

REGIONAL COOPERATION IN PREVENTION AND MITIGATION

INTRODUCTION

The subject of disaster management has attracted greater attention in recent times, a not surprising development, given the enormous losses in terms of human life and property in the wake of natural disasters, which, due to modern technology, have been given world wide publicity.

Indications are, however, that while the occurrence of natural phenomena which constitute hazards still remain beyond our control, there is no doubt that with appropriate attention to planning and other techniques, the havoc and destruction wrought by these occurrences on life and property can be ameliorated.

The ability to reduce the impact of disasters on any community must depend heavily on the promulgation of the appropriate awareness throughout the population, using to the fullest possible extent, whatever vehicles exist by virtue of those interests, groupings and organizations which are community based and which have over the years, become part of the community culture.

DEFINITIONAL ASPECTS

This paper will attempt to utilize the classic definitions of prevention and mitigation as they tend to be used in the terminology of modern disaster management.

PREVENTION focusses on the hazard which causes a disaster, and tries to eliminate, or to drastically reduce its effects. The construction of a dam to prevent flooding, is an example of prevention. This approach, while necessary, has proven to be expensive and often has produced results which are less than expected.

MITIGATION focusses on measures that can be taken to minimize the destruction and disruption effects of a hazard and thus reduce the magnitude of a disaster. This has proven generally to be the best and most cost-effective method of dealing with disasters. Most mitigation measures can be integrated with normal development activities at little additional cost, e.g. the design and strengthening of buildings to withstand credible hazards, the enforcement of land use controls which restrict development in high-risk areas, diversification of economies so as to reduce dependency on a single disaster prone sector etc.

One of the problems which face the advocates of active mitigation and preventive measures, is the infrequency of such events in the individual territories of the Caribbean, despite the relative frequency of hazardous occurrences over the region as a whole. This means that in individual island populations, substantial portions of the population reach well into adulthood without ever experiencing, at first hand, the devastation which can follow in the wake of a catastrophe.

In the current circumstances of economic difficulty, perhaps some thought needs to be given to the economic virtue of regular and inherent mitigation procedures as against the process of assuaging the economic disaster that follows in the wake of serious events. When the psycho-social costs are added to the cost of replacing physical infrastructure, the considerable down-time of productive sectors, particularly when entire economies are monolithic in nature, or at most depend on two or three fragile sectors, the contrast in terms of cost must be staggering.

THE PRESENT SITUATION

There is no doubt that the activities of the PCDPPP over the period of its existence achieved much in the way of heightening the awareness of the region to the potential hazards which exist, and also in advancing in many ways the basic capabilities of concerned officials in the fields of preparedness and prevention.

The general consensus after its ten years of operation, however, is that while considerable progress has been achieved, the necessary linkages between preparedness and development have not been cemented, and that the concept of mitigation measures being incorporated into the ordinary procedures of planning for development, requires a good deal more effort before it becomes the accepted norm.

On the positive side, Disaster Preparedness focal points have been established in the majority of the countries of the region and all the CARICOM countries and the British Virgin Islands are signatories to the Agreement Establishing the Caribbean Disaster Emergency Response Agency (CDERA) which organization was established in September of 1991.

The principal expectations of the Agency, is that it will have two principal capabilities. The mobilization and deployment of, those resources which will be required to provide relief, and early restoration measures, based on early and qualified assessment, in the aftermath of any disastrous occurrence.

What must not be overlooked, however, is that the principal resources available to CDERA in its efforts to provide this type of response, are the resources of the individual participating States. In order to be fully functional therefore, it is imperative that the resources available be efficiently catalogued on an ongoing and properly maintained basis.

The undertaking of this exercise by all participating countries, will be an effective advance, not only in enhancing the preparedness of the individual States, but also in the development of a sounder basis for general decision making at both the national and regional levels.

Additionally, the efforts of the PCDDPP have established the availability of significant resources in the region, what is still not apparent however, is the cohesion which is so necessary to ensure their optimal deployment and utilization should a disaster require their skills.

Some measure of progress in this direction however, is evident. A number of the national focal points have Emergency Information Systems in place, and there are proposals to extend this capability and to upgrade the existing systems in the imminent future.

What is envisaged is the compilation of a geographical information system, regional in scope, and comprising information, not only on the vulnerabilities of each participating state, but also cataloging the resources available in each, and their availability to assist in any relief effort which may be mounted.

This information is not only intended to serve local requirements, but to be available through the auspices of CDERA, to come to the urgent assistance of any stricken state.

It is proposed that these information systems contain, not only the material resources available, but also information on all the human transportation, and other specified skills which may be required to deal with any type of foreseeable disaster.

The communications capability of the region has also increased as a result of the efforts of the PCDPPP, with the aftermath of Hugo and Gilbert lending added impetus to efforts in this direction. For example, from a situation in which Cable and Wireless were in the wake of Hugo, only able to apply two portable earth stations in the region, they now have similar equipment available in each of the islands which they serve.

