



General Assembly

Distr.  
GENERAL

A/C.2/43/7  
27 October 1988

ORIGINAL: ENGLISH

Forty-third session  
Agenda item 82

DEVELOPMENT AND INTERNATIONAL ECONOMIC CO-OPERATION

Letter dated 25 October 1988 from the Chargé d'affaires a.i.  
of Trinidad and Tobago to the United Nations addressed to  
the Secretary-General

I have the honour to transmit herewith a copy of the document entitled "Programme of action for small island developing countries", which was endorsed by the CARICOM Ministers for Foreign Affairs at a meeting held in New York on 10 October 1988, with the request that it be circulated among Member States as an official document of the General Assembly under agenda item 82.

(Signed) Hamid MOHAMMED  
Chargé d'affaires a.i.

ANNEX

PROGRAMME OF ACTION FOR SMALL ISLAND  
DEVELOPING COUNTRIES

THE PROBLEMS OF ISLAND DEVELOPING COUNTRIES

As early as 1976 the General Assembly of the United Nations issued a call for attention to the special needs and problems of island developing countries (IDCs) in its Resolution 31/156 of 21 December 1976, and repeated in Resolutions 32/185 of 19 December 1977, 34/205 of 19 December 1979, 35/61 of 5 December 1980 and 37/206 of 20 December 1982. The concern of the United Nations General Assembly (UNGA) was reflected in the Resolutions 98(IV) of 31 May 1976, III(V) of 3 June 1979 and 138(VI) of 2 July 1983 of the Conference on Trade and Development. The Resolution of the 39th Session of the General Assembly (Second Committee) 39/212 of December 1984 took on a more urgent tone.

2. In reiterating the call for specific action in favour of IDCs, the United Nations General Assembly recognised:

. . . "the difficult problems faced by island developing countries, in particular those which suffer handicaps due especially to their smallness, remoteness, vulnerability to natural disasters, constraints in transport, great distances from market centres, a highly limited internal market, lack of natural resources, heavy dependence on a few commodities, shortage of administrative personnel and heavy financial burdens."

3. The UNGA also noted with concern that "the specific measures envisaged" had "not yet been fully implemented" and it called on States and international organizations to respond positively in this regard. More specifically, it requested the competent organisations of the UN System, in particular, UNCTAD, UNIDO and the UN Capital Development Fund, "to take adequate measures in order to respond positively to the particular needs of IDCs".

/...

4. In 1985, the sub-regional office of the Economic Commission for Latin America and the Caribbean (ECLAC) received a mandate from the Caribbean Development and Cooperation Committee (CDCC) to develop a programme in favour of the small IDCs of the Caribbean. In September 1987, the Foreign Ministers of the Caribbean Community (CARICOM) endorsed a joint CARICOM/CDCC approach to the project. More recently, in May 1988, a Meeting of a Group of Experts on the problems of IDCs was convened by UNCTAD.

5. Unfortunately, there is now considerable evidence of a perception, by many countries, that insularity poses special problems and thus requires specific attention. The Asian Development Bank reported that its operations in the South Pacific had expanded substantially over the years and that the Bank had -

. . . "evolved a framework for its operations adapted to the special conditions of the South Pacific developing member countries, particularly their small size and geographical isolation, limited and narrow resource bases, scarcity of trained manpower, weak development/institutions, and prevalence of some communal tradition often not conducive to rapid resolution of economic development issues".

This framework included a level of per capita income lending much higher than that for all its developing member countries.

6. There is a case to be made for special treatment of IDCs. The Tenth Session of the CDCC, held in Port-of-Spain in November 1987, decided that a review of the existing literature on the problems of the small IDCs should "be undertaken", with a view to deriving an authoritative statement capable of persuading sceptical international donors of the validity of this category. This presentation is an attempt to do so. It draws heavily on a number of academic studies as well as workshops and conferences involving public officials and international civil servants.

7. IDCs are defined in terms of their geographic and economic characteristics. These characteristics determine the parameters within which an analytical examination of the problems facing IDCs may best be approached as well as those areas which deserve special attention.

/...

8. It is instructive to note that most small developing countries are islands. There are 78 countries or territories with populations of one million or under, and of these more than 70 are developing countries and more than 50 are island developing. Thus, most of the small countries are developing countries and most of the small developing countries are islands. Further, of the 69 IDCs listed by UNCTAD, 59 had populations of less than one million in 1981. In respect of land area, 62 of the 69 have land areas of less than 20,000 square kilometres and 44 of them less than 1000 square kilometres. When, therefore, one is discussing small IDCs, one is also discussing small developing countries but with additional characteristics peculiar to their island nature.

9. There are very grave diseconomies associated with smallness relating, for example, to:

- size of markets and high unit costs;
- high per capita infrastructural costs;
- limited human resources;
- demographic instability;
- absolutely small national incomes;
- openness; and
- dependence on international trade.

These, together with the peculiarities attendant upon insularity are discussed hereunder.

