shipping networks.

The criteria includes the number of ships using ports and their container carrying capacity, the size of vessels, range of services and the number of companies deploying ships in the ports of individual countries.

ASEAN countries, with the exception of Singapore and Malaysia, still rank low down the Index in terms of international maritime trade volumes. Singapore and Malaysia have the highest world rankings at 113.2 and 99.7 respectively. Vietnam scores 48.7, Thailand 37.7, Indonesia 26.3 and the Philippines 17.2. Cambodia 3.5 ranks and Myanmar 4.2.



Singapore has become a template for global excellence in ports management and the handling of containers. The container throughput was a record 31.6 million twenty foot equivalent units (TEUs in 2012), a 5.7% increase on 2011. Total cargo tonnage handled, also rose by 1.2% to reach a record 537.6 million tonnes.

Singapore also ranks as the leading port in the World Bank's 2012 Logistics Performance Index, an analysis that measures the ease of customs formalities in ports of 155 countries, the state of infrastructure, logistics competence, tracking and tracing goods as well as the time taken by ships to load and unload.

According to the Maritime and Port Authority of Singapore (MPA), their ports contribute about 7% to the country's GDP and employs 170,000 people. More than 120 shipping companies are also headquartered in Singapore. The total tonnage of ships registered grew by 13.2% in 2012 to reach 65 million gross tonnes, putting Singapore among the top ten of the world's ship registries.

However, the administration continues to invest and has launched an expansion of its Pasir Panjang container terminal. This investment will result in the terminal being capable of handling up to 50 million TEUs, a 40% increase on present capacity.

The MPA says that its US\$2.9 billion project will add 15 new berths, an automated container yard and unmanned rail mounted gantry cranes at the port. An additional 6,000 metres of quay will be added while the harbour will be deepened to a draught of nearly 18 metres. (*Marine & Port Authority of Singapore*)

Malaysia's ports are also steadily enhancing their competitive position as a hub in the Region. An estimated 95% of its trade by volume is carried by seaborne trade through its largest container ports of Port Klang and Port Tanjung Pelepas.

Work to expand Port Klang will double its container handling capacity to 20 million TEUs by 2020, while investment at Tanjung Pelepas is due to increase the port's handling capacity 25% to 10.5 million TEUs.

Elsewhere in the Region the picture is more mixed. In a number of countries the constraints on seaborne trade are increasingly apparent, with decades of under investment in ports threatening to hold back economic growth.

Indonesia Port Corporation announced a US\$2.47 billion project to extend Tanjung Priok port. Located in North Jakarta, it handled 6.2 million containers in 2012 and is the country's principal maritime hub which around 70% of Indonesia's containerised exports and imports passes.

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Indonesia's East-West Pendulum plan aims to improve maritime transport links through the country's main sea corridor connecting the ports of Belawan, Batam, Jakarta, Surabaya, Makassar and Surong.

Seven new container terminals are being planned by 2023 in addition to two petroleum products terminals, with the aim of increasing handling capacity at Tanjung Priok to 18 million TEUs.

Another challenge is that most of the country's existing infrastructure is concentrated in Java and Sumatra, leaving the eastern part of the country relatively isolated. Outside of the capital no ports are capable of receiving trans-oceanic vessels. This means that much of Indonesia's cargo has to go through Malaysia and Singapore.

According to a 2012 McKinsey report, the challenge for the Government and business is to connect smaller but rapidly growing cities on islands off Java, such as Balikpapan and Pontianak in Borneo, Pekanbaru in Central Java and Makassar in Sulawesi.

Indonesia's East-West Pendulum plan aims to improve maritime transport links through the country's main sea corridor connecting the ports of Belawan, Batam, Jakarta, Surabaya, Makassar and Surong. Each is due to be developed with greater draughts, ICT systems and container handling equipment in order for them to act as the country's gateway ports. Vietnam is hoping to attract investors with the partial privatisation of three of the country's main ports by 2014 including Quy Nhon, Da Nang and Hai Phong. Progress is being made and in April 2013 a US\$1.2 billion Public Private Partnership (PPP) project to build the Hai Phong International Gateway Port, in joint venture with Japan's Official Development Assistance programme, was announced.

The development at Hai Phong will allow vessels up to 100,000 tonnes to dock, establishing a logistical system that will allow Vietnamese exports to reach Europe and the US without the need to go via other ports in the Region.

A partial privatisation of Vietnam's biggest port in Saigon is also expected to commence after it is relocated to a new industrial zone on the outskirts of Ho Chi Minh City.

The Philippines, an archipelago of 7,100 islands, flanked by the Pacific Ocean and South China Sea, also has pressing reasons to develop not only its ports but also to improve inter-island maritime connectivity. As in other parts of the Region PPP projects are being promoted.

In 2010, the Philippines Ports Authority, the industry regulator, said that at least five state controlled ports would be de-nationalised and handed over to PPPs.

One of the most innovative developments in recent years has been the introduction of the Philippines Nautical highway in which trucks and passenger vehicles can drive straight on and off Roll-on, Roll-off (Ro-Ro) vessels.

Introduced in 2003, the Ro-Ro services allow ports that do not have facilities to accommodate ocean-going container ships to transport smaller cargoes and passengers.

Regular sailings are linked to truck and bus schedules and connect the main island of Luzon through the island provinces of Masbate, Cebu, Bohol and Camguin to Mindanao in the southern Philippines. Where services have been introduced transport costs for goods have been reduced up to 40%.

It is this type of integrated system that other ASEAN countries can emulate and its impact has been likened to the introduction of lowcost airlines on transport systems. (*Bridges Across Oceans: Initial* Impact Assessment of the Philippines Nautical Highway System and Lessons for Southeast Asia," ADB, 2010)

While Ro-Ro networks are seen as an effective means of targeting underserved areas, rather than a replacement of existing shipping networks, they could also play a significant role in developing the Region's 51,000 kilometres of navigable inland waterways. (*Asia Foundation*)

Myanmar's ports have the potential to become regional transportation hubs serving markets in China, India, as well as Southeast Asia. One of the biggest potential projects involves building a new deepwater port at Dawei to connect eastwards to Bangkok via a double lane highway.

From the west of the proposed new port, shipping lanes could be established to link Dawei with Kolkata and Chennai in India and therefore able to compete with Singapore, 1,600 kilometres south, as the main route for India-ASEAN trade. Dawei and other potential new ports in the Region could cut costs and the journey times between major transit hubs significantly, helping to forge a new era in global maritime trade.

GE in ASEAN

With over a century of history in ASEAN, GE is, until today, a partner for sustainable growth in the Region. A partner that continues to support the development of the Region's infrastructure and people. A partner that has helped transform this Region when, in April 1890, it installed the first electric street lights in ASEAN on Real Street in Manila, the Philippines.

Since then, we have grown to more than 7,500 employees in ASEAN with offices in Indonesia, Malaysia, Vietnam, Thailand, Singapore, the Philippines, Cambodia, Brunei and most recently Myanmar, bringing us closer to our local customers. This has not only helped us to deepen our relationships with them but it has also enabled us to localise our solutions to address their challenges.

Building, Powering, Moving, and Curing to make the world better has been a GE promise in ASEAN

How have we delivered in this respect? Let us consider a few examples. Our energy efficient wind turbines generate 15MW of energy in Bac Lieu Vietnam, and our Haiphong facility manufactures components for power generation to be exported worldwide. Every 38 seconds, an aircraft equipped with GE technology takes off in ASEAN. In 2012 alone, one in five people in ASEAN flew on such aircraft. Lifesaving medical technology is now within reach for millions of people with GE's modern and affordable medical solutions. Our longstanding support for Indonesia's railway infrastructure, which has lasted over six decades, now moves 200 million Indonesians annually.

We keep our promises not only through solving local challenges but by offering solutions that bring this Region to the World and the World to this Region.

Modern healthcare solutions delivered

Indonesia has far fewer hospital beds and fewer physicians per 1,000 people compared to either Vietnam or Lao PDR. With a severe lack of investment to build healthcare infrastructure especially in rural areas, Indonesia has a long way to go in meeting its Millennium Development Goal target to reduce maternal and mortality rates.

Rural healthcare is an area where GE has an innovative solution: Vscan 1.3.

Especially localised for the Indonesian market, the user interface of this ultrasound is in Bahasa, Indonesia, and healthcare providers have the option of accessing attractive financing options by Bank Negara Indonesia, to enable them to purchase and operate their own ultrasound device.

Less than 2% of total healthcare practitioners in Indonesia today are equipped with the means to use the technology in their practice. Vscan 1.3 will go a long way in supporting the country's goal to reduce its maternal mortality rate by 75% by 2015.

Navigating through new aviation territory

GE is implementing the world's first network of International Civil Aviation Organization (ICAO) Required Navigation Performance Authorization Required (RNP AR) flight paths designed by a third party in Malaysia, which is set to be deployed at 15 Malaysian airports. The programme includes GE-designed ICAO 9905-compliant RNP AR approach paths, which is the highest performing type of PBN procedure that allows aircraft to fly precisely defined paths, without relying on ground-based radio-navigation signals. It can also be designed to shorten the distance of an aircraft's flight en-route, reducing fuel burn, exhaust emissions and noise pollution. The technology's reliability can help air traffic controllers reduce flight delays and mitigate air traffic congestion.



GE will be designing, deploying, validating and maintaining a network of precise RNP procedures to utilise AirAsia's A320 fleet performance characteristics. Kuching and Penang International Airports are the first to undergo evaluation work. GE will also provide education and training for the flight crew, technical staff, dispatchers and air traffic controllers.

Different power challenges, one answer: GE

In the 1970s, GE's first Frame 5 gas turbine was supplied to the Electricity

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Building, Powering, Moving, and Curing to make the world better has been a GE promise in ASEAN

Generating Authority of Thailand (EGAT) for use at its Lan Krabue power plant. Since then, EGAT's gas turbine fleet has grown to over 100 units with a combined production of 8,000MW. Besides EGAT, GE also supplies other Thai energy producers like PTT, Ratchaburi, and Tri Energy with combined-cycle gas turbine equipment.

EGAT's Saha power plant uses two GE LM6000 Aeroderivative gas turbines each rated at 44MW. The gas turbines, which began producing power in early January 1999, provide power to EGAT and other manufacturing companies in the Saha Industrial Park. The Rojana power plant also features two LM6000 gas turbines supplied by IHI and these units began commercial operation in late February 1999.

Thailand's largest chemical producer, PTT Utility, has a 13 year contractual service agreement with GE to ensure its Rayong power plant operates smoothly. The gas turbines there generate more than 300MW of power to power more than 15 petrochemical plants.

Vietnam's energy revolution is in the wind

Located about 200 kilometres southwest of Ho Chi Minh City, in the Mekong Delta region, the Bac Lieu project was the first wind farm in Vietnam. Built using GE's wind turbines, the project was designed to protect the environment of the region, known as the "rice basket" of the country, which accounts for the largest amount of Vietnam's seafood exports. The ten wind turbines in Bac Lieu output 16MW of power and it joined the national grid in June 2013. The second phase of the project will involve the construction and installation of more than 50 GE wind turbines.

The Hai Phong wind turbine facility manufactures generators for 1.5MW wind turbines with components sent to service centres around the globe. The facility employs about 600 young Vietnamese. With total export volume in excess of US\$271 million, the wind turbine facility is amongst the best performing industries in Hai Phong.

Rice, Asia's wonder crop

Currently, only 50% of rural villages in Cambodia have access to electricity with demands for power growing at 25% a year. Located in the country's rural rice milling region of Kamphong Cham, the SOMA Group selected GE's Waukesha gas engine technology to power its Hak Se mill.

Cambodia produces about 400,000 tonnes of concentrated rice husks annually, which can be used as a reliable source of biogas to produce



renewable energy. After the rice husk has been converted into biogas, the two GE VHP 5904 Waukesha engines burn it to generate 1.5MW of renewable electricity. Less than two kilogrammes of husk can produce one kilowatt-hour of electricity. Part of the power will support the rice mill's operations while surplus electricity will be sold to the local grid, providing an economical power supply and improving the living standards of people in the area.

This project helps meet the goals of Cambodia's Rural Electrification Programme which are focused on supplying electricity to every village by 2020 and to connect 70% of the country's households to the grid by 2030.

How clean can a glass of water be?

The GE Singapore Water Technology Center at the National University of Singapore (NUS) is a key part of our Global Technology network that develops advanced water technologies to solve some of the world's most pertinent water challenges. Singapore's vision and commitment to innovation in the field of water makes it an ideal location for our centre and our partnership with NUS enables us to undertake collaborative projects of mutual interest in the field of water purification.

The Technology Center brings talented scientists and engineers together to work on state-of-the-art technologies such as advanced membrane technology, advanced analytical technology, membrane chemicals, and systems engineering. We are working to develop new solutions for low energy seawater desalination, water reclamation, and more efficient water reuse that constitute advancing fundamental research and innovation in water treatment.

Aviation sector set for further expansion

ASEAN's airlines are investing heavily to expand and modernise their fleets in order to meet an unprecedented growth in air travel that is being spurred by the Region's economic expansion and surging demand for low-cost air travel.

Philippine Airlines has ordered 100 aircraft including 20 wide-body Airbus A330-300s, eight of the manufacturer's A340s, five A300s in addition to 44 Airbus A321s, 15 A320s and four A319 single-aisle airliners. Indonesia's flag carrier Garuda is also receiving new aircraft including wide-body Boeing 777s.

These new aircraft will permit non-stop services to operate on intercontinental routes such as Jakarta-London. Thai Airways is also deploying its new super jumbo Airbus 380s to connect Bangkok and London on a daily basis for the first time.

However, it is the surge in domestic air travel that is driving investment in the Region's aviation sector. Air travel in Indonesia, for example, has nearly doubled since 2008 reaching 72.5 million passengers in 2012, with the number predicted to rise to 100 million by 2015 and 180 million in 2018, according to the Sydney based Centre of Asia Pacific Aviation (CAPA). Tony Tyler, Director General of the International Association of Air Transport (IATA), has said that by 2015, 37% of all passengers will travel on routes to, from or within the Asia-Pacific region compared to 29% for Europe and North America.

The trend will be accelerated after 2015 when the ASEAN Economic Community comes into being. As current bilateral restrictions on operations between countries in the Region end, opportunities will open up for a further burst of growth. In particular an open skies policy will allow low-cost carriers the flexibility to operate international services outside their own country bases, without having to operate through joint ventures.

Airlines will have the freedom to serve all capital cities in each member country without restrictions. A single aviation market will help regional tourism markets to grow and stimulate competition between low-cost carriers across the Region.

There is substantial room for services to expand in a region under-served by aviation services. Con Korfiatis, Vice President of the low-cost Citilink airline, points out that in Indonesia there are not much more than 300 single-aisle airliners to serve a country of 17,000 islands with a



population of 230 million. This number compares to the estimated 3,000 aircraft operated by carriers in the US to serve 310 million people.

There is clearly substantial potential. Ambitious airlines in the Region are looking to emulate the rapid and sustained success that budget airlines have experienced elsewhere such as Southwest Airlines in the US as well as Ryanair and Easyjet in Europe.

This is a key factor in ASEAN's continuing investment in new aircraft. Malaysia based Air Asia, the Region's biggest low-cost carrier (LCC), placed an order valued at US\$18.4 billion in 2011 for 200 of the latest version of the Airbus 320 series. (*Airbus Press Release 13/12/12*)

Philippines Airlines LCC subsidiary Cebu Air, has 32 Airbus A320s, 30 A321s and ten A319 short haul aircraft on order.

The biggest order from regional carrier has come in the last two years from Indonesia's Lion Air, who has placed US\$45 billion of orders for 234 Airbus A320 single-aisle airliners and 230 Boeing 737s for delivery over the next decade.

In less than a decade, LCCs have gone from a few small scale operations to providing a majority share of the market. CAPA estimates that budget carriers now have a 52% share of air travel in the Region, double that of five years ago. Their share of traffic is likely to grow further in the years ahead as air travel becomes increasingly accessible to the Region's expanding middle income customers.

