Institutional Responses to Environment and Natural Resources Management: A Case of the Sustainable Development Bill for Fiji[1]

Biman PRASAD

Senior Lecturer in Economics, The University of the South Pacific, Fiji Centre
e-mail: Chand_b@usp.ac.fj

Abstract

The proposed Sustainable Development Bill (SDB) is a comprehensive piece of legislation, which proposes to lay the foundation for appropriate policies for the management of the environment in Fiji. Many developing countries are having difficulty in developing appropriate institutions to protect and sustainably manage their environment. In many cases, legislation enacted by governments fails to deliver results for environmental quality because it is not implemented effectively. This paper briefly discusses the proposed legislation from the point of view of its shortcomings for effective implementation and its implications for environmental degradation due to climate change.

Key words: environment, Fiji, institutions, natural resources, Sustainable Development

1. Introduction

Fiji's draft Sustainable Development Act 1999 has been debated in Fiji's parliament since 1999 (Bill, No.34 of 1999). However, just when the Act was about to be accepted and approved by Fiji's Parliament, a military coup led to the overthrow of the democratically elected government. The Sustainable Development Bill may not be implemented in the short-term, but the Act represents an historic opportunity for Fiji to develop an appropriate set of legislation for management of environmental and natural resources. This paper analyses the Act in the context of its applicability in Fiji in the hope that it can be adopted sooner rather than later.

The Act is a comprehensive document and lays down the rules for the establishment of a National Sustainable Development Council. The Council will oversee the following: (1) requiring environmental impact assessments in respect of Development proposals, (2) providing for codes of environmental practice and (3) requiring a national resource management plan and (4) prohibiting pollution of the environment. The legislation compares well with the environmental laws normally adopted in the economically more advanced nations. However, the apprehension about these laws and regulations is how effectively it would be administered and if the resources are available and allocated. Additionally, there is no mention of climate change in the Bill. This paper will first analyse the major focus of the Act and what it intends to achieve from the point of view of the management and conservation of the environment. Second, it discusses the Bill in relation to the levels of political responses to the issue of climate change, and suggests improvements that could be included in the Bill to take into account the impact of climate change at the local and national level.

2. The Components of the Sustainable Development Act (SDA)

The act provides for the establishment of the National Council for Sustainable Development (NCSD). The role of the NCSD is to direct the formulation of the following national policies on sustainable development:

(a) Policy on Integrated Resource Management, which must include the following:
  (i) Policy on Sustainable Coastal Management;
  (ii) Policy on Sustainable Mineral Resource Development;
  (iii) Sustainable Forestry Development Policy;
  (iv) Sustainable Fisheries Development Policy;
  (v) National Biodiversity, Conservation and Protected Areas Policy;
  (vi) Policy on Sustainable Agricultural Development;
  (vii) Policy on Sustainable Resource Management on Native and State Lands;

(b) Policy on Poverty, Sustainable Human Settlements and Achieving a Sustainable Population;
(c) Policy on Integrated Waste Management;
(d) Policy on Sustainable Human and Environmental Health;
(e) Sustainable Tourism Policy;
(f) Policy on Energy Conservation; and
(g) Policy on Training, Education and Investment.

The Bill further states that the sustainable development policies that could be developed must:

- Not adversely impact the carrying capacity of the natural resources of the state; and
- Balance environmental, economic and social activities and interests, to provide the guiding principles for any subsequent legislative framework that is formulated for each ministry, department or statutory authority.

The Environmental Trust Fund is for the financing of

- Debts for nature swaps;
- Programmes to support biodiversity conservation and other programmes required under the environmental Practice, including the retention of technical experts, the investigation or analysis of any matter or the undertaking of any environmental monitoring or audit programme;
- Necessary expenses incurred in the formulation of the national state of the environment report, National Environment Strategy and the National Resource Management Plan;
- Environmental rehabilitation work; and
- Environmental awareness programmes.

Other features include the establishment of Environmental Management Units and Environmental Management Committees. These Units and Committees would not achieve much as the matter will be left in the hands of the department and the business owners. Particularly dangerous is the establishment of management committees by the employers. In fact, by any measure, these management committees would legitimize environmental actions which may run counter to good practice.

The preparation of a state of the environment report is a good requirement, as it will allow strategies to be put in place at least at five-year intervals. The Environmental Impact Assessment requirement is another comprehensive aspect of the bill, which is commendable. However, one of the biggest difficulties with this is the availability of human resources to carry out detailed and proper impact assessments. The process can become very political as well, given the powers granted to the Minister of Environment. For example, by Sections 37 (5) and 38 (e), the minister may add classes of proposals to, or delete classes of proposals from subsection (2) and (3) and decide any other class of development proposals exempted from the EIA process by the Minister by regulation. Regulations set in Section 39 give the Minister excessive powers over the EIA process.

