

Programme and performance budgeting in Malaysia

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SUMMARY

This paper reviews the evolution of programme and performance budgeting (PPB) in Malaysia from its beginning in 1969, through the in-depth implementation phase which began in 1972, to the present day. It outlines the system in the Ministry of Health, where PPB has been extensively developed and comments on the systems established in other in-depth ministries, in several of which little appears to have been achieved. In 1981 all other agencies were asked to adopt PPB in their budget submissions. Compliance has been superficial. The paper explores the constraints to the further development of PPB. These range from difficulties of securing appropriate staff, lack of top-level commitment and information problems, to the inherent difficulties of programming and performance measurement. In seeking to evaluate the success of PPB the paper adopts two approaches. The first, involving a small questionnaire survey amongst those involved in PPB, reveals rather guarded opinions concerning its usefulness and progress. The second, which explores the use made of PPB, reveals little use by legislators, budget officers or line managers, and no link between PPB and the planning process. However the audit department expresses considerable interest in relation to performance auditing. In summary the achievements of PPB have been modest.

ORIGINS OF BUDGET REFORM

The purpose of this paper is to evaluate the success of the programme and performance budget (PPB) reform in Malaysia.¹ PPB is an improved system of government budgeting which developed in the USA in the 1950s and 1960s and was the subject of a United Nations manual in 1965. Many developing countries adopted the new system, and many writers have described its principles. Far fewer writers have attempted to evaluate it in practice. This paper traces the evolution of PPB in Malaysia, attempts to evaluate its contemporary usefulness to the various information-users for whom it is designed, and reviews constraints to its further development.

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¹The field work for this study was carried out in February/March 1984. It comprised 23 interviews with senior Malaysian civil servants and public officers with duties in the administrative and financial areas. Interviews were carried out in 10 administrative ministries/departments, and in INTAN (the Institute of Public Administration), the Auditor-General's Department, the Implementation and Coordination Unit of the Prime Minister's Department, the Accountant-General's Department, the Budget Division, and the Financial Management Systems Unit, the latter three being part of the Ministry of Finance. While this article is based partly on commissioned research work carried out by Dr Doh of the Faculty of Economics and Administration, University of Malaya, the views expressed are those of the author.

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Table 1.

Term	Definition	Example
Activity	A collection of homogeneous types of work in a programme, the purpose of which is to contribute to the accomplishment of the objective	Training of school teachers
Project	An activity of a capital nature	Building a school
Objective	The goal to which all the activities within a programme are directed: the end product or goal relates to the basic mission of the agency	Improving education

The system of financial management inherited at Independence stressed control, conformity with rules, and the legality of expenditure. Reflecting these preoccupations, the traditional government budget was expressed in the form of line itemization, listing the expenditures requiring to be funded but neglecting to clarify the aims behind the money figures or the achievements to be accomplished. As Doh (1981) has explained, the change of focus from custody to development, which occurred in the post-colonial era, highlighted the need for appropriate administrative reforms. Two influential reports prepared the way for budgetary reform: that of Montgomery and Esman (1966), two Ford Foundation consultants, which dealt generally with development administration; and that of Mudford (1967), a member of the Harvard Advisory Group, which dealt specifically with the system of government budgeting. The need was felt for an improved system of managing and controlling the allocation and utilization of resources. The result was Treasury Circular No. 5, 1968, which announced the introduction of programme and performance budgeting.² It was hoped that this system would provide more meaningful information for taxpayers, members of parliament and government officials, in particular introducing managerial tools which would help with the evaluation of performance; and that it would bring about a closer relationship between budgeting and planning. For the purpose of the reform the Supply Division of the Treasury was redesignated the Budget Division, and its staff was doubled; the UN Manual (1965) was adopted as a blueprint; and a former controller of the US General Services Administration was sponsored by the Ford Foundation to act as budget adviser. In addition an accounting adviser was sponsored by the Canadian Government, and was assisted by a team of about 25 US Peace Corps workers serving as 'systems accountants'.

The circular of 1968 identified two components of PPB: programme budgeting (programmes and their costs) and performance budgeting (measured performance

²At the outset the new system of government budgeting went under the initials PPBS. However these initials are more commonly used to describe the analytically more ambitious Planning Programming Budgeting System used in the USA in the 1960s. The Malaysian system, which follows the UN Manual (1965) quite closely, goes under the acronym PPB, for Programme and Performance Budgeting. Nevertheless manuals published by Ministry of Health still use the initials PPBS.

Table 2.

Year	Number of agencies converted
1969	8
1970	19
1971	39

and costs in relation to previously set targets). Early reform efforts were directed predominantly at the first. For this purpose the definitional guidelines adopted in successive Treasury circulars are shown in Table 1.

The first phase of the budget reform covered the years 1969 to 1972. It was characterized by the progressive horizontal extension of the system shown in Table 2. Thus for the financial year 1972 all federal agencies had adopted the new form of budget presentation. Programme/activity structures had been established for each agency, and classification and coding schemes had been developed for expenditures and revenues (Government of Malaysia, 1977b, p. 5).

The first phase of implementation has been characterized as being 'mechanical'. In a long list of the inadequacies of the system as it existed in the early 1970s, Doh (1972) gives: over-emphasis on technical aspects of the system; neglect of the human factor; failure to develop 'understanding, receptivity and capability in utilizing the data'; lack of commitment to the system on the part of top administrators; lack of adequate training and, consequently, lack of trained staff, aggravated by staff transfers; lack of support for the system in the Treasury itself; lack of substantive change between the new programme structure and the structure it replaced, etc.

