

ATOLL ISLAND STATES AND THEIR ECONOMIC VULNERABILITIES: A CASE STUDY OF MALDIVES

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CERTIFICATE

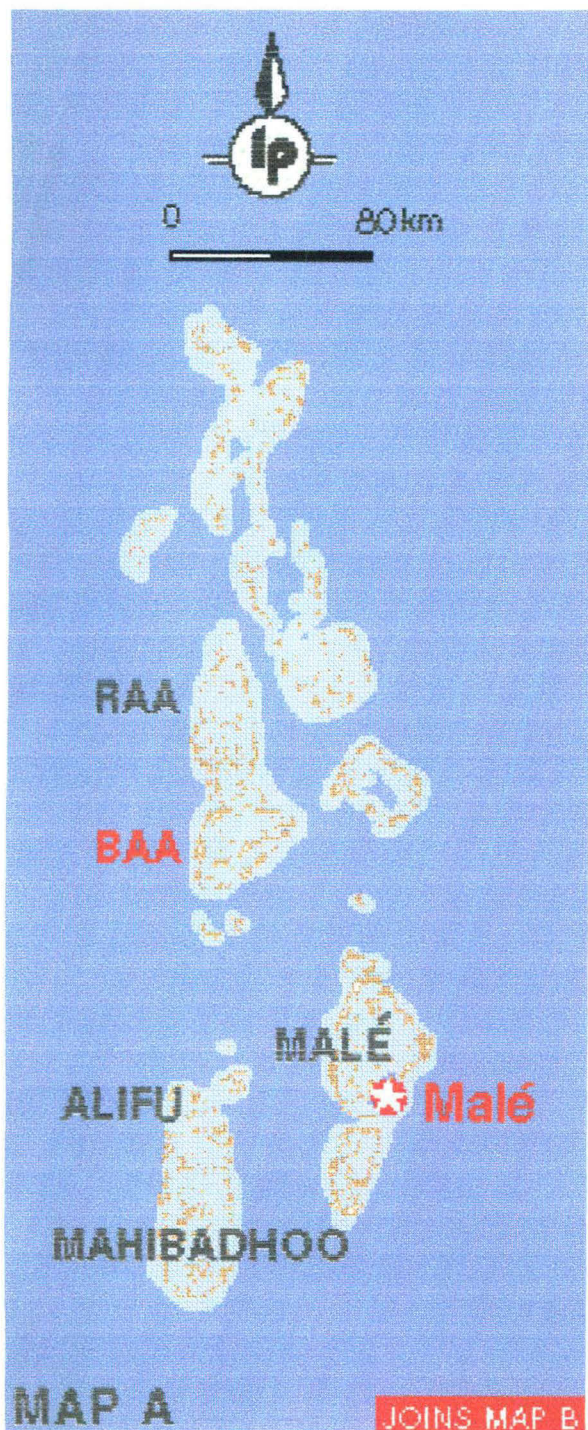
Certified that dissertation entitled "Atoll Island States and Their Economic vulnerabilities: A case study of Maldives" submitted by Deepak Ahlawat is in partial fulfillment for the degree of Master of Philosophy of this university, is his original work. This dissertation has not been submitted for any other degree of this or any other university.

We recommend that this dissertation be placed before the examiners for evaluation.

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Maldives

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Preface

This dissertation entitled, “Atoll Island State and their Economic Vulnerabilities: A Case Study of Maldives” is intended to analyse the impact of certain geographical characteristics on small Island States, especially on their economy.

Small Island States are peculiar in their geographical settings and are associated with remoteness and environmental fragility. They have limited resource base which hinder their rapid economic development. The geographical and typical environmental settings are the reasons for their economic, political and ecological vulnerability. To overcome these constraints, these States, by and large, rely heavily on the developed countries. Paradoxically, the dependence upon the developed economies has compounded their problems especially in terms of their economic development.

Maldives has been selected for this study, keeping in view its peculiar features. The study has been undertaken with a view to analyse how the geographical features of Maldives affect its economic development and to what extent it is economically vulnerable.

This dissertation has been divided into four chapters. In the First Chapter, a conceptual classification of islandness and its relation with the economic vulnerability has been provided.

In the Second Chapter, an attempt has been made to highlight the peculiar geographical features and these have been linked to the economic constraint which Maldives is facing in the process of developing and sustaining its economy.

The Third Chapter has analysed how the economic development process has created economic vulnerability for the country. In this context, Maldives' import

and export structure and the level of foreign assistance has been analysed to find out its economic dependency.

In the Fourth Chapter, various policy measures which Maldives adopted to overcome economic vulnerability has been analysed.

New Delhi.

Deepak Ahlawat

ACKNOWLEDGEMENT

Research of any kind warrants tremendous involvement at the psychological level. The study haunts you, goods you, comes heavy upon your back. And especially, if one is a beginner, the initial interest that sparks off the determination to embark upon, the study becomes cumbersome mid-way. This is where one needs support from others. A bit of advice, a word of encouragement, a pat on the back prompts you back in action.

It was at such a turn in the course of my study that my supervisor Dr. P. Sahadevan came to rescue me in an elderly way. When I feel, I was driving into the quagmire of methodological intricacies during the analysis. My supervisor literally led me by hand out of such a mess. I owe him an immense debt of gratitude. Without his supervision my dissertation would not have seen the light of the day. Also, my indebtedness goes to other faculty members in the department who are very co-operative.

My special thanks goes to my friends Shiv Kumar Yadav, Sanjeev, Rajneesh, and Jitender who, like real friends offered their helping hand even before my request for the same. My thanks are also due to Rakesh Raipuria for his help. I am very thankful to my friend Anupam Sharma and Bhabhiji, who spent many sleepless nights to bring my work in the present form. Finally, I must confess that the affection my parents showered upon and the lesson of optimism and dynamism which my parents taught me impelled me to pursue my research with convincing zeal and enthusiasm.

The views expressed in this study, the conclusions drawn and any error that may remain are attributable to me alone.

New Delhi

21 July, 1999



Deepak Ahlawat

CHAPTER 1.

Island and Economic Vulnerability of Small States: An Analytical Framework

Island and Economic Vulnerability of Small Island States: An Analytical Framework

Small Island developing states are marked by unique physical and socio-economic features . They are characterized by pervasiveness of oceans and wide scale under development.

Smallness can be defined on the basis of different variables. Although the dividing line between small and large countries changes through history as population grows, we can still find six different approaches to the definition of small states¹.

1. The First group of authors avoids the entire problem of definition either because it is irrelevant to them or impossible to resolve. Annette Baker Fox², David Vital and Mario Hirsch are some of those who belong to this group.
2. The second group of authors tries to link size to smallness. Size of a state can be defined in terms of its area, population and Gross National Product (GNP). Authors like Ronald P. Barston³, belongs to this group.
3. The third group of scholars includes Peter R. Baehr⁴ argues that difference between small states and greater powers cannot be explained by size variable alone. It also

¹ Niels Armstrup; " Perennial Problem of Small States: A Survey of Research Efforts." Cooperation and Conflict ; Vol. 4; 1976; Norway.

² Annette Baker Fox; " The Small States in the International System, 1919-1969" International Journal ; Vol. 24; 1968-69; PP.751-764.

³ Ronald P. Barston; " The External Relations of Small States" In A.Schou and A.O. Brundtland (ed); Small States in International Relations ; Stockholm; 1971; PP. 43.

⁴ Peter R. Baehr; " Small States: A Tool for Analysis" ; World Politics ; Vol. 27; 1974-75; PP. 456-466.

depends on other factors such as : structure of international system, geographical position and domestic political systems of states.

4. Another group of scholars concentrates on size as a perceptual problem. Accordingly, states which perceive themselves as small are also by definition small states. This group includes the author like Robert L. Rothstein⁵
5. Authors belonging to the fifth group try to analyse the behaviour of small states by concentrating on specific situations, assume to show some essential characteristics of small size behaviour, which then be generalised to other situations⁶. This group includes authors like David Vital.
6. Raimo Vajrynen suggests five factors to categorize small states⁷ :
 - i. Low rank states either as measured by 'hard' data or by perceptual data;
 - ii. High degree of external penetration;
 - iii. Specific type of behavior;
 - iv. Specific interests of small states compared with other states;
 - v. A specific role of small states, and in particular a specific role conception by the decision – makers of the small states⁸.

The above mentioned five dimensions are not equally important. They regard rank and role as basic definitional elements and consider the interest approach as very promising.

⁵ Robert L. Rothstein; “ Alliances and Small Powers” ; New York and London; 1968; PP. 23

⁶ David Vital; “ The Survival of Small States: Studies in Small Power/Great Power Conflict” ; London; 1971; PP. 9.

⁷ Raimo Vajrynen; “ On the Definition and Measurement of Small Power Status” ; Cooperation and Conflict; Vol. 6; No. 2; 1971; PP. 91-102.

⁸ Raimo Vajrynen; “ The Position of Small Powers in the West European Network of Economic Relations” ; European Journal of Political Research ; Vol. 2; 1974; PP. 143-178.

It is, however, noteworthy that smallness should be viewed only in general terms. For instance, if one talks of deficiency, various indicators connoting them can not be absolutely quantified and correlated. At best, they give an idea of range of smallness. Second, smallness is a relative concept. Some states may be viewed as large in the regional framework but small in global context. Finally, smallness is not static but dynamic.⁹ The discovery of an important resource like oil or a better mobilisation and augmentation of available resources may change the position of a state in the power hierarchy. The best example is Japan.

In our analysis of small states, we consider three main characteristics viz area, population and GNP for defining smallness of states.

Being an island is another important determinant of economic development for any state. According to the Cambridge Encyclopaedia, island is defined as a piece of land totally surrounded by water, in an ocean, sea or lake. It may be formed by (i) Remnants of former highland cut off from the rise in sea-level or by subsidence (ii) Volcanic eruptions on the oceans floor (iii) Deposition of sediments or (iv) Coral islands. Associated with it are such general features as smallness, remoteness and insularity and environmental fragility¹⁰

Many island developing states face special disadvantages which render the economies of these states vulnerable to forces outside their control. The economic vulnerability refers to a condition which threatens their economic viability. The concept, however, is subjective and its meaning differs from person to person.

⁹ Percy Selwyn " Small, Poor and Remote : Islands at a Geographic Disadvantage" (Sussex ; Institute of Development Studies, 1978); PP. 43-49.

¹⁰ Lino Briguglio " Small Island Developing States and their Economic Vulnerabilities" ; World Development ; Vol. 23; No. 9; 1995; PP. 1615- 1632.

Different Political economists use different variables to create vulnerability index. For instance, Lino Briguglio has used three variables i.e. exposure to foreign economic conditions, insularity and remoteness and proneness to natural disasters¹¹. It is hypothesized that higher the incidence of these three variables in a country, the higher the degree of its vulnerability. Everything else, including GDP and per capita, remaining constant.