The National Resource Management Plan is a good provision in the bill. However, there are already various units and departments in the government, which have some of the same responsibilities, for example the Mineral Resources Department, has its own resource management plan. The government would need to rationalise the operation of these different departments and units so that there is no overlap or duplication of the work that must be carried out.

3. Funding Implications of the New Bill

One of the most difficult and contentious issues regarding any environmental legislation is the availability of resources, in terms of both funding and human resources to ensure the implementation of the regulations. Often other economic imperatives and budgetary constraints do not allow governments to spend appropriate levels of money on management of the environment. Budgetary allocations are often at the expense of allocations for environmental management.

In the case of the Fiji's Sustainable Development Bill (SDB), an estimate of the funding implications would bring about more acceptability and responsibility to the public, who would ultimately pay for the costs that would be involved in implementation of the bill. These costs must be transparent and the community must see the costs and benefits as a social responsibility. The people must understand the idea of sustainability. Environmentalists have used the term sustainability to indicate a balance between economic growth and environmental conservation and management. While there are many definitions of sustainability, one that is most commonly used refers to "meeting the needs of the present generation without compromising the needs of future generations" (World Commission on Environment and Development; 1987). Economists define a sustainable development path as, "If and only if the stock of overall capital assets remains constant or rises over time" (Pearce and Warford, 1993). Implicit in these statements is the fact that future economic growth and prosperity must be critically dependent on the quality of air, water and land resources. If these endowments are destroyed indiscriminately for short-term economic gains then both the present and future generations will be worse off. Therefore, it is important for policy makers and planners to have some idea of the costs involved and how this could be factored into the figures for economic growth and human welfare. Environmental accounting is important in making appropriate estimates of the costs. There is now a view and awareness in the accounting profession of the need to report and evaluate environmental costs in corporate annual accounts.

In terms of environmental accounting, the overall capital assets in society include manufactured capital,

human capital and environmental capital. If we accept this definition, sustainable national income or sustainable net national product (NNP) is the amount that would be consumed without reducing the overall capital stock. This can be represented as follows:

$$NNP^* = GNP - D_M - D_N$$

Where *NNP* is the sustainable national income, D_M is the depreciation of manufactured capital and D_n is the depreciation of the environmental capital. According to Todaro (2000), an even better measure would be as follows:

$$NNP^* = GNP - D_M - D_N - R - A$$

Where R is the expenditure required restoring environmental capital (fisheries and forests) and *A* is the expenditure required to avert destruction of environmental capital (air pollution, water and soil degradation, etc). The sustainable development bill therefore should make a beginning and require corporate sectors to include environmental reporting in their annual accounts. This would promote awareness in the corporate sector and would be the first step in valuing resources at the local level.

In fact, it appears that there two kinds of forces which have doubts and reservations about the SDB. The first is the corporate sector and the second may be the resource owners and the institutions, which manage these resources on behalf of the owners. While there is now much more awareness about corporate social responsibility in developed countries, it is not the case in developing countries and certainly not in Fiji. Companies still believe in the traditional idea that their responsibility is profits and with profits they can provide jobs for employees, good returns for investors and prosperity for the community as a whole (Andriof & McIntosh, 2001). In the case of SDB, there are already concerns from the business sector. The second problem with respect to the implementation of the SDB is the nature of property rights in land and other natural resources. There is a possibility of conflict between the legislation, its implementation and the needs of the communal owners. In the case of Fiji, about 88% of the land is communally owned and is managed by the Native LAND Trust Board on behalf of the indigenous owners.[1] The SDB will therefore have to be carefully blended and harmonized with the traditional property rights regime if it is be successfully implemented.

4. Climate Change and the Implications of the SDB

It must be stated that the sustainable development bill or any other legislation or policies for the proper management of the environment is a political response by the government and other stakeholders in the whole game of managing the environment. It must also be pointed out that while abatement and control of greenhouse gas emissions is the most certain way of avoiding climate change, for many countries including the Pacific Islands this is not an option. Climate change will occur due to the actions of others but the countries themselves will have to ascertain the impact of climate change and put out policies for adaptation and adjustment to minimise the adverse impact of climate change on resources.

It is therefore important to study the Sustainable Development Bill of Fiji to see whether the bill has provisions to provide policies for adaptation and adjustment to possible impacts of climate change on the various sectors of the economy.

