INTERVIEW WITH HANS-DIETER EVERS

KNOWLEDGE SOCIETY AND THE MODERNIZATION OF SOUTHEAST ASIA

BY HAQ STAFF

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***HAQ*:** What does the term "knowledge society" mean and why is it important in understanding the world we live in today or the world tomorrow?

Evers: Knowledge has been identified as the foremost factor of production in post-industrial societies by Peter Ferdinand Drucker and many others.[1] In a feudal society, land, as the major productive factor, structured social relations. A society in which knowledge has assumed the leading role in social and economic change is called a knowledge society.[2]

A knowledge society has the following characteristics: its members have attained a higher average standard of education in comparison to other societies, and a growing proportion of its labor force are employed as knowledge workers. A majority of its members use information and communication technology and have access to stored knowledge through the internet. Its industry produces products with integrated artificial intelligence, for example, by adding chips with stored information to its products. Its organizations – private, government and civil society – are transformed into intelligent organizations, namely organizations that have stored information and best practice solutions to problems in digital form.[3]

There is increased organized knowledge in the form of expert systems, organizational plans, and digitalized expertise, which is stored in data banks. There are multiple centers of expertise, ranging from university institutes to private laboratories, and a polycentric production of knowledge. Experts and consultants have formed an important "strategic group." There is a distinct epistemic culture suitable for the production and utilization of knowledge.[4] Most industrial countries show many of these characteristics and have moved into the direction of becoming knowledge societies or may have become knowledge societies. Identifying the characteristics of knowledge societies allows us to understand the new evolutionary forces at work in our societies.

***HAQ*:** What is your vision of a functioning "knowledge society," particularly in the Asian context? Is there a generic model that is applicable across the world or is there a unique template that takes into account country-specific factors?

Evers: In each society there is a unique interplay between local and global knowledge. I don't have a vision, but I assume that a functioning Asian knowledge society will have successfully translated global knowledge into local knowledge. They will have developed a distinct Asian epistemic culture that contributes to the production of new unique knowledge. The use of classical Chinese texts to develop new business strategies or the use of local knowledge of rice farmers to develop new productive and disease-resistant strains of paddy are just two examples of the direction in which the growth of a localized epistemic culture will lead. In both cases global scientific knowledge was combined with local knowledge. A "localized global epistemic culture" refers to an "ideal type" (in the sense of Max Weber) of a knowledge society of different real types with region-specific features. As the term "ideal type" suggests, it will never fully be implemented in reality.

***HAQ*:** How does the advancement towards a "knowledge society" figure in the overall process of modernization in Southeast Asia? In particular, is "knowledge society" a distinct new stage in the modernization of Southeast Asian societies? How is the movement towards a "knowledge society" different from the prior processes of economic, social and political development that we have observed thus far?

Evers: The most modernized Southeast Asian societies are those that have advanced towards a stage of a knowledge society. Singapore and to a lesser extent Malaysia fit this example. They are on the way, but they haven't arrived yet. Becoming a knowledge society implies reaching a new stage of modernization or a stage of postmodernism, a term I would rather like to avoid.

There are, however, alternative paths of modernization, for example, by copying industrial mass production of 20th century Europe and America. Societies following this path (like Indonesia or Vietnam) may become NICs (newly industrialized countries) but not necessarily "knowledge societies," at least not in the present decade. Former Minister of Industries and President of Indonesia Habibie has, with mixed success, used imported knowledge to develop high-tech industries, like aviation industries, but the major push for industrialization has come from simple mass production, especially in the textile sector. Political leaders in Singapore and Malaysia hope to leapfrog from early stages of industrialization into a knowledge economy. They have made great efforts in this direction, in the same way as Japan made great efforts to adopt the German model of industrialization in the 19th century or South Korea learning from the Japanese experience in the 20th century.