IN-DEPTH IMPLEMENTATION

The Treasury was aware of these weaknesses, and following a thorough evaluation it decided to continue on an in-depth rather than a horizontal basis (Government of Malaysia, 1972). This meant that effort would now be concentrated on a small number of 'pilot' agencies, with the objective of creating operationally effective systems, before extending the new approach to other agencies. The new approach was supplemented by thorough-going administrative changes, designed to give support and continuity to the reform efforts. A high-level PPB steering committee was appointed to make policy decisions relating to implementation, approve all plans with government-wide implications, act as a medium for obtaining any necessary changes in legislation, provide assistance to the agencies selected for in-depth implementation, appoint subcommittees for special studies, and initiate action. The Financial Management Systems Unit (FMSU) was a new creation, within the Budget Division.³ It was to provide the secretariat and organizational focus for the new phase of the reform. Originally planned specifically to oversee the process of in-depth implementation of PPB, FMSU was subsequently expanded to

³Originally it was termed the PPBS Implementation Unit. Later, with an extension of its functions into financial management generally, it became known as FMSU and achieved its independence of the Budget Division.

four sections: in-depth implementation, Treasury projects, accounting projects, and automatic data processing. In addition to these arrangements, in each in-depth activity a steering committee was appointed and a PPB cell established. Thus impressive administrative support was given to the budget reform, details of which are available elsewhere (Government of Malaysia, 1977b; Doh, 1981).

This has been characterized as the 'dynamic' phase (Doh, 1981). The Ministry of Health was chosen to initiate the process. Subsequently, six other agencies followed suit (the Ministries of Finance, Education, Public Works, and Social Welfare; and the Departments of Posts, and Telecommunications). The developments at the Ministry of Health were the most ambitious. Its 1977 Implementation Manual, with over 450 pages, shows an eight-programme structure, subdivided into 30 activities. These in turn are subdivided into sub-activities. For each programme, activity and sub-activity an objective and a description of service is given. Within this structure is a system of responsibility and cost centres. At the responsibility centre level, which is the higher level, 36 centres are identified for the accumulation of costs for 1979. For the longer term, on full implementation of the system, 168 such centres are to be recognized. A coding manual shows an input coding block as shown in Table 3. A further imposed coding block of 13 digits shows the location of responsibility and cost centres and the programme/activity structure. Since 1977 several changes have occurred:

- (1) The Ministry's coding scheme was found to be incompatible with that of the Accountant-General. As a result the latter's 12-digit code has now been adopted.
- (2) In 1981 a second manual was issued, including a large number of suggested performance indicators, and in 1983 a supplementary volume was issued to explain the new coding block.
- (3) There are now nine programmes.
- (4) A pilot study has been in progress experimenting with a uniform costing system applicable to all hospitals.

In summary, in the Ministry of Health, development of a technically very elaborate system has been slow and subject to setbacks. A satisfactory programme/activity structure has been developed, as have many output indicators. However, on the technical level it is still proving elusive to link costs with outputs. No evidence is available of the system's usefulness for management. Given the technical nature of the documentation generated, the non-financial background of most health service administrators, lack of PPB training for them, and the fact that the implementation

Table 3.

Vote head	Department	Collator	Objects of expenditure
Three digits which follow the votes given in the annual estimates	Four digits assigned by Accountant-General	Four digits identifying responsibility and cost centres	Four digits governed by Treasury circular

unit is structurally isolated from line managers, it is unlikely that the new system has yet had much impact on internal decision-making.

The situation in the other in-depth agencies is summarized in Table 4. The brief details do little justice to the amount of skilled manpower applied in the first four instances, or to their impressive results in the form of working papers, coding schemes, and manuals. Nevertheless, what emerges is an uneven and incomplete pattern of implementation, with two of the seven in-depth agencies with no noticeable achievement to date, and all six for which information is available, experiencing very considerable difficulty in the performance measurement and unit costing area.

By 1985 this situation had changed marginally. For instance the Education cell now has three members of staff, and that of Social Welfare one. The information in Table 4 needs interpretation to be understood properly. First, the only agencies subject to in-depth implementation in the period 1972-1979 were the Ministries of Education, Finance, and Health, and the Department of Posts. Of these, only the Ministry of Health developed a workable PPB system. This was done initially with the help of expatriate staff. Later these left, but the staffing of the PPB cell remains quite high, down to the present day. In the Ministry of Finance PPB never really got off the ground, and in the Ministry of Education the early impetus petered out. Evidence from that ministry suggests that the reform is seriously incomplete. With the PPB cell unmanned until recently, and the steering committee suspended, its prospects look bleak. Managers have turned their attention to alternative techniques using different data systems, such as work improvement, productivity improvement

Table 4. Progress to date with introducing PPB in in-depth implementation agencies

Department/ Ministry	Staffing of PPB cell (1984)	Achievements
Health	6	(As discussed)
Public Works	4	Programme/activity structure established; accounting system aligned with this structure; but a costing system using performance indicators is still at the study stage
Posts	1	Programme/activity structure established; accounting system aligned with this structure responsibility and cost centres identified but difficulty experienced in relating performance indicators to costs
Education	Unmanned	(As for Posts)
Finance	Unmanned	Programme/activity structure established but little else
Social Welfare	Unmanned	(As for Finance)
Telecommunications	(No information)	(No information)

and quality control. Nevertheless some progress is being made in performance measurement.