In all of this, the joint efforts of the implementing agencies involved in the PCDPPP have played a significant role, together with the OAS and some parts of the private sector.

In itself, the initiative of Caribbean Governments in the formation of CDERA is a sign of the greater consciousness which exists in the region, and which, if supported, can lead to major developments in the whole area of disaster management.

Past efforts at disaster management were not confined to the involvement and sensitization of the public sector, but also showed the way forward in terms of the involvement of the private sector in the collaborative efforts of the utility companies across the region, and the attention which organizations of the nature of CARIPEDA are focussing on the activity of disaster management.

A considerable amount has also been achieved in the health sector, with the assistance of PAHO. Health coordinators are in place in all of the countries and hospital emergency plans have been drawn up in most. Health sector plans for the district/community have been developed in several countries. Education/Training of health personnel in disaster management skills has been give high priority.

THE WAY FORWARD

The above information is by way of illustrating the considerable work on disaster management which has been achieved during the last 10 years, and is not by any means intended to be exhaustive.

What it does indicate is the existence of the kind of platform from which a determined effort can be launched to ensure that, within a reasonable time frame, and with the right kind of assistance provided on a timely and appropriate basis, the region can be capable of developing a self-sustaining disaster management network.

This does not, however, mean that the need for assistance will be permanently phased out. The nature, geography and development level of the region is such that assistance of one kind or another will still be required in terms of updated technology etc; but at least the use of such assistance can be maximized and its delivery more equitably based.

(1) LEGISLATION

A detailed study of the current status of emergency legislation throughout the region needs to be undertaken and recommendations for modernization submitted to Governments for their urgent consideration. This is necessary to enable all credible disasters in this particularly disaster prone region to be catered for by the assignment of responsibilities in a logical manner and to assure the allocation of adequate resources to sustain the new legal basis. only if these steps are taken can workable disaster plans to cover all foreseeable eventualities be formulated and tested to working efficiency.

The existence of the Law Faculty of the University of the West Indies together with prior experience of regional projects in the field, appear to make this an area which lends itself to regional cooperation and mutual assistance.

(ii) TRAINING

A fundamental prerequisite for the strengthening and further development of disaster management capability in the region, is the reinforcement of the training function, and its application to every aspect of education in the region. In particular, the relevant training needs to be incorporated into the curricula of all levels of the education of future professional and technical personnel, while the training institutions themselves need to become the repository and distribution points for the results of research, and the documentation and accumulation of relevant experience in the region.

In this latter activity, attention must be paid to the documentation of a considerable amount of 'local knowledge' which resides in the communities of the region, particularly at the rural level. This can be of considerable assistance in the determination of the vulnerability of certain areas to certain types of disasters.

Given the capability of the entire community to participate in the processes of mitigation and prevention, it seems that the necessary awareness must be instilled throughout the education process. A major regional effort is needed to devise and develop the necessary curricula intervention which enables the individual, no matter what his field of endeavor, to consistently apply the precepts of mitigation and prevention as a natural adjunct to the normal processes of planning and decision making.

(iii) THE MEDIA

Work has already been undertaken in the area of involving the media, and certain initiatives have been developed among media practitioners by the involvement of the Caribbean Broadcasting Union. Considerably more effort needs to be channelled in this direction, perhaps commencing with the involvement of the Caribbean Institute of Mass Communications (CARIMAC) of the University of the West Indies, again aimed at the incorporation of the relevant skills and attitudes as part of the development of the region's budding journalists, no matter what their various specializations.

However, the role of the regional media cannot be understated in the urgent quest for general public awareness. Work needs to be undertaken at both national and regional levels, on the production of programmes which identify and target the several audiences which comprise the population.

Another tried and tested function of the electronic media, is the use of its capacity to provide alternative means of ensuring that crucial information reaches to target groups which may be deprived of normal communication services.

(iv) INVOLVEMENT OF THE PRIVATE SECTOR

To an ever-increasing extent, substantial proportions of the resources of the region are being held by the private commercial sector. Their responsibility for and interests in, the mitigation of the effects of disasters are also increasing in proportion, and efforts to include the philosophy of disaster mitigation into their own planning processes need to continue.

A leading role in this direction needs to be played by the engineering/construction sector and considerable work has been done in this field, notably in the development of the Caribbean Uniform Building Code (CUBIC). The publication of the Code, however, is only the beginning and more work is required if it is to be adapted to local conditions and to become the acknowledged basis for construction activities in the region.

One of the most important mechanisms for facilitating the recovery process in the aftermath of a disaster is the insurance industry and its role should not be limited thereto. It can be a tremendous influence on the whole prevention and mitigation field, by insisting on standards of construction and other preventive measures as a prerequisite for coverage, and by offering incentives by way of reduced premiums for retrofitting and other similar measures.