As the new budget airlines continue to generate traffic, sustain their load factors and yields, a new market sector has been established according to Campbell Wilson, Chief Executive of Singapore Airline's subsidiary Scoot, which has been set up to address a growing market for budget medium to long haul services.

There are concerns that even with multibillion dollar investment in fleet expansions, the Region's plans may be delayed as a result of inadequate investment on the ground, in airport and transport infrastructure.

The Region contains some of the world's busiest international airports including Jakarta's Soekarno-Hatta International, Bangkok's Suvarnabhumi, Singapore's Changi and Malaysia's Kuala Lumpur International. They and others are operating beyond the capacities they were originally designed for.

Served by more than 6,000 flights a week, Singapore's Changi airport has won numerous international awards for passenger and airline satisfaction. In addition, the airport handles nearly two million tonnes of freight a year. It ranks as the number one logistics hub among 155 countries globally, in the World Bank's 2012 Logistics Performance Index.

Many of ASEAN's main airports are struggling to keep pace with demand, resulting in long delays, long lines and aircraft forced to stack

overhead or wait for lengthy periods on the ground for take off or disembarking. One of the principal reasons for the congestion is the rapid development of budget airlines in the last few years.

In order to maintain its status, Changi airport requires ongoing investment. A fourth terminal will enable an additional 16 million passengers a year to be accommodated by 2017. There are also plans for a fifth terminal and a third runway in the next decade, which will raise the airport's overall handling capacity to 66 million a year by 2023.

Malaysia is building another terminal due to open in 2014 that will serve LCCs and their passengers. Jakarta's Soekarno-Hatta airport is being overhauled with plans for a third runway and a fourth terminal. An entirely new airport to serve the capital is being discussed.

Bangkok's Suvarnabhumi airport which received 52 million passengers in 2012, is due to complete an expansion by 2017 raising its capacity to 64 million passengers a year. This will also reinforce its credentials as one of Asia's main hubs and is especially well located to serve Cambodia, Myanmar, Lao PDR and Vietnam.

A new US\$185 million international terminal is also due for completion by 2015 at Thailand's Phuket airport to ease congestion during the peak tourism season from November through to April.

In Indonesia, a new US\$290 million terminal at Bali's Denpasar International Airport is due for completion by 2014. Much more airport development will be vital for Indonesia's long term economic well being. Stretching 5,000 kilometres east to west, much of the country's transport infrastructure is concentrated in Java and Sumatra.

As a result, large eastern parts of the country lack connectivity. According to a McKinsey report the challenge for the government and businesses will be to connect fast growing smaller cities on islands off Java, such as Balikpapan and Pontianak in Borneo, Pekanbaru in Central Sumatra and Makassar in Sulawesi.

Only a few of Indonesia's airports at present have sufficiently long runways for international flights and the three largest airports serving Jakarta, Medan and Denpasar are operating well beyond originally designed capacity.

Indonesia's Transport Ministry estimates that airport infrastructure needs to grow by more than 30% a year. Consequently more than 20 airport projects are in various stages of development, with a total of 45 projects planned for the next ten years.

Such large scale investments are likely to involve Public Private Partnerships (PPPs) both in Indonesia and elsewhere in the Region.

Vietnam is looking to the private sector to develop new airport infrastructure to cope with rising domestic demand and also to compete with neighbouring Thailand, Malaysia and Singapore for international traffic. New green field international airports have been discussed for Ho Chi Minh City and for Hanoi.

In some areas the private sector is well established in airport development. In Thailand, Bangkok Airways operates its own airports on Samui Island, at Sukhothai and at Trat in the east of the country.

Philippine Airlines along with San Miguel Corporation, which owns 49% of the airline, is looking at constructing a new airport near Manila as an alternative to the congested Ninoy Aquino International Airport.

"While private investment will be necessary to speed up development of new airport facilities, an effective economic and regulatory framework will be needed to ensure that the national interests are protected," according to IATA's Director General, Tony Tyler.

Aviation engineering -Maintenance Repair & Overhaul (MRO)

According to Boeing current market outlook, new low-cost carriers and demand for intra-country travel in the Region have resulted in a substantial increase in single-aisle aircraft. This huge and accelerating expansion is increasing demand from airlines for MRO services, an area which is becoming a major growth industry in ASEAN member states.

US based aviation consultancy TeamSAI predicts that the MRO market will reach more than US\$24 billion a year by 2023, almost double its present level.

Frost & Sullivan forecasts that MRO business is expanding at an annual growth rate of 10% in Malaysia, 6.6% in Singapore, 6.2% in Vietnam, 5% in the Philippines and 4.5% in Thailand.

A number of countries in the Region are seeking to develop MRO activities. Lufthansa Technik Philippines has completed its third and largest hangar which can accommodate the Airbus A38O at its facility near Manila International Airport. The company, set up in 2000, is a joint venture between the German airline and the Philippines MacroAsia Corporation.

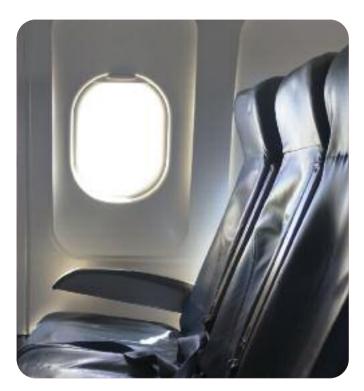
Thailand also wants to develop MRO industries as well as serving as a training centre for pilots and air crew, with Bangkok's former main airport

at Don Muang proposed as an MRO hub. Studies are also being undertaken on the potential of Nakhon Ratchasima Airport, northeast of Bangkok, being developed as a new service centre.

The Thai Government is keen to see the country become a full service aviation hub and the Board of Investment is promoting the manufacture of aircraft parts and equipment, in addition to repair and adaptation of aircraft for different purposes.

Maintenance and repair operations are seen as a route towards the production of aircraft components with the aim of establishing aviation industry Tier 1 suppliers, which can provide equipment and systems such as engines, flight control systems, fuel systems, and also Tier 2 producers which are certified to manufacture and develop parts according to specifications provided by aircraft manufacturers.

Thailand has a base on which to build such production with several international companies involved in the manufacturing of aircraft parts. These include the Ducommun Inc producing microwave switches, the Weston SEA making precision components, the Primus International a composite materials integrator, Driessen Aircraft Interior Systems producing galley and air cargo equipment, and the General Electric MRAS manufacturing engine parts and Leistriz producing engine blades.



Malaysia's aerospace manufacturing sector is already one of the country's fastest growing industries. In 2012, it recorded sales of more than US\$896 million employing around 5,100 workers, according to the Malaysian Industry Government Group for High Technology.

The sector is home to numerous Tier 2 suppliers to Boeing, Airbus and others and is becoming increasingly known for its expertise in the production of high-strength lightweight carbon-fibre components that feature extensively in the manufacture of new aircraft. (*Crowded Skies.* New Players staking the Claim to Aerospace industry Capital Investment Site Selection)

Indonesia anticipates developing its own MRO sector, which according to Frost & Sullivan recorded US\$540 million of business in 2011.

The country's largest MRO company is GMF AeroAsia, an offshoot of the country's flag carrier Garuda. The company has recently enhanced its engine overhaul capacity with a new engine test cell unit that has been developed in conjunction with General Electric and CFM International.

Garuda President, Emirsyah Satar, describes acquiring the test-cell capability as an important milestone for Garuda Indonesia and GMF AeroAsia, in their goals to have engine shop capabilities and to become a major maintenance centre of excellence in the ASEAN area.

The engine test unit will allow the airline to maintain and service its growing Boeing 737-800 fleet locally. The facility reportedly will have full overhaul capability for the CFM56-78 in 2015 and be able to maintain 150 engines a year by 2016. (*Asian Press Group-asianaviation.com/ articles/406/Meeting-engines-MRO-needs*)

Richard Budihadianto, President and Chief Executive of GMF AeroAsia, sees considerable scope for MRO business development in Indonesia where he expects the market to grow to US\$2 billion by 2015, driven by the planned fleet increases of Garuda and those of low-cost carrier Lion Air. (*flightglobal.com/feature/Singapore-special/mro*)

For the time being, the hub of the Region's MRO activity remains within Singapore, which has already established a comprehensive range of maintenance services and aircraft modifications and conversion capabilities for both passenger and freight aircraft.

Backed by a large pool of more than 100 aerospace companies, Singapore has garnered a quarter of the Asian MRO market and has become the leading aviation hub in the Asia-Pacific area contributing a quarter of the Region's output. (*www.edb.gov.sg/content/edb/en// aerospace engineering 28/52013*)

Some of the local companies have international reach in a worldwide industry valued at more than US\$50 billion a year. Among these is Singapore's ST Aerospace. Now approaching its 40th anniversary the company started out in 1975 focusing initially on military contracts. Commercial business now makes up 70% of its US\$1.4 billion annual revenue. The company continues to expand its facilities and capabilities in China, Panama and in the US and is also seeking to enter the business aviation sector and develop hangar space at Singapore's new Seletar Aerospace Park.

Other leading providers of engine MRO services include SAESL, a joint venture of Singapore Airlines' engineering arm, together with Rolls-Royce and Hong Kong Aero Engine Services. SAESL has been

designated by Rolls-Royce as a regional centre for the company's latest Trent 900 series of aero engines which power Singapore Airlines' fleet of 19 Airbus A380 aircraft. (*Rolls-Royce*)

There will be a growing requirement for skilled workers in the sector as it extends in the Region. Boeing forecasts that 67,400 aircraft technicians and engineers will be required in the Region, out of a total worldwide requirement of 243,500 qualified personnel by 2030. This prediction is based on the number of new aircraft on order and new airports due to be constructed.

In Indonesia, GMF AeroAsia envisages a requirement for 4,000 engineers and mechanics by 2015, 80% more than at present. Roll-Royce is also setting up a training unit at its Seletar site in Singapore with the aim of providing training in various skills. All these initiatives will be needed as governments in the Region increasingly target their involvement in this crucial market.

Mobile technologies drive Region's internet connectivity

New technologies, in particular advanced digital mobile standards, are transforming access to the internet. This is proving vital in areas of the developing world where the economic and social benefits of adequate and affordable telecoms services have previously been denied.

Development of cellular telephone networks is providing a fast track to connectivity where there is a growing commitment by governments to the introduction of higher speed broadband services through third and increasingly fourth generation mobile devices. This is allowing greater access to internet based services in the Region.

In Cambodia, Acleda Bank introduced mobile only bank accounts in 2012. These accounts allow customers to pay bills, conduct person-toperson payments and buy phone credit using their mobile phones. Customers can also make deposits and withdraw at bank branches and ATMs with such accounts.

As a result of cellular technologies becoming increasingly more affordable, the use of mobile computer tablet devices has expanded. In the Philippines alone demand for these devices grew fourfold in 2012. Prices across the Region have fallen by a quarter according to estimates from Germany's Nuremberg based consultancy GfK. (*Reuter report in Daily Finance Singapore 23.7.13*)

Adoption of smart phones continues to grow in Southeast Asia at speed, according to a GfK report which found that consumers across Singapore, Malaysia, Thailand, Indonesia, the Philippines, Vietnam and Cambodia spent US\$3.4 billion on these devices in 2012. (*www.newshour24.com*)

This trend is welcome in a region where for many, the mobile phone is the only technology available to access the internet. This connection is vital in a world still facing a digital divide.

Swedish telecoms giant Ericsson estimates that 60% of the world's population now has a mobile subscription, with more than six billion globally. The company predicts that by 2017, 85% of the world's population will have third generation coverage, allowing access to internet and other broadband services.

No country can afford to be left behind in the digital revolution. It is estimated that a 10% increase in internet penetration leads on average to 1% of sustainable GDP growth, while a doubling internet speed can improve GDP by 0.3%. (*ericcsson.com/res/docs/2012/Myanmar report*)

ASEAN countries are making tangible progress in the digital revolution. According to the World Economic Forum's 2013 Networked Readiness Index, it shows that Singapore is in second place after Finland

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Indonesia in an effort to improve broadband and internet take-up, is laying 35,380 kilometres of submarine optical fibre cable along the coasts of the country's major islands.

and ahead of most advanced industrial countries and twelve places above Hong Kong.

Current rankings also show that several other member states are steadily improving their performance with Malaysia, Thailand, Indonesia, Vietnam and Brunei recording advancement in the index that assesses 144 countries.

There is however, a great deal to be done before the benefits of telecoms and internet access are evenly spread throughout the Region. Cambodia is placed 106th in the Networked Readiness Index, receiving relatively low scores for the use of the internet by individuals, businesses and government compared to Singapore or Malaysia. Other economically more advanced countries in the Region are striving to catch up. These include Thailand, Indonesia, Vietnam and the Philippines which are listed in 74th, 76th, 84th and 86th place respectively in the Index. In contrast, Malaysia is ranked in 30th place globally while Singapore is bettered only by Finland.

Indonesia, in an effort to improve broadband and internet take-up, is laying 35,380 kilometres of submarine optical fibre cable along the coasts of the country's major islands. Another 21,870 kilometres will integrate the undersea element with urban centres and industries in the archipelago through what is known as the PALAPA ring. A final phase of the cable network linking Sulawesi and Maluku to Papua is expected to be completed in 2015.

Implementation of the system will be a significant boost to the telecoms market in Indonesia. According to International Data Corporation (IDC), a US technology market intelligence provider, the country's broadband market will develop at a annual growth rate of 55% up to 2016, driven by the increased coverage provided by mobile operators in addition to declining prices of mobile modems.

Thailand's Minister of Information and Communication Technology, Anudith Nakornthap, outlined a "Smart Network" plan in which the Ministry will adopt a co-network collaboration with private operators to provide network connectivity to 16 million homes through existing infrastructure for third and fourth generation mobile services. The US\$2.6 billion project aims to raise Thailand's broadband penetration to 80% within three years and 95% by 2020. (*www.futuregov.asia/thailand-pushing-us-26-bil-expand-braodbandnational*)

Thailand is also seeking to deploy mobile broadband systems to support distant learning for schools in remote areas, provide healthcare information as well as encouraging access to e-government services including technical help for farmers.



The greatest scope to improve services lies in the more populous areas such as Thailand, where at present, an estimated 23.7% of the population use internet services according to ITU figures.

In spite of an increasing use of mobile devices to access services, the percentage of individuals using the internet is still low in most of the Region. In the Philippines just 36.2% of the population were recorded as internet users by the ITU in 2012. The figure falls to 15.36% in Indonesia.

In Malaysia, a more advanced economy, the user figure is still relatively small at 65.8% compared to 74.18% in Singapore.

Myanmar is one of the countries least touched by the tremendous global developments in telecoms over the last two decades.

Only around one million of the country's more than 60 million people enjoy the benefits of a mobile telephone, and it is estimated that less than 400,000 have internet access. This situation is due to be remedied with a masterplan involving new laws governing telecommunication services including privatisation of the state owned Myanmar Posts and Telecommunications. (*KPMG Infrastructure in Myanmar www.kpmg.com/mm*). The aim is to achieve a mobile telephone density of 76%-80% and internet penetration of more than 50% by 2016. (*Myanmar The next telecommunications greenfield? www.deloitte.com*)

There is an urgency to improve services to accelerate Myanmar's integration into the ASEAN economic community. Japan's Sumitomo Corporation and NEC Corporation in conjunction with NTT Communications are working on a contract awarded in 2012 in support of the country's emergency communications network improvement plan. This follows the promise of US\$17 million of assistance from the Japan International Cooperation Agency.

The companies will help improve communication infrastructure linking the main cities of Yangon, Mandalay and Naypyidaw and will also operate systems supporting internet connections. The Japanese companies say they expect to continue helping in the area of communications expansion in Myanmar's urban and rural areas. (*www.nec.com NEC press release 21.5.13*)

However, as has been illustrated elsewhere in the Region, it will be mobile services that will drive the country's telecoms overhaul. An award was made in 2013 to Norway's Telenor and Ooredoo (formerly Qatar Telecom) to operate cellular networks in Myanmar. Their 15 year wireless licences represent some of the largest foreign investments in the country since 2011.