Of the other agencies subject to in-depth implementation only the Ministry of Public Works has made substantial progress. In-depth implementation started in mid-1979. The approach is based on three inter-related components:

- (1) establishment of meaningful programme/activity structure;
- (2) alignment of the accounting and financial management systems with the above structure;
- (3) establishment of performance indicators under each programme, activity/project and their subdivisions.

The first component was completed in 1980 and applied to the 1981 budget. The second comprises four related projects:

- (a) identification of responsibility centres;
- (b) development of coding structure;
- (c) modification of accounting systems;
- (d) evolution of financial reporting systems.

To realize these projects three manuals have been prepared: PPBS Implementation Manual (which includes the preliminary identification of performance indicators: 57 at programme level and 226 at activity level); Financial Accounting Procedures Manual; and PPBS Accounting Codes Manual. It had been hoped that the PPBS Implementation Manual would apply to the 1984 Budget, but failure to complete computer programs in time prevented this. However the accounting and financial reporting system is expected to be computerized and operational during 1984. As an interim measure codes set out in the Accounting Codes Manual will be used. However, in 1986 the Government of Malaysia is set to adopt a Central Accounting System (the Irvine Report, Government of Malaysia, 1983). As the proposed system will have slightly different accounting codes from those established by this ministry, adaptation will be necessary before 1986. The third component, performance measurement, is still at the study stage. Discussion is continuing between the PPBS section and performance measurement co-ordinators appointed by managers of responsibility centres. The first stage, identification of performance indicators, is nearing completion. Further work needs to be done on the second, the design of a reporting format. In general the work on performance measurement and unit costs has encountered several conceptual and practical difficulties, particularly for projects whose outputs are not readily quantifiable (because, for instance, outputs are dissimilar or irregular) and in the allocation of shared costs. Moreover there is resistance on the part of managers to the PPB concept.

RECENT DEVELOPMENTS

A second horizontal phase of budget reform commenced with the publication of Treasury Circular No. 3 (1981). This required all remaining agencies to adopt PPB in their budget submissions. Thus the situation in 1984 was:

- (1) All budget submissions in PPB form.
- (2) The budget document subdivided by recipient agency and further subdivided by standard objects of expenditure, but not in PPB form.
- (3) A programme and performance book to which all agencies contribute, published as a separate volume for users such as members of parliament, audit department, members of the public, and other external parties. It presents operating and development expenditures together programme by programme.

Lack of a detailed, coherent plan for the second horizontal phase is in contrast to the care taken in 1972 to plan the in-depth phase. It was always part of the logic of in-depth implementation that trained staff would be transferred from in-depth implementation agencies, to spearhead innovation in other agencies. This has not occurred. It is suggested that the numbers of trained analysts were so small that it was impossible to do this without prejudicing the progress of in-depth implementation. This did not prevent several trained experts being transferred to promoted posts having nothing to do with PPB. Clearly then the staffing of PPB cells in ministries unfamiliar with PPB was a low priority. No additional staff was allocated and ministries had to make do with staff untrained in PPB, albeit high-grade staff, supported by advice from FMSU.

The results could be clearly seen from visits to two non in-depth agencies (Defence and Agriculture). In these agencies some superficial adaptation of terminology has occurred but no fundamental change has taken place. The Ministry of Defence has one programme (National Defence) divided into five activities: defence administration, armed services, logistics, training, and research and development. The Ministry of Agriculture programmes are based on existing departmental structure. In neither ministry is there an implementation unit, the changes having been accomplished by existing financial staff. Given pressure of time, other duties and lack of skills in PPB, it is hardly surprising that these changes go no further than adjustments in terminology and budget format.

One can view Treasury Circular No. 3 of 1981 as a desperate effort to achieve the appearance of a reform, the substance of which had proved elusive for the previous 12 years. Relevant to such a view are the facts that the main PPB Steering Committee had first lost status (members had appointed their deputies to attend) and then failed to meet over the period 1980-1983. Thus the reform movement was virtually rudderless. A number of informants noted a lack of momentum after 1981, attributing this variously to changes in government priorities and changes in top Treasury personnel. On the other hand, the circular was published after much thought. It was observed that agencies such as the Ministries of Health and Public Works had made considerable progress with PPB. There was also an awareness of difficulties of implementation. On balance it was thought that these two agencies could serve as examples for further progress in implementing PPB. The circular was therefore intended to create greater awareness of PPB which might extend to in-depth implementation.

Setbacks have certainly slowed the pace of reform, but a plan for PPB implementation exists. One part of this provides for the conversion of the budget document into programme/activity format in 1985. To date, line items have been used for expenditure as shown in Table 5. Thus the total budgeted costs of

Table 5.

General head	Code
Emoluments	1000
Services and supplies	2000
Acquisition of capital assets	3000
Grants and fixed charges	4000
All other expenditure	5000

individual programmes and activities were not shown in the budget document. For 1985 this presentation has been inverted with programmes and activities shown as the major subdivisions of the budget, and beneath them, line item detail shown according to general heads of expenditure. Another development is more conjectural: whether to abandon the separate annual publication, 'Programme and performance budget', and to assimilate its contents in the annual budget document. On the one hand this would integrate what are in effect two budget documents and would ensure their concurrent examination; on the other, it is difficult to see how all the information currently contained in the 'Programme and performance budget' could usefully be assimilated in the budget document, without making it top heavy for legislative purposes.