#### FEATURES OF INSULARITY

10. The UNCTAD Paper "Viability of Small Island States", provides a most erudite definition of insularity:

"True insularity only exists where the emerged land area is entirely exposed to the influence of the sea. 'True' islands are primarily areas of land which have emerged at a sufficient distance from the continent to escape direct influence, in terms of physical, as well as human and economic factors. Emergencies of

/...

less than 10,000 km. in area are too small to give rise to phenomena unrelated to the influence of the ocean; there are true islands....The smaller the surface area, the higher will be the coast-line/surface area ratio and it is this ratio that affords a good measure of the degree of insularity".....

11. IDCs include independent members of the United Nations, as well as island territories which are integral parts of a metropolitan nation. UNCTAD lists 31 IDCs which are member States of the United Nations, and 38 island territories.

12. IDCs vary widely in their geographical characteristics. They range from archipelagoes, where the majority occur with a few close to mainlands, to single islands in mid-ocean. There are high islands derived from volcanoes, from aggregations of continental rocks, or from elevations of reef rock. There are low islands, comprising single islets or two or more connected by a reef to form atolls of carbonate rocks generally less than 15 feet above sea level. The mountainous ones are prone to erosion, and pose difficulties for transportation, and the flat ones are prone to the removal of soil through wind erosion. This means reduced arable land and limited agricultural output, both in terms of quantity and variety of crops.

#### Small Size

13. Small size is the most often mentioned characteristic of IDCs. Limited land area together with uneven terrain limit the scope for crop culture. Furthermore, most IDCs are located in the tropical or sub-tropical zone where poor soils, intemperate weather conditions, and the proliferation of weeds and insects make agriculture rather problematic. The range of agricultural commodities is also limited by the fact that very few islands span more than one latitudinal zone. A rare exception is Jamaica, which is able to exploit the temperature gradient of different altitudes and grow sugar on the plains and coffee and strawberries on the hills. IDCs are thus usually forced into a pattern of crop specialisation which places them at the mercy of commodity price fluctuations on the world markets.

/...

14. It has been argued that IDCs which are less than 10,000 square kilometres are so small that their viability is totally influenced by the sea. The smaller the island, the larger is its coastline in relation to its area. This and the direct influence of the sea generate costly problems for coastline management, protection, and surveillance, which nonetheless must be priorities for the survival and development of IDCs.

#### Remoteness

15. Remoteness tends to be another characteristic of IDCs. Many IDCs are more than 500 kilometres away from the nearest continent, and located away from the most frequented shipping and airline routes. The Group of Experts on Feeder and Inter-Island Services by air or sea have extended the characteristic of remoteness by the addition of the concept "outerness":

"An outer island becomes 'outer' only in relation to the superior development of some other place, be it a mainland centre or some other island, and as such the concept can be applied on many scales. Thus the whole of the Caribbean archipelago consists of outer islands in relation to metropolitan centres in Europe, North America or even Venezuela and Columbia, but some are also outer islands in relation to more developed islands such as Trinidad, Barbados, Jamaica and Antigua."

16. This remoteness leaves those IDCs vulnerable and unprotected and extremely dependent on transportation - air and sea - and communication links. However, in the area of sea transportation there is difficulty in obtaining a dependable service from international shipping companies especially for the small islands since the relatively low tonnages do not provide enough incentive for ships to call. But trade, which constitutes a huge proportion of the GDP of small islands, must be moved. Apart from small vessels - engaged in intra-regional trade - the approach to the shipping problem has been a regional one in the Caribbean, given the configuration of the islands in the Region. However, this service is still proving to be inadequate and financially non-viable. The high cost nature of Caribbean ports - the result of high infrastructural and equipment costs, and repayment of the resulting high loans; sub-optimal use and loss of revenue from loss of transshipment activities; peculiar compensation packages, weak management, inadequate equipment, etc. does not help matters.

### Ecosystems

17. The fragility of the ecosystems of IDCs is partly a consequence of their geographic isolation. Owing to detachment from the evolutionary, biological processes which took place on continents, they tend to have primitive and delicate biotic patterns.

18. Their fragility is exacerbated by the infringement of modern economic activity in a very small space, and within the context of limited technological capability and limited natural resources. Sand is removed indiscriminately and mangrove uprooted from swamps for construction thus leading to beach erosion and a reduction of marine life. The development of light industries in small islands has not seen a parallel development in technology for industrial waste disposal - particularly toxic waste - in small islands.

19. For IDCs as well, limited physical space and isolation mean that people live, dispose of waste and access water all in the same area, and inadequate or inappropriate waste disposal methods could lead to widespread health problems.

20. The dumping of hazardous wastes from industrial countries has now become an additional problem for small islands which lack the tools to protect their environment and are perceived to be vulnerable to blandishments from large corporations in the industrialised nations.

21. Another danger to the fragile ecosystems of IDCs is the destruction of forests to provide firewood, thus removing protection from watershed areas, and promoting erosion of the soil which in a small island falls into the sea instead of into the lowlands, for recultivation. Island forests are usually small and slow to recover from extreme damages.