Island states have valuable resources, including marine resources, coastal environments, bio-diversity and, most importantly, human resources. Their potential is recognised but the challenge for island states is to ensure that they are used in a sustainable manner for the well being of present and future generations¹². They are afflicted by economic difficulties and confronted by development imperatives similar to those of developing countries. Generally, island states also have their own peculiar disadvantages and characteristics, so that the difficulties they face in the pursuit of sustainable development are particularly severe and complex. Even so, large number of island states are small, remote and poor in resources. They share enough in common with each other (as well as non-island small states) to merit attention as a group¹³.

The disadvantages of small island states which ultimately make them vulnerable, arise from:

1. Climate change and Sea Level Rise.

¹¹ Ibid.

¹² Afroze Shaheen "Do Small States Behave Differently from Big States? A Critique of Maurice East's Alternative Model" ; *BIISS Journal* ; Vol. 14, No. 1; 1993; PP. 2.

¹³ C. E. Diggins "The Problems of Small States" ; *The Round Table* (1985), 295 (191-205)

2. Natural and Environmental Disasters¹⁴.
3. Small Size and Population Growth.
4. Limited Coastal and Marine Resources.
5. Limited land resources and prospects.
6. Limited Energy generating capacities.
7. Limited and Restricted socio-economic infrastructure.
8. Dependence on Tourism Resources.
9. Limited Economic Resources and Prospects.
10. Vulnerability to Domination by Multi-national Corporations and Financial Institution¹⁵.
11. Lack of Transport and Communications.
12. Lack of Science and Technology infrastructure.

As all these problems are closely inter-related, it is also necessary to consider them against the economic difficulties of Third World developing countries, to which most of them belong¹⁶.

Climate Change and Sea Level Rise

Island States are particularly vulnerable to global climate change and sea level rise. As their populations, agricultural land and infrastructure tend to be concentrated in the coastal zone, any rise in sea level will have significant and

¹⁴ Lino Briguglio; 1995; PP. 1615-1632.

¹⁵ C. E. Diggins "The Problems of Small States"; The Round Table (1985), 295 (191-205) Also see Paul Streeten, "The Special Problems of Small Countries" World Development; Vol. 21, No. 2, 1993; PP. 197-202.

¹⁶ Ibid.

profound effects on their economic and living conditions. Even the very survival of low lying islands is threatened.

Inundation of out lying island and loss of land above the high tide mark may result in loss of exclusive economic rights over extensive areas and in the destruction of existing economic infrastructure and human settlements. Global climate change may damage coral reefs, and affect both subsistence and commercial fisheries production. The increased frequency and intensity of storms that may result from climate change will also have profound effects on both the economies and environment of island states.

Natural and Environmental Disasters

Small island developing states are prone to extremely damaging natural disasters, arising out of cyclones¹⁷, volcanic eruptions and earthquakes. In some islands, the range of these disasters includes storm surges, land slides, droughts and floods. Due to climate change, such events including drought are perceived to be occurring with increasing frequency and intensity. Natural disasters are of special concern to small island developing states because of their small size; their dependence on agriculture and tourism; their narrow resource base; and the pervasive impact of such events on their people, environment and economics.

Small Size and Population growth

There are many disadvantages that stem from small size, which are magnified by the fact that many island states are not only small but are themselves made up of a number of small island which are known as atolls. These disadvantages include a

¹⁷ Lino Briguglio, op.c.t., 1995; PP. 1615-1632

narrow range of resources, with undue specification; excessive dependence on international trade, thereby creating vulnerability to global developments; high population density, which increases the pressure on already limited resources¹⁸; overuse of resources and premature depletion; relatively small watersheds and threatened supplies of fresh water; costly public administration and infrastructure including transportation and communication and limited institutional capacities and domestic markets¹⁹, which are too small to provide economies of scale while their limited export volumes sometimes from remote locations lead to high freight costs and reduced competitiveness. Small islands tend to have high level of bio-diversity but the relatively small numbers of various species impose high risks of extinction and create a need for protection.

In most of the island states, the rate of population growth exceeds the rate of economic growth, placing serious and increasing pressure on the capacity of those countries to provide basic services to their people. The other case is that although their population density may be high, many island states have small populations in absolute terms, insufficient to generate economies of scale in several areas and, therefore, have limited scope for the full utilization of certain types of highly specialised expertise.

Coastal and Marine Resources

Sustainable development in small island developing states depends largely on coastal and marine resources because their small land area means that those states

¹⁸ Paul Streeten "The Special Problems of Small Countries" World Development ; Vol. 21, No. 2; 1993; PP. 197-202.

¹⁹ *ibid.*

are effectively coastal entities. Population and economic development – both subsistence and cash – are concentrated in coastal zones. The establishment of 200 mile exclusive²⁰ economic zone has vastly extended the fisheries and other marine resources available to small island developing states.

Many island states face severe constraints in terms of both the quality and quantity of freshwater. This is particularly the case for low lying coral-based islands, where groundwater supplies are limited and are protected only by a thin permeable soil. Even where rainfall is abundant, access to cleanwater has been restricted by the lack of adequate storage facilities and effective delivery system.

As freshwater resources are vital for meeting basic needs of people, their inadequate protection and supply can set important limits to sustainable development.

Limited Land Resources and Prospects

The small size of islands coupled with land tenure system, soil types, relief and climatic variation, limit the area available for urban settlement, agriculture, mining, commercial forestry, tourism and other infrastructure. They create intense competition between land use options, which ultimately leads to degradation of the limited land area because of high population pressure on a limited resource base.

The search for an improved quality of life, with its increased demands for cash income, leads to greater production of cash crops (since they are more revenue earning)²¹, an increase in areas of cultivation leads to more mechanised production

²⁰ Ramphel S. ; “ Small is Beautiful but Vulnerable; The Round Table (1984), 292 (367-371).

²¹ C.E. Diggines, “ The Problems of Small States” ; The Round Table (1985) , 295 (191-205).

systems. In the past, unsustainable agriculture practices in those areas have contributed to deforestation, and agrochemical pollution of soil, freshwater and coastal resources.

Limited Energy Generating Capacities

For their energy resources, the island states are heavily dependent on imported petroleum products, largely for transport and electricity generation. They are also heavily dependent on indigenous bio-mass fuels for cooking and crop drying. The renewable energy resource endowments of these states vary greatly. All have substantial solar resources, which have still not been developed to their full potential. Wind potential is highly variable with location both within and between countries. Hydroelectric power is a possibility only for some islands.

The use of renewable energy resources as substantial commercial fuels by small islands states, is dependent upon appropriate technologies.

Limited and Restricted Socio-Economic Infrastructure²²

Small states do not necessarily have particularly low educational standards, at least up to secondary school level; many islands account for high degree of literacy and general education. But they are usually too small to sustain their own university, technical colleges or industrial and agricultural training institutions. Their more gifted students must therefore, seek these facilities overseas – usually at a distance and expense which only a privileged few can afford.

²² Ibid.

And only a few of them eventually return to settle in their homelands. This, in turn, makes it difficult for their governments to embark on indigenous development programs. As a result, they are compelled to rely on expatriate work force, thereby losing a great deal of foreign exchange.

Dependence on Tourism Resources

The tourism industry has contributed much to the economic development of island states. It also stimulates the development of other sectors. However, if not properly managed and planned, tourism could significantly degrade the environment on which it is so dependent. The fragility and interdependence of coastal zones and the unspoilt areas on which eco-tourism depends calls for careful management. One of the special tourist attractions of small island developing states is the distinctiveness of their cultures. The diversity and fragility of their environments are reflected in diversity and fragility of their cultures. The protection of the former is an important condition for the protection of the latter.

Limited Economic Resources and Prospects

Thus, island states are particularly vulnerable to natural as well as environmental disasters²³ and have a limited capacity to respond to and recover from such disaster. Island states are limited in size, have vulnerable economies and are dependent both upon narrow resource bases and on international trade, without any means to influence the terms of trade.

²³ Lino Briguglio; 1995; PP. 1615-1632.

Lack of opportunities for achieving economies of scale, together with their narrow resource base, tend to limit the total production of the island states to a narrow range of crops, minerals and industries, both manufacturing and services. Any adverse development concerning those productive sectors is likely to lead to significant reductions in output, a fall in foreign exchange earnings and increased unemployment.

It is argued that small island economies have limited resource or poor natural resource endowment. Limited resources are defined in terms of utility and quantity.

The limited use implies that they are either single used or have very limited scope for inter-industry use. Hence, these industries heavily depend on imported inputs for their quick industrial growth or to diversify their industrial base. If they import resources for industries, they are bound to lose their comparative advantage. Since island economies are of sea-locked nature, they depend on natural climatic conditions. Most of the small island economies are not able to fulfil their domestic agriculture requirements²⁴. Hence, their marketable surplus for industrial use is either zero or negative or very small.

Weak island economies have limited ability to exploit economies of scale. The economies of scale represent the relationship between input and output; it also depends on the rate of growth of diversification of inter-industry linkages or intra-industry linkages. Generally, island economies have import content for industrialization; they do not have indigenous technologies to meet the national requirements. Lack of technological development necessitates the importation of

²⁴ C.E. Diggines, "The Problems of Small States"; The Round Table (1985), 295 (191-205).

skilled man power for economic development. This, in turn, increase production cost. Sea-locked economies also have poor infra-structural base.

The high import content for industrialisation means that there is hardly any scope for promotion of import-substitution industries²⁵, its promotion is possible only with the help of higher export earnings, for that they need further imported inputs.

As a result, they adopt protectionist policies. These policies result in inferior quality products, higher price and parallel market in domestically produced goods. The higher price results in additional burden on consumer.

Small island states are not geographically small but also they are economically small. By economically small, we mean that the size of their market, GNP and GDP are small in size²⁶. They cannot expand their market due to their limited resource base, limited demands, high import dependency, diminishing returns and poor infrastructure. These countries are not able to invest in infrastructure projects, which require huge amount.

These economies have adopted import led growth strategy with high dependency on export. This results in inefficiency, higher price burden on consumer and monopoly or duopoly. Under this situation they cannot gain from trade. It is generally found that terms of trade are always against interest of these countries. It further limits the expansion of domestic market. International trade theory suggests

²⁵ Nadim Khalaf, "Country Size and Economic Instability", Journal of Development Studies ; Vol. 13; July'76; PP. 423- 28.

²⁶ Paul Streeten "The Special Problems of Small Countries" World Development ; Vol. 21, No. 2; 1993; PP. 197-202.

that small economies cannot influence international prices. Hence, they are price takers because of their high import dependency and unreliability on exports.

Domination of MNC's and Financial Institutions (FIs)

This too is by no means a peculiarity of small countries. But here again a difference of degree can easily be notable. In very small country there is unlikely to be a large number of opportunities for investment. This is due to various reasons, as we have explained, like structural constraints, protectionist policy, small size of market, lower purchasing power and high transportation cost²⁷. This limits their investment capacity. They generally opt for either costly commercial loans or more restrictive institutional loans from financial institutions i.e. International Monetary Fund or World Bank. But funds from these banks or institutional loans are governed by strongest conditions, which these states find difficult to follow.