CONSTRAINTS

The budget reform is clearly incomplete. One is bound to seek reasons for this, given that it is now 17 years since Malaysia first adopted PPB and that considerable resources have gone into its development. The constraints operating earlier have been comprehensively reviewed (Doh, 1972). Depressingly, the factors listed are almost as true today as they were when they were written. This is despite recent, more optimistic, accounts of progress (Doh, 1981).⁴ Thus the following constraints continue to operate:

- (1) over-emphasis on the technical aspect and neglect of human variables; little attention to developing understanding, receptivity and capability in using the data;
- (2) inadequate support from top-level administrators;
- (3) lack of trained staff;
- (4) inadequate support in the Treasury itself, particularly by budget examiners who by and large have not used a PPB approach in their work;
- (5) staff transfers whereby those trained in PPB are subsequently promoted to unrelated jobs.

The head of one in-depth implementation unit lists the following outstanding problems:

⁴At the time of Doh's 1981 paper there was considerable high-level support for PPB, both in departments subject to in-depth implementation and from the Steering Committee.

- (1) *Lack of commitment* on the part of the Agency Steering Committee, budget officers, and managers.
- (2) *Lack of trained personnel* in in-depth units. Apart from a short general course, most have had to learn on the job. Frequent turnover of staff and consequent need to train new entrants. Sometimes staff are temporarily allocated to other assignments.
- (3) *Information generation and use*. Progress has been slowed down by difficulties in computerization of financial reporting. Slow progress has made management restless and less convinced of the system's usefulness in generating information for better decision taking.
- (4) *Lack of central agency support*. Failure of budget examiners in the Treasury to adopt a PPB approach. Lack of interaction between the in-depth units and the central agency, and lack of detailed guidelines on performance measurement.
- (5) *Technical difficulties* in relation to identifying output indicators and allocating overhead costs.

Such problems were noted by other informants: in particular, of the three heads of PPBS units interviewed, two experienced a sense of isolation both from the agency's line management and from FMSU. In addition several respondents commented on the failure of most budget examiners to adopt a PPB approach; difficulties in the costing and performance measurement field; and staffing problems.

We now consider in more detail two major constraints: the human factor and data handling. The first constraint is very familiar to developing countries: lack of trained staff. To illustrate, the Treasury corps of accountants from which the entire Malaysian public sector derives its accounting skills, currently numbers about 260. Inevitably essential skills are spread thinly, and this is a significant constraint on the adoption of new methods. A contributory problem has been competition for skilled staff from private sector employees offering higher rewards than the public sector. Partly for this reason the accounting corps lost between 40 and 50 of its members in 1983. The other source of financial skills for the Malaysian public sector is the Administrative and Diplomatic Corps of the Civil Service. This is an elite corps whose members start their government careers as generalists. Then at about Superscale G⁵ they are expected to specialize in one of three categories:

- (1) human resources and organizational management,
- (2) financial resources management,
- (3) economic resources management.

When they enter Superscale D they become generalists once more. Large numbers of posts in financial management are therefore filled by members of this cadre in mid-career. Within financial management, entrants may choose one of several specialisms: budget, taxation, supply and materials, investment and loans, international finance, and insurance. Thus PPB Implementation cells are staffed by those choosing budgeting as a specialism. Staff are posted by the Public Service

⁵This is a promotion point in the career structure of members of the Administrative and Diplomatic Corps.

Department (PSD), which is responsible for career development and for matching people with jobs. PSD has to contend with the problem of lack of trained staff generally. Paradoxically the career pattern of members of the Administrative and Diplomatic Corps, both mitigates and aggravates this problem. To start with, the posting of high-flyers to specialist areas mitigates the problem of lack of skilled staff. They become increasingly valuable as experts as their experience develops in the specialist areas to which they have been allocated. However at the very time when they are approaching maximum usefulness as specialists, they are drawn back into the higher levels of the generalist stream, to be replaced by more junior, less experienced, members of the same corps starting to serve their specialist phase. This system might work reasonably well if relevant staff were in plentiful supply. (Even then, there is a potential problem if some specialisms require more than a generalist background for their successful execution.) But when the relevant grades of staff are in short supply the system cannot work well. Those responsible for personnel have to abandon sensible policies concerning developing needed skills, ensuring that departments are adequately staffed with suitably experienced people, ensuring adequate periods of overlap when key staff are replaced, and planning the rational career development of civil servants. Instead they are forced into policies governed by expediency and characterized by inconsistency. Within the area of PPB the symptoms are apparent: staff skilled in PPB have been transferred to jobs for which their skills have no relevance; staff replacing them have either arrived with no relevant training or with training of a scanty nature. Even some staff who were sent abroad to receive training in PPB have returned to find they had been given unrelated postings. Such transfers represent a leakage of expertise. Looking at transfers from the opposite point of view, we could ask to what extent they have been used to promote and expand PPB? Here we know that there have been no staff transfers between FMSU and PPB implementation units. If there have been transfers between in-depth implementation units they have been uncommon. Moreover no attempt has been made to transfer skilled staff from in-depth implementation units to the other ministries required to adopt PPB following Treasury Circular No. 3 of 1981.

Summarizing, the human factor has been an important constraining factor in the development of PPB in Malaysia. Lack of relevant skills has held back the progress of reform, particularly as staff exercising such skills have been in very short supply in respect of alternative employments in the Malaysian public sector. In the resultant allocation process PPB has not always been able to attract or retain the staff which it needs, and opportunities have been lost for establishing broad-based specialist support. On the demand side, failure to persuade budget examiners and programme managers to adopt a PPB orientation has deprived the system of many of its most important users. Poorly resourced and largely ignored, since 1981, it is hardly surprising that PPB has been slow to develop.

