Akademika 64 (Januari) 2004: 43 - 63

Being Multi-Disciplinary in Development Studies: Why and How

MADELINE BERMA
JUNAENAH SULEHAN

ABSTRAK

Bidang Pengajian Pembangunan adalah penting dan releven kerana ia memberi tumpuan terhadap isu-isu dan masalah berhubung dengan negara-negara membangun pada pasca Perang Dunia II. Selepas tahun-tahun 1950-an, Pengajian Pembangunan berasaskan multi dan inter-disiplin telah dibentuk untuk meneliti dinamik perubahan yang berlangsung di negara-negara yang pernah dijajah. Ini disifatkan sebagai pendekatan-pendekatan yang penting untuk menelaah isu-isu pembangunan yang begitu ruwet, namun konsep pengajian pembangunan itu sendiri masih kurang difahami. Makalah ini bertujuan membincangkan kesesuaian, halatuju dan destinasi Pengajian Pembangunan, khususnya di Malaysia. Termasuk di dalam perbincangan ini ialah epistemologi Pengajian Pembangunan, liku-liku sosio-sejarah yang telah dilewati oleh disiplin ini di negara-negara membangun termasuk di Malaysia, kemampanan serta cabaran-cabaran yang dihadapi dalam disiplin ilmu yang berasaskan multi dan inter-disiplin di universiti-universiti tempatan. Makalah ini berakhir dengan menyarankan beberapa cadangan dan strategi untuk membentuk serta mengekalkan Pengajian Pembangunan berasaskan multi dan inter-disiplin untuk masa depan.

ABSTRACT

The field of Development Studies is undoubtedly pertinent and relevant as it focuses on issues and problems of less developed countries in the post World War II. After the 1950s, Development Studies with multi- and inter-disciplinary base was established to explore the dynamics of changes taking place in post-colonial societies. This was perceived as the key approaches to the complex development issues, however the concept itself is still poorly understood and misconstrued. This article aims to discuss the relevance, directions and destination of Development Studies, particularly in Malaysia. Included in these highlights are the epistemology of Development Studies, the socio-historical path that this discipline had gone through in the developing countries and also in Malaysia, and the sustainability and challenges of a multi- and inter-disciplinary knowledge, established in local universities. This article ends

with recommendations proposed in promoting ways and strategies to develop and sustain a multi- and inter-disciplinary Development Studies for the future.

INTRODUCTION

Development Studies is undoubtedly relevant in the early post-World War II period because it deals mainly with issues and problems of the less developed countries (collectively termed as 'Third World') and their efforts to replicate the economic success of developed countries (First World). Since the mid-1980's, the legitimacy of Development Studies is being questioned and criticised. Now, globalisation has made it difficult to identify the First, Second or Third Worlds of the post-WW II era. The blurring of these three worlds, particularly after the collapse of the Soviet Union, led some analysts (Schuurman 1993) to question the ability of Development Studies to explain and understand the development problems confronting the world (as opposed to its earlier focus on the Third World). More importantly, present trends in knowledge creation, the rising wave of mono-disciplinary fundamentalism (Hettne 1990: 286), market liberalism, deregulation and privatisation, and the changing needs of the developing countries necessitate a critical analysis of Development Studies as an academic discipline.

The objective of this article is to discuss the relevance, directions and destination of Development Studies, particularly in Malaysia. It will attempt to answer: Why is Development Studies relevant? How to promote and sustain Development Studies? What are the challenges in promoting multi- and inter-disciplinary studies in Malaysian universities, using Universiti Kebangsaan Malaysia as a case in point. This article presents some thoughts as to how multi-disciplinarity might be better accommodated within Development Studies courses and the problems faced in promoting multi-disciplinary Development Studies.

DEVELOPMENT STUDIES: GOING BACK TO THE FUNDAMENTALS

Before highlighting the 'why and how' of being multi and inter-disciplinary in Development Studies, historical retrospection is necessary. This is in tune with looking at why Development Studies with multi-disciplinary base was established after the 1950s, the needs required for its establishment and the changing political and socio-economic environment between the rich and poor nations of the world, thus setting Development Studies the academic platform to explore the dynamics of changes taking place in societies, particularly post-colonial societies.

The term 'Development Studies' came into common usage as denoting a holistic approach to the enquiry of processes, which are transforming people's

lives throughout the world. Bjõrn Hettne, in his Development Theory and the Three Worlds (1990: 4) defined Development Studies as:

> …a problem-oriented, applied and inter-disciplinary field, analysing social change in a world context [of material disparities], but with due consideration to the specificity of different societies in terms of history, ecology, culture, etc.

Among the processes that concerns Development Studies include: social and economic changes; impact of rapid economic growth; cultural impediments; poverty and inequality; the relationships between the developing and developed countries; the attempts by people and institutions to engage with, ignore or resist the process of transformation; including their struggles to modify or preserve their physical environments.

After the Second World War, the field of Development Studies and research were the focus of scholars who were keen to study post-colonial societies, which were going through political upheavals and socio-economic transformation. During the decades of the 1950s and the 1960s, modernization theory became the impetus that draws more attention to the need to understand poverty and social decadence in post-colonial countries. With modernization theory, uni-lineal social evolution is perceived as the necessary stages of development that post-colonial countries will have to achieve in order to be industrialized nations like the west. During these decades economists, followed by sociologists and anthropologists, viewed issues of development from different angles. Big names such as Myrdal, Sweezy, Baran and Robinson, for example attempted to focus on economic development as an important impetus towards growth and modernisation. Gunnar Myrdal in *Asian Drama* (1968), insisted that poverty in most developing countries exacerbated the widening gap between the rich and poor nations of the world (Abdul Rahman Embong 1974). Values, culture and quality of life were noted to be deteriorating.

