

Abstracts of the National Statistics Conference 2005

A National Statistics Conference 2005 (the Conference) was organized by the Department of Statistics, Malaysia (DOSM) from 19-20 September 2005. The theme of the Conference was "Statistics for National Development". The Conference was officiated by the Honorable Minister in the Prime Minister's Department, Dato' Mustapa bin Mohamed. The objectives of the Conference were to deliberate on statistical issues and to identify the relevant data requirement for the country's development planning as well as for the implementation of the country's policies. The conference served as a forum for enhancing the role of DOSM as the main agency that provides data to both the public and the private sectors. It also served as a platform for statisticians to exchange opinions, experience and knowledge with policy makers, analysts and experts. The abstract of the paper is presented as follows:-

SESSION 1

Manufacturing Sector in the Malaysian Economy – AFTA and its Implications on Employment

By Davies Danavaindran

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Management Committee, Federation of Malaysian Manufacturers (FMM)*

The paper presented an overview and profile of the manufacturing sector and its performance in the Malaysian economy. It then examine AFTA and its implications on the manufacturing trends in the country and its impact on the employment trends in the manufacturing sector.

The manufacturing sector in Malaysia has been the fastest growing sector with a 9.8 per cent growth in 2004 compared to 8.3 per cent in 2003. It contributes to about a third of GDP with manufacturing exports accounting for approximately three quarters of total exports in 2004. Employment in this sector

totaled 2.9 million persons while manufacturing sales expanded by 19.7 per cent in 2004. This sector continued to grow in 2005 supported by the growth of export-oriented industries, double digit growths of resource-based industries such as palm oil and rubber products, electrical and electronics industry as well as the robust performance of the transport equipment industry. Meanwhile, small and medium industries (SMI) constituted 90.0 per cent of the manufacturing sector in 2000 while the number of companies in operation was 18,271.

The main objectives in the formation of AFTA (ASEAN Free Trade Area) in January 1992 are the creation of an integrated regional market with 515 million people and a combined GDP of US\$700 million and an efficient and competitive base for foreign direct investment in ASEAN countries. In addition, AFTA is committed to gradually reduce tariffs over a ten year period beginning 1993 and eventually eliminate all import duties by 2010, thus making available access to a wider market and to reap economies of scale.

This paper depicts the relevance of AFTA in the context of the Malaysian economy and the formation of ASEAN multinational enterprises, the capacity to innovate and create and the willingness to invest in new technologies and R&D. These changes require rapid innovation within the Malaysian manufacturing environment in order to remain competitive in the global market. Promotion of outsourcing activities in accountancy, finance, IT systems, warehousing are aimed at reducing costs while the focus on core competencies and the enhancement of new technologies and process innovation are lauded.

On employment trends in the manufacturing sector, the paper highlighted a steady growth in employment from 6.6 per cent in 2003 to 7.2 per cent in 2004 surpassing the target of 4.6 per cent in the 8th Malaysia Plan as well as a steady rise in value of investment per worker from RM288.2 in 2001 to RM377.0 in 2003. In this context, the measures outlined include the

provision of skilled/technical workers, enhancing productivity through integration of human and technical resources and the adoption of best practices as benchmarks.

In conclusion, the role of the Federation of Malaysia Manufacturers (FMM) through its involvement in various capacities has further enhanced the move towards higher productivity driven measurement activities.

SESSION 2

Evaluation of Poverty: Data Requirement in Implementing Program of the Target Specific

By Noriyah Ahmad

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Prime Minister's Office*

The paper briefly discussed poverty eradication strategies with emphasis on the concept and measurement of poverty. It also enlightened the sources of data for planning, monitoring and implementation of these strategies. It has also emphasized on the requirement of data for target specific programmes in Malaysia.

As regard to poverty eradication, Malaysia has adopted long-term policies since the early 1970's. It started with the introduction of '**New Economic Policy (1971-1990)**' which aimed to reduce and ultimately eradicate poverty among all Malaysians irrespective of race. The second phase of the strategy was the introduction of '**National Development Policy (OPP2), 1991-2000**' with the intention to eradicate hardcore poverty.