Myanmar is an attractive market for investors. According to Ooredoo's Asia Regional Director, Nicholas Swierzy, while Indonesia is the largest market for the Qatar telecoms company, Myanmar, with estimated sales of US\$2 billion a year, is expected to be its second largest.

Telecoms renewal boosts adoption of new ICT

Sound and reliable telecoms services are the foundation for development of ICT. ASEAN members recognise that these technologies are a key enabler for growth and essential for the Region's social and economic integration. The adoption and development of these technologies are seen as helping to transform ASEAN into a single market. (ASEAN ICT Masterplan 2015)

Malaysia's digital initiatives such as "Get Malaysian Businesses Online" as well as the build up of data centres are helping to fuel IT services growth in the country.

Thailand's market is predicted to expand by 9.8% to reach US\$12.1 billion in 2013, making the country the second highest spender in the Region after Indonesia. IDC says that the Kingdom has the potential to become a regional ICT hub with the advent of the ASEAN Economic Community. (*www.bangkokpost.com/print/360403/*)

Opportunities are also identified in Vietnam to provide IT consulting services in a largely undeveloped IT market, which is expected to expand as more state owned enterprises are privatised.

The Philippines is the largest international location for offshore Business Process Outsourcing (BPO) services providing operations for major foreign clients and call centres. The industry grew by 20% in 2012 and is expected to be valued at US\$25 billion by 2016 contributing 10% of GDP, according to the Philippine BPO Association. (Investvine.com/Philippines-bpo-industry-to-hit)

There is also a concerted effort by the Singapore Government to attract and host major international IT companies seeking a regional base.

This concept permits smaller firms to rely on remote access computing rather than having to accommodate their own hardware and install and maintaining applications. Since services are hosted remotely, they can be accessed from any computer or phone.

Thailand's Minister of Information and Communications Technology, Anudith Nakornthap, says that cloud computing service frees state bodies from the responsibility of having to procure their own equipment and software, resulting in a significant reduction of government IT costs.

ASEAN countries have the opportunity to be at the forefront of the new IT approach. In particular, there are expectations that Singapore will become a hub for the development of cloud computing.

Glittering mining prospects need careful management

Prospects for mining precious metals and industrial mineral ores are growing throughout Southeast Asia, a region that is already established as a leading world producer in several key areas.

Indonesia is the world's largest producer of nickel, for example, with production of 7.52 million tonnes in 2011 of which 6.39 million tonnes was exported.

With sales of around 11,000 tonnes a year, Indonesia is also the world's largest exporter of refined tin accounting for about 40% of the world's trade. Singapore, Malaysia, Japan, China and South Korea are the largest customers.

Mining is becoming a significant investment motor in some of the lesser developed economies in the Region. In Cambodia, plans have been reported for an US\$11 billion Chinese venture to develop high-grade iron ore deposits, a steel plant, as well as a port and railway infrastructure at Rovieng in northern Cambodia.

The World Bank says that the rapid development of natural resources has transformed the economic landscape of Lao PDR with mining now a US\$1 billion a year industry. The mining sector accounts for around half the country's exports and 15% of government revenues.

Australia's PanAust is looking to develop its third copper and gold mine in the country. The company's operations and those of China's Minmetals Corporation already produce around 200,000 ounces of gold a year in addition to copper and silver.

Thai companies are also developing a coal mine and power station that are expected to come on stream in Lao PDR during 2015. Several potash developments are also underway by Chinese, Vietnamese and Thai interests.

In addition, a Chinese-Australian joint venture is examining the feasibility of a bauxite project in the south of the country. Such developments are a much needed boost to an economy striving to catch up with others in the Region. The World Bank has said that the natural resource wealth of Lao PDR with sensible management can contribute to rapid sustainable growth and poverty reduction in the coming few years.

Mining is already well established as a major economic contributor in Indonesia with its share of GDP, together with quarrying operations almost trebling in eight years to 6.8%. The sector attracted US\$3.2 billion in Foreign Direct Investment (FDI) in 2012, representing 17.3% of all FDI in the country.



Australia's Freeport McMoran operates one of the world's largest copper and gold mines in Papua where its Grasberg mine holds reserves of 32.2 million ounces of gold, 31.6 billion pounds of copper and 860,000 pounds of cobalt.

Hong Kong's G-Resources Group has invested some US\$700 million into the new Martabe mine in North Sumatra Province at Batang Toru which came on stream in 2012 with an annual production capacity of 250,000 ounces of gold.

Future development prospects are very encouraging. There are still considered to be vast opportunities in Indonesian nickel mining, for instance, with nationwide ore resources estimated at two billion tonnes.

The Ministry of Energy and Mineral Resources estimates that metallic resources include world scale deposits of gold, silver, bauxite, platinum, cobalt, manganese as well as copious deposits of copper, iron, tin in addition to coal.

In 2011, Indonesian gold mining operations produced 104,536 kilogramme's of gold, of which 81,196 was exported. Copper production totalled 878,276 tonnes of which 612,208 tonnes was exported.

There is also growing international interest in Malaysia's mining sector. The Government has issued 200 new leases since 2010. Singapore based iron-ore miner Zhong Cheng Mining recently decided to move its operations to Malaysia, with reported plans for a US\$384 million investment programme.

Business Monitor International forecasts that Malaysia's mining industry will reach US\$38.7 billion by 2017, growing 2.5% a year. The bulk of the increase is expected to result from the country's nascent gold mining in contrast to tin where growth in a historically important industry is limited through a depletion of resources.

There have been calls for more land to be made available for exploration and development and speedier decision making. Malaysian Chamber of Mines Executive Director, Muhamad Nor Muhamad, is quoted as saying the country can make huge savings in foreign exchange outflow if the mining sector can be further developed. This, he acknowledges, will require a variety of technology and skills and be very capital-intensive.

The chamber identifies plentiful coal deposits in east Malaysia which could meet the country's entire domestic needs and provide a surplus for export. Potential for nickel, gold and copper mining is also seen in Sabah and the central belt of Malaysia, stretching from Kelantan State to Johor State.

The Philippines, with estimated mineral resources valued at some US\$850 billion, also holds vast potential. This includes possibly the world's third largest gold ore deposits, the fourth highest copper reserves, fifth largest nickel and the sixth biggest chromite ore deposits. This is in addition to large scale resources of iron ore, bauxite and rare earth minerals such as titanium, vanadium, molybdenum as well as cobalt.

Around 30 major international companies are already involved in mining operations including Australia's BHP Billiton, Japan's Sumitomo Metal Mining, Brazil's Vale, Anglo American, AngloGold Ashanti and Anglo-Swiss Xstrata.

A number of very large scale exploration and development projects are underway including the largest undeveloped gold and copper deposit in Southeast Asia at Tampakan in South Cotabato Province. Majority owned by Xstrata, the resource is estimated to hold 16.2 million ounces of gold and 13.9 million tonnes of copper.

Another major project due to come on stream is the Didipio mine development on Luzon island in the northern Philippines. The mine is expected to produce 100,000 ounces of gold and 14,000 tonnes of copper a year by OceanaGold of Australia.

There are few parts of the Region not possessing unexploited and valuable mineral resources. Vietnam holds some of the world's largest bauxite reserves mostly located in the country's central highlands. Myanmar also contains significant natural resources including copper, zinc, tungsten, tin, precious stones and industrial aggregates in addition to its petroleum and gas.

There are still outstanding questions about the ultimate benefits and costs of mining in areas such as the Philippines as well as in other ASEAN countries. Concerns over environmental impact, transparency as well as the disruption, compensation levels and ultimate rewards to local populations need to be weighed against wider national economic development considerations. It is a challenging agenda and given the sensitivities involved, likely to be a keenly argued debate throughout the Region.

Integration provides vast agricultural opportunities

Agriculture is a vital sector for the ASEAN community accounting for over 25% of GDP in some member states and providing more than 40% of total employment in the case of Myanmar.

Food security is a priority to meet the needs of the Region's expanding population as well as underpin the steadily growing role in the export of agricultural and forestry products to global markets.

There is no shortage of resources with arable land totalling around 60 million hectares. The Regions's forests and waterways also contain some of the richest habitats on earth.

These valuable natural resources include the Greater Mekong Subregion which covers vast swathes of tropical forests and rivers in Cambodia, Lao PDR, Myanmar, Thailand and Vietnam. Borneo, in addition, comprises 24 million hectares of equatorial rainforests stretching along the borders of Indonesia, Malaysia and Brunei.

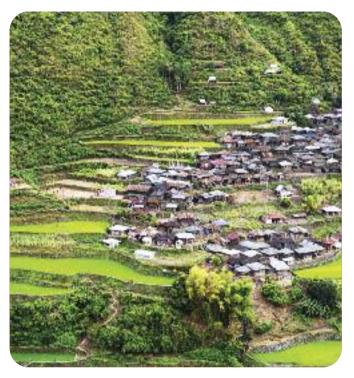
ASEAN countries are established as important world suppliers of commodities. Indonesia, Thailand and Malaysia, for example, cultivate some 3.3 million tonnes a year of rubber, accounting for around 70% of the world's production.

Indonesia and Malaysia are the Region's main palm oil producers and provide nearly 90% of global output. Indonesia exports around 18 million tonnes a year of this versatile commodity whose uses range from production of vegetable oil for cereal products, crisps and confectionery to soaps, detergent, cosmetics and biofuel.

Agricultural output is increasingly important in the composition of the Regions exports. Between 2003 and 2010, agro-based exports increased threefold with the total value rising from US\$11.8 billion to some US40 billion. Food processing and manufacturing contributed up to 13.5% of GDP.

The Philippines is one of the world's largest producers of coconuts and pineapples, and a major producer of rice and sugar. Some of the biggest global food producers and domestic industries have developed large scale cultivation and processing facilities. These include domestically based San Miguel and other corporations including foreign companies such as Del Monte, Kraft Foods, Unilever, Nestle and Dole Food Company.

According to figures given at 2013s ASEAN-EU Business Summit held in Hanoi, agro-food sales account for 17% of total exports for Vietnam



and Indonesia and 14% for Thailand. The latter's food exports are running at around US\$30 billion a year with exports to other ASEAN countries representing some US\$6 billion of the total.

With some 1.4 million hectares of land under cultivation for sugar cane, Thailand is the world's second largest sugar producer after Brazil with exports of 6.5 million tonnes a year, valued at more than US\$3.6 billion.

The country also ranks as the world's largest producer of shrimp, processed chicken and canned tuna and provides high quality food products for markets in Europe, Japan and North America as well as the ASEAN Region.

Closer regional cooperation could see the percentage of export sales within ASEAN countries rise up to 30% in the next few years, according to Petch Chinabutr, Director of the Thai National Food Institute.

The ASEAN area is already Thailand's largest export market accounting for 20.6% of sales, followed by Japan at 14.6% and the US at 12.8%.

The National Food Institute (NFI) is urging small and medium sized enterprises to cooperate with companies in other ASEAN countries to utilise new technologies and improve the free flow of goods and raw materials. The NFI, which operates independently under the Ministry of Industry, focuses on implementing international quality standards, technology and food safety research and development. This has helped establish Thailand as one of the top five net food exporters in the world.

Sales of canned and frozen fish including catfish, shrimp, prawn, carp and tilapia are a growing export for Thailand and others in the Region. Around 17% of the world's aquaculture production is produced here. Indonesia is the largest producer with an annual production estimated at 3.9 million tonnes followed by Vietnam, Philippines and Thailand with production of around 2.5, 2.4 and 1.4 million tonnes a year respectively.

Export growth is also part of the strategy of less developed countries in the Region.

Cambodia's Rice Policy is designed to promote diversification of its economic sectors by catalysing growth in paddy rice production and milled rice export to match growth seen in the country's garment and service sectors.

Agriculture, led by rice farming, contributes to roughly a third of the country's GDP and has immense potential for strengthening Cambodia's economic growth and to accelerate poverty reduction.

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If the country's rice export sector were to reach its full potential, it could produce three million tonnes of milled rice, with a total export value estimated at US\$2.1 billion. At present, an under utilisation of arable land and high energy costs are stalling expansion.

Agriculture plays a vital role in Indonesia's economy and contributes 15% of GDP, the third largest total after hydrocarbons and manufacturing. The country's food crop production, livestock and fisheries output is valued at some US\$90 billion a year with rubber, palm oil and forestry production providing an additional US\$22 billion.

Indonesia is the world's third largest cocoa producer providing some 450,000 tonnes a year and a significant coffee producer with an output of 700,000 tonnes in 2012. Indonesia is also the world's eighth largest tea producer according to the UN's Food and Agriculture Organisation.

Indonesia in common with other countries in the Region is seeking to move agriculture further up the value chain to attract investment from global agro-industry and domestic companies. Following the World Economic Forum on East Asia in 2011, the Partnership for Indonesian Sustainable Agriculture was set up to assist this process.

The aim is to facilitate private sector investment and achieve a 20% increase in yields of commodities such as corn, soybeans, rice, poultry, livestock and aquaculture. Founding partners include Indofood, McKinsey & Company, Nestle, Sinar Mas, Syngenta and Unilever.

As the world's largest rubber exporter, Thailand has a long history in the cultivation and harvesting of the commodity and operates some of the largest plantations and rubber processing facilities in the world. Downstream applications are well established with tyre manufacturers including Michelin, Goodyear and Bridgestone among them.

The country's rubber exports are valued at more than US\$13 billion a year. Annual production is expected to increase by 7% by 2017, as a result of a plantation expansion strategy.

Malaysia, which is the Region's third largest producer of rubber after Thailand and Indonesia, exported around US\$11 billion of the commodity in 2012, an amount it aims to triple through investments over the next seven years. (*Malaysian Rubber Board annual report*)

Plantations and its agriculture sector are important drivers of economic growth in Malaysia, contributing more than 11% to GDP and providing employment to a similar percentage of the working population. The country also ranks as one of Asia's main furniture producers and is among the top ten exporters in the world. Malaysia is seeking to more than double its timber exports to more than US\$13 billion a year by 2020.

An economic transformation programme is also seeking to expand cultivation of rice, fruit and vegetables and in other areas where Malaysia currently is a net importer. As expansion strategies take hold in the Region, issues of environmental sustainability, and the handling of its water resources, are also paramount concerns.

One of the biggest threats to the Mekong River's ecological system is long term deforestation of the river basin. One of the most important freshwater fisheries at Tonle Sap in Cambodia is reported to have seen larger migratory species of fish decline significantly. The wetland area, that stretches over 16,000 square kilometres, is the largest freshwater lake in the Region.

Regional cooperation has emerged through initiatives such as the Mekong River Commission, formed by Cambodia, Lao PDR, Thailand and Vietnam. The Commission is using the Biodiversity Conservation Corridors Initiative which is backed by the Asian Development Bank, to speed up efforts to address conservation and climate change issues.

The Heart of Borneo Project by Brunei Darussalam, Indonesia and Malaysia, is driving cooperation among the three countries to protect, conserve and sustainably manage remaining forest land and nearby areas.

Malaysia and Indonesia are the largest contributors to certification of sustainable palm oil trees with one million hectares of certified production area under the Forest Stewardship Council.

However, there is an urgent need for ASEAN countries to increase their collaboration on deforestation. An increasing frequency of forest and land fires over the last few years has had huge consequences by creating smog conditions in major cities across the Region. Avoiding and reversing the loss and degradation of forests is a crucial element of sustainable development.

The deployment of a Brazilian type satellite observation system to cover the Region's forests and regular checks on the ground have been suggested as a way forward for future monitoring. The Region has prodigious natural resources that if carefully used and nurtured will be of long term benefit to every country in the area.



ASEAN states move to universal healthcare

ASEAN has traditionally relied on a mixture of public and private healthcare with an emphasis on the latter. It is a structure that is likely to continue as more countries in the Region begin to move towards the provision of universal healthcare.