However, researches on development that seek empirical explanation from the modernization theory were criticized as being too simplistic, optimistic and based on western-biased capitalism that was too ethnocentric. This led to the formation of alternative ideas based on neo-Marxism calling itself the dependency school of thought in the 1960s and then the world system analysis in the 1970s as the alternative perspectives that seek to understand development issues in post-colonial countries. Nevertheless, these school of thoughts were also challenged and criticized as being simplistic and trying to ignore cultural factor which was seen as a pertinent factor to understand the social and economic problems of post-colonial countries, particularly the human development factor.

This led to numerous conceptual and theoretical debates in the 1980s, which also attempted to understand social transformations and changes. Despite the differences in perspectives, inevitably, the three main schools of thoughts were trying to study social changes from different paradigm. Empirical explanation

attempts to show how problems in theoretical perspectives are explained based on changing research questions, changing research agendas and research methodologies and facts. The conflicting theoretical polemics of the three main school of thoughts led to the "war of the paradigms", since there was no single framework consisting of basic assumptions that could be accepted by the different school of thoughts. However, there was a step further in the war of the paradigms. For example, classical dependency blamed underdevelopment and dependence on capitalist countries the main factor that caused poverty in Third World countries, however studies on the 'new' development agendas and policies show that development in developing countries is imminent despite the dependency. This seems to be a shift in the orientation of thoughts in development.

The objective of Development Studies has strong normative basis – development is an emancipatory project to solve the problems of poor, marginalized and exploited people in the developing countries. This problem-solving approach had been the prime focus of most development literatures in Malaysia and this could be traced back even during the colonial period, for instance, by the earlier scholarly writings of Abdullah Munshi in the nineteenth century (1820s) when he wrote of poverty and ignorance among the Malay populace of the Malay settlements during British rule. Za'aba in 1923 focused on the material and non-material neglect of the Malays by the colonial government and the impact on the dividing gap between the races (in Ungku Aziz 1964). Abdullah Munshi and Za'aba were local scholars who were thinking about development but not making development as a discipline.

In the 1950s, Development Studies in Malaysia was unheard of and issues relating to development were confined within the realm of the Social Sciences discipline but this was still at an infant stage. The Social Sciences itself was not fully developed and intellectual tradition among the local academia was relatively new. This was largely because of the colonial history that did not intend to develop local academic institutions, thus leading to a lack of scholars to engage in discourses and publication from the indigenous point of few. However in the 1960s, further intellectual polemics on the need to have Development Studies are later spurned by writings of authors such as Ungku Aziz (1964) who wrote on the monopoly and monopsony system as a result of poverty. His main ideas had profound impact on policies formulation and the implementation of anti-poverty programmes. In addition to this, development in the country received a big boost because of the setting up of the Economic Department in Universiti Malaya by Ungku Aziz who had been academically trained as the first local development economist and his famous 'sarong index' as a benchmark of poverty for the rural areas. Ungku Aziz's invaluable contribution is considered a catalyst to writings and researches in development studies of his generation. James Puthucheary and Syed Hussein Al-Attas are intellectuals who contributed to the intellectual debate on development problems with zeal and dedica-

tion. Puthucheary was a discipline-based thinker on development who actually wrote from prison. His peers classed him as a political economist where his earlier works concerned foreign investments in the country. He considered investments not only propelled unequal income because profits were channelled out of the country, but also highlighted the issues of poverty that is manifested in social class conflict. Syed Hussein Al-Attas wrote from Leiden on development in Malaya and his ideas were greatly influenced by European school of thought and looked at development as a critique of Europe.

They are followed by writings of other researchers, for example to note a few, geographers like Hamzah Sendut (1964, 1966) who highlighted the socio-economic impact of urbanisation; Syed Husin Ali (1964, 1979) and Mokhzani (1965) on the social stratification and mobility of newly urbanised community in this country, social anthropologist like H.M Dahlan (1976) on the nascent society of a developing nation like Malaysia, Affifudin Omar (1974), of the changing values of peasant economy within a modernised agricultural programme and Kamal Salih (1976) on the issues of inaccessibility of urban and rural development and Rahman Embong (1974) who debated on the orientation of the Social Sciences discipline and Development Studies in the country. Development Studies were gradually introduced in local universities since the late 1960s and 1970s with courses taught such as rural development, sociology of development, rural community, preindustrial society and urbanisation (Abdul Rahman Embong 1974). The 1970s was considered the second decade of Development Studies where rigourous intellectual discourses were keen to push Development Studies as a discipline. Malaysian scholars tried to theorise development in response to the country's need and to look into development problems from different dimensions but integrated as a corpus of knowledge. Such endeavour ultimately led to the setting up of the Faculty of Development Sciences in 1984 in Universiti Kebangsaan Malaysia. Research projects attempted to look at development from a multi- and inter-disciplinary approach.

In the 1980s and 1990s, the Malaysian circle of academia published numerous literatures on development; an indication that reflects the third generation of scholars of Development Studies that saw the importance of Development Studies from various fields and disciplines. These include Jomo (1984, 1986), Ishak Shari (1988, 1990) Samad Hadi (1989), Shamsul Amri (1986), Sham Sani (1989) Diana Wong (1987), Hood Salleh (1995), Anuwar Ali (1995), Zawawi Ibrahim (1998), Chamhuri Siwar (2001) and Abdul Rahman (2002) who attempted to articulate the underlying factors of development impact and change, analysed from different paradigm and perspectives.