### Proneness to Natural Disasters

22. IDCs, especially the smallest islands, are particularly prone to natural disasters. According to a joint study by UNCTAD and the Office of the UN Disaster Relief Co-ordinator (UNDRO), natural disasters show a marked concentration in tropical and sub-tropical islands:

/...

"Tropical cyclones, including hurricanes and typhoons, are essentially a feature of warm oceans and coastal regions: over larger land masses and temperate seas their violence decreases rapidly. Hurricanes, earthquakes, volcanoes and high mountain ranges, of which islands are often only the highest tops, are most concentrated in quite narrow active zones....Along such active zones, stretching down the Pacific, Atlantic and Indian oceans, are found the island tips of submarine ranges which are particularly prone to seismic and volcanic activity. Many islands are, of course, entirely volcanic and volcanic explosion has destroyed some of them."

23. Tropical hurricanes and storms, and volcanoes have caused the greatest damage to IDCs. While droughts are less frequent, small islands are subject to floods and land slides. Naturally, the effects of any disaster are more pronounced for a small island than for a larger country with a wide variety of products, back-up facilities and resources for recovery. Hurricane David in 1979 destroyed 80 per cent of Dominica's housing stock. In St. Lucia, the damage inflicted by a cyclone in 1980 was estimated at 89 per cent of GNP. In St. Vincent and the Grenadines, 16,000 people (15 per cent of the population) were temporarily evacuated when Soufriere erupted in 1976, while the entire population had to be removed from Tristan da Cunha in 1961.

24. Insularity imposes limits on the range of economic possibilities open to IDCs. This means that even if small IDCs administered their economies with maximum skill, their economic potential would still fall short of that of large countries.

25. It has been said: "A large economy can do practically everything that a small one can, but not vice versa". Even though the per capita income of Barbados is many times that of India, Barbados cannot support the kind of complex technological activity that India can. Further, whereas small continental countries can participate in the economic activities of large contiguous states, e.g. electricity grids and railway systems, IDCs do not have that advantage. Additionally, for very small states structural transformation to a diversified economy is enormously difficult to achieve and self-sustaining growth is almost impossible.

/...



### Limited Natural Resources

26. Smallness and insularity also impose limits on the extent and range of natural resources available for exploitation. Moreover, many small islands, because of their geological origin (oceanic volcanoes), are unlikely to have minerals of economic importance. Except for those which are geologically part of a continent, they are also unlikely to have commercial deposits of fossil fuels. A few small islands in the Pacific possess significant reserves of phosphates.

27. Water is frequently a severe problem. Only the largest and wettest high islands have ample sources of water. Even on some of these there are seasonal and sometimes serious shortages. Most small islands have few or no permanent streams or lakes, and their aquifers are often limited. Wells are easily invaded by salt water, while deforestation limits the incidence of permanent streams which are also polluted by industrial activity.

### Marine Resources

28. The area of marine resources, where islands would seem to have a comparative advantage, is in fact a source of serious problems. Traditionally, tropical waters do not support an extensive supply of edible fish. In addition, island waters are less productive than continental waters, reflecting the significantly smaller volume of run-off of nutrient-rich water from islands and their limited or absent continental shelves. Although tropical islands may contain coastal coral reef ecosystems with high biomass productivity, deep tropical oceans are usually ecologically barren. Island fishing activities, therefore, tend to be either minimal or subject to over-intensive exploitation. The declaration of Exclusive Economic Zones (EEZs) gives IDC nominal title to the resources of large oceanic areas. However, some rights are not recognized by all countries (e.g. ownership of highly migratory species of fish). At any rate, small islands lack the resources to monitor and police their EEZs. Furthermore, because of economic and technical difficulties, the prospects for the exploration of deep sea resources of minerals are not bright.

/...

### Demographic Constraints

29. In absolute terms the population of IDCs are small - sometimes so small as to make economic viability questionable. Severe diseconomies derive from the narrow markets which reflect small populations and relatively low and mal-distributed incomes. This deprives producers of the economies of scale available in large economies, and makes for high unit costs. This puts them at a disadvantage in the international market in that producers of tradable goods cannot use the domestic markets to recover fixed costs while using marginal costing to penetrate foreign markets.

30. The small population of most IDCs also creates tremendous problems in the provision of many services which are considered essential in modern societies. For example, highly specialised professionals might not have enough clients to support themselves and the scale of production sometimes does not permit crucial research and development. In some instances, common services, like shipping, university education and meteorological services may be provided co-operatively among neighbouring IDCs, but often expensive facilities like airports and harbours, must be replicated on each island.

31. Yet, population size frequently appears to exceed the carrying capacity of the island. Resources are limited and insufficient to provide the employment opportunities and support for the growing labour force. Traditionally, the limitations of the domestic economy were alleviated by emigration. Restrictions on immigration, and selective immigration measures by the metropolitan countries have exacerbated the problems and led to the phenomenon of decreasing total net emigration together with increasing net emigration of skilled labour. The disproportionate emigration, to wealthier countries, of people trained in professional and technical skills at considerable cost to IDCs is of particular concern. Sometimes a few successful emigrants may return to start businesses. However, the more highly skilled seldom do. This situation creates severe problems for the manpower planners and puts the IDCs at a further disadvantage of a human resource base inadequate to take advantage of the more efficient types of technology. To secure a supply of skilled workers, an IDC must train

/...

people on a scale greater than its anticipated requirements. To repatriate a skilled expatriate often requires a much larger outlay than is normally budgetted for.