For those shortly to implement such schemes in the cases of Indonesia and the Philippines there are big challenges ahead. However, even in these countries, which together account for more than half of the ASEAN Region's 600 million population, the private sector is likely to continue to play an important role in the provision of services to stateinsured patients.

In January 2014, health insurance is due to cover almost 122 million people throughout Indonesia. A tax exempt state corporation, BPJS Kesehatan, has been established to roll out the scheme which is to be extended to the whole of the country's 240 million population by 2019.

Thailand is already a pioneer in the Region having introduced free universal healthcare at the point of delivery in 2002 and demonstrating that the concept is not out of reach of middle income countries. Virtually the entire 67 million Thai population is now covered for primary care through to hospital treatment.

The Philippines aims to attain universal healthcare by 2016. From this date around 100 million Filipinos will be covered by insurance according to Dr Eduardo Banzon, President of the Philippine Health Insurance Corporation, which has been set up by the Government as a tax free vehicle to enact the scheme.

In some countries in the Region such as Singapore, the private sector is well established as the main healthcare provider.

Singapore has a well funded compulsory insurance scheme that allows some of the most advanced levels of health provision to be offered. The Parkway Group's Mount Elizabeth hospital in Singapore is the first centre in Southeast Asia to offer stem cell transplant therapy for acute tumours. The country has developed at the top end of hospital treatments offering such specialised care as neurological procedures and heart transplants. Access to such advanced care remains though an aspiration in much of the rest of the Region.



Many countries in the Region will have to make very substantial increases in annual investments in healthcare to catch up with averages in OECD countries. Even in Malaysia, spending is still only one tenth of that in Western Europe and in Indonesia one seventieth according to World Health Organisation 2011 figures.

Finding sustainable methods to fund basic healthcare is a challenge and involves a keen focus on cost containment throughout the ASEAN area. There are no easy choices to obtaining the most from limited budgets. Singapore began to restructure its public hospitals to make them run on corporate lines in the mid 1980s. Indonesia has since introduced the self financing methods for its hospitals. The Philippines, for example, is estimated to require more than 152,000 new hospital beds to serve its population. The Region urgently needs to train more health professionals including technicians as well as doctors and nurses. According to a recent study by the industry expert analysis company, Frost & Sullivan, the proportion of healthcare workers in the Asia-Pacific region is 6.8% per 1,000 of population compared with 18.9% in Europe and 24.8% in North America.

Health service coverage remains stubbornly uneven throughout the Region with an average ratio of just three doctors for every 10,000 people in Indonesia, compared to nine per 10,000 of population in Malaysia.

Not surprisingly people live longer in the wealthiest ASEAN countries.

Myanmar, while increasing its healthcare spending still has the lowest life expectancy of any country in the Region and also has more than 50% of malaria related deaths. According to a report in 2012 by the Lancet, this is a result of poor diagnosis but also to the prevalence of counterfeit antimalarial medication.

The path is complex and there is no single formula as ASEAN member states adopt different solutions tailored to their own circumstances. However, an improvement and wider coverage of medical services is a priority in the Region.

Malaysia's former Health Minister, Liow Tiong Lai, declared that healthcare is viewed as investment and not as a cost burden to the country encompassing primary, secondary and tertiary care. As a result, the country has increased its spending on health to 4.4% of GDP

The Tourism Authority of Thailand (TAT) estimates that 2.4 million foreign visitors arrived in the country in 2012 for health services, generating revenues of US\$439 million.

compared to 2.9% in 1997. The system, as with others in Southeast Asia works in tandem with private healthcare providers.

It is believed that the Region's shape of future healthcare provision is unlikely to replicate systems in the West but provide an environment for innovative forms of Public Private Partnerships (PPPs) to develop.

This may see the Government's role steadily shifting from provider to regulator with private health companies working in partnership with the state in the provision of services. In Vietnam and Indonesia, for example, private providers are purchasing and managing large items of equipment such as MRI scanners, which are placed in public sector hospitals and paid for over several years.

PPPs are already playing a prominent role in the provision of more extensive medical services. An example is the US\$130 million teaching hospital under development at Kuantan in Malaysia. Peninsular Medical (PenMedic), a subsidiary of Ahmad Zaki Resources Berhad (AZRB), has a 25 year concession to build and maintain the 300 bed hospital. The hospital, with facilities for 735 students, is due for completion in 2015.

Malaysian owned Parkway Group is involved in a PPP project in Brunei. Other providers such as India's Fortis and Bangkok Hospital Group have also built up considerable expertise and experience in Singapore, Malaysia and Thailand.

The private healthcare sector is also very active in providing services to foreign "medical tourists". Singapore is estimated to receive more than 400,000 foreign patients a year.

A growing international number of patients are attracted by low cost treatments. Hospitals in the Region can offer complex operations ranging from heart-bypass procedures to hip and knee replacements or IVF procedures often at a quarter of the cost in the US or in Europe.

Thai hospital groups have positioned the country as a hub for a variety of procedures.

The Tourism Authority of Thailand (TAT) estimates that 2.4 million foreign visitors arrived in the country in 2012 for health services, generating revenues of US\$439 million. TAT expects three million medical tourists by 2016 and a doubling of 2012s revenues.

Bangkok's Bumrungrad International Hospital is one of the largest privately run facilities in Southeast Asia. The hospital which has a large number of Middle Eastern patients has a streamlined operation, starting with its own reception area at the international airport and providing serviced apartments for patients families in addition to its clinical services.

Demand particularly from Middle Eastern patients has increased dramatically as a result of visitors being allowed to stay for up to 90 days instead of the previous limitation of 70 days.

Business is growing and many independent private hospitals in both Bangkok and provincial areas have partnered with larger hospital groups as a means of staying competitive.

Further cross-border investments will also result from the liberalisation due to follow ASEAN's economic integration in 2015.

ASEAN builds role in global life sciences

The ASEAN Region is poised to occupy a critical and distinctive place in the future of the global technology industry both as a pharmaceuticals manufacturing hub and as a location for bio-sciences research and development.

Singapore is already looked upon as the pharmaceutical hub of Southeast Asia.

The top 30 of the world's leading life sciences companies have made Singapore their base with GlaxoSmithKline, Abbott Laboratories, MSD (Merck), Novartis, Pfizer and Sanofi, all positioned there, where they have collectively invested more than US\$4 billion.

Moving towards 2015, it is expected that Singapore's biomedical sector will employ in excess of 15,000 people and achieve 8.5% compound annual growth rate with pharmaceuticals being a key driving force.

Singapore's success in attracting leading bio-technology companies is also reflected in its growing role in new approaches to research.

Fewer than 5% of drugs under development gain approval for public use. In the past, exploratory work and clinical trials were distinct and followed each other in a sequence, this was a time consuming and costly

exercise. Translational research aims to bridge the gap between basic research and delivering an effective product. Discoveries made in the laboratory are used in clinical trials with volunteers. Data generated from patients responses can then be fed back to researchers allowing them to modify products where required. As a result new innovative products can be adopted for use much quicker.

This type of approach seeks to end compartmentalisation in research and development by translating research findings more rapidly into practical applications through multi-disciplinary collaboration, linking skills in the physical sciences to those in biology and medicine.

In addition to developing new modes of research and development the Region also has the potential to provide entirely new types of drugs.

The Malay Archipelago is also one of the world's most concentrated areas of biodiversity. The rainforests of Brunei Darussalam, Malaysia, Indonesia and the Philippines contain thousands of species of plants.

Because the compounds that might be created from these plants are staggering in terms of their scientific and medical applications, scientists from around the world are being drawn to investigate the forests for unknown resources. "Bio-prospectors" have already discovered a wide variety of chemicals in the flora of these tropical forests.

Brunei's Tropical Biodiversity Centre is forging ahead with plans for a bio-technology industry to develop pharmaceuticals from the microbes found in the Sultanate's forests.

Thailand is seen as a natural base for biotechnology following on from the country's highly developed agricultural and food sectors and is being advanced by the country's National Centre for Genetic Engineering and Biotechnology. Thailand has more than 165 companies operating in the area and has also developed as a major centre for pre-clinical trials.

Malaysia has also identified biotechnology as a new engine of growth for the economy. In 2012, exports of pharmaceuticals were valued at US\$180 million. It is envisaged that life sciences will generate considerably more in the next five years as the country heads towards being an integral part of global drug development, clinical trials and contract manufacturing.

Officials hope that Malaysia will become an increasingly attractive potential destination for foreign biotechnology companies and investors interested in this sector. The Malaysian subsidiary of Germany's Siogen have already been instrumental in developing allergy therapies.

Vietnam with its availability of skilled labour, and a competitive cost environment, also has the potential to be a leading manufacturer of mass produced biotech products as well as agriculturefocused research.

Sanofi, in 2013, announced the launch of a new manufacturing facility to be sited in Saigon High Tech Park in Vietnam's Ho Chi Minh City.

The US\$75 million investment is designed to serve Vietnam's pharmaceutical markets and other areas in Southeast Asia. The leading French company has a long established presence in Vietnam with existing plants employing 1,200 people in Ho Chi Minh City.

Increasingly, Southeast Asia offers foreign investors advantageous regulatory and intellectual property environments with access to capital and skilled workforces. The expanding size of the Region's pharmaceutical market, predicted to reach US\$80 billion a year by 2017, underlines the potential.



ASEAN commits to education and new skills

A sound education system accessible by all, is key to any country's social and economic development. This is clearly recognised by ASEAN countries where a pro-active educational agenda is being followed in order to produce workforces with the necessary skills to compete in future global markets.

In view of this requirement, ASEAN countries are making the improvement of educational standards and widening access to primary, secondary and technical and vocational education a major priority. Much progress has already been achieved in spite of the difficult hurdles still faced in some parts of the Region. The latest UN Human Development Index, for example, shows that children in Lao PDR and Myanmar on average have just 4.6 years and 3.9 years of schooling respectively while the average is also relatively low in both Cambodia and Indonesia at 5.8 years.

In spite of the challenges, sound progress is being made by ASEAN countries. A joint report from the World Bank, UK Department for International Development and Belgium Development Cooperation in 2012 concludes, for instance, that "Vietnam has made impressive gains in improving educational performance over a relatively short period of time. Vietnam's literacy rate and school attendance rate compare favourably to other countries in the Region and in the same income group".

The country's reform agenda is seen as critical in order to meet the public demand for a higher performing education system and build a sustainable foundation for human development in middle income Vietnam. (*World Bank News Release 25/4/12 "High Education For All Should Be Vietnam's Priority"*)

Thailand is seen by the OECD as having achieved impressive progress in providing education to most of its population. Nevertheless, significant disparities in access still exist, especially between rural and urban areas. (*OECD SE Asia 2013 report*)

The importance placed by the Philippines Government on improving education is seen in its record allocation of US\$6.6 billion in the 2013 national budget, an increase of 22.6% on the previous year and the highest figure given to any government department. President Benigno Aquino III, has said that half this amount is for upgrading facilities and building new schools. (eGov Innovation Editors 30/7/12)

However, even in those countries where longer periods are spent in education, there is some way to go before the averages seen in the US and Germany, for example, of 13.2 years and 12.2 years are reached. In Malaysia and Singapore, which are the most advanced economies in the Region, pupils spend an average of 9.5 years and 10.1 years in school. (UN 2013 Human Development report)

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In common with Singapore, Malaysia is also seen as focusing on academic fields that serve national socioeconomic goals such as banking and finance, engineering and health sciences.

Indonesia, with the highest population in Southeast Asia, is making a big effort to overhaul the nation's education at all levels, which is why the Government announced that state spending on education in 2013 will increase by 6.7% to US\$34.9 billion. (*Jakarta Globe 17/8/12*)

The rewards arising from successful educational development will be immense. Indonesia's economy is likely to break into the world's top 15 in the next decade and will need a growing skilled and talented labour supply.

There is a lot of headway still to be made. Although currently 22% of the college age population is enrolled in a training programme in Indonesia, this is a lower percentage than in Brazil, Russia or China, according to Boston Consulting Group. (*Boston Consulting Group news release 28/5/13*)

Providing more opportunities for technical and vocational training is also an important task elsewhere in the Region. Vietnam, for example, needs more skilled workers in areas such as information technology, tourism as well as finance and banking. (*Education New Zealand Southeast Asia 2013*)

In order to address its education issues, Malaysia has launched an education blueprint to improve the country's schools system. The Malaysia Education Blueprint 2013-2025 lays out a roadmap of policies and initiatives to be undertaken in order to achieve reform goals.

The strategy aims to create a more innovative and educated society. One proposal by the Ministry of Education with the intention of setting higher standards is to raise the entry bar for joining the teaching profession to the top 30% of graduates.

In common with Singapore, Malaysia is also seen as focusing on academic fields that serve national socio-economic goals such as banking and finance, engineering and health sciences. (ASEAN-Canada Research Partnership 10/5/13)

Singapore, which already has an enviable reputation for providing quality higher education shows just how high the Region's educational bar can be raised. In the 2012 annual university ranking of Asian Universities, published by Quacquarelli Symonds, the National University of Singapore placed second while Nanyang Technological University was 17th. The University of Malaya was ranked 35th. (ASEAN-Canada Research Partnership 10/5/13)

ASEAN increases education cooperation

Student mobility, the transfer of academic credits, quality assurance and creation of research clusters have been identified as priorities to harmonise ASEAN's higher education system that encompasses an estimated 6,500 higher education institutions and 12 million students in the ten member states. (*topuniversities.com*)

The ASEAN University Network (AUN) is strengthening the existing network of cooperation among 26 of the Region's leading universities to promote information dissemination in an effort to accelerate development of regional identity. This includes development of a quality assurance system which will lead to mutual recognition of academic standards in member countries.

This process will be helped through a credit transfer system to facilitate recognition of each country's academic qualifications. The AUN has also set up an intellectual property network, organising conferences, workshops and setting up relationships with IP networks.

The Cha-am Hua Hin Declaration on the Roadmap for the ASEAN Community (2005-2015) also listed several initiatives to promote cross-

border education within the Region. Member states agreed to facilitate staff and student exchanges, and create research clusters.

Meanwhile, Thailand, Lao PDR and Vietnam are discussing plans to develop methods that will lead to vocational qualifications being recognised in each country. Dr. Dao Viet Dung, Director of Vinh University of Technology Education in Vietnam has said that the trination vocational training scheme will set the same standards in professions across the three countries, making it easier for those in the same field to move across borders. (*ASEAN Trade Union Council*)

English needed for economic development

Globalisation has accelerated the growing role of the English language in Southeast Asia where it has become the working language in most ASEAN countries, notably Singapore and the Philippines.

A poll carried out in 2012 by market research company, Ipsos, found that 74% of people use English to communicate with foreigners in Singapore.

In multi-ethnic Malaysia, English is the basis of post secondary school tertiary education. "English language skills are not considered optional anymore but a necessity," according to Azirah Hashim, Dean of Humanities and Ethics Research Cluster at the University of Malaya. (*Southeast Asia Globe*)

The country's schools strategy seeks to ensure every child is proficient in English. (*The Star 17/9/12*)

"Deficiency in English language skills and consequent deficiency in social networking aptitude, hinders progress in the adoption of technology and

modern teamwork processes needed for high value-added activities," according to Malaysia's National Economic Advisory Council. (*National Economic Advisory Council report 2010*)

A relatively widespread basic English language proficiency has helped the Philippines become the world's largest call centre hub. As a result, the country is looking to develop into more value-added services such as Business Process Outsourcing which focuses on English language back office services.

An index of English language proficiency drawn up by language training company EF Education First, for example, gives a high rating to Singapore and Malaysia, a low rating to Indonesia and Vietnam and a very low level to Thailand.

A lack of communications skills in the world's foremost business language, could slow foreign investment into the type of value-added manufacturing these countries are increasingly seeking to attract.

In 2011, Vietnam launched an ambitious education reform programme to ensure that by 2020, all school leavers are competent in English. Competence levels of both language teachers and students will be measured according to the Common European Framework of Reference (CEFR). (*Guardian Weekly 8/11/11*)



Touching lives, improving life

P&G globally is committed to ensuring a better quality of life for children in need around the world. Our company purpose is to touch and improve lives, now and for generations to come. Every year, P&G reaches more than 50 million children through our corporate cause platform which enables children and their families to live, learn and thrive by getting off to a healthy start, receiving access to education and building skills for life.