Despite Development Studies important contributions, some began to question its relevance and theoretical strength (Schuurman 1993; Booth 1994). Since mid-1980s, Development Studies was thrown into a theoretical impasse. Development Studies were 'muddling' through theoretical debates and polemics, attempting to criticize the failures of Marxisme and Neo-Marxisme after the end

of the Cold War. Research endeavors, for example in the field of development economics and sociology of development, were conceptually conceived in pieces and separated from the multi-disciplinary methodological examination. Some even questioned the legitimacy of Development Economics; another development-related field. Others, even claimed that the field of Development Economics is "dead", (see Lal 1983; Seers 1979; Sen 1988) partly due to its repeated failure to address some of the major issues confronting developing countries, such as poverty, inequality, unemployment, instability, corruption, lack of transparency including environmental degradation. Also, with the end of the Cold War, the West no longer see the need to focus on the well-being of Third World countries. Evidently, many were sceptical that Development Studies (including Development Economics) have the theoretical and methodological tenacity to survive in the present uni-polar world and face the challenges posed by neo-liberalism and globalisation. Some neo-liberals have even proclaimed 'the end of history' (Fukuyama 1992) and the the emergence of a neoliberal order. Increased globalisation and liberalisation have further reduced the powers of the actor (such as the State, government officials) that so much Development Studies sought to serve in the past. Thus the question arises: is Development Studies relevant today? The following sections will attempt to provide some answers to this question on the relevance of Development Studies.

THE RELEVANCE OF THE DEVELOPMENT STUDIES

Unlike the sceptics, this article chooses to follow the approach adopted by Hettne (1990: 246) who maintained that it is not "time to give up the Development Studies [organisationally]". Like Hettne, this article argues that Development Studies is still useful in explaining current development issues and problems. Development Studies is not a discipline in disintegration (Hettne 1990: 249).

To remain relevant, Development Studies should not only fulfil the needs of universities. Instead it needs to evolve in such a manner as to accommodate and satisfy a variety of interests including universities, policy makers, business and industry. As part of this process, one has to address the questions concerning, *inter alia*, the relevance of Development Studies, the balance between knowledge building and market demand for Development Studies graduates, and how to prepare students to be better prepared to cope with the complex nature of today's socio-economic environment.

DEVELOPMENT STUDIES: THE RATIONALE FOR A MULTI-DISCIPLINARY APPROACH

To remain relevant, it is important for Development Studies to defend itself against the rising wave of mono-disciplinary fundamentalism. To do so, it is necessary on the one hand, to go back to fundamentals and, on the other hand, to re-construct Development Studies in the light of new realities, options, critiques, and theoretical developments.

What are the fundamentals of Development Studies? The fundamentals of Development Studies lie in its inter- and multi-disciplinary approach. Development Studies has used and should continue to use inter- and multi-disciplinarity as legitimation for its distinctive organisational space. Clearly, the key to its relevance now is its holistic integration and broad theoretical perspective based on such disciplines as economics, sociology, politics, philosophy and religious study.

Based on the authors experience lecturing undergraduate and postgraduate Development Economics and Sociology of Development courses at Universiti Kebangsaan Malaysia, there are three considerations to justify the need for a multi-disciplinary approach to the study of development issues and problems. They are the complexity of development problems; the "crisis" in economics education; and changing nature of knowledge production.

COMPLEX NATURE OF DEVELOPMENT ISSUES AND PROBLEMS

In this era of globalisation, problems and issues are more complex and less localised than ever before. Development problems (poverty, corruption, environmental degradation, population increase, income inequality), as we understood, are often connected with other problems such as politics, institutions, governance, culture and religion. Poverty, for example, is not just a problem related with lack of income, but poor access to resources and skills, policy biasness, attitude towards wealth, etc. Development problems are so complex that no single discipline can possibly explain and respond to them effectively. Practicing economist know that solutions to what may be defined prima facie as economic specific problems may require a non-economic specific solutions such as policy changes, social interaction, new marketing strategies, including political interference. Clearly, economist are required to be proficient in all facets of marketing, psychology, management, sociology, law, political science including ethics.

Development issues and problems became more complicated because of the tendency for researchers, academics and policy makers to disintegrate the problems into many facets and develop abstract models to 'simplify' them. The abstraction or disintegration of real problems into many facets creates a false impression that development problems are isolated from other problems. This

artificial separation of problems was partly responsible for the difficulties that students encounter in applying their theoretical knowledge to the problems of the real world.

Also, a concerted method of studies from a multi-disciplinary field will enable researchers to study social phenomenon in a holistic manner, putting history, cultural and worldview factors as part of the centre of research investigations. In the social science disciplines, western-based epistemology becomes the main reference in dealing with local development issues. This often becomes problematic when the conceptual definitions are not able to adjust to the local realities. For example theoretical definition of post-modernism or post materialism, which still lags the local empathy and suitability to the formulation of local social agenda and development policies. Clearly, there is a need to provide alternatives that could be reconsidered under the Development Studies discipline.

Development Studies can play important roles in delivering knowledge, ideas and intellectual discourses on the need to understand changes in social systems from the multi and inter-disciplinary dimensions. This is the advantage that Development Studies possess despite the never-ending debates on development paradigms and the need to reformulate alternative framework in exploring contemporary development issues, which are now greatly influenced by globalization. It is the ability of Development Studies to understand changes from a multi-disciplinary dimension that gave it an added strength as compared to its mono-disciplinary counterparts such as economics, sociology and politics.

ECONOMICS EDUCATION AT THE CROSSROAD

Generally, the study of development issues is assigned to the discipline of economics. The extent, to which the economics curriculum taught at the universities can provide the understanding and solution to development issues and problems, is already being questioned. In the last fifteen years, there has been a strong debate on the usefulness of (development) economics for understanding and providing solutions to economic problems. Economist are known to use predictions based on highly abstracted economic models as a basis for understanding and providing solutions to the complexities of development problems. The Report of the Commission on Graduate Education in Economics in the USA acknowledged the limitation in economics education: "We believe that we do a better job of teaching new PhD's theory and tools than we do teaching their use" (Krueger et al. 1991). The Commission highlighted the relative emphasis on mathematical techniques versus economic substance. A glance at economics journals and the number of Nobel Prize for Economic winners reveals the tendency to "mathematicise" economics.