32. The analysis of the CARICOM situation does not indicate much room for improvement over the next decade. Open unemployment ranges between 15 and 25 percent of the labour force. In the Study, "Caribbean Development to the Year 2000: Challenges, Prospects and Policies" recently completed, projection for labour force growth is not less than 23 percent in any country and may be as much as 54 percent in the worst case. High birth rates and falling mortality rates together with constant or decreasing net emigration lead to the expectation of a doubling of population in the 25 to 49 years age groups. This has implications for the provision of social services such as education and health. With the back-log of unemployment and the looming unemployment situation, the requisite supply of jobs, together with the required economic and social infrastructure, would therefore not be forthcoming unless growth in the regional economies increase to beyond an average of 6 percent per annum.

#### Constraints in Administration

33. The Commonwealth report on the vulnerability of small states has pointed to the emergence of many island nation states regardless of their suitability or convenience as administrative units. One of the main characteristics of small islands is the existence of bureaucracies which are too heavy in relation to economic and population size. The existing administrative and technical skills to man these island nation state bureaucracies are inadequate and, as a consequence, a variety of activities are undertaken largely by a few individuals, and in the absence of support facilities such as trade and diplomatic missions and other elements of an information network. In summary, the institutional organisation of these governments is insufficient and, at times, inappropriately developed, not clearly defined, with uneven distribution of functions and responsibilities among public institutions.

/...

34. The problems of administration are more complex for multi-island states which have small populations spread over wide sea spaces.

#### Financial Constraints

35. Relatively small population size, limited resources, and absolutely small national incomes, also limit the availability of capital for the development of IDCs.

36. The small scale of IDCs also condemns them to severe diseconomies in the installation and maintenance of infrastructural elements. Runways for 747 aircraft must be as long in Barbados as in London and deep-water harbours as deep in St. Kitts and Nevis as in Caracas. There are also minimal economic scales and standards for facilities such as power plants, telecommunications systems and cement plants. However, the costs of such installations in IDCs must be borne by so few tax payers that the financial burden is much greater than in the case of a larger society with a lower per capita income, and often cannot be borne alone. This is the most powerful argument against the application of the per capita income criterion in the issue of the graduation of IDCs from World Bank borrowing privileges. IDCs therefore have always relied heavily on capital inflows, either as foreign investment, imperial grants or, more recently, foreign loans, whether commercial or concessional.

37. In addition to the constraints in size, the history of the IDCs has also predisposed them towards economic specialisation, especially in their international trading arrangements. The mercantilist policies of the colonial era cast IDCs in the role of providing tropical products and other raw materials for processing in the metropolises for subsequent re-export to the colonies with a resulting rigidity in the use of the land area and inflexibility in the ability to diversify if only because there is virtually not enough additional land area available.

38. Thus, their limited productive possibilities, the bias of their colonial past, the constraints of limited domestic markets, as well as the need to repay foreign debt, make international trade a sine qua non for the existence of IDCs. Indeed, empirical studies reveal

/...

an inverse relationship between the size of an economy and levels of international trade. For small developing countries the visible exports approaches 75 percent of GNP, and for IDCs sometimes exceeds GNP.

39. The above factors all contribute to the pre-eminence of balance of payments consideration in the economic management of IDCs. Since investment is the engine of growth, economic policy in any IDC is mainly concerned with raising an adequate on-going supply of capital for the promotion of economic growth, and the generation of adequate foreign exchange earnings for the servicing of outstanding debts. Failure to service past debts tends to dry up the inflow of foreign investment; this, in turn, reduces the level of foreign exchange earnings, marking the beginning of a potential vicious downward spiral for the economy.

#### Measures Required

40. Thus, in summary, the major factors that can be identified as contributing to the vulnerability of IDCs, thereby necessitating action on a number of different fronts are:

- (i) Proneness to natural disasters - hurricanes, volcanoes, earthquakes and similar acts of God, and acts of man such as oil spills and other environmental pollution requires elaborate disaster preparedness measures and mechanisms, particularly in the light of the devastation to small islands that these occasion.
- (ii) The geographical remoteness of IDCs and their relatively extensive coastlines are a constant invitation to invasion. Smuggling, the invasion of EEZs by alien fishermen, and even attacks by guerillas and mercenaries must all be guarded against.

In addition, islands have a high dependence on capital intensive air and sea services which are costly to maintain, are obviously at a disadvantage in terms of freight costs of imports and exports while their service industries, especially tourism and transshipment, are severely handicapped by inadequate or expensive port services.

/...

Archipelagic IDCs have the further problem of inter-island or intra-regional transport. Transport costs frequently determine the viability of industries. Given the situation of high costs and low volume, IDC Governments are frequently forced to undertake the operation of airlines, shipping and ferry services in circumstances where private enterprise find the rate of return unattractive.