Transportation and Communication

Transport and communications²⁸ are the lifelines, linking small island developing states with the outside world. It is also vital for their integration and sustainable development. Distance and isolation have resulted in relatively high transport costs, including high transport insurance costs, for many small island developing states. Domestic markets are too small to provide economies of scale and remoteness of many rural and outer-island communities constrains options and increase costs.

²⁷ C.E. Diggines, "The Problems of Small States" ; The Round Table (1985) , 295 (191-205).

²⁸ Lino Briguglio, 1995, PP. 1615-1632.

Science and Technology

Science and technology are crucial for the achievement of sustainable development. In small island developing states, science and technological capacity remains underdeveloped both in terms of research and development of institutions. At the same time, some island people adopt traditional knowledge and life. There is also a constant tension between tradition and modernity, thereby making the integration process rather difficult.

Trained people are needed in wide range of fields in order to ensure development of country. Limited national capacities mean that in a number of areas, emphasis will have to be given to regional approaches and joint ventures with international community. Encouragement of private sector involvement could also be very important because of limited government capacity to undertake both training, research and development.

Conclusion :

Vulnerabilities of small island states arise from a number of sources. They play havoc on the eye of people. Natural and environmental disasters cause severe damage to which the island states have limited capacity to respond. Small island developing states are among those that contribute least to global climate change and sea-level rise; they are the ones who suffer a lot.

Small island developing states are limited in size, have vulnerable economies and are dependent both on narrow resource base and international trade, without any means of influencing the terms of trade.

To enhance their national capacities and self reliance, small island developing states, with the assistance and support of international community, should promote human resources development programs, including education, training and skills development.

CHAPTER 2.

Geographical Features and Economic Constraints of Maldives

Geographical Features and Economic Constraints of

Maldives

The geo-physical setup of any state is a significant factor in determining the level and pace of economic development. Geography provides a natural base for economic development, it also puts several constraints on economy. In this chapter an attempt is made to discuss various peculiar geo-physical features of Maldives. Maldives, like other small island developing states, faces problems associated with its small size, remoteness and insularity disaster proneness and environmental fragility¹ How these problems put constraints on the process of its economic development and sustenance will be analysed in this chapter.

Location

The Republic of Maldives is located in the Indian Ocean, about 450 miles westward of Sri Lanka. Its northern most tip is 300 miles south west of Cape Comerin, in India, and the southern most island of Gan is 240 miles north of Diego Garcia in the Chagos archipelago. Such a physical remoteness explains its historical insularity to a considerable extent²

¹ P. Sahadevan, "Maldives: Search for security"; Dipankar Benerjee (ed), Comprehensive and Cooperative Security in South Asia, Institute of Peace and Conflict Studies, New Delhi, 1998; PP. 208.

² U. Phadnis and E. D. Luithui, "Maldives: Winds of Change in Atoll State" South Asia Publishers; New Delhi; 1985.

Maldives is grouped together in clusters called Atolls, of which there are about twenty in all but grouped into for some thirteen divisions by the Maldivian government for administrative purpose³.

The archipelago of Maldives is studded with 26 natural atolls and a total of 1,190 coral islands, of which only around 202 are inhabitable. Each island is surrounded by a shallow lagoon, enclosed by a coral reef, which safeguards the island from the hazards caused by a rough, turbulent sea. Hundreds of these islands with other coral growth collectively form an atoll. Almost all islands are flat with no hills or mountains and freshwater ponds are found only on few larger islands⁴.

“Barrier Reefs”⁵ encircle the southern Atolls fortifying them admirably against the violence of the waves and severe storms which frequently visit these islands. None of these atolls are thus protected, except in a few detached parts. These reefs are in many places just a wash; in others, they form long stretches of sand less than 8 feet above sea-level and in general either circular or ablong.

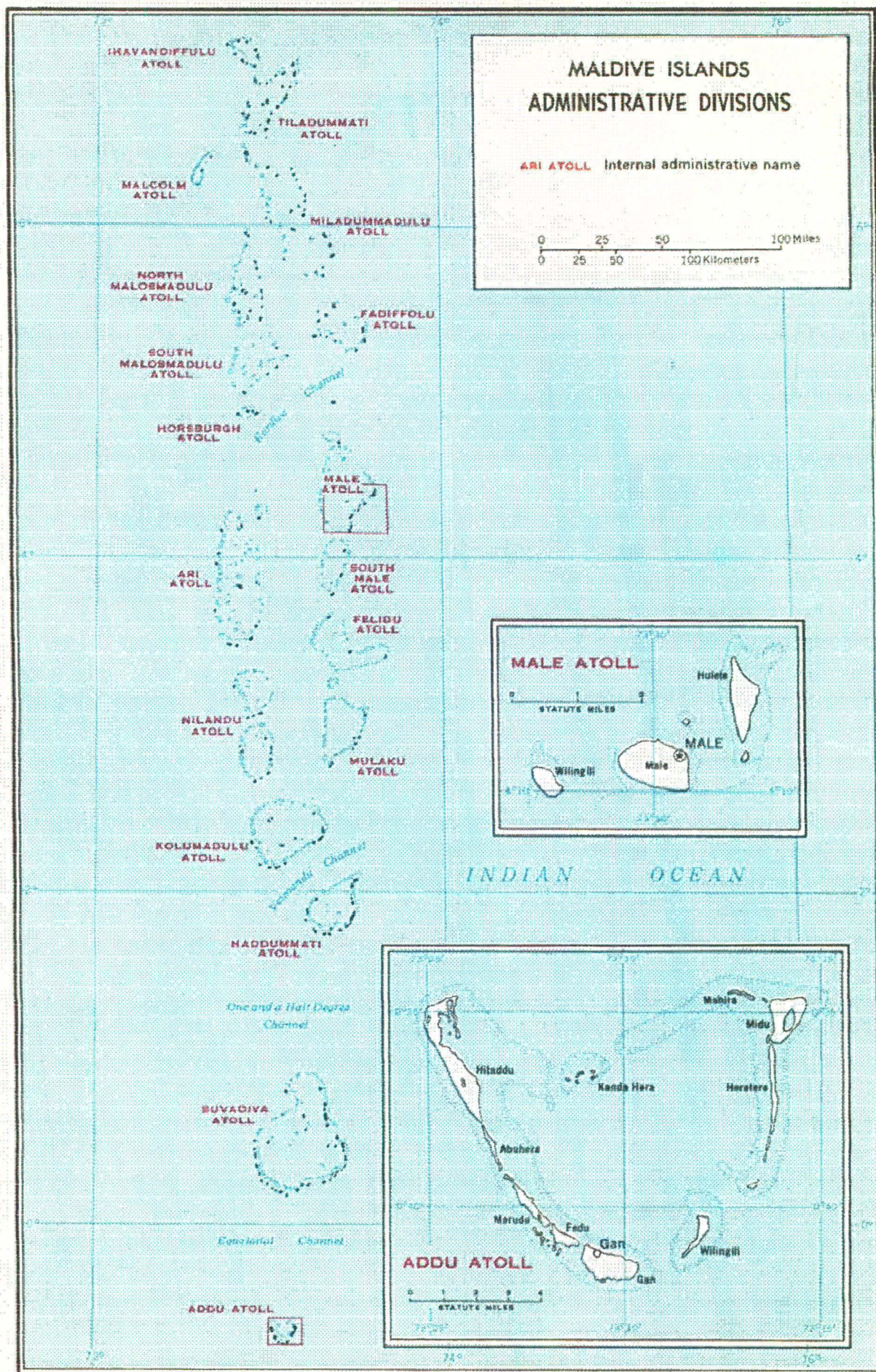
Demography

The land area is only 115 sq. miles (298 sq. Kms). The ‘inhabited’ islands (202) are mostly those which have settlements from ancient times. The category of inhabited ones includes those islands which are covered with coconut trees. On such

³ H. C. P. Bell; “ The Maldives Islands: Monograph of History, Archipelago and Epigraphy”

⁴ “ Maldives”; Ministry of Tourism; Male’; 1998.

⁵ Ibid.



islands, a few families may be living to collect coconut but their citizenship registration would be of some nearby inhabited islands⁶.

According to the 1995 census⁷, the population of Maldives was 244,644 persons, reflecting a annual growth rate of 2.75 percent for the period 1990-1995. There has been a slight decline in the growth rate between 1985 and 1995. The sex ratio (Male/ 100 females) was 107.63, 105.25 and 104.57 in 1985, 1990 and 1995 respectively. There has been a slight decrease in the sex ratio over these years (Table-2). The population of Male', the capital, was highest with 62,973 persons. This has contributed to housing shortages and deterioration of other social services and facilities in the capital. Male remains one of the densest capitals of the world⁸.

The coral substance of the islands and their salinity have resulted in the non-existence of dense forests. While thick growth of almond are restricted to larger islands, coconut palms, breadfruit, screwpines, banyan and lesser vegetation are in plenty⁹. Mangroves thrive in brackish waters and different species of grass and sedge grow along the shorelines.

The important horticultural and vegetable produces including fruits such as bananas, papaya, watermelon, mangos, pine-apples, jugubes custard, apples and lime; vegetables like green chilli, small onions, cereals such as millet and maize; and



⁶ U. Phadnis and E. D. Luithui; "Maldives: Winds of Change in Atoll State" : South Asia Publishers, New Delhi; 1985.

⁷ Maldives; Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

⁸ Least Developed Countries Report; 1995.

⁹ U. Phadnis and E. D. Luithui; "The Republic of Maldives: Development Imperatives of a Small State" : SIS; JNU; 1982.



Table – 1. Census Population (Atoll wise)

S.No.	Atolls	Island		Population		
		Inhabited	Uninhabited	1985	1990	1995
	Total	202	993	180,088	213,215	244,644
1	Male'	1	-	45,874	55,130	62,973
2	Thiladhunmathi Uthuru Buri	16	24	9,899	12,031	13,657
3	Thiladhunmathi Dhekunu Buri	17	20	10,850	12,890	14,769
4	Miladhunmadulu Uthuru Buri	15	39	7,509	9,022	10,462
5	Miladhunmadulu Dhekunu Buri	14	64	6,864	8,437	10,096
6	Maalhosmadulu Uthuru Buri	16	74	9,416	11,303	12,528
7	Maalhosmadulu Dhekunu Buri	13	68	6,982	7,716	8,727
8	Faadhippolhu	04	56	6,414	7,725	8,847
9	Male Atholhu	09	95	8,734	10,133	11,650
10	Ari Atholhu	18	61	7,861	9,793	5,340
11	Felidhi Atholhu	05	14	1,419	1,697	6,404
12	Mulaku Atholhu	09	26	3,490	4,186	4,810
13	Nilandhu Atholhu Uthuru Buri	05	21	2,148	2,614	3,167
14	Nilandhu Atholhu Dhekunu Buri	08	49	3,568	4,199	4,825
15	Kolhumedulu	13	55	6,949	8,109	9,651
16	Hadhdhunmathi	12	71	7,212	9,101	10,192
17	Huvadhu Atholhu Uthuru Buri	10	79	6,054	7,295	8,164
18	Huvadhu Atholhu Dhekunu Buri	10	150	8,905	10,417	11,984
19	Fuah Mulaku	01	-	4,983	6,160	6,971
20	Addy Atholu	06	27	4,957	15,177	17,648

Sources:- U. Phadnis and E.D. Luithui; "Maldives : Winds of change in Atoll State; South Asian Publishers; New Delhi; 1985; PP-6.