The American Economic Review (May 1990: 438) argued that "changes are needed in the content and structure of PhD programs in economics". The Com-

mission on Graduate Education in Economics were concerned that graduate economics program may be turning out a generation "with too many idiotic savants, skilled in techniques but innocent of real economic issues" (Krueger et al. 1991: 1045).

A similar concern was evident in the Malaysian academic circle. This concern culminated in the organisation of two national conferences on university economics education. One of the issues highlighted in these conferences is the inability of economic graduates "to integrate their knowledge of economics with problems on an inter- and intra-sectoral basis" (Rahmah, Zaini & Abd. Razak Dan 2001: 27). The conference also pointed out that economics education tends to have a strong emphasis on theory, but limited on application of these theories in economics education. From these discussions, it is evident that economic students have difficulties applying theory to real-world problem and use theory in empirical application.

One of the reasons for the weak link between tools and application is related to economic education and the limited efforts at integrating knowledge from different disciplines. Also, the highly technical, mathematicised and abstracted approach adopted by economics makes it difficult for economic studies to appreciate the less mathematical approaches adopted by other social science disciplines. In its concern for objectivity and rigour, economics namely econometrics, hardly make any attempt to adopt a multi-disciplinary approach, let alone promote it. As what the Commission had proposed, the way to improve economics education is to integrate economics with other disciplines.

The emergence of development economics in the post World War II, as a sub-discipline of economics, to deal with the development problems has not brought about the much-needed remedial effect. Continuing problems in the world scene have led to questions about the adequacy of traditional economic development theories, strategies and policies. Some development economists complained that development economics as a subject is "declining in importance", "in the doldrums" (Hirschman 1981) or even "dead" (Seers 1979). One of the reasons is that Development Economics fails to incorporate knowledge from other Social Science disciplines into development theory or into the analysis of development process. Development economics, fails to recognise that other disciplines have a lot to offer in explaining, understanding and providing solutions to development problems.

Undeniably, the first post WW II generation of development economists had attached considerable importance to the role of non-economic factors, such as cultural endowments, social structure and political organisation in economic development. Professional opinion, however, did not deal kindly with the reputation of development economists who made serious attempts to incorporate knowledge from the other social sciences into development theory. Now, there is a tendency for development economics to follow the footpath of mainstream economics. Development Economics is becoming highly mathematical as

reflected by the articles published in the *Journal of Development Economics*. Also, Development Economics tend to have a strong economic content, as reflected by its sub-disciplines such as: Theory of Economic Development, Development Planning, Economic, Rural Development, Project Evaluation, Agricultural Economics including Foreign Trade. Development economics hardly extend its perimeters to cover other aspects of development such as politics, sociology, culture, management, and law including religious studies. The predominance of economics over other disciplines gives the impression that all development problems are economic problems. This is not surprising when the solutions to these problems are designed from a purely economic perspective.

Development economics needs to acquire a more comprehensive and multidisciplinary subject matter through its integration with Anthropology, Sociology, Politics, Management, Law and Religious Studies. These disciplines have valuable insights that can contribute to Development Economics. Let us briefly highlight some of their contributions.

Anthropology is often conceived as the science of culture. Development Economics can benefit from anthropology by incorporating the role of cultural factors into development analysis and to utilise that knowledge in designing development programmes and institutions. By incorporating anthropology, Development Economics can understand the norms and values that govern economic relationships.

Sociology can also be integrated into economic development analysis. As a science of society, sociology is useful in development economic planning because it can provide the knowledge on social behaviour and the implication of different social structures. This knowledge is important because it provides responses to policy initiatives to evaluate the effectiveness of project or policy designs. Sociology also provides the knowledge about the impacts of changes associated with economic growth.

Political science also has its fair share of contribution to Development Economics. In most cases, economic development and political development intersect over a broad front. Politicians make policies, including economic ones. Knowledge of economics and politics is indeed useful in understanding the interplay of political factors in economic decision or policy making. Our vision is similar to what is articulated by Hirschleifer (1985: 53); "Good economics will also have to be good anthropology and sociology and political science and psychology". To meet the changing demands of the modern economic system, both Economics and Development Economics must and need to draw knowledge from multiple sources of knowledge.

CHANGING WORKPLACE AND NEW METHODS OF KNOWLEDGE PRODUCTION

In Malaysia, the need to be multi-disciplinary is related to changes in the workplace and work pattern to meet the demands of an ICT-driven economy.

Malaysia is currently in the process of moving away from manufacture (creation using physical tools) to what Burgoyne (1995) termed as "mentofacture" (creation using the mind), which is a characteristic of the ICT-driven economy. In this "new economy", information has superseded equipment, and knowledge-based workers are replacing production-workers as the firm's most important assets. The knowledge that employees hold is the key to organisational success. Knowledge-workers are expected to be able to absorb more information and be responsible and creative in solving problems and making decisions.

Changes in the workplace demands a reappraisal of work practices, renewed emphasis on collaboration and teamwork, and the need to be multi-skilled. An ICT-driven economy also demands that workers have sufficient skills and knowledge. This competence-based approach and the trend towards 'client-centeredness' provide an impetus and the context of multi-disciplinary teamworking.

The Malaysian economy and workplace of the 1990s and 2000s carry with them an expectation that workers will be multi-skilled, competent and capable of taking greater responsibility and initiatives. Discussion to this point has support in findings contained within studies and conference papers presented by Mohammad Haji Alias et al. (1992), and Rahmah Ismail et al. (1999). While these studies were conducted five years apart, both studies came to similar conclusions: economics graduates need more than a knowledge of micro- and macro-economic principles, international trade theories and econometrics. Graduates are expected to enter the workplace equipped not only with the functional knowledge and skills, but also, with adequate communication, interpersonal and teamwork capabilities.