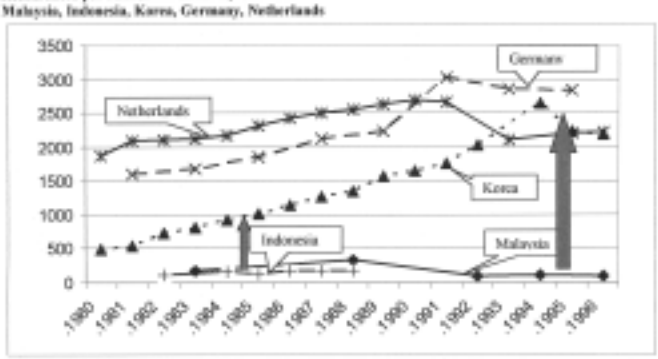
***HAQ*:** It seems that some countries in the ASEAN region are better placed to adjust and adapt to this new advancement, provided that they have already reached certain levels of economic, social and political development. Do you agree with this assessment? Are developed countries more likely to succeed in the transformation into a knowledge-based society? More importantly, do you think such disparities in the level and speed of adjustment will create a gulf – in terms of success in the progress towards a knowledge-based society – among the ASEAN countries?

Evers: The "knowledge gap," as defined in the World Development Report 1998/99 and measured by standard indicators, has indeed widened between the old industrial countries and ASEAN. Singapore and Malaysia have charged ahead in comparison to the other ASEAN countries, but the global knowledge gap is widening, if we compare Malaysia with countries of similar size in terms of population or square miles, like Germany.

The knowledge gap, measured by the number of researchers per million inhabitants, has widened dramatically during the 1990s, mainly because the industrialized countries have moved ahead while Malaysia has increased the number of researchers in absolute but not in relative terms. A similar picture would emerge if you use other indicators like expenditure for R&D (research and development) or ICT (information and communication technology) infrastructure.

The attempt by ASEAN countries to close the knowledge gap (K-Gap) reminds us of the earlier belief that "underdeveloped countries" could catch up with the industrialized world and that the gap between poor and rich nations could be closed by modernization. Replicating exactly the development experiences of industrial societies on their way towards a knowledge society will not succeed for the simple reason that globalization has dramatically changed the global conditions under which development takes place.

Researchers per Million Inhabitants, 1980-1996: Malaysia, Indonesia, Korea, Germany, Netherlands



Source: Data UNESCO 2001 http://www.unesco.org. Graph by H.D. Evers.[1] Arrows show the increasing k-gap between Malaysia and South Korea, 1985 and 1995.

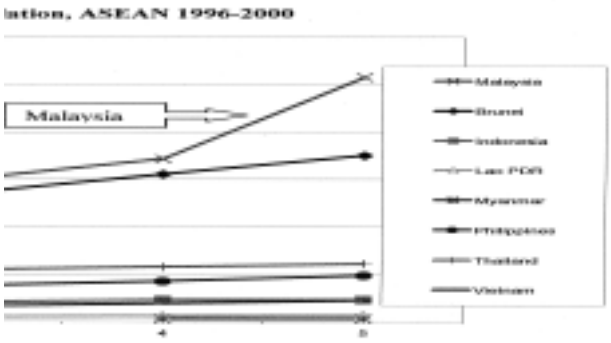
Using comparative geographical, strategic, and cultural advantages may, with a persistent government policy, succeed in achieving developed knowledge-society status. Singapore appears to be a case in point and Malaysia or Thailand may follow. The Malaysian policy of jumping directly into the stage of a knowledge-based economy, leaving out other stages, may work, as did Germany's strategy during the 19th and early 20th centuries to catch up and surpass Britain as an industrial country. The social and political turbulences and disasters of this (German) policy are well known. Political upheavals are likely when one system of economy and society is transformed into another. A nationalist way to force a country on a fast track of development invites authoritarianism.

This tendency is certainly visible both in Malaysia and Singapore, although the political consequences have been mild in comparison with the European experience. The current public discussion on the development of a knowledge-based economy and society in these two counties is focused on technological issues, like the improvement of the information and communication technology. The possible social and political consequences are neglected and need to be further explored.