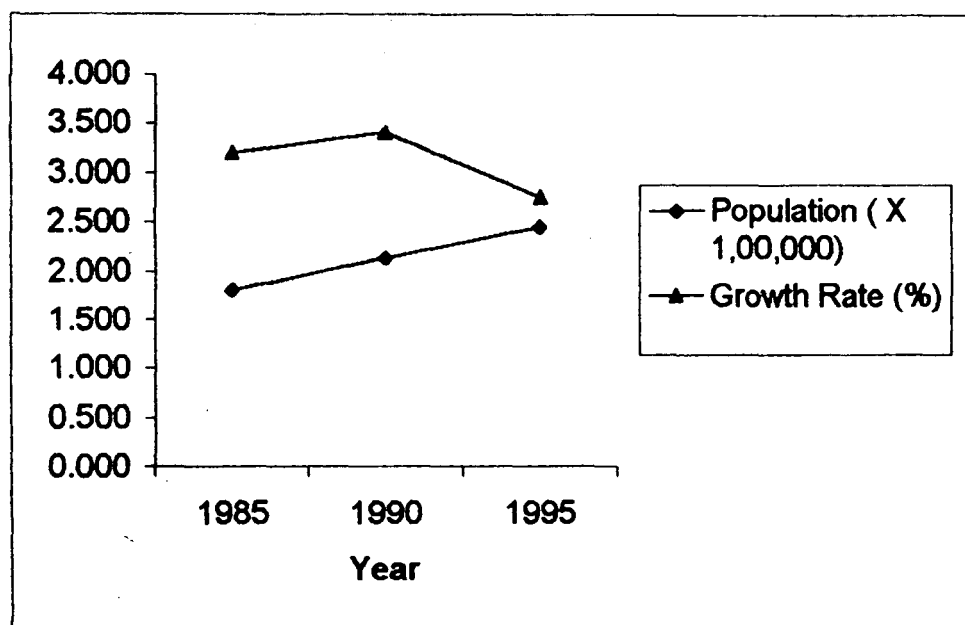
1. Maldives: Statistical Year Book; Ministry of Information and Culture; Male'; 1985.

Table- 2. Demographic Features of Maldives

S.No		1985	1990	1995
1.	Population	180,088	213,215	244,644
2.	Growth Rate (%)	3.2	3.4	2.75
3.	Sex ratio (Male/100 Females)	107.63	105.25	104.57

Source :- Maldives: Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

Demographic features



Graph 1.

roots and tubers like taro, yam, sweet potatoes and cassava are also grown domestically¹⁰.

Tropical flowers are found in abundance either in wild or cultivated in gardens. A large variety of local timber is also grown for domestic use. The casurina (*Casurina equistifolia*), a large, fast growing evergreen, is being promoted by the Ministry of Fisheries and Agriculture as excellent wind breakers to shelter weaker plants from the damaging effects of sea-spray¹¹.

Constraints on Economic Development

A country, located in tropical zone, with the land area of 298 sq. km., and very little (3000 hectares) arable land cannot produce much for its own food requirement is obvious. This compels the population to search for food requirements from other sources. Being an island state, Maldives can rely well upon oceanic food. Although oceanic foods provides the required proteins, the demand for food grain is high. The country still depends on the import of food grains.

As the Island State is built on coral reef, the scope for mineral wealth is almost rare because the coral reefs are made up of limestone (calcium carbonate). Presence of ferrous and non-ferrous metals is out of question due to its geological history of formation. It is possible that rock salts such as lime, cement, plastering material etc.¹² may be available. Hence, the absence of mineral base creates

¹⁰ Hello Maldives; Ministry of Tourism; Male', 1998.

¹¹ ibid

¹² Maldives; Statistical Year Book; Ministry of Information and Culture; Male', 1995.

constraints in largescale industrialisation. Even ecology of Maldives archipelago is very fragile. Therefore, it needs balanced and sustainable utilisation of its resources.

The country lacks skilled and trained manpower to work in an efficient way. A large portion of its population is engaged in fishing. In agriculture too, farmers work at subsistence level. This is how the geophysical features of an island state sets a limit to the securing of scalar economy in a conventional sense.

More clear vision of the relationship between geophysical features and possible economic activities would be made by taking various sectors of economy and their contribution to development.

Agriculture

In many countries, agriculture sector is often considered as the backbone of economy. It is most influenced by the whims and fancies of the nature and environment. The agriculture production of any country depends on the type of its soil, amount of rainfall, and other climatic factors¹³. The land of Maldives is characterised with sandy soil¹⁴ having very low water retention capacity which makes it less fertile specially for the needs of food crops.

Further, the agriculture was constrained by the unscientific method of cultivation, mainly involving slash and burn cultivation¹⁵. Besides, the institutional framework such as increased land tenure system and poor infrastructural facilities hinders the development of agriculture.

¹³ "Principles of Geography"; NCERT Publication; New Delhi; 1993; PP. 64.

¹⁴ "Maldives"; Ministry of Tourism; Male'; 1998.

¹⁵ U.Phadnis and E.D. Luithui; " Maldives: Winds of Change in an Atoll State" ; South Asia Publishers; New Delhi; 1985; PP. 8.

Thus, the peculiar geo-physical features has made greater impact on agricultural economy of Maldives. This makes agriculture as an insignificant factor in island's economy, which employ 8% of the work force and produce less than 10% of GDP in 1990. The relative importance of agriculture sector has significantly declined from 13.71% of GDP in 1984 to 8.20% in 1993 (Table-3). The available land has potential to cultivate only few crops due to poor soil quality. Apart from tree crops like coconut, breadfruit, banana, mango, pine and lime, agriculture activities include cultivation of millet, sweet potato, cassava, yam, chilli, green pepper, onion, pumpkin and watermelon¹⁶. As such, all the main food staples such as rice, wheat flour and sugar have to be imported¹⁷ for domestic consumption. Given the geophysical constraints the government is trying to diversify the economy by developing the other sectors such as shipping and tourist industries, where it has comparative advantage over others.

Manufacturing Industries

The geophysical features also hinders the growth and diversification of industries directly and indirectly. The poor agricultural sector which is supposed to provide feedback in the form of raw materials and readily available market could not be able to provide required feedback. This makes the Maldivian industries least diversified and restricted mainly to fisheries and shipping industry. The high cost of import of raw material makes production unviable. There are only a small number of modern industries in Maldives including fish canning, garment making and soft

¹⁶ P. Sahadevan; "Maldives: Search for Security" ; Dipanker Benerjee (ed) "Comprehensive and Cooperative Security in South Asia" ; Institute of peace and Conflicts Studies; New Delhi; 1998; PP.208-9.

¹⁷ Encyclopaedia of SAARC Nations.

Table – 3. GDP by Sectors of Origin, 1984 – 1993 (In Percent)

S.No	Sector	1984	1987	1990	1993
1.	Gross Domestic Product	100.0	100.0	100.0	100.0
2.	Primary Sector	31.92	29.25	25.78	22.30
	Agriculture	13.71	10.98	8.89	8.20
	Fisheries	16.11	16.42	15.06	12.30
	Coal and Sand Mining	2.10	1.86	1.83	1.80
3.	Secondary Sector	13.82	13.78	14.23	15.40
	Construction	7.73	8.19	8.56	9.30
	Manufacturing	6.09	5.59	5.67	6.10
4.	Tertiary Sector	54.26	56.97	59.99	62.30
	Distribution	16.63	16.27	17.02	19.10
	Transport	2.29	5.23	5.82	6.50
	Tourism	15.24	17.25	18.14	17.10
	Real Estate	3.96	4.35	4.14	4.20
	Services	8.02	5.34	5.67	6.20
	Government Administration	8.11	8.52	9.19	9.20

Source :- Maldives: Statistical Year Book; Ministry of Information and Culture; Male', 1995.

drink bottling. Other small scale industries include net-weaving (coir, yarn weaving), applying lacquer designs on rares and containers.

Maldives has to import its most essential consumer and capital goods owing to the dearth of manufacturing industries which contribute less than 7% of GDP (1994; at constant prices with base 1985)¹⁸. The manufacturing sector (including electricity) has shown a declining trend in 1980s. Since 1990 it has shown recovery and increased from 5.67% in 1990 to around 6.1% in 1993 as proportion of GDP (Table 3)¹⁹. This could be because of the lack of metallic/non-metallic and other mineral resources which are the main raw materials for the development of capital goods industries.

Energy Resources

Further more the lack of energy resources curtails the growth of industries. Not surprisingly, Maldives has no commercial resources of its own. It mainly relies on imports of petroleum products. It has installed capacity of around 40 million kw hour of electricity (1993)²⁰, which is mainly fuelled by imported diesel oil. The potential of hydro and nuclear based power is almost negligible. The only potential for indigenous energy development would seem to lie ideal in solar energy or tidal energy. This however has not materialised with the present level of technological and scientific developments.

¹⁸ UN Statistical Year Book for Asia and The Pacific; 1996.

¹⁹ Maldives; Stratestical Year Book; Ministry of Information and Culture; Male'; 1995.

²⁰ UN Industrial Commodity Statistics Year Book; 1994.

Lack of Skilled Manpower

Maldives badly needs trained manpower. The literacy rate in Maldives may be high in trends of country's traditional education system, but only 15 percent of students receive a formal post primary education in government schools. The country is faced with a lack of manpower, in as much as there were only 100 university graduates in the country in 1985, whereas some 3,800 were required for professional jobs²¹. Despite the fact that the expenditure on education by the government represents 13.6% of total expenditure in 1996, there are only a few institutes for technical and higher education in the country²². Maldives Institute of Technical Education was started in mid 1993 with the aim of creating pool of skilled manpower²³. The problem is further aggravated by the widely scattered nature of the islands. A sparsely populated character of the country brings in its wake a host of problems in development of country wide infrastructural network. The policy of the government is to enhance the unified system of education, increase enrolment of students at home and make provision for scholarships to go abroad. It also gives emphasis on vocational and on the job training in the main areas of economic activities.

Communication and Transportation

The underdeveloped mode of communication and transport increase the cost of production. This makes it disadvantageous for producers to capture raw material,

²¹ Least Developed Countries Report; 1997.

²² Maldives; Ministry of Information and Culture; Male' ; 1996.

²³ Ibid.

scattered over large number of atolls. At the same time, reaching the market for finished goods involves large transportation costs. The transportation in Maldives is 60% state owned, mainly consists of marine transport. However, this facility is restricted to few main islands. The government repeatedly emphasised on the improved transportation and communication between male and other atolls as well as among islands within atolls. In the early 1980s, the government established the Atolls Trading Corporation with a view to purchasing locally produced items from the atolls, encouraging development of small scale industries and expediting growth of and inter-island transport network.