Disaster Relief

P&G touches the lives of the community through disaster relief programmes. Our flagship not-for-profit programme is called Children's Safe Drinking Water (CSDW) which provides clean drinking water to impoverished communities in the developing world through P&G's Purifier of Water. An advanced technology which was developed by P&G and the US Centres for Disease Control and Prevention, the product transforms contaminated water into clean safe drinking water.

Since its establishment in 2004, the CSDW programme has partnered with more than 120 NGOs throughout the world to provide six billion litres of clean drinking water to people in more than 65 countries. By 2020, P&G aim to "save a life an hour" by delivering two billion litres of clean water each and every year. The programme has saved an estimated 32,000 lives and prevented 250 million days of diarrheal illness.

P&G has extended aid to some of the most critical global emergency relief situations where safe drinking water is a critical need, in the wake of hurricanes, earthquakes, tsunamis, typhoons, flooding and other disasters. CSDW has provided aid to the Aceh tsunami, Cyclone Nargis in Myanmar, Yogjakarta and Padang earthquakes, Thailand flooding and Typhoons Ketsana and Sendong in the Philippines.

P&G engages partners such as local government, distributors, celebrities, media, customers, consumers and employees in our CSR programmes, to help touch and improve the lives of the community and children in ASEAN and around the world.



Myanmar

In 2007, P&G joined hands with World Vision Singapore, to provide over 25 million litres of clean, safe drinking water to the disaster victims of Cyclone Nargis, contributing a total of US\$310,000.

CSDW has since provided US\$350,000 to stockpile 4.5 million sachets in preparedness for future disasters.

In May 2013, P&G partnered with Chelsea Clinton, Board Member of the Clinton Foundation, to deliver the 6th billionth litre of clean drinking water in Myanmar and announced a landmark partnership with USAID to mark the occasion.

Indonesia

In Indonesia, due to its geographical landscape, P&G focuses its efforts towards disaster relief programmes, which started during the 2004 Aceh tsunami, and subsequent Padang and Yogjakarta earthquakes, and flooding in Jakarta in January 2013.

Together with World Vision Indonesia, P&G donated water purification packets through local clinics called POSYANDU, endorsed by the heads of the medical community who were involved directly in the training of how to use P&G's Purifier of water. The programme helped protect the people and children of Padang Pariaman from an epidemic of diarrhea and water borne diseases, common consequences in the aftermath of disasters. In Pariaman, P&G Indonesia also helped the community to build temporary housing in Desa Kudu and donated P&G products such as Pampers, Pantene, Safeguard and Oral B toothbrushes.

Philippines

P&G supports the disaster management and community health programmes of the Philippine National Red Cross (PNRC) by donating over US\$448,000 worth of products and financial aid during natural calamities including typhoons and landslides and outbreaks of diseases such as H1N1.

Thailand

P&G Thailand provided 2.5 million water purification sachets to the Thai Red Cross Princess Pa Foundation, to provide safe drinking water to the 2011 flood victims. Partnering with media and retailers such as Tesco in the relief efforts, P&G donated products such as Pantene, Safeguard, Pampers, Whisper, Gillette, Oral B in survival kits packed by our own employees. Spearheaded by the Downy fabric conditioner brand, P&G also created the Downy Scent of Hope programme with trucks that serviced the evacuation centres, providing much needed service of washing laundry for the flood victims. P&G received royal recognition for the relief efforts.

Giving back to the community via children's education

Thailand

P&G supporting Thai children's education

P&G Thailand looks to support the welfare of young children, from newborns to aged 13, as these are the important formative years of a child's development. In Thailand, P&G started a unique campaign called "Back To School" to help support Thai street children and give them the chance of an education. P&G also supports a campaign called "One Year, One School" which builds new schools and educational facilities. Through a partnership with the Ministry of Social Welfare and Human Security Development (MOSDHS), the Foundation for the Better Life of Children, and related welfare agencies, P&G helps to provide proper basic healthcare and education to 25,000 street or homeless children.

Philippines

Gawad Kalinga (GK) ("Giving Care") P&G Philippines have donated over 200 houses to the Gawad Kalinga programme where P&G helps improve lives through continued investment in a P&G village of 200 homes, helping provide shelter for the homeless people of Baseco, Tondo, Manila; development of P&G Safeguard A.R.A.L (Acquired Reading and Learning) School which includes the awarding of scholarships to underprivileged children in the P&G village.

3-pid Handog Edukasyon (Gift of Education) Through the purchase of P&G 3-pid value packs of key brands Tide, Ariel, Mr. Clean, Downy and Safeguard, P&G have enabled sending over 75,000 students in over 575 schools to school for one day by giving him/her necessary school

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Over the past five years, P&G partnered with World Vision to build four kindergarten schools in Lao PDR, Cambodia and Vietnam. This has benefitted nearly 1,000 children, with a total budget support of US\$250,000.

supplies. On our 75th Anniversary, P&G have provided 35,000 more students with school supplies and have refurbished a school with seven classrooms that was damaged by Typhoon Ondoy.

Hand washing education

P&G Philippines partnered with the Department of Health to come out with public health advisories on proper and effective hand washing through the annual celebration of the Global Handwashing Day beginning 2008 and are educating young students nationwide on this important habit by supporting the DOH's Essential Health Care Programme, targeting three million students in three years.

Teen Education - P&G have partnered with the Department of Education in this school programme that provides teens modules on their interests and needs at a pre-pubescent stage, reaching over 1.2 million young girls since 2005.

Mother's Education - Since 2004, P&G have had an ongoing education and sampling programme that teaches mothers the proper and sanitary way of using diapers through Barangay Health Centres and public hospitals reaching at least 700,000 mothers every year.

E. Studyante

P&G is taking its commitment to children's education to the next level with E.Studyante, which aims to provide 1,000,000 laptops and

internet connectivity to beneficiary school children. The programme will enable students towards enjoyable self discovery of a wider world of knowledge that helps them be more competitive in the future.

Beyond Borders: Singapore

Building one school every year: With support from P&G Singapore headquarters, P&G's Beyond Borders programme aims to help support less fortunate children who live beyond Singapore's borders. Over the past five years, P&G partnered with World Vision to build four kindergarten schools in Lao PDR, Cambodia and Vietnam. This has benefitted nearly 1,000 children, with a total budget support of US\$250,000.

Vietnam

P&G Vietnam has partnered with Unicef and local newspaper Tuoi Tre to provide hygiene & sanitation facilities and hygienic practice training to 12,500 students in disadvantaged areas of Vietnam such as Can Gio, Ben Tre, An Giang, Dong Thap, Dien Bien, Ninh Thuan, Binh Duong with a total investment of US\$345,000 from 2009-2011. In 2012 & 2013, P&G helped 2,000 children with special needs to improve health & integrate into the society via Special Olympics sports. Almost 2,000 scholarships have been given to disadvantaged students of Binh Duong, Lam Dong, Dak Lak, Dak Nong & Kon Tum. For five years now, every Tet (Vietnamese Lunar New Year), P&G

partnered with customers Metro, Big C, Lotte to bring meaningful Tet gifts to thousands of disadvantaged children, women & families across the country.

Indonesia

1 year, 1000 smart children

In Indonesia, there is a population of 26.1 million children between the ages of 0-6 years old. However, about 73% of this age group have no access to any form of Early Childhood Development (ECD) Services. In the year 2003, the revised Education Law Number 20 recognised early childhood education as an important stage in life prior to enrolment in primary school education.

P&G Indonesia committed to help the Government in providing Early Childhood Education programme through Balita Cerdas (smart children) programme. In the past three years, P&G Indonesia created ten Early Childhood Education programmes with four P&G Community Centres in Sukabumi, West Java, to be used as the class of the ECD and Community activities. Balita Cerdas has touched the lives of almost 3,000 children including their parents.

In 2011, Balita Cerdas moved to Jakarta to touch lives of another 1,000 children per year, in cooperation with a local NGO - Rumah Zakat.

Together with UNICEF, the programme has become one of the most successful education programmes, which not only focused on ECD, but also empowerment of the community, including Posyandu Cadres as the teacher of ECD programme. P&G also became the first private company that has an ECD programme with an integrated and holistic programme in Indonesia.

Malaysia

The P&G Open Minds programme was established in Malaysia with the purpose of providing children with special needs, such as autism, dyslexia and cerebral palsy, the support they dearly needed. Open Minds is part of P&G's global corporate cause, and focuses the philanthropic efforts of P&G's brands and employees to support the lives of children in need, from infancy to 13 years old.

Since its inception in 1999, P&G Open Minds has worked with dedicated organisations and partners that share our commitment to helping and improving the future of special children through various projects and campaigns. Its worthy efforts have so far benefitted more than 10,000 special children in the country.

ASEAN Corporate Social Responsibility 2012-2013 Partnership with Special Olympics

In 2012, P&G launched its first regional partnership across ASEAN to raise funds and awareness for Special Olympics. P&G is contributing US\$250,000 to boost marketing activities and fund training resources for the organisation in Singapore, Malaysia, Thailand, Vietnam and Indonesia.



Real Estate investment opportunities throughout the Region

Nothing reflects economic dynamism more than the Region's surging real estate developments, witnessed in the often spectacular construction of new offices, retail outlets, housing, hotels and industrial parks.

The Region's steady move towards urbanisation is dramatically changing the shape and size of cities. While just over nine million people live in the central area of Jakarta, more than 23 million live in its larger metropolitan area, making it the largest mega city in Asia and the third largest in the world.

By 2025, Asia is expected to host seven of the world's ten largest metro regions. These are likely to include Manila, Bangkok and Jakarta according to Wharton Business School estimates. (*knowledge@ Wharton, Wharton School's online business journal*)

As cities continue to expand, Chicago based global real estate consultants Jones Lang LaSalle says it can see a number of real estate trends and opportunities in emerging markets across Southeast Asia as the Region's economies continue to outpace the rest of the world by a considerable margin. (*Jones Lang LaSalle announcement 4.6.13 Reuters*)

According to Stuart Crow, Head of the firm's Asia-Pacific Capital Markets, "there are increasing allocations being directed to real estate investments by global sovereign and other fund investors".

Investor interest is also growing in the Region's Real Estate Investment Trusts (REITs) with around 14 that have an estimated capitalisation of US\$4.7 billion, listed on Bursa Malaysia. the country's stock exchange. Large US, Canadian and Middle Eastern investors are returning to the Region and, together with active Asian high net worth individuals and pension funds, are creating strong demand for assets here.

"The growth translates to robust domestic investment into commercial property, driving demand for office and logistics space. Increased consumer spending will also support the development of retail malls and accompanying infrastructure," says Chris Fossick, Jones Lang LaSalle's Southeast Asia Director.

In Jakarta, office demand has increased by nearly 150% in four years, growing 7.4% this year. The city's office market is now described as one of the tightest in Southeast Asia with low vacancy rates and total take-up in 2012 reaching 350,000 square metres, 5.4% higher than in 2011 says a recent report by UK accountants and consultants KPMG. The report also says that in the Philippines demand for office space has also witnessed record levels. (*KPMG Asian Real Snapshot/Spring 2013*)

Real estate investment is also expanding in Malaysia's growing economy with almost one million square metres of new offices expected over the next four years.

Much of this additional space will be provided in the Tun Razak Exchange development which involves a huge new financial district being built on a 28 hectare site in Kuala Lumpur. Abu Dhabi's sovereign wealth fund is a significant investor in the project.

Another major Malaysian venture is the Warisan Merdeka, a 118 storey tower block which will be higher than the city's landmark Petronas twin towers.

In another move Malaysia Airports Holdings and Mitsui Fudosan have agreed to develop the latter's largest factory outlet in the Region on a 20 hectare site near Kuala Lumpur International Airport, with a total commercial area of 47,000 square metres. (*Malaysian Star 24.4.13*)

As well as strong demand for office accommodation, retail market occupancy rates in Jakarta have been rising consistently since 2009 and touched 81.4% in December 2012.

The retail growth story is not limited to bigger cities and areas such as Jakarta and Bali but has extended to tier two cities such as Bandung and Medan, the KPMG report says. However, there is considerable room for further development. Retailing in Indonesia with its growing middle class and expatriate population is still at a nascent stage.

Indonesia's residential property market is also buoyed by the same factors and has resulted in a sharp increase in the building of luxury apartment complexes in Jakarta.

Property loans contributed 13.68% of Indonesian commercial banks' total outstanding loan portfolio in 2012.

Foreign investor participation in the development of real estate is being assisted by more open and businesslike approaches. Jones Lang LaSalle's 2012 Global Real Estate Transparency Index says that openness in the Region's real estate markets is improving as investors and corporate clients extend deeper into Southeast Asia. This is reflected in greater availability of market data and regulatory changes.

According to Chris Fossick, "We are now starting to see increased transparency in the real estate markets of these economies which will ultimately spur regional growth, encouraging investment. As a result, the real estate industry is in a unique position to influence and be involved in many key aspects of development in the Region, both economic and social. This is both an opportunity and a challenge for our industry and we need to work closely with both private and public enterprise to ensure real estate adds full value".



Regional focus on sports industry development

There are few parts of the world that have larger numbers of people avidly following sport than in the ASEAN Region. It is seeking to achieve a more participatory and winning role in major international competitions. Apart from increasing involvement in sport, governments also want to gain a share of a very large, and growing, world sports industry.

The income generated from business enterprises, goods and services, media rights and sponsorship that are focused on sport is huge. PwC estimate that the global sports industry will be worth more than US\$145 billion by 2015.

At the first ASEAN ministerial meeting on sport held in Yogyakarta, Java in 2011, Ahmad Shabery Cheek, then Youth and Sports Minister said.

"We can and should exploit this opportunity in what is relatively an untapped market for ASEAN members," (*Bernama 14/12/11*)

During the Heads of State summit in Brunei Darussalam, 2013 was designated ASEAN Sports Industry Year. The summit meeting also agreed that "cooperation with the private sector in sport and related activities will not only promote healthier lifestyles among our people as we move towards the ASEAN Community in 2015 but also further contribute to building a stronger regional identity".

The bigger the occasion the greater is the degree of international attention and business interest. Such considerations were paramount in Malaysia's hosting of its first Formula 1 Grand Prix race in 1991, as well as Singapore's inaugural Formula 1 race in 2008. While both ASEAN



members already had achieved economic status in the Region and globally, and were already established visitor destinations, neither ranked highly in the world of sport.

Formula 1 motor racing is the most watched television sporting spectacle after the World Cup and Olympic Games according to the Deloitte Sports Business Group. Malaysia has now been hosting the event for 14 years at the Sepang International Circuit. This has allowed the country to project itself as an international destination offering fine dining and five star accommodation as well as high-end entertainment and shopping.

The country's Prime Minister, Najib Razak has said: "Formula 1 has been an engine of growth in our country with Malaysia reaping numerous benefits from its involvement in the sport and is the most effective platform for Malaysia to be known worldwide," referring to the promotion of the country as both a destination and a place to do business. (*Bernama 23/3/12*)

Thailand is also vying to become a host venue for the Formula 1 calendar within the next few years. Bangkok's Rattanakosin Island as well as Phuket, Khon Kaen and Nakhon Ratchasima have been suggested as possible venues by the Tourism and Sports Ministry.

Singapore is also further developing its sports industry, targeting it to contribute US\$2 billion to GDP by 2015, a 40% increase over 2010. This is to be achieved by developing the island as a "regional hub for sports related companies and organisations". (*Ministry of Community Development, Youth and Sports 2009*)

Motor racing is just one of a number of high profile sports events that Singapore has hosted including the 2011 World Netball Championships and as co-host with Malaysia, the Junior World Hockey, in 2009. The island was also a stop over destination on sailing's round the world Volvo Ocean Race in 2006.