The other major constraint relates to data handling. Doh has referred to the information requirements of PPB. He analysed the length of the budget estimates submitted by four agencies to the Treasury just before and after PPB adoption, showing that over a 5-year period the length of budget submissions had increased by a factor of five (Doh, 1980, p. 94). Detailed coding schemes have been devised to handle the data problem. They seek to ensure that a transaction is correctly identified at the outset, and therefore later aggregated with like items and entered in

the correct cell of the cost matrix. They also permit subsequent computerization. Coding schemes in the three in-depth agencies for which we have information have all had to be revised because of the incompatibilities with the coding scheme used by the Accountant-General.

Clearly a system which uses data from the government accounting system must itself be compatible with that system. But the link between PPB and the government accounting system is closer still. If the government accounting system fails to present figures of relevant cost in an accurate and timely manner, any system dependent upon it will share its defects. In 1977 the Public Accounts Committee Report contained a 'statement of concern'. This referred to various defects of government accounting and financial control, which had been the subject of repeated audit observations, and which had not been rectified. Specifically mentioned were errors and delays in the presentation of financial statements, incorrect cash balances, failure to make bank reconciliations, unvouched expenditure, payments without authority, defects in trust fund accounts, loans granted without authority, inadequacy of records, and defects in departmental accounts. The Public Accounts Committee therefore required a report from the Accountant-General and the Treasury, in a specified format to answer detailed questions in all these fields. That the defects referred to were serious and deep-rooted is implied in the Public Accounts Committee report, and is supported by subsequent developments in government accounting. A team of consultants from the Bureau of Management Consulting, Supply and Services, Government of Canada, started work in 1982. Their project concerns many aspects of financial management in Malaysian government. In particular the intention is to introduce a fully centralized accounting system for the Government of Malaysia, in collaboration with the Accountant-General's Department. Details are given in the Irvine Report (Government of Malaysia, 1983). One of the objectives is to produce the backbone of a financial information system for ministries. It is clearly implied that such a system did not exist beforehand; or, if it did, that it was seriously defective. This being the case, the prospects before these accounting reforms for the evolution of a version of PPB useful for decision-making purposes were not particularly bright.

INHERENT DIFFICULTIES

In addition there are inherent difficulties with the system itself. These are found in two major areas: programme structures and performance measurement. The importance of a sound programme structure for Malaysia was stressed at the outset by Navaratnam (1970). The root cause of the difficulty with programming is succinctly described by Doh (1972):

Programmes are objective or output-oriented and are rationally designed to produce outputs for the purpose of accomplishing certain national objectives. Organisations, however, are responsibility- or accountability-oriented in terms of funds appropriated by the legislature. Very often they are the product of historical response to political pressures and expedience, or even haphazard acts of creation.

Moreover, organizations exist in the real world and are departmentalized according to an accountability structure adopted by their creators or managers, whereas programmes and activities are conceptual artifacts derived from the literature on PPB. Inevitably there are fundamental differences between the two, and these pose difficulties.

A fundamental question is: should programmes transcend agencies? In other words, should programmes be based on government's policy objectives, and all agencies contributing to a particular objective be treated together as a single programme? This complex structure appears in the literature (Churchman and Schainblatt, 1972). It would require parts of agencies to be located in different programmes. Toye (1981) noted that in Malaysia programmes are coterminous with the responsibilities of one ministry. He regarded the continued identification of programmes with activities of single departments or ministries as a key limitation on programme budgeting in Malaysia (p. 139). Thus he favoured what we might call the Churchman and Schainblatt model. Two influential Malaysian reports reject this model. First, Badruddin (1981) regards it as a remote ideal, arguing instead in favour of programming at below ministry level 'because in our endeavour towards nation building it has been found necessary to isolate certain ministerial responsibilities for which development thrust must be accorded priority', and because it reduces organizational resistance to the reform. Second, the Irvine Report (Government of Malaysia, 1983, p. 11) contains the following passage:

A third approach is to define a program in such a way that it crosses the boundaries of different departments and different votes. While such an approach may be feasible in a republican, congressional system such as that of the U.S.A.—where it was said to have been used by McNamara while Secretary of Defense—it simply produces inconsistencies and unnecessary tensions in a Parliamentary system where Parliament approves all financial authorities and ministers are responsible to Parliament. The characteristic of a transaction which indicates its objective(s) is therefore, in the case of Malaysia, the related vote or an aggregation of votes which authorize expenditure on a program but which do not cross the boundaries of ministries or departments.

In summary, the practical difficulties of the Churchman and Schainblatt model are awesome, particularly in the realm of information requirements. Given that the USA, with its abundant technical expertise and other economic resources, has experimented with this model unsuccessfully, it is probably wise for developing countries to avoid it, and to devote their scarce resources to improving more fundamental aspects of their information systems.

With programmes/activities located below agency level there are three possible models:

- (1) that the existing organizational subdivisions of the agency be designated programmes/activities;
- (2) that a new programme/activity structure be devised which replaces the organizational structure (the new programmes and activities become the managerial building blocks of the organization);

- (3) that a new programme/activity structure be devised which coexists with organizational structure (thus there are two structures for the same agency existing side by side but used for different purposes).