Fishing

The fishing industry is a vital sector of Maldivian economy. It is the largest source of foreign exchange earning after tourism which account for around 20% of GDP (1994)²⁴. The fishing industry is the back bone of Maldivian economy, since it not only brings foreign exchange earning but also takes care of food requirement²⁵ of people. This sector provides employment to about 22.4% of total work force²⁶ in 1992; 20.5% in 1990²⁷; (See table – iv). Hence, in an underdeveloped country, the role of agriculture sector has reduced the fishing.

This could be attributed to its geophysical setup in the Indian Ocean and large economic zone with a range of about 120km. Despite this, Maldives could not be able to exploit its full potential of fish catch. This is because of its geological

²⁴ UN Statistical Year Book for Asia and The Pacific; 1994.

²⁵ U.Phadnis and E.D. Luithui; “ Maldives: Winds of Change in an Atoll State” ; South Asia Publishers; New Delhi; 1985; PP. 8.

²⁶ ILO; Year Book of Labour Statistics; 1993.

²⁷ Maldives; Strateistical Year Book; Ministry of Information and Culture; Male’; 1995.

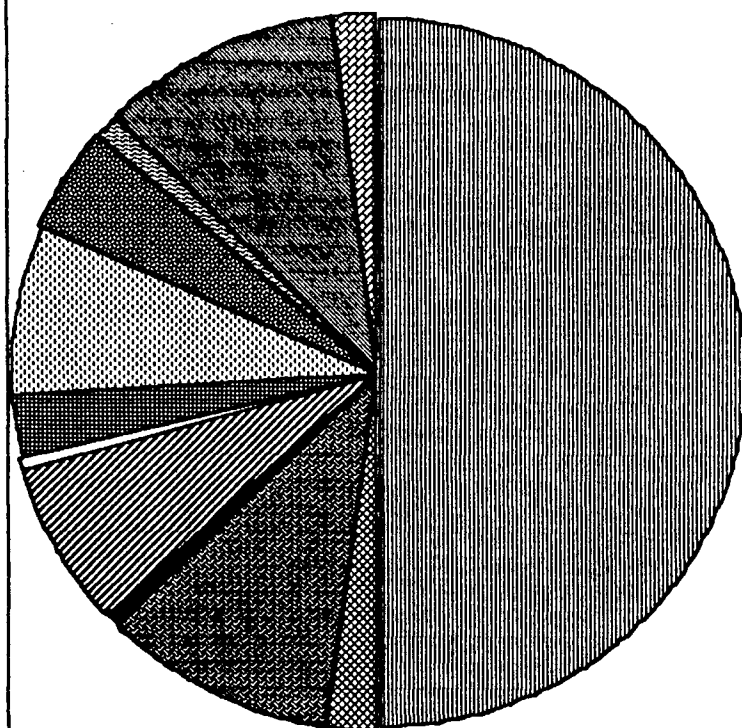
Table – 4. Employed population By Industry (Census 1990)

S.No	Industry	Employed Population (number)	Employed Population (%) *
1.	Total Employed	55,949	100.00
2.	Agriculture and Forestry	2,619	4.7
3.	Fishing	11,498	20.5
4.	Quarrying	496	0.89
5.	Manufacturing	8,441	15.1
6.	Electricity, Gas and Water	445	0.8
7.	Construction	3,151	5.6
8.	Wholesale and Retail Trade	8,884	15.9
9.	Transport, Storage and Communication	5,321	9.5
10.	Finance, Insurance and Business	1,058	1.9
11.	Community, Social and Personal Service	11,848	21.2
12.	Not stated	2,188	3.9

Note:- Figures are rounded off

Source :- Maldives Statistical Year Book, Ministry of
Information and Culture, Male', 1995.

Employed Population (number)



- Total Employed
- Agriculture and Forestry
- Fishing
- Quarrying
- Manufacturing
- Electricity, Gas and Water
- Construction
- Wholesale and Retail Trade
- Transport, Storage and Communication
- Finance, Insurance and Business
- Community, Social and Personal Service
- Not stated

features. Being a coral island, its oil reserves are very limited. All the efforts for exploration of oil reserves are unsuccessful. Recently, in February 1989, the government of Maldives along with Netherlands Company, Royal Dutch Shell, signed a contract permitting exploration of petroleum. In 1991, however, no reserves of petroleum or natural gas could be discovered in the Maldivian waters²⁸. The deficiency of fuel resources fosters the process of modernisation and mechanisation of fishing industry.

In the early 1970s, the government, with the help of an International Development Association (IDA) loan, launched modernisation programme. But this led to a significant rise in the import bill and trade deficit. Due to high cost of imported fuel and oil crises in 1970s and early 1990s, the cost efficiency was vastly eroded. The fall in fish imports in 1980s and early 1990s, was due to more intense competition from foreign producers and falling prices in principal European markets.

The inability of Maldives to fully exploit its Marine resources made the government in 1985 to issue fishing licenses to foreign countries – France and Spain – enabling them to catch up to 40,000 metric tons of tuna per year within its economic zone. In returns, Maldives got 10% royalty on the total catch, based on US lending prices. Thus, Maldives have to evolve technical knowhow and scientific management to tap the marine resources in what goes to make up 98% of country's territory²⁹.

²⁸ B.H. Farmer; Physical and Social Geography; Chapter on Maldives; PP. 604-213.

²⁹ U.Phadnis and E.D.Luithui; 1985; PP. 48.

Thus, the fishing industry meets the immediate needs of economy. At the same time, raising the technological base has generated certain problems. In the first place, the country has been made increasingly dependent on foreign companies for its most important industry. Consequently, its markets are limited. Second, increasing mechanisation of fishing boats has brought Maldives within the ambit of world-petrol-price crises. Third, it has displaced labour (specially of women) as drying and salting opportunities have become limited. Consequently, it has led to greater malnutrition as a result of fall in the intake of fresh products which formed a part of the daily diet of Maldivians.

Tourism and Shipping

Another important sectors of economy are tourism and shipping industries. They constitute a major proportion of GDP by economic activities. These sectors are obviously better suited to Maldives because of its geo-political set up, natural beauty and ecological factors. In the early years tourism had hardly formed one percent of GDP; it accounted for 17.10% of the GDP in 1993³⁰. The number of tourists visiting Maldives rose from 3,789 in 1972-73 to 324,311 in 1995³¹. The huge demand from the emerging economies in Asia helped to more than offset the decrease in arrivals from Europe due to recession. This also decreased the dependence of Maldives on Europe's economic condition. In 1994 the number of tourist totalling 279,655 exceeded the local population of 244, 644. Tourism revenues are comparable to four-

³⁰ Maldives; Statistical Year Book; Ministry of Information and Culture; Male', 1995

³¹ Statistical Survey; Ministry of Information and Culture; Male', 1996.

fifth of visible export receipts and in 1992 receipts from tourism provided an estimated 198.2 Rufiyaa. The revenue from tourism helped Maldivian economy immensely to overcome the balance of trade deficit in its external accounts.

Yet, the tourist industry was seriously affected by civil disturbances in Sri Lanka. There was 0.5% decrease in the number of arrivals in 1986 compared to 1985, but it was recovered soon and revenue from tourism was sustained. The industry provides good employment opportunities, particularly for women who have been displaced by mechanisation and consequent sale of fresh fish³². At present this industry employs less than two percent of labour force.

The shipping industry was established to cater to the needs of Maldives. But it involved in commercial activities. During the 1980s, however, the shipping sector, which was dependent on third-country trade for more than 90 per cent of its cargo earnings³³, suffered from the world wide recession as well as from the effects of Iran-Iraq war. Because of the heavy losses incurred during 1982-84, the Maldives National Ship Management Ltd. Operated a fleet of eight general cargo vessels and two container vessels, and handled about 60 per cent of Maldives total imports³⁴.

³² U. Phadnis and E. D. Luithui; SIS; JNU; 1982.

³³ B.H. Farmer; Physical and Social Geography; Chapter on Maldives; PP. 604-213.

³⁴ Statistical Survey; Ministry of Information and Culture; Male'; 1996.

Conclusion

The geo-political setting of Maldives determines, to a large extent, its economy and the way of living of its people. Various economic activities in the country depend upon the interactions between man and nature. In particular, the sea-locked Maldivian economy has limited natural resource base, including low fertility of land and meagre forest and mineral wealth.

The forward and backward linkages of poor energy resources and meagre agriculture production have limited the scope of diversifying their activities to the challenging world agro-based industrial demands. In such, under-developed small countries, the short term needs supersede the long term vision of development. The insufficiency and low marginal productivity erodes their competitiveness in the global commodity market. This inefficiency is mainly due to poor infrastructural base, diminishing returns and low investment capacity.

Alongside, the Maldives has been trying to find ways and means to blend economic growth with social justice. It is confronted with the task of maximum utilisation of hitherto underutilised resources. This requires a long gestation period as well as induction of inputs, which its economy can ill afford mobiline on its own. Consequently, Maldives has shed its age long isolation and insularity and its gradually getting enmeshed in the vortex of international politico-economic systems to meet developmental goals. Moreover, inspite of all the constraints put by nature, the possibility of improving all sectors on sustainable basis is not ruled out.

CHAPTER 3.

Economic Development and Vulnerability

Economic Development and Vulnerability

In the previous chapter, we have seen how geophysical features of Maldives create constraints in economic development. In the present chapter, an attempt is made to quantify the process of economic development against the background of some theoretical formulations.

Economic development generally indicates the following: empowerment in material welfare of people; eradication of mass poverty; changes in the composition of inputs and output that generally include shifts in the underlying structure of production; economy is organised in such a way that productive employment is given to working age population rather than a privileged minority; and greater participation of groups in decision making process¹.

Thus, economic development may be defined as nothing less than the “upward movement of the entire social system;”² or it may be interpreted as the attainment of a number of “ideals of modernisation.” They include rise in productivity, social and economic equalization, modern knowledge, improved institutions and attitudes, and a nationally coordinated system of policy measures that can remove the host of undesirable conditions in the social systems, which have perpetuated a state of under development³.

Measurement of Economic Development

Economic development is measured in four ways:

¹ Charles P. Kindleberger and B. Herrick; “Economic Development”; McGraw Hill; New York, 1977; p. 1.

² Myrdal; “Asian Drama”; P. 1869.

³ C. E. Black; “The Dynamics of Modernisation;”, New York, 1966; pp. 55-60.