A comparison within ASEAN shows that countries following a persistent policy of "knowledge governance," like Malaysia and Singapore, have overtaken other ASEAN countries on their way towards a knowledge society. If we use the number of personal computers as a rough indicator to measure the ease of access to knowledge, we can see that Singapore is far ahead of other ASEAN countries, as a matter of fact so far ahead that the data on PCs does not fit into our graph below. We can therefore talk about an ASEAN knowledge gap that the ASEAN Secretariat should take note of.

Another gap occurs within countries, like the knowledge gap between the western and the eastern states of Pen-

insular Malaysia.[5] Investment in ICT infrastructure is unevenly distributed, and the eastern states have suffered from social erosion through migration to the economically more vibrant western states. A similar situation is visible in the development gap between eastern Indonesia and Java.



002, and Third Malaysia Perspective Plan, various
years 1996 to 2000.

***HAQ*:** How well would countries like Indonesia, which is currently engulfed in its own set of political, security and economic problems, adjust to such a process?

Evers: Separatist movements and other forms of turmoil draw on Indonesia's resources, both financial as well as intellectual. The government has paid more attention to securing national unity than developing a knowledge-based economy. Indonesia is a country rich in natural resources and has not felt the pressure to develop innovative knowledge as an alternative factor of production like Singapore has. The Indonesian elite have been much more tied to the extraction industries than their Malaysian counterparts. Indonesia has followed the path of industrialization by importing rather than developing the necessary knowledge base. The ambitious high-tech industries, like the Nurtanio aircraft company, have lived on borrowed knowledge, high government subsidies and window dressing.

It should, however, be recognized that the government has invested heavily in education. Illiteracy rates have come down dramatically, after a nationwide primary school system was put into place. This is a major achievement. Secondary schools and universities have been established in every province of Indonesia, but the content and quality of education and research have been neglected. Setting up research institutes and inter-university research centers with World Bank loans has not yielded the desired results so far. Given the current political problems and the effort put into the administrative and fiscal decentralization, little attention is paid to develop the local knowledge base further.

Indonesia cannot withdraw from the impact of globalization in its Western or Middle Eastern forms, but has slim chances of developing into a knowledge society in the near future. There is, of course, the overwhelming impact of the US model of development towards a knowledge society, supported by students returned from studying in the US, but a substantial part of the Indonesian Muslim population sees the Islamic world system as a model for development. A large but unknown number of Indonesians (as well as Malaysians) have been educated in Middle Eastern institutions of higher learning and support a knowledge base for their societies different from the European or American models.

HAQ: You mentioned in your work that Malaysia was in the midst of catching up with South Korea in terms of high-tech sector development – for instance, in the creation of the Super Multimedia Corridor – right up to the eve of the Asian financial crisis. Now, five years after the crisis, South Korea has resumed its edge in the technological race while Malaysia is struggling to regain its footing, as seen, for instance, in the current dire state of the semi-conductor and computer parts industry in Penang. How has the financial crisis altered the prospects – in terms of attaining a knowledge-based society – for ASEAN countries like Malaysia and Singapore? Will these countries eventually catch up with the leaders like the US and Japan?

Evers: The financial crisis has certainly been a setback for Malaysia and Singapore, but I feel not a decisive one. There has been a slowdown in completing the ICT infrastructure of the Super Multimedia Corridor, an area south of Kuala Lumpur designed to become Malaysia's Silicon Valley. The industrial countries in the European Union and in North America are very quickly developing their knowledge-based economies. Catching up with them will be difficult, if not impossible. Developments take place under conditions of the world market and world politics.

The United States government has assumed a neo-imperialist strategy of securing its position, as shown in its current policies towards Iraq and the Middle East. It is very much governed by a policy of securing raw materials, oil and other natural resources, but ultimately also knowledge resources. If this neo-imperialist policy is continued, the United States will use its political and military power to prevent Asian countries from challenging its dominance. As knowledge has developed into one, if not the major, resource for further development, the US will not be able to forego its leading role in producing and utilizing knowledge for economic and military purposes.