Clearly, these studies highlighted the importance placed by business leaders and government officers on people skills, general knowledge, analytical thinking and the capacity to communicate, all of which require a synergistic multi-disciplinary orientation. Despite the importance of these skills, we are concerned that graduates, (particularly economics) have the requisite skills to meet the demands of the ICT-driven economy. Our added concern is related to the issues raised earlier regarding the limited capabilities of students (particularly, economics) to integrate theory and application of economics or solve real-life development problems.

One can trace the source of these problems to the way knowledge is produced. In the currently predominant teaching model at universities, economics students typically undertake courses in sequential manner, semester by semester. Knowledge acquired in a sequential subject-by-subject manner, may result in a compartmentalised or fragmented comprehension of what is taught. This approach inclines students to treat each subject as a single and without any relationship with other disciplines. Students fail to recognise that subject areas and disciplines are inter-connected and part of the bigger body of knowledge. Not surprising, university students develop a single-disciplinary, as opposed to

multi-disciplinary, way of thinking based on their specific discipline-based training. For example, the failure of a development project may be seen by an economic major as a problem stemming from market imperfection; a sociology major may perceive the problem to be caused by unwillingness of participants to participate in the project; whereas a political science major may trace the root of the problem to political interference in administration.

Undeniably, students are exposed to a range of discipline and provided with a rich knowledge base, but they are insufficiently taught how to integrate and use that knowledge. This article argues for greater integration of what are taught to students, particularly Development Studies, to better prepare them to cope with the complex nature of today's development problems and meet the needs of the new workplace. Multi-disciplinarity can serve as bridge to link the various disciplines and help to overcome the artificial intellectual framework provided by traditional education.

In fact, the World Bank highlighted the importance of multi-disciplinary as part of the methods of knowledge production to meet the needs of an ICT-driven economy. According to the World Bank, most universities in developing nations function at the periphery of the international scientific community. They are "unable to participate in the production and adaptation of knowledge necessary to confront their countries' most important economic and social problems" (*World Bank Report*, undated: 47). Universities in Malaysia are still struggling to adapt to the new realities of an ICT-driven economy, particularly one that focuses on the inter-disciplinary approach in the production of knowledge.

Table 1 highlights the different approaches in knowledge production as indicated by a shift in the ways knowledge are produced: from a single-discipline based approach (in the traditional knowledge production) to a trans-disciplinary based (in the new knowledge production). Now, multi-disciplinary is the keyword in the language of knowledge production and human resource development. Booth (1994: xiii) recognised the potential of multi-disciplinary in Development Studies as reflected in his writings that "[t]he importance of Development Studies, and the importance of making it a genuinely inter-disciplinary undertaking in which political, social and spatial/environmental dimensions figure predominantly, has never been greater than in the 1990s".

Having discussed the need ('why') for multi-discipline approach to Development Studies, the following section outline the meaning and methods ('how') of multi-disciplinarity and the factors inhibiting its success. It serves as a background to the discussion on the ways to achieve multi–disciplinary in course curricula and research on development issues.

TABLE 1. Differences between 'old' and 'new' knowledge production

Old knowledge production	New knowledge production
Single discipline-based	Trans-disciplinary involving diverse range of specialist
Problem formulation governed by interest of specific community	Problem formulation governed by interest of actor involved in application
Problem set and solved in (largely) academic context	Problem set and solved in application-based context
Newtonian model of science specific to field of enquiry	Emergent theoretical/conceptual framework not reducible to single discipline
Research practice conforms to norms of discipline's definition of 'scientific'	Research practice reflexive and socially-accountable
Quasi-permanent, institutionally-based teams	Short-lives, problem-defined, non-institutional teams
Hierarchical and conservative team organization	Non-hierarchical and transient team organization
Normative, rule-based, 'scientific', knowledge produced	Consensual, continuously negotiated knowledge produced
'Innovation' seen as production of new knowledge	'Innovation' also seen as reconfiguration of existing knowledge for new context
Separate knowledge production and application	Integrated knowledge production and application
Dissemination discipline-based through institutional channels	Dissemination through collaborating partners and social networks
Static research practice defined by good science	Dynamic research practice characterized by on the move problem solving
Static research practitioners operating within discipline/institution	Mobile research practitioners operating through networks.

Source: http://www.surveying.salford.ac.uk/resources/lisbon/papers/ian.pdf

MULTI-DISCIPLINARY STUDIES: CHALLENGES

Multi- and inter-disciplinarity may be the key approaches to today's complex development issues, but the concept itself is poorly understood. What does inter- and multi-disciplinary mean? Inter-disciplinary concerns the relations within a discipline. It can be attempted in various ways. Firstly, the theory of one discipline may be applied to the empirical territory of another (e.g. health economics, the new political economy). Secondly, it involves the fusion of different territories. Multi-disciplinary brings together the contributions of economics, sociology and politics and other disciplines to the understanding of development. There are various challenges for promoting multi-disciplinary studies in Malaysian universities. The following section discusses these challenges.

FACTORS INHIBITING MULTI- AND INTER-DISCIPLINARY STUDIES

Currently, the environment within which development studies institutions operate is difficult in many ways. Despite the need for multi-disciplinary approach in the present academic environment, efforts at introducing this approach have been rarely sustained. In Malaysia, efforts had been made to introduce inter-and multi-disciplinary programs in the universities with the formation of Development Science Faculty by UKM and the introduction of Development Studies by Universiti Malaya and Universiti Sains Malaysia. The extent to which the faculty and academic discipline can sustain the onslaught of mono-disciplinarity and the demands of restructuring at local universities, is an issue worth discussing.

A close examination of public universities in Malaysia clearly shows that there is still limited emphasis on inter- and multi-disciplinary education. The practice may well be due to a combination of various factors, such as (a) disciplinary 'chauvinism', (b) lack of understanding of what inter- and multi-disciplinarity is and what promotes or hinders its functions, (c) structure and reward system that favours field and subject specialisation, and (d) lack of prestige associated with multi-disciplinary studies.