1. **GNP:-** One of the methods to measure economic development is in terms of an increase in the country's real national income over a long period of time. But this is not a satisfactory measure because of certain conceptual difficulties⁴.
2. **GNP per capita:-** The second measure relates to an increase in the per capita real income of the economy over the long period. Economists define economic development in terms of an increase in per capita real income or output. This indicator of economic development and the rate of increase in real income should be higher than the growth rate of population. But difficulties still remain.
3. **Welfare :-** There is also a tendency to measure economic development from the point of view of economic welfare. Economic development is regarded as a process whereby there is an increase in the consumption of goods and services of individuals. According to Okun and Richardson, economic development is “ a sustained, secular improvement in material well being, which we may consider to be reflected in an increasing flow of goods and services⁵”.
4. **Social Indicator:-** Dissatisfied with GNP or GDP per capita as the measure of economic development, certain economist have tried to measure it in terms of “ social indicators.” These include health, food and nutrition, education including literacy and skill, employment, conditions of work, consumption of basic necessities, transportation, housing, including household facilities, clothing, recreation and entertainment, social security etc. all these indicators emphasize on the quality of the development process.

⁴ Note “Real National Income” refers to the country's total output of final goods and services in real terms rather than in money terms.

⁵ O. Okun and R. W. Richardson, “Studies in Economic Development”, p. 230.

Obstacles to Economic Development

Even though the general characteristics of under development are not common to all the under developed countries, the factors which inhibit development are more or less same in developing countries. Some of the factors which inhibit development are as follows:-

1. Vicious Circles of Poverty:-

There are circular relationships known as the 'vicious circles of poverty' that tend to perpetuate the low level of development in developing countries. The basic vicious circle stems from the fact that in Least Developed Countries, total productivity is low due to deficiency of capital market imperfections, economic backwardness and under development. However, the vicious circles operate both on demand side and the supply side. The demand side of vicious circle is that the low level of real income leads to a low level of demand which, in turn, leads to a low rate of investment and therefore, deficiency of capital, low productivity and low income. Low productivity is reflected in low real income. This means that low level of saving, which leads to low investment and deficiency of capital, in turn, leads to a low level of productivity and income. Thus, the vicious circle is complete from the supply side⁶.

The third vicious circle envelops under developed human and natural resources. Development of natural resources is dependent upon productivity capacity of the people in the country. If the people are backward and illiterate, lack

⁶ Mishra and Puri; "Development and Planning: Theory and Practice"; Himalaya Publishing House; Bombay; 1991; pp. 60-73.

in technical skill, knowledge and entrepreneurial activity, the natural resource will tend to remain un-utilized, under-utilized or even mis-utilized .

2. Socio-Cultural Constraints

No doubt shortage of capital is a serious obstacle but it is not the only obstacle to economic development. According to the UN Report on process and problem of Industrialization in Underdeveloped Countries, there are 'elements of social resistance to economic change' in underdeveloped countries, which include institutional factors characterised by rigid stratification of occupations' reinforced by traditional beliefs and values⁷.

3. Agricultural Constraints

The poor performance of the agriculture sector is a major reason for the sluggish economic growth of developing countries. The constraints are to be found in the environment in which farmers operate; the technology available to them, the incentives for production and investment, the availability and price of inputs, the provisions of irrigation and the climate.

4. Human Resource Constraint

Underdeveloped human resources are an important obstacle to economic development in developing countries. Such countries lack critical skill and knowledge required for an all round development of the economy.

⁷ Leon Mears and Adamantios Papelasis; "Determinants of Economic Development"; in Adamantios Papelasis (ed.); Economic Development-Analysis and Case Studies; Universal Publishers; Delhi; 1976; pp. 162.

Economic Growth in Maldives

The Maldivian economy is in many ways unique compared to the economies of other developing countries. In regard to economic growth, despite adverse global economic circumstances the country showed substantial progress in early 1980's. During 1980-84, the GDP increased by 43 per cent in real terms; in 1989-93 it increased by 41.5 per cent. The GDP has increased from Rf 374.2 million to Rf 536.5 million and from Rf 843.27 million to Rf 1190.2 million respectively⁸ in absolute terms. However, some caution has to be exercised in interpreting the statistics. There is a sizable foreign exchange outflow from the country because the expatriate workers send their income to their countries. Due to this, there is a divergence between the Gross Domestic Product (GDP) and the Gross National Product (GNP).

An analysis of sectoral contribution to GDP for 1993 show that highest contributions to GDP have come from tourism, fisheries and distribution services. These sectors contribute 17.10 per cent, 12.30 per cent and 19.10 per cent respectively. The primary sector contributes nearly 22.30 percent to GDP while the secondary sector contributes about 15.40 percent. The tertiary sector, including the government's contribution accounts for the rest 62.3 percent⁹.

Finance

Monetary scenario of Maldivian economy is recorded in table 5. The money supply is increased by as high as fifty three times between 1982 and 1994. It was

⁸Maldives: Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

⁹ Ibid.

14.6 million Rf in 1982 and increased to 995.98 in 1994. Net foreign assets also showed a positive trend between the same period. These were negative in 1982 and 1987 but after that trend changed and it became positive. Domestic Credit, which increased from Rf 274.7 million in 1982 to Rf 1475.92 million in 1994, comes mainly from Central Government Public enterprises and Private sector. It is notable that except in 1987, public enterprises are contributing between 5.2% to 13.93% to the domestic credit. Significant contribution to domestic credit till 1994 was that of Central Government and Private sector comes at second place¹⁰.

In 1981 the country's first central bank, the Maldives Monetary Authority, was established, and the currency was changed from rupees to rufiyaa. In 1982, the first commercial bank, The Bank of Maldives Ltd. was opened as a joint venture between the Government and the International Finance Investment and Credit Bank of Bangladesh. Import controls, obliging foreign businessmen to use banking facilities in Maldives, were also announced in 1982. In 1985, with a view to reducing the deficit on the balance-of-payments current account and to remedy a serious shortage of foreign exchange, the Government imposed controls on the supply of bank credit, restricted capital expenditure on development projects, and 'pegged' the exchange rate of the rufiyaa to the currencies of Maldives' principal trading partners. In 1986 it introduced an import-licensing system, which successfully curtailed expenditure on imports, but this was revoked in March 1987, when the rufiyaa was devalued by 30 per cent and allowed to 'float'.

¹⁰ IMF, International Financial Statistics.

Table-1. GDP and Per Capita GDP of Maldives: 1984-1993.
(million Rf)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
GDP (at 1985 constant Prices)	527.5	600.3	651.9	709.7	771.6	843.2	980.0	1,054.8	1,121.1	1,190.2
GDP (at Current Prices)	502.4	600.3	673.5	876.2	988.3	1,148.0	1,393.4	1,686.5	2,028.7	2,380.0
GDP Per Capita (Rf)	2,964.0	3,333.0	3,427.0	3,610.0	3,801.0	4,027.0	4,596.0	4,724.0	4,857.0	4993.0

Source :- Maldives: Statistical Year Book; Ministry of
Planning and Development; Male'; 1995.

In September 1992 the monetary authorities introduced a range of restrictive measures, including an increase in bank reserve requirements to 35 per cent, a rise in the ceiling on bank loan rates, the imposition of a minimum deposit rate of 5 per cent, and an increase in bank capital requirements. By the end of 1992 the rate of money supply growth had decreased to 13 per cent, compared with 25 per cent in 1991; in 1993, however, the growth in money supply was estimated to have risen again to more than 36 per cent.

In 1993 the Government sold 15 per cent of its shares in the Bank of Maldives Ltd. to public companies and 25 per cent to private individuals.

Foreign Trade

The analysis of country's foreign trade shows that it plays a significant role in the economy. For export earning, the country depends on a narrow range of goods and services viz. fishing, tourism etc. In case of imports the country has to purchase most of its requirements such as consumer items, petroleum products and capital goods from outside. This trend is evident from the past record and is expected to continue into future.

As shown in table-2, in 1984, the value of exports amounted to 30.1 percent of GDP (34.9 percent in 1989 and 20.5 percent in 1992) while the value of imports was 67.4 percent of GDP¹¹ (88.9 percent in 1989 and 98.6 percent in 1992). This indicates that the country's economic fortunes tended to be greatly influenced by external forces.

¹¹Maldives: Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

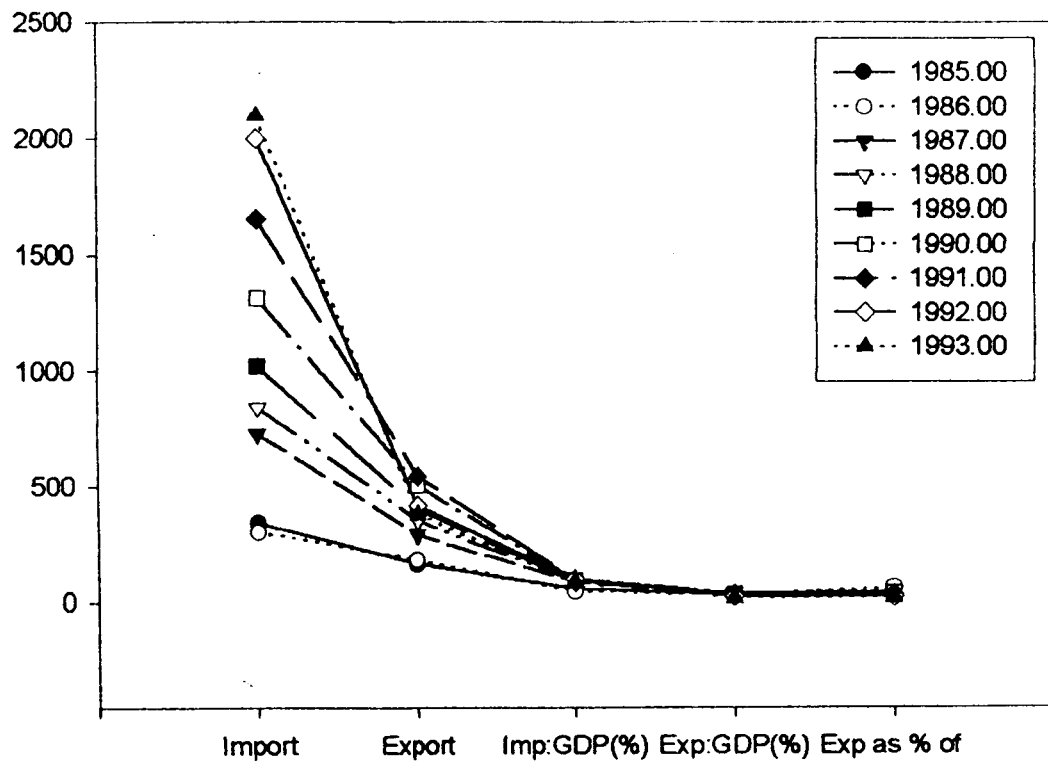
Table-2. Foreign Trade of Maldives: 1985-1993.

(million Rf)

Contents	1985	1986	1987	1988	1989	1990	1991	1992	1993
Import	339.9	301.8	726.3	842.7	1020.3	1315.4	1653.8	2001.5	2097.7
Export	163.3	179.5	289.6	351.4	400.5	503.0	544.3	416.7	377.4
Import:GDP(%)	56.6	44.8	82.9	85.3	88.9	94.4	98.0	98.6	88.0
Export:GDP(%)	27.2	26.7	33.0	35.5	34.9	36.1	32.3	20.5	15.8
Export as % of Import	48.05	59.6	39.80	41.61	39.25	38.24	32.9	20.79	17.95

Source :- Maldives: Statistical Year Book; Ministry of
Planning and Development; Male'; 1995.