The third phase is geared towards the **National Vision Policy (OPP3) 2001-2010** target to reduce incidence of poverty to 0.5 per cent by 2005. A shift of focus to improve quality of life of the bottom 30 per cent emphasized more on target-specific approach to poverty, particularly among the Orang Asli,

Bumiputera minorities in Sabah and Sarawak, and pockets of poverty in the interior and urban areas.

SESSION 3

Emerging Issues in Malaysian Financial System: Policy and Challenges

By Dato' Mohd. Razif Abd. Kadir

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The paper started with the Malaysian strong economic fundamentals during the pre-Asian financial crisis. However, Malaysia was not spared during the Asian financial crisis. Thus, this has prompted the government to take a holistic approach towards financial restructuring. Amongst the measures taken were the establishment of Danaharta, Danamodal and Credit Debt Restructuring Committee (CDRC). Within 2 years, Malaysia managed to get out of the crisis with only 5 per cent usage of public funds for the restructuring efforts and restoring economic stability. The government realized that the financial sector has to be transformed to cater especially for the intense competitive pressures, globalization and liberalization of financial markets. Thus, in order to remain competitive and relevant, Financial Sector Masterplan and Capital Market Masterplan were introduced in 2001. The masterplans were the blueprints for comprehensive development for the next 10 years. These include strengthening legal, regulatory and supervisory framework for financial institutions, emphasizing on capacity building measures for financial institutions, enhancing the role of bond and equity markets as an alternative source of financing; concurrent development of other financial businesses and promoting active consumers and shareholders. The policy formulation and responses introduced after the financial crisis were to cater for the challenges ahead in the financial sector. The Malaysian government is continuously taking restructuring measures to address inherent weaknesses and set the foundation for longer term developmental efforts. The policies

formulated were to manage future challenges as well as to balance the financial, monetary and economic stability.

SESSION 4

Formation of Inter-country Production Network in East Asia:

Application of International Input-Output Analysis

By Dr. Ikuo Kuroiwa

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The main purpose of this paper is to highlight the interrelationship of transactions between East Asia countries which could be obtained from integrated Asian International Input-Output Tables. Trend of trade in intermediate goods, structure of spatial linkages and clusters in the machinery industries were analyzed.

Based on the 1995 Asian International Input-Output Tables, the volume of trade in intermediate goods between year 1985 and 1995 especially for Singapore and Malaysia was extremely high as compared to other East Asia countries. Malaysia's regional and overseas dependency ratios of capital goods in 1995 were very high. However, East Asia economies had low regional and overseas dependency ratios of consumption goods. This indicates that the main purpose of trade in East Asia was the procurement of production goods and much less the procurement of consumption goods.

Taiwan, Korea, Singapore and Malaysia had high Grubel-Lloyd indices while, readings for Indonesia and the Philippines were low due to the vertical structure of trade in these economies. By comparing the Grubel-Lloyd index item by item, it was found that intra-industry trade of intermediate goods, especially material and machinery industries increased as the East Asia economies industrialized.

Structure of spatial linkages shows an industrial linkage between industries in different countries. Methodologies used to obtain the spatial linkages were hypothetical extraction method and Ghosh model. From the spatial linkages, it was found that there was similarity in the structure between the spatial and domestic linkage effects. Electric machinery had strong spatial forward linkages which indicate that its usage as intermediate goods (i.e. parts and components) was strengthened. Percentage of strong intra-industry spatial linkages increased sharply. In addition, new model of international division of labour, such as fragmentation, has proceeded particularly in the electric machinery industry.

Clusters in the machinery industries especially motor vehicles and electrical machinery industries expanded significantly. Within the cluster of motor vehicles, the strength of spatial backward linkage effects from Malaysia and the Philippines to Japan exceeded 30 per cent and 40 per cent respectively. Since spatial linkages have strengthened outside the U.S and Japan, Singapore came to play a pivotal role in this development.