Golf is another sport with an increasingly growing profile in Southeast Asia. Many courses have been developed over the last 30 years along with the introduction of professional competitions.

Interest in golf has accompanied expanding economies and the rise of high and middle income groups especially in Singapore, Malaysia, Thailand and Indonesia. The latter alone has around 160 courses with another 50 expected to be built over the next few years. (*Myanmar Associates 2013 Asia Pacific Golf Summit 25/7/13*)

Now ten years old, the professional golf Asian Tour is one of the most established golfing bodies in Southeast Asia. The tour schedule in 2013 saw tournaments in Indonesia, Philippines, Malaysia, Thailand as well as Vietnam for the first time. Myanmar is hoping that its hosting of the 2013 Southeast Asia Games, the largest sporting event in the Region, will make a statement about its increasing engagement with regional and global economies.

In March 2014, Asia will take on Europe in a recently launched EurAsia Cup team match-play golf tournament to be held in Malaysia.

Mega sporting events which have mass popular appeal and regional as well as international significance, focus attention on any country which can generate positive publicity for the host nation, its culture and highlight its attractions for visitors and investors. A big event is also a signal that a country has arrived on the international scene. Other tangible benefits are seen in improvements to infrastructure as well as new sports venues and stadiums.

Myanmar is hoping that its hosting of the 2013 Southeast Asia Games, the largest sporting event in the Region, will make a statement about its increasing engagement with regional and global economies. The event will be held in the country's new capital Naypyidaw and in Yangon and Mandalay and features some 33 different sports competitions. It will be the first time since 1969 that the Games have been held in the country.

The Region's ability to stage large scale sports events will be enhanced as a result of Singapore's Sports Hub project, the world's largest sports Public Private Partnership (PPP) and also described as "Asia's most inspiring destination for sports and entertainment," by the developers.

The project, due to be completed in 2014, is located in Singapore Island's Marina Bay area on a 35 hectare site. It will be connected to the

city's Mass Rapid Transit network and major roads. It will also be 15 minutes from the city's Changi International Airport.

Envisaged as an integrated centre for a range of uses, the main feature of Singapore's Sports Hub project is a new 55,000 seat stadium with a retractable roof. A 6,000 seat indoor Aquatic Centre, a 3,000 seat multipurpose arena, some 41,000 square metres of commercial space and other leisure and commercial developments are also to be built.

The US\$1.3 billion project is based on a 25 year concession agreement, under which the Singapore Sports Hub Consortium is responsible for the design, build, finance and operation of the project. Singapore Sports Council is the sponsoring government authority. (*Singapore Sports Council*)

While the aim of the Sports Hub is to be a sustainable commercially viable project, there are in addition wider implications. The intention is also to create a sporting culture within the community by encouraging even greater participation, grooming young talent as well as stimulating the corporate community's interest and investment in sports.

In the last ten years, participation rates in sports have been rising in Singapore in almost all age groups. Singapore, encouraged by its Sports Council, Ministry of Education, Health Promotion Board and other agencies, has achieved a growing participation in sports activities. It is hoped that by 2015, 66% of the population will take part in some form of sports activity.

In terms of sporting excellence, the official aim is to build on Singapore's medal success at the 2012 Olympic Games in London, when a silver medal was won in weightlifting and a bronze medal in table tennis.

Neighbouring Malaysia also won a silver medal in badminton and a bronze in the women's diving competition. Indonesia achieved a silver medal plus a bronze in weightlifting while Thailand won silver medals in weightlifting, boxing and a bronze in Taekwondo.

While the overall medals haul is modest, a lot more achievement is likely to be recorded in future as improved facilities and sponsorship increase the development of athletes able to win world contests across a broad spectrum of sports.

There will be increasing focus on football, which is undoubtedly the most popular spectator and participatory sport in the Region. Top European football clubs such as Barcelona, Manchester United, Arsenal, Liverpool and Chelsea have all had pre-season tours in Southeast Asia in 2013.

These clubs are increasingly engaged with promoters and sponsors in the Region and enjoy widespread local support with games played in Thailand, Malaysia and Indonesia. Top ranking European football clubs Athletico Madrid, Chelsea and Arsenal are involved in schools programmes and football academies in Singapore. Similarly Bayern Munich has involvement with a number of football school programmes in Indonesia. (*The Wall Blog. wallblog.co.uk southeast asia scores with English premier league*)

While football is immensely popular in Southeast Asia, clubs and national sides in the Region have struggled to match the best in Asia or feature in major international football events such as the World Cup.

In an effort to raise standards, the ASEAN Football Federation (AFF) has announced the creation of a Super League, a competition that will pit the best club sides in Southeast Asia in the same type of contest as seen in the Champions League in Europe. The new competition is expected to feature two clubs from the national leagues in Malaysia, Singapore, Thailand, Indonesia, Cambodia, Myanmar and Philippines.

The start up of the planned Super League is seen as leading to more participation in sports activities and also serving to develop the commercial aspects of football at a national and regional level. (*World Sports Group*)

In 2013, the AFF announced that the organisation intends to bid to stage the 2034 World Cup. This is likely to be on the basis of two or more countries co-hosting the event as in 2002, when South Korea and Japan acted as the joint hosts.

ASEAN seeks to broaden tourism's benefits

Tourism has continued to expand over the last 20 years with international arrivals to ASEAN countries increasing by an average 7.3% a year from 21.8 million in 1992 to a record 89.5 million in 2012.

Travel and tourism business is estimated to contribute 11.1% of total GDP. Revenues now generated are estimated to sustain a total of 25.4 million jobs, some 8.8% of total employment, across a wide range of economic sectors according to the World Travel and Tourism Council (WTTC).

In a report on the economic impact of tourism on Southeast Asia the WTTC, London based global tourism promoter, says that in the next decade international tourist arrivals in the Region will reach 145 million and that these will generate expenditures of US\$192 billion, an increase of 6.5%. This growth is expected to provide up to 28 million jobs, directly and indirectly. (*WTTC 2013: Travel & Tourism Economic Impact Report Southeast Asia*)

The impact of tourism development programmes is most apparent in the Region's larger economies. Indonesia earned US\$27 billion in 2012, contributing 3.1% of GDP and employing more than three million people. Malaysia, Singapore and Thailand also have earnings from the sector, estimated at US\$19.5 billion, US\$13.5 billion and US\$25.3 billion respectively.

Malaysia's Tourism and Culture Minister, Mohammed Nazri Abdul Aziz says his country is aiming to receive 28 million visitors in 2014 and 36 million by 2020. This number is expected to generate revenues of US\$50.1 billion. (*New Straits Times 25/5/13*)

Tourism Authority of Thailand's Action Plan 2014, predicts that international visitors will generate US\$62 billion of revenues by 2015. Thailand earned US\$30.5 billion in tourism revenue in 2012 from 22.3 million foreign visitors. (*TTR Weekly 24/7/13*)

The Philippines, which until now has tended to lag behind others in developing its visitor attractions, is placing greater emphasis on infrastructure and air connectivity. With the necessary investment taking place the country's tourism revenues are expected to increase from US\$5 billion expected in 2013 to nearly US\$10 billion in 2016, according to Ramon Jimenez, Secretary of the country's Department of Tourism.

Vietnam continues to make substantial headway expanding its tourism industry According to Vice President, Nguyen Thi Doan: "The sector has

been a major factor in job creation, economic development and poverty alleviation in Vietnam, leaving no doubt that tourism has played a crucial role in our country's overall socio-economic development,".

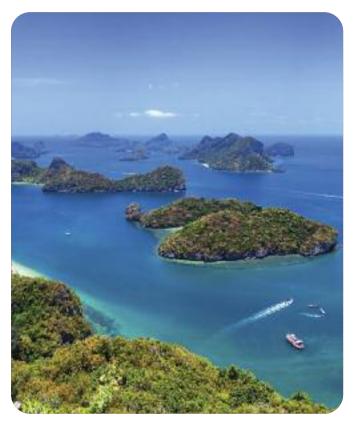
UN World Tourism Organisation Secretary-General, Taleb Rifa agrees: "Vietnam is a tourism success story," he says. "The country has clearly identified tourism as key to its future prosperity, has implemented the appropriate policies and, as a result, has transformed Vietnam into a leading destination in Asia".

David Scowsill, President and CEO of WTTC, is another admirer of the country's achievements: "Vietnam must be recognised for its admirable commitment to travel and tourism. The sector already accounts for 4.3% of Vietnam's GDP and 3.7% of all jobs. These numbers are expected to rise at almost double the global average over the course of the next ten years". (UNWTO Press Release 20/4/12)

Tourism is also one of Cambodia's key economic sectors and it is regarded as a pillar in its national economic development strategy. The country earned an estimated US\$1.2 billion from its nearly two million visitors in 2012, representing 9.1% of the country's GDP.

This income has had a multiplier effect with the development of new hotels, restaurants, retailing outlets and transport. The sector employs some 823,000 people directly or indirectly according to figures compiled by the World Economic Forum's 2013 Travel & Tourism Competitiveness Report.

The country's future tourism trends are also looking bright with a study published by the Japan External Trade Organisation (JETRO), projecting 4.5 million visitors for Cambodia in 2015, rising to seven million in 2020.



This is expected to generate around US\$5 billion in revenue and create 80,000 more jobs.

Lao PDR identified tourism development as a major aim when it started to change to a free market economy in the late 1980s. The target now is to transform the country into a global destination for cultural and nature tourism with its Tourism Strategy 2006-2020 aiming to attract 3.5 million visitors by 2015. 66

One of ASEAN's major policies is to encourage tourists to think beyond a single destination and spread the growing numbers of visitors to the Region to less visited areas.

Such economic benefits have yet to be emulated in other parts of the Region.

Myanmar, for instance, has only just begun to market the country's diverse and extensive natural and cultural assets. The country's Tourism Masterplan 2013-2020 outlines investment of some US\$487 million to develop the sector and has set an ambitious target to attract three million international visitors by 2015 and more than seven million by 2020.

Fundamental to this strategy is the encouragement of Public Private Partnerships (PPPs) to develop the sector's potential. Regional cooperation is also a firm element. This is seen as necessary to ensure consistency in standards as well as visa policies in order to promote the country with other ASEAN destinations and the Greater Mekong Sub-region.

One of ASEAN's major policies is to encourage tourists to think beyond a single destination and spread the growing numbers of visitors to the Region to less visited areas.

In order to achieve this, the Region's national tourism organisations have agreed to use the tagline "Southeast Asia - feel the warmth" in marketing and promotional materials.

A key issue concerns the introduction of a single visa for international travellers in the Region. Initiatives have also been introduced to develop

a set of tourism standards with a certification process, enabling tourism professionals to work in any of the ASEAN member states.

If tourists are to move beyond a single resort or city easily within the limited time available to a vacation or business visitor, considerable development of the Region's roads, airports, railroads and maritime links will be needed. Southeast Asia's tourism development as a multi-destination entity hinges, to a large extent, on efficient and cost effective transportation modes being in place.

Brunei Darussalam is hoping its plans to develop as a centre for ecotourism and to become a convenient base to explore the rest of Borneo will be enhanced by plans to develop bus services across Borneo and the launch of low-cost airline Darussalam Air in early 2014. The latter could increase the number of stop over visitors, especially those from the southern Philippines, eastern Indonesia and from China. (*Investvine 21/7/13*)

There are numerous other areas of potential cooperation between countries including joint training programmes, heritage management, private sector collaboration, customs procedures in addition to transport connectivity.

Lao PDR, Thailand and Cambodia have agreed to promote cross-border facilitation of tourism and ease travel through border checkpoints with

Cambodia and Thailand already embarked on a single visa pilot project. (*The Phnom Penh Post 24/8/12*)

"Southeast Asia, with its great outdoors and rich, diverse culture, has the potential to be a strong global brand in tourism, especially when the ten ASEAN member states introduces a Schengen-like visa for visitors and as infrastructure spending boosts capacity to host visitors," says Maria Dumlao, a member of the World Economic Forum's Global Agenda Council on Southeast Asia. The Region's tourism ministers agreed to collaborate on working towards the Common Visa initiative at the ASEAN summit meeting in Jakarta in 2011.

In June 2013, ministers and tourism authorities of the Philippines, Myanmar, Cambodia and Indonesia also signed a "Statement of Intent on Smart Visa". This initiative seeks to introduce a digital paperless substitute for the traditional visa. The smart visa could be obtained by a traveller by going online when making a reservation at airlines and travel agents participating in the scheme. (*ASEAN 5/6/13*)

Despite the desire to draw greater numbers of visitors in order to generate higher revenues from tourism, there is a growing awareness that the Region's attractions have to be developed in a sustainable way.

According to Tith Chantha, Cambodia's Director General of Tourism; "We will try to determine how best we can further link up and develop our national and cultural tourism products in an environmentally sustainable and responsible manner when promoting and marketing them to the international market".

ASEAN's Tourism Marketing Strategy 2012-2015 states that there has to be a caution raised about the impacts that the numbers of visitors

have on economic, cultural and social environments. "There is growing recognition that sustainability and responsibility are essential elements of continuing to have successful destinations," it concludes.

There is every possibility that tourism can help ease poverty and other social issues and act as a strong supporter of heritage and natural conservation. "It is important that the ASEAN tourism plan is seen not simply as a document concerned with increasing international arrivals into the Region but one that seeks to meet a number of societal goals". (*ASEAN press release 26/12/12*)

Tourism has been a growing industry in Thailand for more than 50 years and is now well established on the international tourist map, with around 30 million visitors expected by 2015. While concerns have been voiced about visitor numbers outpacing development of infrastructure and putting too much pressure on cultural and natural assets, the sector is a substantial revenue earner. (*TTR Weekly 24/7/13*)

Expected improvement to infrastructure, especially better roads and improved railways and airports will be important for the Region's travel and tourism sector and to developing much more varied visitor options. Greater focus on establishing maritime connectivity, for example, also opens up the option of developing more cruise packages for international visitors looking for a alternative to a Mediterranean or Caribbean cruise. (*Dumlao*)

ASEAN's plans to accelerate and improve travel facilities and connectivity within member countries will also strengthen the Region's efforts to be a strong competitor within the global tourism industry. (*ASEAN press release 26/12/12*)

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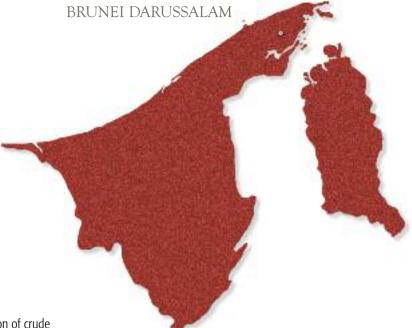
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The economy of Brunei Darussalam is driven by its production of crude oil and natural gas. The Government is hoping that offshore exploration will allow a substantial increase in future output as global hydrocarbon prices remain at a high level. At the same time strong efforts are being made to diversify the economy by encouraging investment in agriculture, fisheries and forestry. Brunei's Vision 2035 plan seeks to increase food self-sufficiency and transform the country into a regional trading and financial hub.

Located on the northern shore of the island of Borneo, Brunei Darussalam consists of two unconnected parts, with a total area of 5,765 square kilometres and occupies only 1% of Borneo's land area. It is bound on all sides by the Malaysian State of Sarawak. To the north there is a 161 kilometre long stretch of coastline next to the South China Sea. The island is also shared with the Indonesian provinces of West, South, East and Central Kalimantan.

Of the total population in Brunei, around 140,000 live in the capital Bandar Seri Begawan. Other major towns are the port of Muara, the oil producing Seria and its neighbouring Kuala Belait. The Panaga area is home to a large expatriate community due to Brunei Shell Petroleum housing and facilities. The majority of the population live in the eastern part of Brunei, while the remainder live in the mountainous southeastern region, in the district of Temburong. Most of Brunei is within the Borneo lowland rainforest eco-region, which covers the majority of the island. There are also areas of mountain rainforest inland.

Culture is deeply connected to religion, with the family being the focal point of the social structure. Islam is the primary religion. The monarchy provides a royal heritage with a direct family line going back to 1405 and this is the only Malay Islamic Monarchy in the world.