(v) TOURISM

The majority of the countries of the region depend heavily on agriculture and tourism to provide the lion's share of their foreign exchange earnings. Both of these sectors are by their very nature prone to suffer from the effects of natural disaster.

In tourism, there has been some degree of planning in the hotel sector for the action to be taken in the threat of a disaster and in the aftermath of disasters. However, active measures need to be taken which will encourage the owners of the tourism plant to pursue such actions as retrofitting, sea-defense work, and the avoidance of vulnerable areas for the construction of new facilities.

(vi) AGRICULTURE

In agriculture, there is considerable scope for the further development of cooperation between the productive sector itself and other parts of the private sector as well as the public sector.

Considerable evidence exists to show that the uncontrolled development of the agricultural sector has contributed to the damage caused by hazardous events. In this sector, as in the housing and construction sector, positive action can be encouraged by the insurance sector, for example by not extending coverage to crops which are planted in vulnerable locations, and by rewarding the observance of good farming practice.

The same methods can also be used by the financial sector, in refusing the extension of credit and other facilities to those who do not incorporate good mitigation practices.

The interest of the public sector can also be greatly served by increased collaboration with the insurance sector, particularly since in the smaller economies, a substantial proportion of building and other capital stock in the public domain remains uninsured, and innovative and ingenious methods of providing some method of coverage need to be devised in the national interest.

A comprehensive approach to risk mapping and vulnerability analysis would be of considerable assistance to the insurance sector, in the correlation of its rates with likely risks.

(vii) **RESEARCH**

In keeping with the need for the development of sound "across the board" mitigation measures, there needs to be a correspondent programme of research, which would, in addition to the actual conduct of scientific and operational research, undertake the identification of key research areas in which potential advances could lead to strengthening the effectiveness of hazard mitigation.

(viii) NGO'S

Quite apart from such well recognized NGO's such as the Red Cross and St. John's Ambulance Brigade, which have established a well defined role in disaster management, there is a large number of community based organizations, many of which perform a developmental function. Any serious effort at developing national capability to prepare for, and to deal with the aftermath of disastrous events needs to seek the maximum possible involvement of these entities.

In addition, there is the regional perspective which a number of such organizations have begun to develop through the interaction of farmers' organizations, credit unions, trade unions, the experience of CADEC and the existence of organizations such as CARIPEDA.

There is a need to provide this sector not only with any necessary technical assistance, but also to actively encourage its fullest participation at all levels of policy and decision making in all aspects of disaster management.

It is probable too, that such organizations may be able to make a substantial contribution towards enhancing the capability of communities to cope with the many and varied social disruptions which are the consequences of certain categories of disaster.

GENERAL

The decision of the CARICOM Heads of Government to establish CDERA and to concentrate, as an initial step, the efforts of that organization on those aspects of preparedness which subtend a response capability, should not be viewed, as a measure which ignores the other and equally important features of the disaster management effort.

Rather, it should be viewed as a commitment, given the current parlous state of the major economies of the region, to allocate scarce counterpart resources in such a manner as to fully utilize those which are available, and to provide the basis to attract external assistance for the larger effort of enhancing regional capability to deal with all aspects of disaster management.

The allocation of scarce resources to the maintenance of a response capability, becomes a more and more difficult political issue, particularly in fortunate times when the threat of disaster appears to have receded.

There seems to be strong evidence of an enhanced awareness of the danger posed to the region by the apparently increasing threat of hazards. The very developmental efforts however, which seek to enhance the quality of life of the residents of the region, will, without a more structural approach to the whole business of disaster prevention and mitigation contribute to the destruction of the infrastructure which seeks to contribute to development.

While the response, relief and rehabilitation, aspects have been partially addressed through the formation of CDERA, there remains the urgent need for attention to the creation of a body charged with the continuous monitoring, development, and implementation of a cohesive region wide prevention and mitigation policy and programme. This should be based on the principle of developing mitigation measures based on research, the transference of the knowledge based on the application of that research, and the adoption, at each national level of specific programmes which can demonstrate the effectiveness of such properly conceived mitigation measures.

If the momentum is to be continued, therefore, efforts to create an on-going and self-sustaining capability must continue apace. Efforts therefore need to be concentrated on the creation of a focal point in the region, which will, inter alia:-

- (a) Serve as a repository for data and information in the region;
- (b) Ensure the availability of trained and capable personnel to lead disaster management efforts;
- (c) Maintain the effectiveness of the component parts of a regional response mechanism; and
- (d) Provide the essential coordination and cohesion in ensuring that regional skills are utilized to maximum effort in combination with any required external assistance.

If the experience and networking which the PCDPPP has served to nurture in the region is not to be lost by attrition, this objective would appear not only to be an urgent priority, but one that deserves serious attention from the international donor community, and one which falls completely within the objectives of the IDNDR.