Clearly the first of these represents no problem in terms of convenience, and in many cases in Malaysia and elsewhere this has been adopted. All this means is a change of terminology with no substantive change of approach. The second model is an exacting one because the new programme structure must be at least as good as the pre-existing organizational structure from a managerial and accountability point of view, besides being appropriate from the PPB viewpoint. The attendant difficulties are that organizational change usually threatens somebody, and therefore creates friction and opposition, and that PPB analysts are not necessarily the best people to reorganize the structure of government. Finally there is the possibility of having two structures—one organizational and the other programme-based—for a given agency. This model is potentially very confusing because the existing accountability arrangements do not coincide with programmes/activities. Thus information generated on the basis of programmes/activities cannot form the basis of a performance accountability system. This would seem to defeat the objectives of PPB.

The difficulties referred to above are familiar to analysts. The results of their work bear little relationship to theoretical principles. In practice the predominating consideration, in the designation of programmes and activities, has been existing organizational structure rather than theoretical precept, and in the resultant compromise administrative acceptability has always been the crucial factor. There was an early attempt to reorganize government functions along programme/activity lines in Malaysia but it was found to be politically unpopular. Attempts were made to integrate organizational subdivisions in some ministries and to replace them with suitably defined programme/activity structures. In others, such as the Ministry of Health, the organizational subdivisions largely coincided with the programme/activity structure and only a change of terminology was needed. Thus, although Malaysia has experimented with all three models discussed above, the first model is the one which has survived and is most common.

That said, it would be wrong to assume that programming has been entirely meaningless. It has led ministries to question and modify their structures. Besides, on some occasions it has helped focus attention on related items, which before the programming exercise would have been considered in isolation. For example Doh (1984) cites the Student Welfare and Teacher Training Programmes of the Ministry of Education. The first allows a number of items related to student welfare (scholarships, overseas students, hostels, food subsidy, and textbook assistance) to be considered concurrently. The second allows the budgets of all teacher training institutions to be considered together rather than separately. Toye (1981) refers to other advantages of the programming exercise: the identification and elimination of worthless output, for which he cites four cases: and the discovery that a ministry's internal structure is not aligned with its objectives and programmes, for which he cites one case (p. 138). On the other hand, he also refers to the limitations of programming referring to three cases of functional incoherence: programmes in the Malaysian budget which consist of activities with unrelated purposes and characteristics (p. 135).

The second inherent difficulty is performance measurement. The UN Manual (1965, p. 48) explained that the primary objectives in this field were 'to obtain physical measures of work effort and results and to establish pertinent relationships with the use of resources'. It counselled caution against complex measurement systems, at the same time listing nine criteria for deciding on the adequacy of work units. The Malaysian approach was to concentrate first on the identification of objectives, the development of a programme/activity structure, and the alignment of the accounting system with the new structure. With these components in place, attention turned to performance measurement. To illustrate, the Ministry of Health⁶ published its first PPB implementation manual in 1977, without mentioning performance measurement, but its revised manual of 1981 proposed very detailed performance measures. For the purpose of these measures, activities were subdivided into sub-activities and these further divided into operations. Output measures were located at the level of operations. For each operation one or more performance measures were identified, and for each measure three main output series were identified:

- (a) actual programme output,
- (b) target programme output,
- (c) effectiveness indicator (a/b).

There are several encouraging features of the Ministry of Health approach: output measurement is attempted at an appropriately low organizational level; measures are not proposed for operations which do not yield satisfactory bases for measurement, and the work on identifying measures has been done meticulously with line managers' help. Nevertheless, the remaining difficulties are formidable. The need to develop performance indicators has held back work on cost-finding, and it has not yet been possible to link output with relevant costs. Thus one of the important PPB aims still proves elusive. Given the resources applied to PPB in the Ministry of Health (in 1984 the PPB unit had a staff of six), the slow progress on this aspect is a sobering thought. Clearly those non-in-depth agencies, required to adopt PPB after Treasury Circular No. 3 of 1981, have no chance whatsoever of achieving this aspect of PPB, given that no extra resources have been made available to them.

Besides practical difficulties there are considerable conceptual problems in the performance measurement area. First there are wide areas of government in which performance measurement is meaningless, because of the nature of operations, e.g. general administration, diplomacy, justice, planning. Second, the use of a single indicator implies that units are more or less homogeneous, whereas differences in quality of service may be crucial to evaluating the service offered. Third, while efficiency is a necessary condition for optimum use of resources it is not a sufficient one. Efficiency implies gaining maximum output from a given input of resources. To base policy decisions on a single criterion of this sort is very misleading if the output indicator does not reveal the full economic benefits of the operation. A government might find itself funding activities which were nominally efficient but not well-directed at fulfilling its policy objectives. Moreover, if it was discovered that resource allocation followed such a criterion, staff efforts might be directed at

⁶The Ministry of Public Works has also made very considerable technical advances in performance measurement.

increasing output in ways which did not necessarily increase effectiveness. In summary, given the difficulties in this area it is hardly surprising that it has progressed so slowly in Malaysia and elsewhere.

EVALUATING PPB IN MALAYSIA

Ideally one would evaluate PPB using cost-benefit analysis. By comparing total costs with total benefits one could identify the extent of net benefit over cost, and use this as a criterion for judging the usefulness of PPB. Unfortunately the benefits of PPB, being mostly in the form of better information to different classes of information-user, would be very difficult to value (Dean, 1986). Instead we first review other writers' views of the achievements of PPB in Malaysia; we then report a small opinion survey amongst those involved in PPB in Malaysia; and finally attempt to evaluate the use made of PPB by various classes of information-user.