Bandar Seri Begawan is Brunei's centre of commerce, finance and government. One of the city's most prominent features is the Sultan Ali Saifuddien Mosque, a tribute and indication of the nation's deep rooted Islamic faith.

Brunei joined ASEAN on 7 January 1984, becoming the sixth member and hosted the ASEAN Regional Forum in July 2002.

BRUNEI DARUSSALAM

Joined ASEAN:	7 January 1984
Head of State:	His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah
Area:	5,765 square kilometres
Border countries:	Malaysia
Coastline:	161 kilometres
Capital city:	Bandar Seri Begawan
Total population:	415,717
Population of capital:	140,000
Climate:	Tropical, hot, humid and rainy
Languages:	Malay, English, Chinese
Religions:	Muslim 67%, Buddhist 13%, Christian 10%, other 10%
Ethnic groups:	Malay 66.3%, Chinese 11.2%, indigenous groups 3.4%, other 19.1%
Monetary unit:	Brunei Dollar (BND)
Natural resources:	Petroleum, natural gas, timber
Major exports:	Crude oil, natural gas, garments
Major export trading countries:	Japan 46.5%, South Korea 15.5%, Australia 9.3%, India7%, New Zealand 6.2%
Major imports:	Machinery and transport equipment, manufactured goods, food, chemicals
Major import trading countries	Singapore 26.3%, China 21.3%, UK 21.3%, South Korea 12.2%, Malaysia 11.8%
Internet domain:	.bn
International dialling code:	+673







Cambodia's GDP grew 7.2% driven by strong exports especially from its garments manufacturing sector. European demand for the country's garments and footwear is expected to maintain robust economic growth, supported by duty-free access to the European Union. Increased foreign investment is funding new industries, including the manufacture of automotive parts and processing of agricultural products. A fast developing tourism industry is stimulating development of hotels, retailing, transport and communications.

Cambodia is located in the southern portion of the Indochina Peninsula. It is bordered by Thailand to the northwest, Lao PDR to the northeast, Vietnam to the east and the Gulf of Thailand to the southwest.

Cambodia's landscape is characterised by a low lying central plain which is surrounded by uplands and low mountains and includes the Tonle Sap (Great Lake) and the upper reaches of the Mekong River Delta. Extending outwards from this central region are transitional plains, thinly forested and rising to elevations of about 200 metres above sea level.

The Mekong River flows south through the country's eastern regions. To the east of the Mekong there is a region of forested mountains and high plateaus, which extend into Lao PDR and Vietnam. In southwestern Cambodia, there are two distinct upland areas, the Kravanh Mountains and the Damrei Mountains. The southern coastal region adjoining the



Gulf of Thailand, is a narrow lowland strip, heavily wooded and sparsely populated, which is isolated from the central plain by the southwestern highlands.

The Mekong River provides fertile, irrigated fields for rice production. Exports of clothing generate most of Cambodia's foreign exchange but tourism is also an important part of the economy.

Cambodia received 2.8 million visitors in 2011, many visiting the Angkor temples in Siem Reap Province, built between the ninth and 13th centuries. The beaches in Sihanoukville in the southeast and the capital Phnom Penh, are the principal visitor attractions. Other attractions include the area around Kampot and Kep, with the Bokor Hill Station.

Buddhism is the main religion and this creates an identity and a behaviour pattern for each person. This also enforces a sense of hierarchy within society. Cambodia is a collective society. This places emphasis on groups rather than the individual.

Cambodia joined ASEAN on 30 April 1999, making them the tenth member.

CAMBODIA

Joined ASEAN:	30 April 1999
Head of State:	His Majesty King Norodom Sihamoni
Area:	181,035 square kilometres
Border countries:	Lao PDR, Thailand, Vietnam
Coastline:	443 kilometres
Capital city:	Phnom Penh
Total population:	15,205,539
Population of capital:	1,519,000
Climate:	Tropical and humid. Monsoon season May to November. Dry season December to April.
Languages:	Khmer, French, English
Religions:	Buddhist 96.4%, Muslim 2.1%, other 1.3%, unspecified 0.2%
Ethnic groups:	Khmer 90%, Vietnamese 5%, Chinese 1%, other 4%
Monetary unit:	Riel (KHR)
Natural resources:	Oil & gas, timber, gemstones, iron ore, manganese, phosphates, hydropower potential
Major exports:	Clothing, timber, rubber, rice, fish, tobacco, footwear
Main export trading countries:	US 32.7%, UK 8.4%, Canada 7.7%, Germany 7.7%, Singapore 6.6%, Vietnam 5.8%, Japan 4.7%
Major imports:	Petroleum products, cigarettes, gold, construction materials, machinery, motor vehicles, pharmaceutical products
Main import trading countries:	Thailand 27.2%, Vietnam 20%, China 19.5%, Singapore 7.1%, Hong Kong 5.9%, South Korea 4.3%
Internet domain:	.kh
International dialling code:	+855



Sources: CIA 2013 World Factbook | World Bank



Association of Southeast Asian Nations



Indonesia has achieved considerable macroeconomic stability. The World Bank says many of the country's fiscal targets were achieved in 2012, when GDP growth of 6.2% was recorded. Indonesia's economy continues to grow and recent levels of growth are expected to be sustained into 2014. There is a growing emphasis on investment in infrastructure to accelerate transport improvements and a more even economic development between the east and west of the archipelagic country.

Indonesia consists of over 17,000 islands, about 6,000 of which are inhabited. These are scattered over both sides of the equator. The largest are Java, Sumatra and Borneo, shared with Brunei and Malaysia, New Guinea, shared with Papua New Guinea and Sulawesi. The capital, Jakarta, is on Java and is the nation's largest city, followed by Surabaya, Bandung, Medan and Semarang.

Indonesia is the most populated of ASEAN's ten nations and is the world's 16th largest country in terms of land area, with Java being the world's most populous island. At 4,884 metres, Puncak Java in Papua is Indonesia's highest peak and Lake Toba in Sumatra its largest lake, with an area of 1,145 square kilometres. The country's largest rivers are in Kalimantan and include the Mahakan and Barito.

Indonesia has at least 150 active volcanoes, including Krakatoa and Tambora. Volcanic ash is a major contributor to the vast agricultural fertility that has historically sustained the high population densities of Java and Bali.

Although the main tourist attraction is Bali, many of the country's best beaches are located on the less known Toglan Islands off the coast of central Sulawesi, Karimunjawa in the Java Sea and the Banda Islands in Maluku Province. Other popular tourist attractions include the temples of Borobudor, the tropical rainforest of Sumatra, the mountainous Lorenze National Park in Papua and West Nusa, home to the Komodo Dragon. Indonesia's eastern most province of Papua contains 1,500 islands and west of Papua lies the Maluku archipelago, once known as the Spice Islands.

Indonesia is perhaps the most culturally diverse of the ASEAN states. There are over 300 ethnic groups in Indonesia. Due to this diverse nature, there is a strong pull towards each person's ethnic group or place of birth or family. The national motto is "Unity in Diversity".

Indonesia is a founding member of ASEAN and a member of the G-20 major economies.

INDONESIA

Joined ASEAN:	8 August 1967 (Founder Member)
Head of State:	President Susilo Bambang Yudhoyono
Area:	1,904.569 square kilometres
Border countries:	Timor-Leste, Malaysia, Papua New Guinea
Coastline:	54,716 kilometres
Capital city:	Jakarta
Total population:	251,160,124
Population of capital:	9,121,000
Climate:	Tropical, hot and humid. More moderate in the highlands
Languages:	Bahasa Indonesia, English, Dutch, local dialects (of which most widely spoken is Javanese)
Religions:	Muslim 86.1%, Protestant 5.7%, Roman Catholic 3%, Hindu 1.8%, other 3.4%
Ethnic groups:	Javanese 40.6%, Sundanese 15%, Madurese 3.3%, Minangkabau 2.7%, Betawi 2.4%, Bugis 2.4%, Banten 2%, Banjar 1.7%, other 29.9%
Monetary unit:	Rupiah (IDR)
Natural resources:	Petroleum, tin, natural gas, nickel, timber, bauxite, copper, fertile soils, gold, silver, coal
Major exports:	Oil & gas, coal, electrical appliances, plywood, textiles, rubber
Main export trading countries:	Japan 15.9%, China 11.4%, Singapore 9%, South Korea 7.9%, US 7.8%, India 6.6%, Malaysia 5.9%
Major imports:	Machinery and equipment, chemicals, fuels, foodstuff
Main import trading countries:	China 15.3%, Singapore 13.6%, Japan 11.9%, Malaysia 6.4%, South Korea 6.2%, US 6.1%, Thailand 6%
Internet domain:	.id
International dialling code:	+62





Lao PDR is on an increasingly sustainable development path. GDP grew 8.1% in 2012, after expanding by an average of more than 7% per year over the previous decade. The country continues to increase its integration into the regional and global economy. This is seen in the steady growth of cross-border investments and exports, particularly hydropower, to neighbouring countries.

Lao PDR is situated between Myanmar, China, Vietnam, Cambodia and Thailand. Its thickly forested landscape consists mostly of rugged mountains, the highest of which is Phou Bia at 2,818 metres, with a number of plains and plateaus. The Mekong River forms a large part of the western boundary with Thailand, whereas the mountains of the Annamite Chain form most of the eastern border with Vietnam.

Dong Hua Sao, at the southern end of the country prevents access to the sea but cargo boats travel along the entire length of the Mekong in Lao PDR during most of the year. Smaller power boats and pirogues provide an important means of transportation on many of the tributaries of the Mekong.

The capital city Vientiane, located on the curve of the Mekong River, has French inspired architecture, it's a vibrant city and popular tourist



destination. Other large cities include Luang Prabang, Savannakhet and Pakse.

Buddhism is the religion of 67% of the population. The people are influenced largely by Buddhist teachings and this is reflected in the culture. Lao PDR is so far, untouched by the modern demands and pace of life. Collectivism is also a strong part of its culture. There are 65 ethnic minorities, each with their own language, making individualism also possible.

Lao PDR joined ASEAN on 23 July 1997, along with Myanmar.

LAO PDR

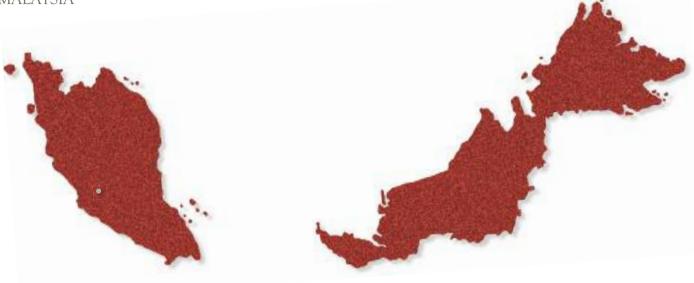
Joined ASEAN:	23 July 1997
Head of State:	President Choummaly Sayasone
Area:	236,800 square kilometres
Border countries:	Myanmar, Cambodia, Thailand, Vietnam, China
Coastline:	Landlocked
Capital city:	Vientiane
Total population:	6,695,166
Population of capital:	799,000
Climate:	Tropical. Monsoon season May to November. Dry season December to April
Languages:	Lao PDR, French, English, various ethnic languages
Religions:	Buddhist 67%, Christian 1.5%, other 31.5%
Ethnic groups:	Lao PDR 55%, Khmou 11%, Hmong 8%, other 26%
Monetary unit:	Kip (LAK)
Natural resources:	Timber, hydropower, gypsum, tin, gold, gemstones
Major exports:	Wood products, coffee, electricity, tin, copper, gold
Main export trading countries:	Thailand 32.8%, China 20.7%, Vietnam 14%
Major imports:	Machinery and equipment, vehicles, fuel, consumer goods
Main import trading countries:	Thailand 63.2%, China 16.5%, Vietnam 5.6%
Internet domain:	.la
International dialling code:	+856





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MALAYSIA



Malaysia has emerged strongly from the global recession of 2008, with GDP growing at 5.8% in 2012, and inflation reigned in at 1%. Forceful counter cyclical policies and intra-regional trade, have assisted recovery. The country's near term prospects are very favourable with both external and private domestic demand, propelling economic activity. In the World Bank's Ease of Doing Business report, the country is ranked 12th one place above Sweden globally.

Malaysia consists of two regions separated by 1,030 kilometres of the South China Sea. West Malaysia in the southern third of the Malay Peninsula and East Malaysia which occupies the northern quarter of the island of Borneo, with it's Provinces of Sarawak and Sabah. West Malaysia is bound by Thailand to the north, the South China Sea to the east, Singapore to the south and the Strait of Malacca to the west. East Malaysia is bound by Indonesia to the south, the South China Sea to the west and north and the Sulu Sea to the northeast. West Malaysia consists of a range of steep forest covered mountains, with coastal plains to the east and west and the principal river is the Pahang. East Malaysia has a broad swampy coastal plain, which rises to jungle covered hills in the interior.

As well as its status as a leading business destination, Malaysia offers beautiful scenery and a huge variety of tourist attractions, from beaches to dense rainforests.

Leading destinations include the Pulau Payar Marine Park at Langkawi, the Gunung Mulu National Park in Sarawak, Sipadan Island in Sabah and Penang's Georgetown, a UNESCO World Heritage site.

Malaysia is a multi-cultural society. The main cultural groups are the native Malays, together with groups of Chinese and Indian ethnicity. Individual lifestyles are maintained. Families tend to socialise within their own ethnic groups but the desire to conform socially, makes Malaysians strive for harmonious relationships in every aspect of their lives.

Malaysia is a founding member of ASEAN.

MALAYSIA

Joined ASEAN:	8 August 1967 (Founder Member)
Head of State:	Sultan Abdul Halim Mu'adzam Shah
Area:	329,847 square kilometres
Border countries:	Brunei Darussalam, Indonesia, Thailand
Coastline:	4,675 kilometres
Capital city:	Kuala Lumpur
Total population:	29,628,392
Population of capital:	1,493,000
Climate:	Tropical. Southwest monsoons April to October, northeast monsoons October to February
Languages:	Bahasa Malaysia, English, Chinese, Tamil, Telugu, Malayalam, Panjabi, Thai
Religions:	Muslim 60.4%, Buddhist 19.2%, Christian 9.1%, Hindu 6.3%, Confucianism, Taoism and other Chinese religions 2.6%, other 1.5%
Ethnic groups:	Malay 50.4%, Chinese 23.7%, indigenous 11%, Indian 7.1%, other 7.8%
Monetary unit:	Ringgit (MYR)
Natural resources:	Tin, petroleum, timber, copper, iron ore, natural gas, bauxite
Major exports:	Electronic equipment, petroleum and liquefied natural gas, wood and wood products, palm oil, rubber, textiles, chemicals
Main export trading countries:	Singapore 13.6%, China 12.6%, Japan 11.8%, US 8.7%, Thailand 5.4%, Hong Kong 4.3%, India 4.2, Australia 4.1%
Major imports:	Electronics, machinery, petroleum products, plastics, vehicles, iron and steel products, chemicals
Main import trading countries:	China 15.1%, Singapore 13.3% Japan 10.3%, US 8.1%, Thailand 6%, Indonesia 5.1%, South Korea 4.1%
Internet domain:	.my
International dialling code:	+60



Association of Southeast Asian Nations



Myanmar's economy is on the move. GDP is estimated to have grown 6% in 2012, and prospects for expansion look highly promising with the Government committed to an extensive agenda of reforms. The country is embarked on a transition from a centrally directed economy to one that is market driven. These changes have the potential to create many investment opportunities.

Myanmar, the second largest country in Southeast Asia, is bordered by China on the northeast, Lao PDR on the east, Thailand on the southeast, Bangladesh on the west, India on the northwest and the Bay of Bengal to the southwest, with the Andaman Sea defining its southern periphery.