Graph 2



During 1985-91 the value of exports grew in absolute terms from Rf 163.3 million to Rf 544.3 million. Over the same period the expenditure on imports increased from Rf 339.9 million in 1985 to Rf 1653.8 million. Accordingly, there has been a deterioration in export-import ratio. The exports for 1991 were sufficient to meet only 32.90 percent of country's import bill. The situation was worse in 1993, as the export bill could take care of only 17.95 percent of import bill¹².

The Maldivian economy is dependent on very wide range of imported goods. Approximately, one half of the import bill is for essential consumer items. A little over one third of the import expenditure is incurred on the importation of intermediate and capital goods. The import value of intermediate and capital goods with 17 per cent in 1980; 31 per cent in 1990 and 37 per cent in 1993 has shown an upward trend. Some of the developmental imports are expected to have a beneficial impact on the economy. The 13 per cent in 1993 is accounted for imports of petroleum products¹³.

An interesting feature in Maldivian exports is the growing importance of garments as an item in the export basket. Statistics show that this became an export item only in 1981 and it contributed to 15.8 per cent of the value of its merchandise exports in that year¹⁴. Garments manufacture constitute about 10 per cent of total export though there has been a considerable variation every year¹⁵. Garment manufacturing is a labour intensive industry and its product comprises mainly garments for export. The export of garments encounters quota restriction from the

¹² Table-2.

¹³ Table-3.

¹⁴ Maldives: Statistical Year Book; Ministry of Information and Culture; Male', 1995.

¹⁵ Asian Development Report; 1996; pp. 129.

Table-3. Composition of Imports (in per cent); 1980-1993.

Goods ↓	Year →	1980	1982	1984	1986	1988	1990	1992	1993
Consumer Goods		67	49.8	51.3	56	55	53	50	50
Petroleum Products		16	5.5	12.9	15	12	16	12	13
Intermediate and capital Goods		17	44.7	35.8	29	33	31	38	37
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source :- Maldives: Statistical Year Book; Ministry of Planning and Development; Male', 1995.

Composition of Imports (in %)

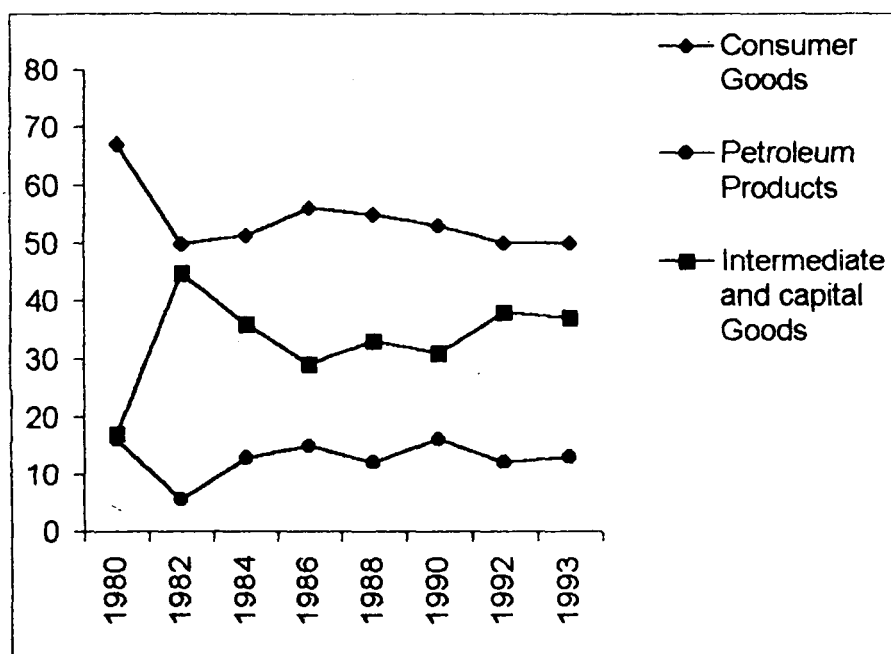


Table-4. Balance of Trade ; 1985-1993.
(million Rf)

Year	Exports (X)	Imports (M)	Balance of Trade (X-M)
1985	163.3	339.3	-176.6
1987	289.6	726.3	-436.7
1989	400.5	1020.3	-619.8
1991	544.3	1653.8	-1109.5
1993	377.4	2096.7	-1719.3

Source :- Maldives: Statistical Year Book; Ministry of Planning and Development; Male'; 1995.

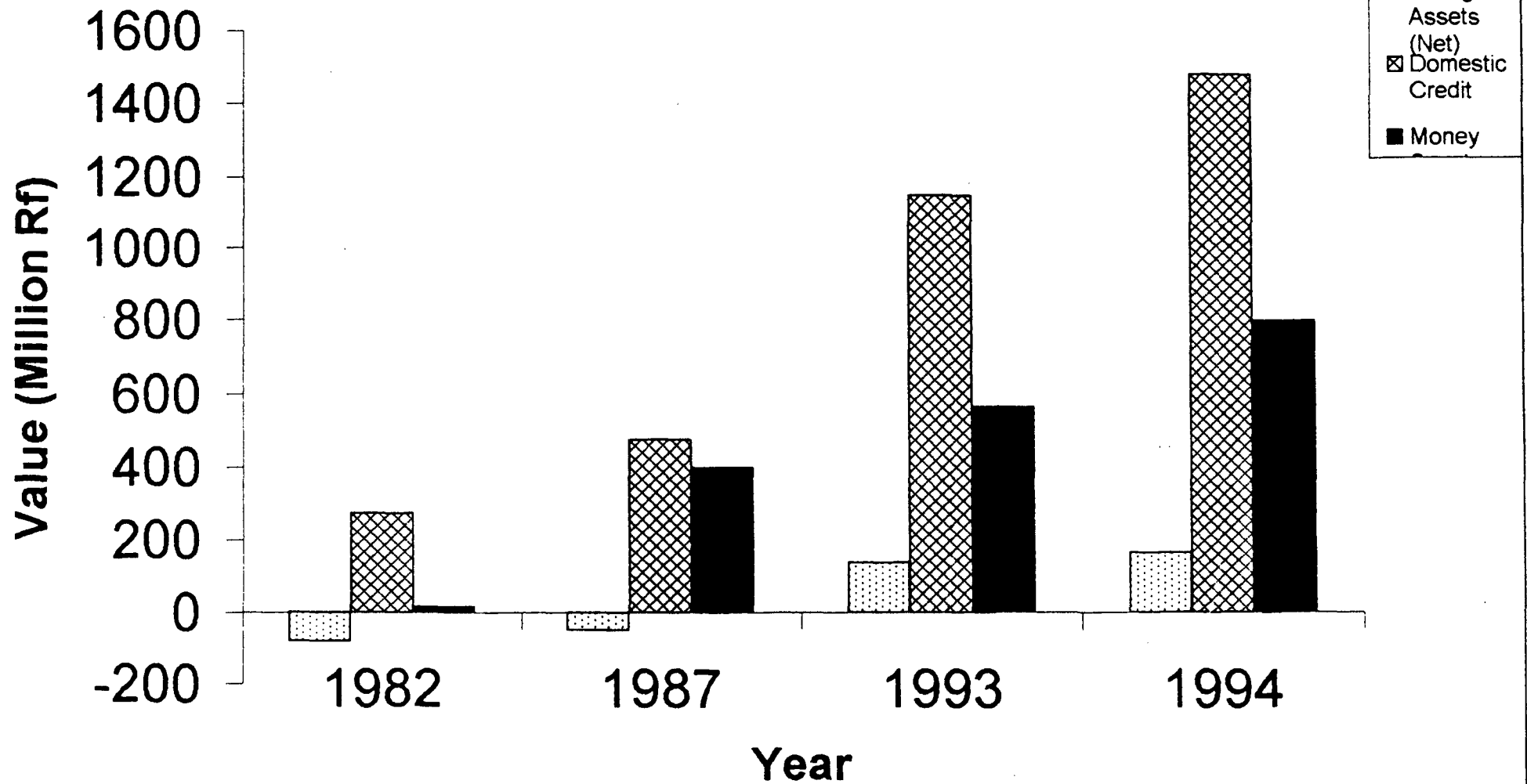
Table 5. Monetary Survey (1982-1994)
(in million Rf)

	1982	1987	1993	1994
Foreign Assets (Net)	-81.5	-48.0	136.57	164.44
Domestic Credit	274.7	472.3	1,147.26	1,475.92
Central Government	162.5 (59.16)	184.6 (39.08)	652.16 (56.84)	938.35 (63.58)
Public Enterprises	14.3 (5.20)	110.5 (23.39)	159.73 (13.93)	160.95 (10.90)
Private Sector	97.9 (35.63)	177.2 (37.52)	335.37 (29.23)	376.63 (25.52)
Money Supply	14.6	396.9	563.52	795.98

Note:- Figures in parentheses is in percent.

Source :- Maldives: Statistical Year Book; Ministry of
Information and Culture; Male', 1995; pp. 175;
Also IMF Survey; November 16, 1987; pp. 344-347.

Monetary Survey



Graph 3

developed countries. This would imply that Maldives could expand into other lines of apparel manufacturing, as quota is imposed only woolen product. As most of the inputs to the production process such as fabrics, chemical and dyes and even labour have to be imported, the value added component of this industry is expected to be small.

Maldives balance of trade has been consistently negative. In value, the imports are rising with a faster pace than exports, thereby widening the trade gap tremendously.

In order to limit an ever-increasing trade deficit, Maldives should pursue a two pronged strategy. It hopes to augment its export earnings by developing further the existing sectors such as fisheries and tourism. The country has to adopt a measure of import substitution and cut down non-essential imports. The tariff structure has gone revisions and trend has been towards higher import duties. This has to be viewed in the context of the need to discourage non-essential imports. Nevertheless, the country can be said to follow an essentially liberal commercial policy.

Foreign Aid

Diversification and increasing exports and mobilisation of foreign aid and assistance constitute the major plank of Maldivian foreign economic policy. The main objective is to create favorable conditions for the economic development.

Maldives membership in several global and regional bodies, such as World Bank, International Development Association, International Monetary Fund, Islamic Development Bank, Asian Development Bank and SAARC has enabled to seek a large scale financial aid and assistance. Besides several West Asian countries such as

UK, USSR, China and Japan have extended grants and loans to Maldives. The total grants and loans amounted to US \$ 30.7 million in 1993¹⁶. Out of this official Development Assistance, bilateral assistance accounted for about US \$ 20 million, while multinational assistance amounts to US \$ 10.6 million¹⁷.

