

Integrating Environment into National Development Planning Strategies

By, Dr. Rozali bin Mohamed Ali, Distinguished Fellow, Institute of Strategic and International Studies

It has been about 20 years since the Brundtland Report, which introduced the term “sustainability” into wide circulation. Brundtland’s definition of sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” is, of course, well known. It has proved to be an appealing and effective definition. It encapsulates many of the ideals and aspirations of a large number of constituents and stakeholders and, in that sense at least, it is satisfactory.

Yet in many ways the definition is insufficiently precise, and over the past years many have grappled with translating sustainability into practical, actionable terms. These include, for example, academics in a variety of fields, governments formulating policy, or communities looking for consensus on necessary trade-offs, right down to individuals seeking ethical lifestyles. Not surprisingly, there have been, and remain, differences and contentious areas.

Integrating sustainability into National Development Planning Strategies is therefore not a straightforward process. Among the principal problems are

- limited understanding of complex systems, particular biological and natural physical systems
- interactions between different kinds of systems eg. social, economic physical, and biological
- definition of scope
- defining suitable indices, and measuring them
- creating appropriate forums to develop consensus, and administrative systems to plan and implement strategies

In the context of planning and strategy at the national level, useful approaches can be found from some of the principles and techniques developed in resource economics.

Here we can find ways of approaching questions such as: Should a resource be developed and, if so, under what rules, at what rate, and at what cost? Are there different rules for renewable and non-renewable resources? How should they be applied?

It is also useful to regard the quality of environmental media, such as air and water, as resources. These are at least partly renewable (through fairly complex mechanisms) and are “used up” through pollution. A large body of recent and continuing work on environmental economics is based on these concepts.

Furthermore, as things always change, we must recognize change and the development dimension. The internal dynamics of sustainability are very complex. Sustainability cannot mean maintaining status quo in perpetuity; this would imply calling a halt to human development, for the use of at least some of the resource base is presumably to improve the social and economic well-being of societies.

Again, borrowing from resource economics, we can consider resources as natural capital which, through utilization, is converted through some process into other forms of capital, such as roads, schools, hospitals and other pieces of physical

infrastructure, into physical systems of production of economic goods and services, into social and institutional systems, and into human capabilities.

Thus we have the terms natural capital, human-made capital, institutional capital, and human capital, and the idea of substitutability between different forms of capital, further the idea that a large part of the development process consists of converting natural capital into human-made capital, which in turn increases the stock of human capital, and the rise of systems and institutions to manage societies. The whole chain of events constitutes what we call development, and the net result is an improvement of the well-being of the societies involved, and enhanced capabilities to face the challenges of the future.

There is a rule, called Hartwick's rule which, informally stated, holds that a resource utilization strategy is sustainable as long as the total stock of capital (natural, man-made, etc) does not diminish over time. This appears to be a reasonable way to assess the sustainability of development strategies.

In the early 1990s ISIS conducted a study to investigate this. Covering the period 1970-1990, this showed that during a period of active utilization of natural capital, there was an estimated net increase in total capital stock over the period. This indicates that the drawdown of natural capital appears to have been used productively in other areas of the economy, ie. for the needs of development. By this criterion, at least, it would appear our natural resource strategies have achieved a modicum of sustainability.

Hartwick's Rule was developed to assess the utilization of non-renewable resources, and there are contending views on its application in general to assess sustainability. For example, there are theoretical objections to applying neo-classical economics concepts to environmental services or biological resources. This has since given rise to the notions of weak and strong sustainability, and no doubt future work will analyse our strategies in greater detail.

Let me conclude with two points that may be useful for this conference:

First, it is unlikely that there was a deep and detailed study on capital stocks when policies were drawn up in the 1960s or earlier and important decisions were made to guide Malaysia's development and define the future. We are not aware of a strong body of academic work, nor analysis on things like Hartwick's Rule, in policy papers. Yet the results, as we have seen, can be considered favourable. The lesson here is that policies guided by simple basic rules of thumb and common sense can also be successful.

Second, Malaysia is rather unusual among market-economy countries in its reliance on central planning. We are used to the idea of Five-Year Plans, Outline Plans, Perspective Plans, etc, and there is little doubt that this approach has served national development very well indeed. While we may be tempted to continue to rely on such an approach, nevertheless we must prepare for the time when uncertainties and the sheer complexity of planning a large and complicated economy will reduce the effectiveness of such an approach.

If this happens, the process of policy formulation will become much more complex. There will be a much larger number of actors, and systems of gathering opinions, creating consensus and making decisions will have to be developed to respond. Much better information dissemination and more efficient markets will be required to guide the decisions of economic agents. Finally there could well be need for more

policy flexibility, in order to react positively to changes which become ever more rapid. From a national development perspective, the requirements for top-down policy will become more onerous, requiring at the same time a much lighter touch and a firm hand.