But there are also homegrown problems. In Singapore the percentage of secondary school and university graduates is still not high enough, and Malaysia has not been able to bring home highly trained scientists and engineers from abroad – but these are problems that can be addressed. More difficult is the establishment of an appropriate "epistemic culture," a culture of innovative knowledge production rather than knowledge consumption. An epistemic culture presupposes a substantial number of persons that are highly motivated in the pursuit of knowledge, are pitted against another in cooperative competition, follow their own high professional standards, work unrestrained by government interference, and are highly innovative in their work.

Furthermore, a successful epistemic culture must not be borne by scientists alone but should also encompass artists, writers, and journalists that produce ideas and discuss value issues. Singapore and Malaysia fulfill some but not all of these criteria. There are probably not yet enough knowledge workers for a sustainable epistemic culture. Political pressure for conforming to values and beliefs set by the government

is still strong – mostly for reasons not related to knowledge production, like internal security. Debate on which direction the development of an epistemic culture should take is highly restricted through severe controls of the media.

These arguments are admittedly largely normative and cannot be substantiated as yet by hard social survey data. It is therefore difficult to guess, much less to predict, whether or not Singapore, Malaysia, or other ASEAN countries will develop an epistemic culture that is strong enough to carry them through towards the stage of a fully developed knowledge society. Singapore and Malaysia appear to be on the right path; Thailand and the Philippines may follow, but this is my opinion, not a predictable fact.

***HAQ*:** How does the movement towards a "knowledge society" affect development of democracy in Southeast Asia? Or, does the creation of a "knowledge society" presuppose the existence of a democratic society with a high level of grassroots civic and political engagement on the part of its citizenry?

Evers: A knowledge society can only be created if the free development of ideas is guaranteed. Only strong governments can afford to allow a free flow of ideas. A knowledge society produces new knowledge and creates a productive economy through innovations. Governments can help to put new ideas into practice. Early industrialization was successfully carried out in most cases with the support of authoritarian governments; knowledge societies need a different political system. Singapore's leaders have acknowledged this and have slowly moved towards a more liberal attitude. Innovative thinking is now stressed in secondary education.

The question remains how far the Singaporean and Malaysian governments are prepared to go. NGOs and opposition parties are subjected to restrictions. There is still a feeling of frustration among intellectuals and knowledge workers that they have to be over-cautious in ventilating their ideas. On the other hand, one has to acknowledge that the political situation of ASEAN countries is still beset by many problems and that governments have to be careful in maintaining stability.

It is difficult to say how an appropriate political system for an emerging knowledge society should be shaped. There are many innovative ideas and institutions shaping the enlarged European Union, which hopefully will allow for the establishment of a new political entity and a forceful knowledge society of many languages and cultural traditions. In Asia, local cultural and political knowledge has many roots as well and can draw on alternative sources in Islamic or Buddhist thought, European and American post-colonialism, ethnic customs and Chinese philosophy.

A diverse cultural heritage could be an ideal basis for developing a vibrant and innovative knowledge society, if the political conditions are right. That means that governments must follow a persistent policy of managing a plural society within a political system responsive to popular demands. To simply classify the Singaporean or Malaysian governments as authoritarian, as many observers do, is neither entirely correct nor helpful.

Both governments are on the move. The direction counts. A knowledge society is not an automatic outcome of globalization. Knowledge just is not like light that "can easily travel the world, enlightening the lives of people everywhere," as the World Bank has proclaimed.[6] To absorb knowledge, to adapt it to local conditions, to use it as a base for the further production of innovative knowledge is a very difficult and time consuming process, which requires high inputs in terms of financial resources.

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***HAQ*:** How does the movement towards a "knowledge society" impact the environment in Southeast Asia? Does it lead to a more environmentally sustainable economic development? How does it impact labor relations and worker's rights?

Evers: Knowledge-based industries are supposed to be "cleaner" than the old smokestack industries and therefore friendlier to the environment. Workers' rights should generally be enhanced in a knowledge society for the simple reason that the proportion of high-level manpower will increase. Knowledge workers are less willing to be controlled by management or by the government. They will only be productive in a relatively free environment.