In the scientific and/or academic community the subject of multi-disciplinarity tends to be under-appreciated. Mono-disciplinarity and specialisation led many students and academic to believe that their discipline is 'superior' to others. For example, Pearce (cited in Ravaioli 1995: 26), claimed that "anyone who works in an interdisciplinary way is considered a bad economist". Economics has long been criticised for its monist premise, that there is only one correct way to understand a system. Such disciplinary chauvinism prevents them from knowing about the theoretical framework, expertise, competencies, responsibilities and methodological underpinnings of other disciplines.

Another factor inhibiting multi-disciplinarity is that academic papers on a single discipline have a better scientific prestige than multi-disciplinary papers.

Papers with a single-disciplinary have the ability to give a profound, consistent and highly technical analysis of single aspects of a problem. Furthermore, journals tend to publish papers based on a specialised subject.

Multi-disciplinary approaches integrate many aspects, which led many to believe that analyses are 'broad' and 'shallow'. Besides, it is difficult to be consistent between different disciplines. Multi-disciplinary analysis has the risk that concepts of different disciplines are used together, using words that are common in one discipline, with the assumption that these words mean the same in other disciplines. The risk is that knowledge from one discipline is misinterpreted and misused.

Another reason for the lack of interest to promote inter- and multi-disciplinary approach is related to the structure of the reward systems at the universities. These structures and reward systems discourage collaboration across disciplines. The organization of universities in units based on disciplines and the need for researchers to protect their own Faculties and Department, and to compete for students and funds makes the cooperation and translation of scientific knowledge across departmental boundaries unlikely. The way forward is for universities to have a better understanding of the term multi-and inter-disciplinary.

A related issue is the relevance of Development Studies in the present academic environment that is characterised by the 'marketisation of Higher Education'. Until today, discourses on the relevance of Development Studies are still being highlighted and debates on whether Development Studies and research can sustain the onslaught of other 'highly demanded' disciplines that has 'market value" seem to catch the attention of the academia. Development Studies, being multi-disciplinary in its own genre, is still being questioned of its existence. Critics of its academic capacity and marketability have its bearing on the academic curriculum, practices and research. In the name of efficiency, faculties and programs were restructured. One such example is the Faculty of Development Science, UKM.

PRACTICING DEVELOPMENT STUDIES: A VIEW FROM DEVELOPMENT SCIENCE

The Faculty of Development Science (FDS) at UKM was established in response to the need for a holistic approach on the education of development in Malaysia. The idea of setting up a Development Studies programme was mooted in the late 1970s by a few scholars who realized that mono-disciplines in the Social Sciences, particularly Economics and Sociology, were less capable of catering to the needs to delve into development issues and problems holistically. Also, these disciplines were compartmentalized. Recognising the need for open disciplinarity, Universiti Kebangsaan Malaysia responded by establishing the Faculty of Development Sciences in 1984, using the multi and inter-disciplinary framework of teaching and research.

The mission of FDS was to implement academic programme designed based on multi and inter-disciplinary approaches, offering philosophy, theoretical, creativity and technical courses among others, as well as practical program for students to suit and enhance the practicality of development in the field. Courses are designated to develop the skills of communication and self-enhancement as part of training for the students to be developmentalists. In brief, the structure and curriculum of Development Studies in UKM has the objective to understand development that encompasses the following elements:

1. Development of the society and the State that are undergoing restructuring of the urban-rural sectors
2. Development and resources management of the private and public sectors
3. Regional development and planning
4. Development of socio-political institutions and State's apparatus responsible for the formulation of public policies
5. Development of culture and language

Taking the above elements into the academic curriculum, Development Studies were organised into four interrelated programmes, (i) Human Development Studies programme (ii) Regional Development Studies programme (iii) Development and Management Studies programme and (iv) Philosophy and Civilization Studies programme. Within these four large programmes, units of studies were set up to cater and implement the academic courses. These are the Urban and Rural Studies Unit, the Spatial Studies Unit, Economic and Management Studies Unit, International Studies Unit and the Philosophy and Civilisation Studies Unit. These units play two major roles, first to deliver academic courses relevant for Development Studies and second, to manage and expand research in fields of development which are multi and inter-disciplinary in nature. Each unit has a chairperson to manage and ensure the smooth delivery of each development program and unit.

The Faculty was sensitive and had responded to the need to put Development Studies in the right perspective. This sensitivity was reflected in the move by Faculty of Development Sciences to reconstruct its ontology, epistemology and axiology of development in the mid 1990s. As a consequence, the Faculty was less bias towards material factors and it takes into account the human and cultural factors of development and the role of civil society. The epistemology of Development Studies considers the Malaysian social characteristics (historically and culturally), integrating theories that are relevant to the Asian region as an important entity in global development of the twenty first century. Economic development is crucial in social transformation; while spatial and temporal issues are given due attention as these have social impacts on human development.

As had been mentioned, the Faculty of Development Sciences, UKM was one of those faculties affected by the restructuring exercise. The Faculty of

Development Sciences; the only multi- and inter-disciplinary faculty of Development Studies in Malaysia, has been restructured, reprogrammed and integrated into the social sciences domain. With the restructuring, the faculty now only exists as a program within the mainstream disciplines. Such restructuring reflects the changing academic paradigm to suit the 'needs' and the 'requirement' of market demand. The restructuring endeavour strikes three basic philosophical cords of the Faculty of Development Sciences; the ontology, epistemology and the axiology of Development Studies. We must emphasize that the goals and objectives of restructuring Development Studies into the social sciences faculty will not make Development Studies less important, instead it will make the inter and multi-disciplines studies attractive to students and researchers who are keen to explore interdisciplinary research and studies.