- (iii) In the absence of appropriate conservation policies, the fragile biological, plant and marine ecosystems could be irreparably damaged with not only rare and unique species, but also the economic potential of those resources being lost forever.
- (iv) Demographic factors could lead to excessive population pressures and strain the "carrying capacity of an IDC". Alternatively, the continuing emigration of professional and skilled personnel might seriously diminish the productive capacity of an IDC. Programmes for the retention and repatriation of such personnel might be necessary.
- (v) Limited resources - human, natural and financial - resulting from smallness, increase the dependence of IDCs on external resources - technical and financial - and thus increase their vulnerability unless some predictability is introduced into the provision of such resources.  
  
In addition, extensive specialisation resulting from limited resources subjects the economies of IDCs to the usually negative impact of marked fluctuations in foreign exchange earnings. The avoidance of severe disruptions in production, external debt servicing, etc, requires programmes to stabilize these earnings.
- (vi) New scientific advances in biotechnology and material sciences are altering techniques which some IDCs now enjoy in agriculture and mining. Competitive production requires mechanisms to enable IDCs to access and utilise these new techniques.

/...

41. These factors all lead, inter alia, to the need for more rigorous standards and therefore higher costs to be imposed on the construction industry; higher levels of foreign exchange reserves to be held against the variability of export earnings; coast guard services to be maintained; long-term conservation programmes to be put in place, etc. All of these require additional resources, and, above all, sophisticated technical and administrative personnel.

42. Some characteristics lend themselves more easily to alleviating measures than others. There is no intention to either identify all the needs of IDCs or to seek external resources for all their needs. What is being identified are the needs which result from insularity with an inclusion of those general ones which are made worse. Catering to these needs however, has to be a joint effort given the absolutely low level of domestic resources - financial and human - available and given the fact that these needs, at minimum levels, are beyond the national resources available. For small IDCs, external technical and financial assistance are a sine qua non for the achievement of a viable economic and social system.

43. There are four areas, intrinsic to the nature of IDCs, which require the special attention of donor agencies, viz: proneness to natural disasters; remoteness; conservation; and population pressures.

44. (i) Proneness to natural disasters demands that IDCs give priority to disaster preparedness and disaster management. This involves:

- training;
- public information/awareness;
- establishing disaster preparedness networks;
- adequate business codes and appropriate building materials;
- building the required facilities and obtaining the necessary equipment; and
- continuous research to improve production capabilities.

/...

45. The Pan Caribbean Disaster, Preparedness and Prevention Project (PCDPPP), for example, was established in 1980 to provide technical support and co-ordinate disaster preparedness activities in participating countries and to assess their preparedness and prevention needs with a view to developing the necessary resources for self-sufficiency.

46. Responsibility for implementing the projects is shared by UNDRO, PAHO/WHO and the league of the Red Cross - and coordinated from the Headquarters in Antigua and Barbuda with one Project Manager and support staff. Administrative costs are met by the countries themselves, but programmes are externally funded. For the budget period 1988-90, the UNDRO component still requires over \$2M in external funding, and much smaller amounts are needed for implementation of the PAHO/WHO and LRCS components. Assistance has been received from the Governments of the Kingdom of the Netherlands and Canada.

47. Aside from those elements included for implementation in the 1988-90 budget, there is much that needs to be done to increase the Region's capability to prepare for disasters. The Region's capability in predicting hurricanes is reasonably advanced and with WMO/Japanese Government assistance, a radar upgrading scheme is currently in progress within the Region.

48. However, some equipment upgrading is needed for monitoring volcanic activity. Most of the volcanoes have some kind of instrumentation, largely portable, but these are old and need to be replaced. A more pressing problem, however, is the need for professional scientists to undertake vulnerability analyses. At the moment, the Seismic Research Unit of the University of the West Indies (UWI), which has been receiving support from the UN Department of Technical Cooperation through UNDP funding, has only three scientists working in this area for most of the Caribbean.

49. In the medium term, attention will soon have to be focussed on an active volcano off the coast of Grenada expected to emerge above sea level in another 20 years, with a view to assessing the impact of its emergence and where necessary, drawing up preparedness plans.

50. As a result of a series of severe floods in recent years, the Government of Jamaica, with assistance

/...



from the WMO, has embarked on a flood plain mapping exercise. This assistance needs to be extended to some of the smaller islands. In St. Vincent and the Grenadines, Saint Lucia, Dominica and Grenada, Landslide maps have been developed with assistance from the OAS.

51. Increasing awareness of the need for building standards which take account of the Region's vulnerability to hurricanes and floods has led to the elaboration of a uniform building code, for the Caribbean, CUBIC. The first three volumes have been developed and printed with assistance and are now with Governments and Engineering Associations. It is hoped that the Centre for Human Settlements through its regional office, will assist with technical support and funding for the elaboration of the other two volumes.

52. (ii) Remoteness engenders the need for attention to be paid to surveillance of the coastlines and the surrounding EEZ. It is not possible, however, for an island with less than 100,000 people to properly police 200 miles of EEZ or keep out drug smugglers. The problems are increased for those with multi-island administrations.