***HAQ*:** A hotly debated issue now in the development of knowledge societies in Southeast Asia is the language or medium of communication. Just recently, Malaysia started to stress the importance of the English language (over Chinese) in this increasingly competitive global economy and fast-paced technological progress. Others seem to think that the Chinese language, given China's gigantic population and economic potential, will probably dominate over English in Malaysia or Southeast Asia more broadly. What is your assessment of this issue? Should Southeast Asia choose one language over the other or choose both languages? Whatever the choice, how can the choice be effectively implemented in specific Southeast Asian countries?

Evers: There is no simple correlation between use of English and success in achieving the status of a knowledge society. Take the example of Finland, the home of Nokia, the world leader in the area of handheld communication devices. The language of instruction in schools is Finnish or Swedish, not English. There is no reason why Malay should not be maintained as the language of instruction up to the university level in Malaysia, or Thai in Thailand and Indonesian in Indonesia. Malay (with Indonesian) is, after all, a very large language in terms of the number of speakers. A multilingual education is, however, most useful for the development of a knowledge society. A multilingual education policy, stressing a national language and one or two large international languages, like English, Chinese, Hindi, Japanese, German or the language of a neighboring country, is a good strategy.

***HAQ*:** It seems that Malaysia, and to some extent Singapore and Thailand as well as other Southeast Asian countries, has

suffered much from brain drain. Reversing this brain drain and successfully retaining those talented human resources would definitely help advance the development towards knowledge societies in these countries. How would you assess the seriousness of this brain drain problem in these individual countries and can you comment on what steps are being taken by these countries to stop or reverse this problem?

Evers: The brain drain is indeed very serious for most Southeast Asian countries. Singapore has set up a foundation to communicate with Singaporeans abroad, and Malaysia and Indonesia have strict rules to bring students back to their home countries after finishing their education abroad. Some countries, like Myanmar or Laos, have not had much success in bringing back highly educated nationals that have fled political and economic oppression.

The issue should, however, not be seen in nationalistic terms. Britain, Australia, and the United States have for a long time actively recruited high-level manpower abroad. Singapore has more recently followed a similar policy by recruiting expatriates from China, India, America, and Europe to staff research institutions, universities, and high-tech companies. Strict control over qualification should be the rule, rather than ethnic or nationalistic considerations.

***HAQ*:** In general, which countries in Southeast Asia have achieved the most progress in attaining a "knowledge society" and how do you explain their successes in this regard as compared to the failures of others? Overall, how would you assess the trend towards a "knowledge society" in Southeast Asia in comparison to the trends in other parts of the world, in particular Europe, North America, and Northeast Asia? What does the future hold?

Evers: Singapore and Malaysia are on their way to becoming knowledge societies in terms of the criteria outlined in the answer to the first question above. Persistent government policies to assist in the development of knowledge societies have been the major factor. These two countries and Thailand have the most democratic systems of government in Southeast Asia and will have a comparative advantage over other Southeast Asian countries today and beyond.

They are geographically far enough away from the center of the economic power of North America and the European Union to be marginalized, but close enough to the upcoming economic power of China. China's economic growth has already created a vast demand for knowledge in the form of consultancy services. This will also stimulate the production of a new "Asian" knowledge in Malaysia, Singapore, and Thailand and thus further development of a knowledge society in these countries.

Endnotes

[1] P.F. Drucker, *Postcapitalist Society* (New York: Harper Business, 1994), p. 4.
[2] For a discussion of the term "knowledge society," see Stehr, N., *Knowledge Societies* (London: Sage, 1994), chapter 6.
[3] "Best practices" are recorded examples of how problems were solved.
[4] This concept has been elaborated by Karin Knorr-Cetina of Bielefeld University: Knorr-Cetina, K., *Epistemic Cultures: How the Sciences Make Knowledge* (Cambridge: Harvard University Press, 1999).
[5] H.-D. Evers, "Malaysian Knowledge Society and the Global Knowledge Gap," *Asian Journal of Social Science* (2003): 31(1) (forthcoming).
[6] World Bank, *World Development Report: Knowledge for Development* (New York: Oxford University Press, 1999), p. 1.