SESSION 5

Social Accounting Matrix: Applications in Policy Formulation

By Prof. Dr. Zakariah Abdul Rashid

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University Putra Malaysia*

Social Accounting Matrix (SAM) is part of ongoing efforts of the Economic Planning Unit and plays an important role in the formulation of the 9th Malaysia Plan. It is a presentation of the System of National Accounts in matrix terms, incorporating whatever degree of detail is of special interest. Presented in a single matrix of an interaction between production, income, consumption, and capital accumulation, SAM is constructed, tailored towards the analysis of income distribution. The power

of SAM, as a tool of analysis comes from choosing the appropriate type of disaggregation of an economy to study the topic of interest.

SAM is a comparative Input-Output formulation and is shown in double entry accounting system where each macroeconomic account is represented by a column for outgoings and row for incomings, forming a square matrix with rows and columns, which bring together data on production and income distribution. The major components of basic SAM comprise of factors of production account, institution accounts, account for production activities and account for the rest of the world. SAM was based on the latest Input-Output tables for Malaysia and is a comprehensive data system, including both social and economic data.

The purpose and focus of study of SAM is poverty and income distribution. Therefore, basic assumptions of analysis regarding the household sectors can be made pertaining to household income and expenditure by region and ethnicity, production structure and distribution of household income by sectors. SAM provides the tool for analyzing the impact on income distribution, by ethnicity and region, whether, *ceteris paribus*, it would lead to divergence or convergence of income disparity. In achieving income parity and the method of analysis, SAM is constructed with the latest version (year 2000), utilizing data from various respectable and trustworthy sources, eventually becoming a useful information about the structure of economy.

SESSION 6

The Agricultural Sector: Policy Direction and Data Requirements

By Dr. Frederick Dee Baker

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Thailand*

The objective of this paper is to view the use of agricultural statistics for policy work. The agricultural sector is one of the dominant sectors contributing to the national income and export earnings, henceforth, to the development policy of a nation. The critical role of the availability of comprehensive, reliable, consistent and timely agricultural data to the development of the agricultural sector need not be over-emphasized. Major applications of agricultural statistics are seen in the policy formulation, planning, project formulation and management, monitoring and evaluation, production planning and market intelligence. It is important that credible data are available to inform and underpin the planning processes; compile national accounts; inform public policy analysis, debate and advice; monitor sector performance; monitor and evaluate the impact of policies and programmes; and, informed decision-making processes.

Agricultural data are required by a wide spectrum of stakeholders which include policy makers, decision-makers and analysts in Government to underpin major Government initiatives; private sectors (investors and traders) and the public at large to access opportunities, risks and prospects in the sectors; NGO's; academia for research and teaching purposes; the donor community to assess requirements for assistance and participation in development initiatives and the wider public for a variety of purposes. Agricultural statistics cover not only crops but on a broader scope encompasses food security, employment, sustainable development, economic well-being, access to technological information and many others which ultimately seeks to view the success of

policies implemented. Food insecurity and rural poverty are always associated with agriculture sector. Agricultural policy should be prioritized and geared towards poverty alleviation. In order to alleviate poverty, strategy should be taken to identify critical areas for rural development, the type of data used for policy work, adopting latest methodologies and to face and take on challenges. In the agricultural sector, importance should be given to areas such as structure and resources, prices and marketing information, external trade, agrarian reform, investment and finance, access to technological information, production and productivity.

Sources of agriculture statistics comprise of the Agriculture Census which provides detailed and comprehensive information, surveys which are carried out periodically or on ad hoc basis and the administrative data.

Identification of policy goals and priority areas can assist in the policy formulation of medium and long-term strategies that can address constraints during development and sequence of policy implementation in the agricultural sector. Agricultural statistics indicators are needed to illustrate to policy makers and the public the linkages and the trade-offs which will identify the cause of the change that affects economic, environment and social values. To evaluate the longer-term implication of current decisions and behaviours, monitoring the direction (i.e. negative or positive) and degree of change need to be analysed in policy making. Methodologies and analyses used should be able to work in line with the country's economic goals for further enhancement of agricultural development in order to bridge existing gaps in data collection and policy making. In view of this, a substantial change in approach should be taken to inform survey statisticians of the needs of the policy (methods, variables, design) before collecting data.