53. The Caribbean has received bilateral assistance with training for Coast Guards and Marine Police, at times within the context of the donor country's own particular interest. UNFDAC and INTERPOL are also providing basic equipment for a regional information network. The Region will have inevitably to move towards a joint policing network in order to reduce their disadvantage and will need assistance for the purchase of capital-intensive equipment, and the development of facilities and across-the-board training to deal with all policing situations.

54. In the longer term, the United Nations will need to consider ways of reducing the vulnerability of small island states to aggression and other illegal action by Third States.

/...

55. Transportation and communication are a sine qua non for economic existence. The high dependence on sea and air for the movement of goods and people has led to the need for investment in aircraft, shipping, ports and airports. Total dependence on international services has proven to be risky.

56. Current initiatives to address existing deficiencies in some areas of maritime legislation, safety practices, data base, negotiating techniques, moving perishable products and handling products in general, are at various stages of implementation. A UNDP study on Caribbean shipping services is expected to recommend a number of alternative viable options for a cost effective cargo/passenger service and identify the various financial and technical elements for which support would need to be sought.

57. The upgrading of ports and port facilities throughout the Region, as appropriate for the needs of small islands, and the improvement of port management have also been identified as areas for immediate attention.

58. Projects will include:

- (a) safety awareness workshops aimed at sensitising small vessel operators and fishermen (some financing from CIDA); and
- (b) non-management and management training for port personnel (UNCTAD/CSA Technical Assistance).

59. Air Transportation is critical to the development of the tourism sector, impacting on the price and quality of the product. Dependence on an international service is highly risky for an industry which is fickle but which contributes significantly to the economies of a number of Caribbean IDCs. Air transport is also expected to be increasingly important to the export of non-traditional products. But a number of deficiencies exist in the air transportation sector.

60. The EEC has agreed to fund a study on the feasibility of establishing a single multinational air carrier for the Eastern Caribbean. The analysis will take into account the operations of the major regional and extra-regional air carriers presently operating between the Eastern Caribbean, Western Europe and North America;

/...

the market segments served; and the strengths and weaknesses of the carriers in the market.

61. An outstanding issue, however, and one that will need early attention, is the development and rationalisation of integrated feeder services into the very small islands of the Caribbean which have considerable potential as tourist havens, but which are just too small for the usual air carrier. In fact, the whole issue of air transport development and planning for small islands spread over 20,000 miles, some of which are only a couple of square miles in size, is a constant headache while such 'critical' matters as airport safety are only focussed on in passing. ICAO could provide technical assistance in those areas and it is hoped that with concerted effort at regional representation in this forum, attention will soon be focussed on these and other problems of small islands.

62. In order to reduce some of the costs of regional institutional building and, within that context, transportation, increasing use is being made of telecommunications and satellite communications for regional lectures/seminars, cultural and news exchange, etc., but this is a new area for the Caribbean and one in need of considerable technical and financial support.

63. (iii) Conservation is an absolute necessity for the existence of small IDCs in a situation of already limited resources and a fragile environment. Forest conservation, not only to prevent soil erosion but also to prevent flooding and preserve the quality and quantity of the water supply is an important aspect of sustainable development. Pollution control is also critical for beaches which are used not only as a tourism resource but also for ports and industrial sites.

64. In the Caribbean Region there are now three institutions in place which are responsible for dealing with various environmental issues. The Caribbean Conservation Association (CCA) based in Barbados is concerned with monitoring and giving technical support to ensure the long-term environmental quality of the Caribbean, e.g. prevention of the dumping of toxic and other dangerous products and wastes. The Regional Co-ordinating Unit (RCU) for UNEP based in Jamaica and the Caribbean Environmental Health Institute (CEHI) in Saint Lucia, were set up to provide technical and advisory

/...

services in all areas of environmental management. In addition, there is the Centre for Resource and Environmental Studies (CERMES) at UWI, Cave Hill, Barbados, which gives training in environmental management.

65. Appropriate technology must be applied to waste and sewerage disposal if this is not to have serious consequences for health, the economy and marine life. UNDP is considering funding for a study which will, inter alia, make recommendations for dealing with the sewerage disposal problem in the CARICOM Region.

66. Following the study, countries will need considerable capital outlay for implementing the recommendations. The Canadian Government, through non-governmental organizations (NGO), is funding an Institutional Development Project for Toxic Chemicals Management in the Caribbean which aims at strengthening the capabilities of CEHI to provide advisory services, promote uniform practices, and coordinate research in toxic chemical management.

67. The overall issue of the toxic waste management resulting particularly from industrial processes is still to be examined. The following are envisaged in such a project:

- (i) a survey of types and quantities of industrial waste;
- (ii) identification of current waste treatment;
- (iii) impact on health and the environment;
- (iv) identification of waste disposal methods appropriate for the Caribbean;
- (v) assessment of current policy and legislation; and
- (vi) development of framework policy and model legislation.