Toye and Doh, both writing in 1981, claim the following achievements for PPB in Malaysia:

Toye:

- (1) Budget examiners are better informed.
- (2) Agencies achieve a clearer view of their objectives.
- (3) Worthless output is identified.
- (4) As financial management improves in agencies, Treasury is prepared to relinquish detailed controls with advantages for Treasury, agencies, and financial management generally.

Doh:

- (1) Budget submissions are more informative, improving the budget dialogue.
- (2) A foundation of good management has been established.
- (3) Better integration between planning and budgeting has been achieved.
- (4) Associated reforms in accounting and financial management have been inspired.
- (5) Budget document is more informative.
- (6) Greater delegation of powers from Treasury to agencies has occurred, and a consequent improvement in its role as leader in management.

Reading through, one would suppose that the expectations expressed for PPB had largely been achieved. The more difficult questions remain-how extensive and how important are these achievements, and what are the current prospects for further progress?

To gain an insight into such questions, a short written questionnaire was distributed to the 23 interviewees for subsequent completion and return. Fourteen questionnaires were returned.

The questionnaire contained seven propositions concerning PPB in Malaysia, to which respondents were asked to tick appropriate boxes: strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. It also contained open-ended questions regarding aspects of PPB. Taking the closed-ended questions first, and assigning scores to the response categories as follows: strongly agree = 1, agree

= 2, neither agree nor disagree = 3 etc., we see that on average respondents took a cautious view of the success of PPB in Malaysia. It was possible to divide respondents between those in central agencies and those in administrative departments and ministries. In all cases the latter respondents took a more critical view of PPB than the former (see Table 7).

Given the level of non-response, and the non-scientific basis of the interview sample itself, such results should be treated with caution. Generally speaking, however, we notice some lack of confidence in PPB, particularly amongst those outside central agencies. We note, for instance, that they agree most with the propositions that the information generated by PPB is not used and that PPB has lost its impetus.

Table 6.

	Average score
'On the whole PPB has been a success'	2.9 (Nearly equivalent to 'neither agree nor disagree')
'PPB has conferred important benefits on the uses of the information generated'	2.5 (Half way between 'agree' and 'neither agree nor disagree')
'PPB is well adapted to the country's needs and resources'	2.0 (Equivalent to 'agree')

Table 7.

	Central agencies (n = 8)	Departments/ ministries (n = 6)
'PPB is well adapted to the country's needs and resources'	1.7	2.3
'PPB has conferred important benefits on the users of the information generated'	2.2	2.8
'Much of the information generated has been ignored by those whom one might have thought would have found it useful'	2.4	2.0
'On the whole PPB has been a success'	2.5	3.3
'There has been considerable commitment to PPB at the highest political level'	3.1	4.0
'PPB has lost its impetus'	2.9	2.0
'It is very likely that more initiatives will occur in the next year or so resulting in further development of PPB'	2.1	2.5

Answers to the open-ended questions throw some light on the reasons for such responses. Respondents were asked to complete the sentence 'In my country the major constraints standing in the way of further development of PPB are...'. Clearly respondents could give multiple answers. Eight separate respondents mentioned lack of staff resources, and five mentioned lack of management commitment. Other constraints mentioned were defective leadership from the centre (4), staff transfers (3), confusion about PPB itself (3), and lack of demonstrable advantage of the system (3). When asked about the most difficult aspects of PPB to achieve, 11 of the 14 respondents mentioned performance measurement or evaluation.

Another way of evaluating the achievements of PPB is to assess its level of utilization. The most visible aspect of PPB is on the supply side: the preparation of manuals and systems, and the presentation of the resultant data in management information reports, budget submissions and other documents. The critical aspect in evaluating PPB, however, is on the demand side: the extent to which the data supplied are utilized and the benefit resulting from use. We now review the users of PPB information.

The 1968 Circular anticipated that PPB would supply information to enable members of parliament to judge the effectiveness of management. Clearly the annual programme and performance budget does supply useful information to MPs and taxpayers, but whether it is much used by them, and whether it allows judgement as to the effectiveness of management, are very open questions. For the purpose of their consideration of the budget four documents are made available simultaneously to MPs: the Budget speech, the Federal budget, the Programme and performance budget, and the Economic report. The Lower House has 154 members. Sixteen days are allotted to the consideration of the Budget. As a result individual legislators have little time to ask questions or to go into detail. In practice the questions raised are largely constituency-based. Some opposition members have adopted a broad outlook, but generally speaking legislators 'have not taken much advantage of the availability of the PPB and financial-based data in the budget documents' (Doh, 1984). That there is some legislative use of PPB is illustrated by Public Accounts Committee resistance to a Treasury suggestion that the annual Programme and performance budget be reduced in size.

We would expect Budget Review Officers to be another important class of PPB user. The 1968 circular envisaged that the system would help government administrators to think and plan in terms of programme objectives and the most efficient and economical way of attaining them. It also spoke of helping to establish budget priorities between competing programmes. Budget review is undertaken by the Budget Division of Treasury. Having met and talked to a representative cross-section of Budget Review Officers it was clear that the PPB approach was not used generally in budget examinations.⁷ There are, of course, individual exceptions, but the failure of the Budget Division itself to reinforce the use of the system is a fundamental constraint.

Another aspect envisaged in the 1968 Circular was linking budgeting with longer-range planning. Doh (1981) claims that there is now better integration in this area.