MULTI AND INTER-DISCIPLINARITY: THE WAY FORWARD

Having identified limitations of disciplinarity, the next step is to find ways to develop, and sustain multi-disciplinary Development Studies. Some of these suggestions may seem reduntant, but they serve the purpose of reiterating their importance and relevance.

As part of renewing Development Studies, there is a need to develop a set of priorities in the formulation of 'appropriate' Development Studies curriculum. The first of these must be the integration of knowledge. Since Development Studies came into common usage as denoting a holistic approach to the enquiry of diverse development problems, it is essential that we drop the premise of monoism, that there is only one correct way to learning and understanding of development issues. To strengthen inter and multi-disciplinarity, it is necessary that students must learn to be conscious of their own conceptual frameworks, conscious of the advantages and disadvantages of the frameworks used by others, and be tolerant of the use of different frameworks by others (see Norgaard 1994).

Also, Development Studies must be able to face the challenge and move away from explaining and understanding development issues purely (or mainly) in monoistic terms, towards a political, moral and above all sociological approach. On the other hand, sociologists who concern themselves with development issues also need to equip themselves with basic economic theory and tools, including an awareness of the economic way of thinking and problem solving. There is need to 'de-economise' Development Studies curriculum, by integrating other disciplines (particularly sociology) into development economics and economics into sociology, anthropology and political science.

Secondly, to support and sustain Development Studies it is essential that efforts be geared towards producing local and relevant case studies, and theo-

retical literature. The need to include local theoretical literature and case studies with foreign ones is necessary to give students a balanced perspective; international, regional, national and local.

Thirdly, universities must recognise that Development Studies is a dynamic subject. As a rapidly changing subject, provisions must be made for the constant updating of the curriculum and of the knowledge and theoretical skills of the teaching staff.

In terms of multi-disciplinary education, we have identified three options. The *first* option is to educate students in such a way that they can understand and appreciate the contribution of several disciplines. This requires a basic education in a particular discipline (mono-discipline). It is widely recognized that inter- and multi-disciplinarity can be sustained if students have a solid grounding in a particular discipline. This method of education must be able to provide the students with a broader view and the inter-connectedness of several disciplines. It must be able to equip students with sufficient knowledge to communicate with experts from other disciplines, to interpret their knowledge, to integrate knowledge from different disciplines and to choose the most appropriate contributions from different disciplines.

The *second* option is to educate students in several disciplines to such a level that they are able to act as responsible practitioners in these disciplines. The risk of this option is that the student gets only a superficial, basic education in all disciplines and does not reach the academic standards in any of the disciplines.

The *third* options is the project approach, in which students study development problems using different disciplines, depending on the question which discipline is most appropriate. This requires a basic education in relevant disciplines and learning the meaning of the paradigms by the practical application.

In terms of research, multi-disciplinary can be done through coordination, co-operation and collaboration. The coordinated approach involves students, researchers or faculties working together in a coordinated way, to identify subjects that can be studied in a mono-disciplinary way. In this approach, the disciplines co-operate only to the level that they divide their work and contribute together to the solution of the problem. The principle objective is that each partner can achieve his/her own goals. This form of multi-disciplinarity will stretch the boundaries of different disciplines. It also enables the research results to be interpreted by different disciplines.

The second approach involves the co-operation of disciplines. In this approach the emphasis is on the synthesis of the result of different disciplines to achieve a common goal. The approach is more concerned with the integration and application of scientific paradigms as compared to in-depth analysis. Students, researchers or faculties exchange information, share resources for mutual benefit and try to combine each other's expertise, experience and competencies in order to achieve a common goal. One of the advantages of co-operative multi-disciplinary research is that it helps people who are not able to

do it on their own to solve problems. Co-operative research is best suited for problems that cannot be solved by single disciplines.

The collaborative approach involves the transferring of concepts, knowledge and methods of one discipline to another domain. The objective is to enhance the paradigm of one discipline using the methods and knowledge of another discipline to increase its potential in solving a certain problem.

CONCLUSION

For Development Studies, multi-disciplinarity is a requirement rather than an option because many problems in that domain have aspects that cannot be dealt with by a single discipline. Furthermore, other disciplines may have methods and tools that can be excellently applied to development problems. While there is an urgent need for multi- and inter-disciplinary Development Studies, we must also be realistic. Let us always be reminded of Perkins's (1990) warnings, "There is a long history of failure of multidisciplinary work" Multi- and inter-disciplinary faculties or Departments, such as Faculty of Development Science, UKM had to pay a heavy price – marginality – to create the opportunity for a venture into multi- and inter-disciplinarity in an age when universities are reduced to a training factory for bureaucracies and businesses.

ACKNOWLEDGEMENT

This article was first presented at the *Seminar on Directions and Destinations in Development Studies*, organized by Faculty of Economics and Administration, Universiti Malaya, 16 January, 2003. It has been improved for purposes of publication.

REFERENCES

Abdul Rahman Embong. 2002. *State-led Modernization and the New Middle Class in Malaysia*. Houndsmill and New Yoke: Palgrave.

_____. (ed.). 1974. *Peranan dan Orientasi Sains Sosial dan Ahli Sains Sosial di Malaysia*. Kuala Lumpur: Jabatan Antropologi dan Sosiologi, UKM.

Affifudin Hj. Omar. 1974. Some Aspects of the Socio-economic Value Systems of the MUDA Rice Farmers in Development Perspectives. MUDA Agricultural Development Authority. MADA Publicaton No. 24. Kedah. August.

Anuwar Ali. 1995. *Globalisasi, Pembangunan Industri dan Peranan Pemerintah di Malaysia*. Bangi:Penerbit UKM.

Booth, D. (ed.). 1994. *Rethinking Social Development: Theory, Research and Practice*. London: Longman Scientific and Technical.

Burgoyne, J. 1995. Feeding minds to grow the business. *Personnel Management* 1(19): 22-25.

Chambers, R. 1983. *Rural Development: Putting the Last Firs*t. London: Longman.