68. Aside from these activities, the following suggest themselves as needing urgent attention:

- (a) Under the auspices of ECLAC/ILPES, in collaboration with CEHI, the conduct of national intersectoral seminars and the

/...

production of appropriate manuals on integrated planning for the protection and preservation of the marine and coastal environment. These would bring together town/urban planners, tourism bureau, representatives of Health, Housing and Agriculture as well as industrialists.

- (b) A study on the commercialisation of algae and algae products such as sea moss/weed and marine based proteins on Caribbean islands without damage to the ecosystem, executed by IMA/UWI with technical and financial assistance from CFTC and other sources. This would take into account the experiences of the Pacific and other tropical islands.
- (c) Support projects for -
  - (i) biomass alternatives to charcoal from forests as an energy source; and
  - (ii) soil conservation through reafforestation programmes.
- (d) Projects to increase stocks through aquaculture and mariculture. Technical assistance provided on a bilateral basis with support from TCDC/UNDP and other agencies.
- (e) UNEP and the UN Centre for Human Settlements could help improve capabilities of CEHI to assist Caribbean countries in developing and managing coastal zone management plans.

69. There still remains much to be done in the protection, management and control of the marine environment which provides and contributes to the bulk of the resources of the IDC. A Study has already been commissioned to assess the fish resources in the Caribbean. However, mechanisms still have to be put in place for exploiting and controlling the extraction of these resources.

#### Development of Marine Based Resources

70. It has been noted that in small islands, marine-based resources are as important as land-based resources both with respect to potential value as well as

/...

potential marine space, and therefore, should be given equal attention in development planning activities.

71. Heads of Government of the CARICOM have mandated the development of a regional programme of co-operation in the management of the EEZ. The Canadian funded project for a regional survey of fisheries resources will provide a stock analysis and give some indication of exploitable species and sustainable yields. Other elements of the EEZ management programme are expected to include:

- (a) control of marine resources from illegal exploitation through:
  - (i) a regional information and policing network; and
  - (ii) negotiation of fishing agreements with third parties within harmonised conditions of access;
- (b) a survey of all living marine resources;
- (c) environmental management of coastal and marine areas;
- (d) delimitation of maritime boundaries;
- (e) review of existing fisheries legislation; and
- (f) support projects for human resources development.

72. An identification of the related policy issues has begun, but at this early stage, there has not been a definitive comprehensive identification of needs. It is envisaged, however, that external assistance will be required for developing a regional policing infrastructure for conducting surveys as well as for delimitation activities.

73. Attention would also be given to developing the marine research capabilities of Member States to undertake studies in, inter alia, the biology of specified species, and the ecology of the coastal and marine environment.

/...

74. The protection and effective exploitation of the EEZ will require resources beyond the means of the IDCs.

75. (iv) In the context of an absence of contiguous borders, limited resources, and the need to conserve, the population pressures can be alleviated only through attention to the productive sectors and to training. Therefore, attention needs to be paid to:

- (a) increasing production in agriculture, manufacturing and fisheries;
- (b) new products including services and a new approach to tourism;
- (c) access to new and appropriate technology;
- (d) increasing exports given the smallness of the internal market and the need to increase production;
- (e) training to provide the necessary technical and administrative skills appropriate for the functioning of small islands and to give flexibility and, therefore, greater job opportunity to the worker; and
- (f) regional co-operation given the potential for larger markets, a larger economic system and a more efficient use of resources through, e.g. common services.

76. (a) Agriculture The 1986 FAO report on the problems affecting agricultural development in the small island states of the Caribbean identifies a number of constraints as a result of size and geography and makes recommendations for:

- the utilisation of new farming technology by small farmers who produce the bulk of the food in the Caribbean, and in this context, the strengthening of investment credit and agricultural extension services to provide technical and financial support to small farmers;

/...

- research into vital areas such as animal feed production and the development of livestock utilising this local feed;
- applied research into crop diversification and alternative uses for traditional crops;
- improved marketing organisation and the development of a market intelligence network; and
- greater inter-island cooperation through TCDC activities.

77. Additional areas for focus identified by the Region, include;

- the promotion of non-traditional exports;
- agro-industrial development; and
- land management.

78. While the FAO has indicated its experience in supporting TCDC activities, it does not outline a possible role for itself in the development and execution of the recommendations. However, implementation will require the funding support of the FAO, along with IFAD and other funding sources.

79. In Manufacturing additional assistance is needed to put Technology Extension Service in place for:

- plant operation;
- quality control;
- labelling and standards;
- equipment, selection, negotiation and acquisition; and
- appropriate market information

80. (b) In the area of services, additional assistance is needed in:

- the identification of Industries in the service sector with the potential for earning and/or saving foreign exchange or employing labour;

/...



- research into and development of the structure of the services industry;
- further development and strengthening of the Tourism industry -
  - o training in tourism planning, marketing and management assistance (financial and technical) in marketing;
  - o statistical development and data processing measures to increase investment and improve planning in the tourism sector; and
  - o market research and product development.

81. (c) Technology in:

- strengthening the Technological Capacity and improving the environment for technological development, adaptation and acquisition;
- negotiating for new and emerging technology;
- adapting existing technology;
- identification of new areas for productive activity; and
- creation of networks and other mechanisms for technology development and acquisition, including the establishment of a technology advisory service for entrepreneurs.