In the north, the Shan mountains form the border with China. Hkakabo Razi, located in Kachin State, at an elevation of 5,881 metres, is the highest point in Myanmar. Three mountain ranges, namely the Rakhine Yoma, the Bago Yoma and the Shan Plateau. They divide three river systems, the Salween, the Sittaung and the Irrawaddy, the longest at nearly 2,170 kilometres which flows into the Gulf of Martaban.

Much of the country lies between the Tropic of Cancer and the Equator. It lies in the monsoon region of Asia, with its coastal areas receiving over 5,000mm of rain annually.

Myanmar has huge tourism potential with its pristine beaches, snow capped mountains, jungle trails and spectacular temples.



There are around 100 different ethnic groups within Myanmar. Much of the Country's population is rural and occupied by agricultural activities. Many of these ethnic groups are largely untouched by western cultures, leaving their own rich cultural traditions still intact. Buddhism is the main guiding force in the lives of the Myanmar people.

Myanmar joined ASEAN along with Lao PDR on 23 July 1997.

MYANMAR

Joined ASEAN:	23 July 1997
Head of State:	President Thein Sein
Area:	676,578 square kilometres
Border countries:	Lao PDR, Thailand, Bangladesh, China, India
Coastline:	1,930 kilometres
Capital city:	Naypyidaw
Total population:	55,167,330
Population of capital:	992,000
Climate:	Summer is tropical, cloudy, hot and humid. Southwest monsoon June to September. Winter less cloudy with
	lower humidity. Northeast monsoon December to April.
Languages:	Burmese
Religions:	Buddhist (89%), Christian (4%), Muslim (4%), other (3%)
Ethnic groups:	Burman 68%, Shan 9%, Karen 7%, Rakhine 4%, Chinese 3%, Indian 2%, Mon 2%, other 5%
Monetary unit:	Kyat (MMK)
Natural resources:	Petroleum, timber, tin, antimony, zinc, copper, tungsten, lead, coal, marble, limestone, precious stones, natural gas, hydropower
Major exports:	Natural gas, wood products, pulses, beans, fish, rice, clothing, jade, gems
Main export trading countries:	Thailand 40.5%, India 14.7%, China 14.2%, Japan 7.4%
Major imports:	Fabric, petroleum products, fertiliser, plastics, machinery, transport equipment, cement, construction materials, crude oil, food products
Main import trading countries:	China 37%, Thailand 20.2%, Singapore 8.7%, South Korea 8.7%, Japan 8.2%, Malaysia 4.6%
Internet domain:	.mm
International dialling code:	+95



The Philippines achieved its target of 6.5% GDP growth in 2012, driven by higher government spending and improved exports. In recent years, the country has restored stability and proved resilient to food and fuel price increases in addition to global recession and the impact of natural disasters. The country's robust economic growth combined with sound fiscal management have also seen the Philippines attain investment grade status from the Japan Credit Rating Agency following similar upgrades from other international rating bodies.

The Philippines is made up of over 7,000 islands but the majority of people live on just 11 of them. Its islands make it the country with the fifth longest coastline in the world. It is bordered by the Philippine Sea to the east, the South China Sea to the west and the Celebes Sea to the south. The island of Borneo is located a few hundred kilometres southwest.

Most of the mountainous islands are covered in tropical rainforest and are volcanic in origin. The highest mountain is Mount Apo, which measures up to 2,954 metres above sea level and is located on the island of Mindanao. To the east of the Philippines on the ocean floor lies the Philippine Trench, where the Galathea Depth is the third deepest place on earth. The longest river is the Cagayan in Northern Luzon. Manila Bay, upon the shore of which the capital city of Manila lies, is connected to Laguna de Bay, the largest lake in the Philippines, by the Pasig River.

The Philippines contains some of the world's most amazing scenery, including the beaches of Boracay, Panglao and Pagudpad, as well as historical sites such as Intramuros, Cebu City, Corregidor and Bataain.



The main religion in the Philippines is Christian Malay, with over 80% of Filipinos practicing Catholicism. Family values are at the heart of the Filipino family. It is recognised and accepted that family members often work for the same company. There is a strong sense of social propriety to conform to societal norms of behaviour.

The Philippines are a founder member of ASEAN.

THE PHILIPPINES

Joined ASEAN:	8 August 1967 (Founder Member)
Head of State:	President Benigno S. Aquino III
Area:	300,000 square kilometres
Border countries:	None
Coastline:	36,289 kilometres
Capital city:	Manila
Total population:	105,720, 644
Population of capital:	11,449,000
Climate:	Tropical marine. Northeast monsoon from November to April and southwest monsoon May to October
Languages:	Filipino, English
Religions:	Roman Catholic 80.9%, Muslim 5%, Evangelical 2.8%, Iglesia ni Kristo 2.3%, Aglipayan 2%, other Christian 4.5%,other 1.8%, none 0.1%
Ethnic groups:	Tagalog 28.1%, Cebuano 13.1%, Ilocano 9%, Bisaya/Binisaya 7.6%, Hiligaynon Ilonggo 7.5%, Bikol 6%, Waray 3.4%, other 25.3%
Monetary unit:	Peso (PHP)
Natural resources:	Petroleum, gold, silver copper, nickel, cobalt, timber, salt
Major exports:	Semi-conductors and electronic products, transport equipment, garments, copper products, petroleum products, coconut oil, fruits
Main export trading countries:	Japan 19%, US 14.2%, China 11.8%, Singapore 9.4%, Hong Kong 9.2%, South Korea 4.7%
Major imports:	Electronic products, mineral fuels, machinery and transport equipment, iron and steel, textile fabrics, grains, chemicals, plastic
Main import trading countries:	US 11.5%, China 10.8%, Japan 10.4%, South Korea 7.3%, Singapore 7.1%, Thailand 5.6%, Saudi Arabia 5.6%, Indonesia 4.4%, Malaysia 4%
Internet domain:	.ph
International dialling code:	+63



Association of Southeast Asian Nations



Singapore is one of the wealthiest countries in Asia. Its highly globalised economy grew by 1.3% in 2012, following a 4.8% increase the previous year. Strong manufacturing and services sectors are the principle elements of an economy that features electronics production, financial services, oil drilling equipment, refining, pharmaceutical manufacturing, processed food and beverages, rubber products and ship repair. There is a growing focus on value-added activities including chemical and biotechnology industries.

Singapore is located off the southern tip of the Malay Peninsular, 137 kilometres north of the Equator. As an island country, it is made up of 63 islands and is separated from Malaysia by the Straits of Johor. There are two man-made connections to Malaysia, the Johor-Singapore Causeway in the north and the Tuas Second Link in the west. Jurong Island, Pulau Tekong, Pulau Ubin and Sentosa are the largest islands after Singapore Island, which contains the capital, Singapore City.

Singapore's land area consists of forest and nature reserves and its primary rainforest is Bukit Timah.

Most work in Singapore is in the service sector and poverty levels are low compared to other countries in the Region. Singapore has the world's highest percentage of millionaire households.

Tourism forms a large part of the economy with over ten million visitors each year. Gambling has been legalised and the country's casino resorts have proved popular destinations.

A largely Buddhist (Chinese) state, Singaporians may claim that they are an egalitarian society, yet they retain strong hierarchical relationships in most aspects of their lives. Singapore is a multi-ethnic society, where culturally diverse, Chinese, Malay and Indian traditions co-exist in a westernised cosmopolitan metropolis.

Singapore is a founder member of ASEAN.

SINGAPORE

Joined ASEAN:	8 August 1967 (Founder Member)
Head of State:	President Tony Tan Keng Yam
Area:	697 square kilometres
Border countries:	None
Coastline:	193 kilometres
Capital city:	Singapore City
Total population:	5,460,302
Climate:	Tropical, hot and humid with two monsoon seasons. Northeastern monsoon from December to March, southwestern monsoon June to September
Languages:	Mandarin, English, Tamil, Malay, Hokkien, Cantonese, Teochew
Religions:	Buddhist 42.5%, Muslim 14.9%, Taoist 8.5%, Hindu 4%, Catholic 4.8%, other Christian 9.8%, other 0.7%, none 14.8%
Ethnic groups:	Chinese 76.8%, Malay 13.9%, Indian 7.9%, other 1.4%
Monetary unit:	Singapore dollar (SGD)
Natural resources:	Fish, deepwater ports
Major exports:	Machinery and electronic equipment, consumer goods, pharmaceuticals, chemicals, refined petroleum products.
Main export trading countries:	Malaysia 12.2%, Hong Kong 10.9%, China 10.7%, Indonesia 10.5%, US 5.5%, Japan 4.6%, Australia 4.2%, South Korea 4%
Major imports:	Machinery and equipment, foodstuffs, consumer goods, mineral fuels, chemicals
Main import trading countries:	Malaysia 10.6%, China 10.3%, US 10.2%, South Korea 6.8%, Japan 6.2, Indonesia 5.3%, Saudi Arabia 4.5%, UAE 4.1%
Internet domain:	.sg
International dialling code:	+65



Thailand's economy rebounded strongly in 2012, with GDP growth of 6.4% recorded compared to 0.1% in 2011, when the dramatic decline in economic performance resulted from devastating floods that inundated industrial estates, farmland and parts of the capital Bangkok. Fixed capital investment also rose last year by 13.4%. Asian Development Bank notes that this was propelled by reconstruction of flood-damaged factories, homes and other infrastructure and the replacement of capital equipment. Public construction was also stimulated by transport and telecoms projects.

Thailand is located at the centre of the Indochina Peninsula and is bordered to the north by Myanmar and Lao PDR, to the east by Lao PDR and Cambodia, to the south by the Gulf of Thailand and Malaysia and to the west by the Andaman Sea and Myanmar.

Thailand is home to several distinct geographic regions. The north of the country is mountainous, with the highest point being Doi Inthanon at 2,565 metres above sea level, the northeast consists of the Khorat Plateau and the east by the Mekong River.

Southern Thailand has the Kra Isthmus, a narrow land bridge, which connects the Malay Peninsula with the mainland of Asia. The centre is dominated by the Chao Phraya River valley, which runs into the Gulf of Thailand. The Gulf of Thailand is also an industrial centre, with the main port in Sattahip being the entry gates for Bangkok's Inland Seaport.

Thailand is the Greater Mekong Sub-region's most visited international destination. Other top destinations include Bangkok, Chiang Mai and the beach resorts of Pattaya and Phuket.

The Andaman Sea hosts the most popular and luxurious resorts in Asia. Phuket, Krabi, Ranong, Phang Nga and Trang and their lush islands all lay along the coast of the Andaman.

The Chao Phraya River and Mekong River are the sustainable resources of rural Thailand. Industrial scale production of crops use both rivers and their tributaries. The Gulf of Thailand covers 320,000 square kilometres and is fed by the Chao Phraya, Mae Klon, Bang Pakong and Tapi Rivers.



Thailand is a stronghold of Buddhism. Many of the rules of etiquette are by-products of the Buddhist religion. Great emphasis is placed on outward forms of courtesy and politeness. The family is the cornerstone of Thai culture. Thailand has a strong hierarchical social structure.

Thailand is a founder member of ASEAN.

THAILAND

THAILAND

Joined ASEAN:	8 August 1967 (Founder Member)
Head of State:	His Majesty King Bhumibol Adulyadej
Area:	513,120 square kilometres
Border countries:	Myanmar, Cambodia, Lao PDR, Malaysia
Coastline:	3,219 kilometres
Capital city:	Bangkok
Total population:	67,448,120
Population of capital:	6,902,000
Climate:	Tropical, rainy, warm, cloudy southwest monsoon from May to September. Dry, cool northeast monsoon, November to March
Languages:	Thai, English, ethnic and regional dialects
Religions:	Buddhist 94.6%, Muslim 4.6%, Christian 0.7%, other 0.1%
Ethnic groups:	Thai 75%, Chinese 14%, other 11%
Monetary unit:	Baht (THB)
Natural resources:	Tin, rubber, natural gas, tungsten, tantalum, timber, lead, fish, gypsum, lignite, fluorite, arable land
Major exports:	Textiles and footwear, fishery products, rice, rubber, jewellery, automobiles, computers, electrical appliances
Main export trading countries:	China 11.7%, Japan 10.2%, US 9.9%, Hong Kong 5.7%, Malaysia 5.7%, Indonesia 4.9%, Singapore 4.7%, Australia 4.3%
Major imports:	Capital goods, intermediate goods and raw materials, consumer goods, fuels
Main import trading countries:	Japan 20%, China 14.9%, UAE 6.3%, Malaysia 5.3%, US 5.3%
Internet domain:	.th
International dialling code:	+66



Vietnam is judged by the World Bank as a development success story and notes that political and economic reforms launched in 1986, transformed Vietnam from being one of the poorest countries in the world, with a per capita income below US\$100, to a lower middle income country with per capita income of US\$1,130 at 2010. The ratio of population in poverty had fallen from 58% in 1986 to 14.5% in 2008. Most other indicators of welfare have also improved. The country's economy slowed in 2012, with GDP of 5% slightly down on the year before. In order to reverse this trend the Government has prioritised an overhaul of public investment strategies and restructuring of state owned enterprises and the country's financial sector.

Vietnam is the most eastern country on the Indochina Peninsula. It is bordered by China to the north, Lao PDR to the northwest, Cambodia to the southwest and the South China Sea to the east. With a population of over 90 million, Vietnam is the 13th most populous country in the world.

Vietnam is a country of tropical lowlands, hills and densely forested highlands, with level land covering no more than 20% of the area. The country is divided into the highlands and the Red River Delta in the north, the Giai Truong Son (central mountains), the coastal lowlands and the Mekong River Delta in the south.

The nation has seven developed ports and harbours at Cam Ranh, Da Nang, Hai Phong, Ho Chi Minh City, Hong Gai, Qhi Nhon and Nha Trang. There are also more than 17,000 kilometres of navigable waterways, which play a significant role in rural life.

Vietnam has a vast cultural legacy and is also endowed with a 3,444 kilometre coastline, providing ample opportunity to develop sea based tourism around spectacular bays, beaches and islands. These include areas such as Mong Cai City, Halong Bay, Hai Phong City, Nam Dinh Province and Da Nang.

The native Vietnamese are the largest ethnic group containing 90% of the population of this largely Buddhist country. The teachings of Confucius highly influence the individual in Vietnamese society. This stresses for, amongst other things; loyalty, honour, sincerity and respect for age. Collectivism is a general part of society with an individual seen as secondary to a group.

Vietnam joined ASEAN 28 July 1995, making it the seventh member.



VIETNAM

Joined ASEAN:	28 July 1995
Head of State:	President Nguyen Minh Triet
Area:	331,210 square kilometres
Border countries:	Lao PDR, Cambodia, China
Coastline:	3,444 kilometres (excluding islands)
Capital city:	Hanoi
Total population:	92,477, 857
Population of capital:	2,668,000
Climate:	Tropical in the south, monsoons in the north with the hot, rainy season May to September. Warm and dry October to March
Languages:	Vietnamese, English, French, Chinese, Khmer
Religions:	Buddhist 9.3%, Catholic 6.7%, Hoa Hao 1.5%, Cao Dai 1.1%, Protestant 0.5%, Muslim 0.1%, none 80.8%
Ethnic groups:	Kinh (Viet) 85.7%, Tay 1.9%, Thai 1.8%, Muong 1.5%, Khmer 1.5%, Mong 1.2%, Nung 1.1%, others 5.3%
Monetary unit:	Dong (VND)
Natural resources:	Phosphates, coal, manganese, rare earth elements, bauxite, chromate, timber, hydropower
Major exports:	Clothes, shoes, marine products, crude oil, electronics, wooden products, coffee, rice, machinery
Main export trading countries:	US 17%, China 12.9%, Japan 12%, South Korea 4.5%, Germany 4.4%, Malaysia 4.4%
Major imports:	Machinery and equipment, petroleum products, steel products, raw materials for clothing and shoe industries, electronics, plastics, automobiles
Main import trading countries:	China 27.2%, South Korea 12.7%, Japan 8.5%, Singapore 8.3%, Thailand 5.3%, Hong Kong 5.2%
Internet domain:	.vn
International dialling code:	+84



Association of Southeast Asian Nations

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