_____. 1986. 'Putting the Last Thing First' in Elkins, P. (ed.) *The Living Economy: A New Economy in the Making*. London: Routledge.

Chamhuri Siwar. 2001. *Pembangunan Mapan: Strategi "Menang-menang' untuk Pembasmian Kemiskinan dan Pemuliharaan Alam Sekitar*. Bangi: Penerbit UKM.

Wong, D. 1987. *Peasants in the Making*. Singapore: Institute of Southeast Asian Studies.

Fukuyama, F. 1992. *The End of History and the Last Man*. London: Penguin.

H.M. Dahlan. (ed.) 1976. *The Nascent Malaysian Society: Developments, Trends and Problems*. Kuala Lumpur: Penerbit UKM.

Hamzah Sendut. 1964. Urbanisation. In Wang Gung-Wu. (ed.) *Malaysia: A Survey*. London.

_____. 1966. Contemporary Urbanisation in Malaysia. *Asian Survey* VI(90).

Hirschleifer, J. 1985. The Expanding Domain of Economics. *American Economic Review* (755): 53-68.

Hirschman, A. 1981. The Rise and Decline of Development Economics. In Hirschman, A. *Essays in Trespassing: Politics and Beyond*. Cambridge: Cambridge University Press.

Hood Salleh. 1995. *Dunia Pribumi dan Alam Sekitar: Langkah ke Hadapan*. Bangi: Penerbit UKM.

Ishak Shari. 1988. *Pembangunan dan Kemunduran. Perubahan Ekonomi Luar Bandar di Kelantan*. Kuala Lumpur: DBP.

_____. 1990. *Ekonomi Nelayan: Pengumpulan Modal, Perubahan Teknologi dan Perbezaan Ekonomi*. Kuala Lumpur: DBP.

Jomo, K. S. 1986. *A Question of Class: Capital, the State and Uneven Development in Malaysia*. Singapore: Oxford University Press.

Kamal Salih. 1976. Unbalance Growth and Persistent Poverty. The Consequences of Unequal Access in Urban and Rural Development. In Mokhzani, B.A.R. and Khoo, S.M. *Poverty in Malaysia*. Kuala Lumpur: Persatuan Ekonomi Malaysia.

Klamer, A. 1992. 'Academic Dogs'. In Collander, D. and Brenner, R. (ed.) *Educating Economist*. Ann Arbor, Michigan: The University of Michigan Press.

Krueger, A. O. et al. 1991. Report on the Commission on Education in Economics. *Journal of Economic Literature* XXIX, Sept: 1035-1053.

McCloskey, D. N. 1985. *The Rhetorics of Economics*. Madison: The University of Wisconsin Press.

Mokhzani, B. A. R. 1965. The Study of Social Stratification and Social Mobility in Malaya. *East Asian Cultural Studies* 4. March.

Myrdal, G. 1968. *Asian Drama*. Harmondsworth: Penguin Books.

Norgaard, R. 1994. *Development Betrayed – The End of Progress and a Co-evolutionary Revisioning of the Future*. London: Routledge.

Puthucheary, J. 1960. *Ownership and Control of the Malayan Economy*. Singapore: Eastern Universities Press.

Rahmah Ismail, Zaini Mahbar & Abd Razak Dan. 2001. Persepsi dan Keperluan Majikan Sektor Awam Terhadap Graduan Ekonomi. In Rahmah Ismail & Faridah Shahadan (ed.) *Pascasidang Seminar Kebangsaan Pendidikan Ekonomin di Persimpangan Jalan*. Bangi: Penerbit UKM.

Ravaioli, C. 1995. *Economists and the Environment – What the Top Economists Say About the Environment*. London: Zed Books.

Samad Hadi. 1989. *Mobiliti Penduduk*. Bangi: Penerbit UKM.

Seers, D. 1979. The Birth, Life and Death of Development Economics (Revisiting a Manchester Conference). *Development and Change* 10(4): 707-719.

Sen, A. K. 1988. Development: Which Way Now? *Economic Journal* 93(372): 745-762. Reprinted in Wilber, C.K. (ed.) *The Political Economy of Development and Underdevelopment*. New York: Random House.

Sham Sani. 1989. *Pembandaran dan Iklim: Implikasi Terhadap Perancangan Bandar di Rantau Tropika Rendah*. Bangi: Penerbit UKM.

Shamsul Amri B. 1986. *From British to Bumiputera Rule*. Singapore: Institute of Southeast Asian Studies.

Schurmann, B. J. ed. 1993. *Beyond the Impasse: New Directions in Development Theory*. London: Zed Books.

Syed Husin Ali. 1964. Social Stratification in Kampung Bagan. *JMBRAS* Monograph. No. I. Singapore.

_____. 1979. *Apa Erti Pembangunan*. Kuala Lumpur: DBP.

Ungku A. Aziz. 1964. Poverty and Rural Development in Malaysia. *Kajian Ekonomi Malaysia* 1(1).

Wan Hashim Wan The. 1980. *Komuniti Nelayan di Pulau Pangkor: Beberapa Aspek Ekonomi dan Sosial*. Kuala Lumpur: DBP.

Zawawi Ibrahim. 1998. *The Malay Labourer: By the Window of Capitalism*. Singapore: Institute of Southeast Asian Studies.

Madeline Berma, PhD
School of Economics Studies
Faculty of Economics and Business
Universiti Kebangsaan Malaysia
43600 UKM Bangi
Selangor Darul Ehsan
Malaysia
e-mail: mac@pkrisc.cc.ukm.my

Junaenah Sulehan, PhD
School of Social, Development and Environmental Studies
Faculty of Social Sciences and Humanities
Universiti Kebangsaan Malaysia
43600 UKM Bangi
Selangor Darul Ehsan
Malaysia
e-mail: june@pkrisc.cc.ukm.my