82. In March 1988 CARICOM adopted a regional policy for science and technology, and in May, a Caribbean Academy of Sciences was inaugurated in Trinidad and Tobago. There is the objective of ensuring the close integration of science and technology into the planning and development of the Region's economies. The intention is that science and technology would be focussed on the pressing needs to increase productivity, to increase competitiveness, to identify and produce new goods and services, to provide the basics for life at an affordable price and in general to optimise use of limited resources. There thus exists a framework within which the Caribbean can exploit the opportunities for using technology to facilitate the achievement of the major economic objectives.

/...

83. (d) In Export Promotion and Development not withstanding the fact that CARICOM countries have become the beneficiaries of a number of preferential trading arrangements, there are two major problems:

- (i) accessing markets for products in which the LDCs have a growth potential; and
- (ii) gearing production to access markets where they can compete.

The first is almost totally outside the control of the IDCs. The second requires assistance in:

- marketing;
- financing, e.g. export credit, export financing and investment financing; and
- gearing for production.

84. (e) Critical to all plans is the Human Resource Development element. This requires:

- (i) setting up technical education programmes;
- (ii) arts and craft training at the primary school level;
- (iii) language training programmes;
- (iv) skills training programme; and
- (v) the development of administrative capability.

85. With small size, isolation and high dependence on the outside world, a priority for the IDC is the development of diplomatic skills, in particular in trade, investment and fisheries negotiation. Training programmes in foreign policy management in small islands must be developed to take account of inter alia:

- the lack of trading and other leverage of small IDCs as a result of small economic size;
- the scarce resources available to IDCs to maintain missions abroad; and

/...

- their relatively high dependence on multilateralism and on networking with international inter-governmental agencies.

86. Current diplomatic training assistance does not give sufficient recognition to the peculiar situation of small IDCs operating in the international sphere. A trade negotiation between Mexico and the United States, for example, is not the same as between St. Vincent and the Grenadines and the United States. Nor can Grenada approach multilateral trade negotiators as Brazil does.

87. The second area for attention is the critical importance of developing and utilising skills within the framework of technical assistance programmes at both the bilateral and multilateral level. Currently, some approaches to assistance limit the use and development of local skills, thus contributing to the continued dependence of small islands on external skills.

88. Thirdly, the improvement of organisational and other skills in the national administration of small islands needs to be addressed. This would include:

- (a) Improvement of the present degree of organisational and managerial capability of the governments to plan and implement public policy and national and sectoral planning for economic and social development.
- (b) Modernization of the financial and budgetary administration of the public sector and its linkage with national and sectoral planning, and human and materials management.
- (c) Development of the national capability to analyse programmes and implement administrative reform programmes to increase the capacity of the government institutions and personnel to play a dynamic role in national and regional development.
- (d) Increasing the effectiveness of the human resources administration to recruit, retain and develop the needed personnel for national development and regional services, in an environment prone to emigration of skills.

/...

89. CARICAD, which was established by Caribbean Governments does not have enough resources to do all the work needed. UNDP has supported CARICAD in the past and the Region hopes for priority funding for CARICAD, at least over the next five years, to enable it to carry out dynamic, intensive streamlining and training programmes.

90. Regional thrust and the exploitation of the advantages of a regional approach to national issues, continue to require additional assistance in:

- (a) implementation of the integrated sector plan which is intended to provide the means by which, inter alia:
  - national sector plans can be developed and integrated into an overall regional framework; and
  - regional production targets may be agreed upon.
- (b) agricultural research to, inter alia, develop new uses of traditional crops;
- (c) export marketing, promotion and development programmes;
- (d) export credit and export credit insurance;
- (e) exploitation of the Region's EEZs;
- (f) training;
- (g) air and sea transport;
- (h) disaster preparedness programmes; and
- (i) financial and technical support to regional institutions

#### CONCLUSION

91. In this context, UNCTAD is urged to:

- (i) collaborate with FAO and UNIDO, in advising small islands on developing areas of comparative advantage in their diversification process;

/...

- (ii) provide a direct information link and an advisory service during multilateral trade or commodity trade negotiations;
- (iii) develop commodity proposals in collaboration with IDCs for the special treatment of small islands in multilateral trade negotiations;
- (iv) assist small islands in developing comprehensive statistical bases on the contribution of services to the economy;
- (v) assist in locating sources of contribution for small island states to the Common Fund;
- (vi) review the adequacy of current export stabilisation facilities bearing in mind -
  - the recommendation of the G24 that under the IMF Compensatory Facility, payment of compensation bears a closer relationship to the actual size of the export shortfall;
  - the need for an increase in the volume of resources and the number of commodities covered under Schemes for the Stabilization of Export Earnings; and
  - the problems which small states are experiencing in contributing to the Common Fund.

92. Finally, it is recommended that, to ensure the effectiveness of the different measures proposed herein, the Secretary-General of the United Nations establish a special Inter-Agency Unit to co-ordinate the programmes of the various agencies dealing with the special problems of small islands.

-----