Statisticians as educators can provide support for policy assumptions, facilitate holistic comprehensive strategies, propose realistic policy scenarios, and help with financial planning and budget allocations. Awareness of the importance of agricultural statistics in policy work helps in bridging the gap between data and policy. Greater emphasis placed on the linkages between demand side (policy use) to the supply side (data collection) reflects the role of statisticians using statistics particularly in formulation, planning and implementation of agricultural policy. Future collaboration between policy makers and suppliers (survey statisticians) can eventually strengthen national systems of food and agricultural statistics. Statistics are only estimates of reality. Reliable statistics is a good estimate of reality. Effective implementation of policies depends on reliable statistics. Hence reliable statistics require sustained and sufficient resources.

SESSION 7

Gender Matters in Human Capital Development

By Assoc. Prof. Dr. Shanti Thambiah

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The paper attempts to analyze into gender matters in the aspects of men and women participation in education and workforce. Statistics on gender have raised many questions on disparity between men and women. It must not address the issue of numbers but also the issue of achievements. Malaysia has spent a large amount of investment in human capital development, namely education. Education instills skills and knowledge in a person that raised the person's productivity and employability. The trend is showing that gender disparity in education is taking place in Malaysia where boys are leaving schools at the upper and post secondary levels and entering into educational institutions that are more masculine in nature or they may drop out of schools and enter the labour market. However, figures on the enrolment of

students in government and government-assisted post secondary education i.e. Form 6 and Matriculation as of 30 June 2004, have shown otherwise, i.e. higher participation of females than males.

The disparity of achievement between the genders in public secondary school examination results at grade 9 (PMR) and grade 11 (SPM) is also a problem in human capital development. The academic performance of male students at the tertiary level is also declining. During the 1990s, women outnumbered men among recipients of post secondary degrees at every level except the doctoral level.

The educational attainment of women among those employed shows that about one fifth of all employed females have tertiary education and about a quarter of unemployed females have tertiary education. Malaysia is educating its female population but their access to employment in the labour market is low. In almost every socio-economic group, males are under-achieving compared to females in education. There is a need to address male educational issues and female employability issues to enhance the effectiveness of human capital development in Malaysia.

SESSION 8

Green GDP and Natural Resources Accounting: Perspective for Malaysia

By Assoc. Prof. Dr. Jamal Othman

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and Business, National University of Malaysia*

Sustainable development is most widely defined as the kind of development that meets the needs of the current generation without compromising the ability of future generation to meet their own needs. The philosophy of sustainable development, unlike decades ago, has propelled environmental issues to the centre stage of the national development agenda.

Malaysia has long been an active proponent of sustainable development. This is strongly manifested in the policy thrusts of the Eighth Malaysia Plan and the Outline Perspective Plan. The National Environment Policy has also explicitly recognized the importance of environmental variables in macro development planning.

One perspective of sustainable development suggests that national income is sustainable if and only if the stock of overall capital assets remains or rises over time. These encompass manufactured capital, human capital as well as environmental or natural capital.

Conceptually, sustainability measures of income should reflect depreciation, depletion, and degradation of environmental resources. To obtain a better measure of GDP as an indicator of welfare and hence sustainable income, the Green GDP is calculated. Green GDP is termed as Adjusted Net Domestic Product (ANDP). The ANDP measure would better reflect true national income, improve recognition of environmental services, account for both human-made and natural capital depreciation, exclude defensive environmental expenditures, and include damages resulting from economic activities.

The Green GDP accounts will demonstrate a clear path towards improved policy formulation in the quest of sustainable development in Malaysia. The need for Green GDP accounts has become increasingly evident in the light of current renewed national policy focus on the natural resource sector, particularly the agricultural sector.

In implementing the Green Accounting System for Malaysia, it will be more efficient to begin with the most important natural resource commodities. This implies the emphasis on valuation of environmental pollution whereas non-marketed environmental services may not be a primary concern in the short-run. The existing natural resource and environmental profiles can be expanded to include other related data such as depletion of natural resources and reserves. Monetary data can be derived from the physical data with additional information and appropriate measurement techniques. The relevant statistics would need to be compiled at the district, state, and aggregated to national level. Data sources may come from traditional line agencies and research institutions, as well as from specially designated studies.