⁷A special course for Budget Review officers was mounted in November 1984 in order to develop a PPB approach to budget examination. Further efforts to this end were envisaged in 1985.

The present study was hampered by lack of access to the Economic Planning Unit. A visit to the Implementation and Co-ordination Unit, however, revealed that management information systems have existed for some time to monitor the physical and financial progress of projects. In 1984 an improved integrated project monitoring system with the acronym SETIA was launched. A single database is kept on computer in the Prime Minister's Department. It covers project creation, yearly budget allocation, expenditure and progress of implementation. No link appears to exist between SETIA and PPB. Thus while links have been established for planning purposes, between formulation, monitoring and execution, PPB remains a thing apart. Doh (1984) has written:

Apart from financial information on development projects, the budget documents do not have other data which planners can use for the purpose of evaluating... For this purpose planners will have to depend on data generated outside the PPB cycle.

We therefore deduce that if there has been better integration between planning and budgeting, it is not as a consequence of PPB.

The only central agency apart from FMSU to express positive interest in the system has been the National Audit Office. An amendment to the Audit Act in 1978 required that the audit function be extended to the assessment of the results of expenditure and the evaluation of performance in relation to results. As a result a performance audit unit has been formed. Currently it has about 130 staff and has produced several reports. Demonstrating the relevance of PPB to the needs of audit, the Auditor-General's 1978 report points out that

Government's investment in terms of money and efforts in the new system (PPB) has been substantial, and it is therefore imperative that the necessary monitoring systems, performance measures and evaluation techniques be developed and enforced quickly in order that the benefits of the system be realised as expected.

Clearly an important link is perceived between performance audit and PPB. Ironically such a use was not envisaged in the 1968 Circular.

As far as internal use is concerned, there is little hard evidence of success or failure. In Malaysia PPB is conceived primarily as a management information system suitable for ministries. As it has been developed in only a few ministries, its achievements in this respect are bound to be limited. But even in those ministries with elaborate systems (Health, Public Works) it has been difficult to interest line managers in its outputs. In summary an inherent defect of PPB is the underlying assumption that once it has been installed its usefulness will be self-evident to users. In practice its usefulness has been apparent to only small numbers of users, despite the resources spent on training and orientation. Perhaps the blueprint offered by the UN Manual (1965) has been a more important influence on PPB than the actual needs of management for information relevant to the decisions they have to take in their working lives. The failure to develop an agency-based PPB to meet the information needs of internal management was one of the three problem areas identified by Doh in 1981. It remains a disappointing aspect of the Malaysian reform.

The hopes expressed for PPB in 1968 remain largely unrealized, or have been realized only in limited areas. This is the result of the small extent of in-depth implementation and the failure to achieve broad-based management support and integration with other management processes. This in turn reflects scarcity of skills; problems of data generation, storage and retrieval; and inherent difficulties in the areas of programming and performance measurement. The UN Manual (1965), despite many cautionary asides, gave an unrealistically favourable impression of ease of implementation, which expatriate advisers did little to dispel. In practice it was found that the system makes heavy and protracted demands on skilled manpower; that parts of the system remain remote from full implementation despite the application of significant resources over an extended period; and that even if the last building block were placed in position, the system would still require quite large maintenance expenditure because of the need to adapt to a changing environment. Consequently it is regarded by sceptics as a process which only promises benefits tomorrow. As a senior financial manager observed: 'the concept was basically untried and untested, and despite all the political will and commitment, was found to be both difficult to implement and slow in producing results'.

The Malaysian budgetary reform was based on several sound working assumptions: that a reform affecting the whole of central government would require adequate institutional support; that a simple type of budget innovation would be suited to local conditions; that the reform could not be sustained in isolation but would require parallel financial reforms; that PPB is most useful as a management tool for line agencies; that programmes are an inappropriate level for performance measurement. Despite a sound approach and adequate political commitment (for a time) it proved difficult to realize the full objectives of the budgetary reform. To date the main achievements appear to have been:

- (1) a budget document subdivided by programmes and activities;
- (2) a comprehensive expenditure and revenue classification and coding scheme based on five general objectives for expenditure and two for revenue;
- (3) several important exploratory attempts to set up financial management information systems in agencies;
- (4) annual data on agencies' objectives, programmes, activities and outputs in published form.

The current prospects of PPB are unclear. On the one hand no new implementation units have been set up in ministries, while some existing units have been deprived of staff and wound up. On this basis the prospects of success of the new horizontal phase of the reform are minimal. On the other hand FMSU is active (albeit with only a handful of staff specifically employed on the implementation of PPB). Another encouraging factor is the change of budget format accomplished in 1985. This indicates that the spirit of innovation is still alive. The other expected change—the assimilation of data from the annual publication (the programme and performance budget) with that of the estimates—is more difficult to interpret. It could be seen either as a retreat from PPB, because the annual publication on PPB would then cease, or alternatively as a tidying-up operation.

One thing is obvious: the budget reform took more resources and more time than had been envisaged either by its initiators in 1969 or by the architects of the second phase of the reform in 1972. Since 1972 its failure to produce significant achievements has led to the withdrawal of resources and high-level support. The failure of the PPB Steering Committee to meet between 1980 and 1983 created a watershed, and it is still difficult to see what lies on the other side. With continued support from FMSU and the National Audit Office it is unlikely that the cause of reform will be abandoned, but given lack of expert staff both in FMSU and the agencies, the reform effort is likely to be attenuated, and it would not be surprising if the broadly comprehensive approach gave way to more isolated reforms in environments favourable to change.

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