For Fiji and indeed for many of the Pacific Island Nations the following sectors are perhaps the most important and it may be appropriate to concentrate on these areas. They are as follows:

- Agriculture:

We have to accept the fact that it will become necessary to adjust and adapt agricultural policies to climate change. Additionally, to what extent countries can do this successfully will determine their ability to produce food and maintain their comparative advantage in agriculture. While one might argue that agriculture will adapt and adjust to economic and technological conditions in any case, that in relation to climate change would be different. Agricultural responses can be either short-term or long-term. In the short term farmers would be able to respond to the existing technologies and strategies, but in the long term substantial investment would have to be made to adjust and adapt to climate changes. These responses will only be possible if both the government and non-government institutions actively promote the development of new technology and practices for farming. These institutions will play a critical role in the allocation of resources and the perception or attitude towards climate change. More often than not agricultural policies in developing countries address the immediate needs of the country and because problems of climate change are highly uncertain and long-term, climate change is not taken seriously. It is not surprising therefore; that the Sustainable Development Bill of Fiji does not include any detailed guidelines on actual agricultural policies. Agriculture in any case causes some damage to the environment, but at the farm level, responses such as the use of irrigation are seen as a mitigating factor to climate change impact.

According to Rosenberg, Crosson, Easterling, Frederick and Sedjo (1989), there are two examples of policy options that are adaptive to climate change:

- The fostering of new technologies and management practices and
- Strengthening institutional mechanisms for flexible movement of land and other resources into or out of agriculture in response to climate change.

- Forests:

Climate change can affect forests, and forests can influence the climate. Forests have an important role in Pacific Island societies:

- To protect and conserve the environment (including soil, water and biodiversity resources);
- To provide cash income to landowners, timber processors and governments;
- To produce wood and other forest products;
- To provide cultural, recreational and tourism opportunities; and
- to sequester carbon. (This role is gaining prominence as the world's forests are being depleted and concerns are growing regarding the potential impact of climate change.) (World Bank, 1996; p.74)

Global warming affects temperature and precipitation, and this can make forests more susceptible to infestation, diseases and eventually fire. Forests can also influence climate, and it is a well-established fact that tropical rainforests are disappearing at a very fast rate throughout the Pacific. Large areas of forests are being lost due to increasing agricultural activities, unsustainable timber harvesting and logging (World Bank; 1996). Because of this concern, a common agreement has been reached among Australia, Fiji, New Zealand, Papua New Guinea, the Solomon Islands and Vanuatu to:

- Work towards a common code of conduct governing logging of indigenous forests, to which companies operating in their countries will have to adhere; and
- Urgently increase monitoring of logging and exports of timber.

The Sustainable Development Bill from the point of view of climate change does not specifically address forestry issues from a policy point of view. For example, the bill does not have specific provisions for reforestation to postpone the buildup of CO^2. Another important aspect is the wildfire policy; questions should be raised as to what provisions are in the Bill to address this menace.

- Water:

The impacts of climate change or global warming on water resources are in many ways uncertain. Climate change models may provide general indications but this again may be highly uncertain. The only certainty is that greenhouse warming will add to water supply uncertainties. However, in certain cases, the impact can be easily seen. For example, water supplies in the coastal regions of the pacific islands are a concern; sea level rises could accelerate salt-water intrusion and may threaten drinking water. In the case of Fiji hydrological droughts cause much suffering and pain to the people and the economic costs to the country have been very high (Terry and Raj, 1998)

There are ways in which countries could adapt to hydrologic change and uncertainty. These are infrastructure development such as dam, canals, and reservoirs to meet the increasing demand; inter-basin transfers such as those in the USA and management through new research and technology.

The policy recommendations in the midst of uncertainty are difficult, for example building new infrastructure in anticipation of climate change is not appropriate. However, new projects that are being built anyway could take into account the possible impacts of climate change. The high cost of infrastructure requires greater emphasis on management practices so that water is managed efficiently from the point of view of both costs and its availability in the future. For example, pricing of water and its usage would provide better incentives for conservation and efficient management of water. The SDB bill does not include specific rules on the management of this important resource. It leaves the development of policies to the National Council. The Bill could have provided for appropriate institutional development to facilitate the allocation of water supplies.

- Sea Level Rises and the Management of Coastal Zones:

Estimates of sea level rises due to green house gas emissions vary widely but in the last century the sea level has risen by about 12 cm– a rate of over 1 mm per year. The impact of sea level rises can not be underestimated, because they not only threaten coastal land and water resources but those inland as well and many other impacts, as is well known in other parts of the world. On a global scale, about one Billion people living on coasts are threatened due to sea level rises. The value of this coastal land can be very expensive, for example, in Bangladesh the coastal land threatened by inundation is about $3,000 per hectare compared to $30,000 per hectare in the Netherlands.

Abandonment

The first obvious response would be to move out of lands threatened by sea level rises. This may be the only solution in the ultimate end, as small island nations may not have a lot of choice

Protective structures

The second response would be to provide protective structures, but this again may be too costly for many of our island nations. In some cases, this has already been done and may be the only appropriate response for coastal land protection. It is already being done in other more developed countries, for example, the Netherlands protects its cities and agricultural land through an extensive system of dikes (Rosenberg, Crosson, Easterling, Frederick and Sedjo; 1989).

However, for the purposes of many of our island nations mangrove forests are very important and could act as a natural response to land degradation due to

sea level rises. We know, however, that mangrove forests are being removed at an accelerated rate due to land reclamation, fishpond construction, and mining and waste disposal. Fiji already has a mangrove management plan, which requires zoning of mangrove areas into traditional use, reserve, industrial use and tourism development. For purposes of climate change adaptation and response, it would be appropriate to see how this could be integrated into the SDB.

As a policy response, national governments must undertake a detailed survey of their coastal resources and the human activities that are occurring there. The SDB does not specifically address these responses to sea level rises due to climate change. In fact, nowhere in the Bill are the words "sea level rise" mentioned.

5. Levels of Political Response by the National Government

The SDB of Fiji is a political response for the proper conservation and management of the environment. In the traditional sense of the issues affecting the environment, national legislation has supported by international agreements and in many cases was harmonized with the existing national legislation. The Bill in its present form achieves the objective to a large extent. However, when it comes to climate change, different dynamics are involved; that is, many aspects of climate change can only be asertained at the international level. However, this does not rule out for national and even sub-national policy initiatives for helping shape international policies on climate change.

According to Moltke and Ramakrishna (1989: 111)

- National governments remain the determiners at international levels; there is no "international legislator" separate from the will of sovereign states;
- Implementation of international policy remains the domain of national authorities; hence international measures which do not lend themselves to implementation in a wide range of national political, economic and social settings stand little chance of success;
- To be successful, policy measures on climate change will require changes in the daily lives of many people and institutions. For most of these, international policies will tend to be remote so that the support and participation of individuals and groups down to the local level will be required to achieve compliance.

Any legislation or policy for the environment must be targeted to achieve the desired outcomes. Because policies do not influence the environment directly, they prone to the use of surrogates, that is, policy is focused towards influencing key parameters in the drive to change environment policy.

6. Concluding Comments

The SDB of Fiji is a leap forward in bringing about awareness in the country of the need to manage our natural resources in an efficient and sustainable manner. While critics would suggest that the Bill does not go far enough to ensure that the environment is protected, the introduction of the Bill must be seen in a positive light. This is a first attempt to put legislation in an integrated manner to achieve a broad range of policy options for the management and conservation of the environment.

However, it must be pointed out that the ultimate goal of any environmental legislation is not its adoption, nor its ratification, but the actual implementation and practice of the legislation. Fiji's SDB has the potential of merely remaining a piece of legislation if proper costing and the allocation of resources are not done properly. The government must attempt to provide an honest and transparent assessment of the cost of the implementation of the Bill and establish the opportunity costs of implementing the Bill.

The glaring absence of provisions for or even mention in the Bill of adaptation and response to climate change is worrying. The impact of climate change on agriculture, water, coastal zones and other natural resources cannot be underestimated. While Fiji and other Pacific Islands nations may not be contributors to greenhouse warming, they cannot escape the impacts of global warming on the lives of their people. It is therefore imperative, that appropriate policy responses for adaptation to climate change be included in any policy directions for the environment. The SDB of Fiji does not make any mention of provisions for anticipated sea level rise, temperature change, and change in the level of precipitation and its impact on agriculture. The Bill should have a section on climate change, and appropriate legislation has to point out policy options for the adaptation to climate change. Only then can the Bill be called a Sustainable Development Bill.

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[1] An earlier version of this paper was presented at the Pacific Islands Conference on Climate Change, Climate Variability and Sea Level Rise, National Auditorium, Rarotonga, Cook Islands, 3-7 April 2000.

[2] The Native Lands Trust Board (NLTB) was formed in 1940 under the British Colonial rule to manage indigenous Fijian land and other natural resources. It remains the key institution in the management and development of the land.

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