It is significant to note that till 1975, the Maldives had hardly any foreign debt. Only in 1976, it started seeking a large-scale foreign aid. Concessional loans and grants steadily declined from US \$ 18.2 million in 1981 to US \$ 6.4 million in 1984¹⁸. The medium and long-term external debt outstanding of Maldives doubled from US \$ 24.8 million in 1980 to US \$ 51.2 million in 1984, but short-term debt stood at US \$ 65 million during the same period. Maldives total external debt has further increased to \$ 126.8 million in 1994, of which \$ 125.8 million was long-term public debt¹⁹. The ratio of debt to GDP in 1984 was 67.3 per cent. The debt service to export ratio increased from 3.2 per cent in 1981 to 28.2 per cent in 1984. In 1994 the cost of debt-servicing was equivalent to 3.4 percent of revenue from exports of goods and services. Foreign aid in 1995 was amounted to an estimated 207 million rufiyaa. In 1991 Japan was Maldives largest aid donor²⁰.

Impact of Foreign Trade and Aid on Maldives

Like other Least developed countries, the Maldives has been confronted with several economic constraints e.g. a sharp increase in import cost of essentials in

¹⁶ UN, Statistical Year Book for Asia and The Pacific; 1994.

¹⁷ Ibid.

¹⁸ Least Developed Countries Report; 1987.

¹⁹ Asian Development Report; 1995.

²⁰ Asia Year Book; Far Eastern Economic Review; 1994; pp. 169-171.

relation to export earnings, insufficient export earnings, low level of foreign exchange reserves and an adverse impact of higher transportation costs.

The growing dependence of Maldivian exports on international market forces is not only obvious but beyond its control. It's major industry -fishing- is dependent on export, which is evident from the fact that real GDP growth in 1995 slowed to 5.8 per cent from 6.6 per cent in 1994, reflecting the sluggish performance of the fisheries sector. It's tourist and shipping enterprises rely almost wholly on foreign demand, and domestic consumption is largely dependent on imports, which means that pricing in Maldives is affected by price in international arena which proves that Maldives, because of its very small portion of trade, is a price taker.

Its over dependence on aid, which is evident from the fact that it has received Official Development Assistance (ODA) of \$ 30.7 million in 1993. Grants accounted for 77.2 per cent and 64.7 per cent of total official credit in 1990 and 1992 respectively²¹. This will be an added strain on a country which has yet to go a long way in meeting its economic needs.

Conclusions

Despite its impressive economic performance over the past decade, in 1996 Maldives was confronted with problem of serious macro-economic imbalances, which have resulted in rising debt, a high rate of inflation, low level of foreign exchange reserves. Another issue that needs to be addressed is the high rate of population growth, which has placed a heavy burden on the economy in general and

²¹ P. Sahadevan; "Maldives: Search for Security"; in Dipankar Banerjee (ed.); Comprehensive and Cooperative Security in South Asia; Institute of Peace and Conflict Studies; New Delhi; 1998; pp. 207-237.

one of the main reasons why Maldives has experienced difficulties in encouraging levels of domestic savings.

Maldives has tried to diversify its foreign economic relations. Diversification of export commodities, countries of export and import and aid programmes have been the main plank of Maldivian foreign economic policy. The main objectives are creation of favourable conditions for effective use of trade and aid. This relationship between donor countries and small recipient countries is characterised by the dependency syndrome. Multinational corporations also exploit small countries to their advantage. Thus, trade deficit and aid assistance plays a role in making the economy more vulnerable.

CHAPTER 4.

Strategies to Overcome Vulnerability

Strategies to Overcome Vulnerability

In the previous chapters, we have seen the vulnerability and its cause in case of Maldives. To tackle the constraints created by geography and economy, Maldives has adopted such a development process which has increased its vulnerability further. Even though the economy has grown since 1980s. To overcome the economic vulnerability, the government has made conscious efforts to develop its various sectors to achieve self sufficiency. In the present chapter an attempt will be made to analyse various policies of Maldives to overcome its economic vulnerability. The policies and measures pertaining to environmental vulnerability and their economic cost are also analysed.

Growth-Oriented economic policies

Maldives has always maintained liberal and pragmatic economic policies and encouraged growth in sectors such as fisheries and tourism, offering comparative advantages to the country. Strategies have been worked out to spread the benefits of such growth to the outer atolls by providing an essential social infrastructure. The government's fiscal and monetary policy, while ensuring attractive investment opportunities for domestic and foreign investors, focuses on a phased program of domestic resource mobilisation. The national currency, the Rufiyaa, is not pegged to a trade weighted basket of currencies. Thus, foreign currency rates fluctuate to market demand. There has been successful growth of economy in the past, it is expected to continue to grow. This is evident from the fact, that during 1995, the gross domestic product (GDP) grew at a rate of 7.2 per cent. The GDP was estimated

at Rf 1,359.4 million in 1995 (at 1985 constant prices) which amounted to a per capita GDP of Rf 5,453.7¹.

Agriculture

Despite the physical limitations such as lack of cultivable land, unfavourable climatic conditions and poor soil, a variety of food and cash crops are grown. Crops such as coconut, breadfruit, mango, papaya, lime, banana, pumpkin, watermelon, taro and chilli have considerable economic value. Agriculture is mostly a supplementary source of income. Given the growing demand for agriculture produce, there is a need to increase production and organise agriculture on a commercial scale².

The main market for agricultural produce is Male' and the tourist resorts. Large quantities of vegetables, fruits, meat and poultry products are imported, thereby draining valuable foreign exchange. Hence, the government is taking measures to encourage and develop agriculture in the country.

The National Planning Agency, therefore, spelt out a program of action in 1980³:

1. High priority to pest eradication programme which is expected to have an immediate effect on the yield of crops like coconut.
2. Stimulating agricultural production in cash crop like green chillies, onion, lemon, banana and pineapple.
3. Restructuring and rehabilitation of coconut plantation.

¹ "Maldives"; Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

² Maldives Mission to United Nations; 1997.

³ U. Phadris and E. D. Luithui; "Maldives: Winds of Change in Atoll State"; South Asian Publishers; New Delhi; 1985.

4. Planting of timber trees.
5. Encouraging scientific backyard farming.
6. Bringing more land under cultivation by providing simple tools to cultivators.
7. Providing agricultural extension services.
8. Experimental cultivation of new crops and use of new methods.

Further, to ensure a long term viability in agriculture, Maldives encourage appropriate forms of land tenure, improved land administration and a greater appreciation of integrated nature of land development in order to facilitate sustainable land use.

Fisheries

Fishing is the old traditional occupation of the people and also the principal means of livelihood. This is comparable to the agrarian population of the rest of the countries of the sub-continent and to the most of the developing countries in the world.

In order to realise the potential of this sector, the government is implementing a number of development projects to increase fish production and export. Measures are being taken to tap the vast marine resource of the country and to this effect the government has established a 200-mile Exclusive Economic Zone⁴. Also, a fisherman's Day is being marked on the 10th of December every year to highlight

⁴ B. H. Farmer, "Maldives" in Physical and Social Geography; pp. 604-613.

the importance of fishing and the role of fishermen in the economic life of the country⁵.

The predominant methods of fishing are pole and line for skipjack and trolling fish such as little tuna, frigate mackerel, wahoo and jacks. The traditional fishing vessel is the sailing boat but from the 1970s the government has launched a programme to modernise the fishing fleet through mechanization. In the past, Maldives exported fish primarily in the form of dried and smoked tuna called "Maldivian Fish" to Sri Lanka⁶. However, in 1971, when Sri Lanka reduced the purchase of "Maldivian fish", there was a strong need for diversification of the market and adoption of alternative methods of fish processing.

In 1978, through an agreement with Marubeni Corporation of Japan, the Maldivian Nippon Corporation was formed and the first factory outside Male' for canning and processing fresh fish opened in the Faadhippolhu Atoll. Although Sri Lanka resumed imports of "Maldivian fish" in 1979, it imported much less than before, and in the same year the government announced the formation of Maldivian Fisheries Corporation, 'to exploit the fisheries resources in the most profitable manner for the benefit of the country'. Raw and fresh fish (whether frozen or canned) now constitute the bulk of fish exports. The Island Enterprise Ltd., a private indigenous company has also been set up as a response from the people⁷.

There are several thousand fishing boats built in the country out of coconut wood, each boat having capacity of about a dozen fishermen. In 1991 the fishing

⁵ Maldives Mission to United Nations; 1997.

⁶ U. Phadris and E. D. Luithui; "Republic of Maldives: Development Imperatives of a Small State"; SIS; JNU; New Delhi; 1982.

⁷ Ibid.

fleet comprised 1,258 pole and line fishing boats (masdhoani) and 352 traveling boats (vadhudhoani)⁸. Since 1974, when the government introduced a major modernization programme, with the help of a loan of US \$ 3.2 million from the International Development Association, most of the fishing fleet has been mechanised, diesel engines replacing sails and more maintenance and repair centers have been built⁹. Although a long-term investment, this has had the unfortunate effect of increasing the cost of fuel imports. At the same time, it also helped to increase the output of fishing industry by more than 100 per cent from 56.992 m tons in 1987 to a record 104,000 m tons in 1994.

The second Fisheries Development Project, which was carried out during the 1980's and early 1990's at an estimated total cost of US \$ 12.6 million, with the help of World Bank and other international organisations, sought to improve productivity in the fishing industry. In 1990 a tuna-tagging programme was undertaken by the Marine Research Section of the Ministry of Fisheries and Agriculture to assess the migratory patterns and growth of important tuna stocks in Maldivian Waters¹⁰. In 1993, two new refrigeration plants (with a total cold storage capacity of 1,000 m tons) were constructed, with the Japanese and Kuwaiti aid, on Maamendhoo Island in the Laamu Atoll. Another new refrigeration plant was built in Gaafu Alif Atoll¹¹.

⁸ "Maldives"; Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

⁹ B. H. Farmer, "Maldives" in *Physical and Social Geography*; pp. 604-613.

¹⁰ "Maldives"; Statistical Year Book; Ministry of Information and Culture; Male'; 1996.

¹¹ World Development Report; World bank; 1994.

The Third Fisheries Development Project was drawn up in 1992 and was expected to cost about US \$ 30.5 million¹². Under the project, which was initiated in mid 1993, a refrigeration complex with a capacity of 1500 million tons, a quay for collector vessel and an ice-plant were to be constructed in Kooddoo Island in South Huvadhu Atoll. In addition, three collector vessel were also purchased as part of the project.

Today, the country exports canned, foreign and salted fish to the far Eastern and European markets as well. The fisheries sector accounted for 11.0 per cent of GDP (1995) and it is the second most important source of foreign exchange¹³.

Shipping

The flourishing government-owned Maldives Shipping Limited was started in 1948 with the formation of the Maldivian Trading Corporation (Ceylon) Limited, which chartered Ceylonese ships to transport consumer goods to Maldives.

By reinvesting the profits, the country was able to develop a sizable fleet of ships. In 1980 the profit of the state owned Maldives Shipping Limited (later renamed Maldives National Ship Management Limited) with 40 ships provided 9 per cent of the government revenue. The government tried to develop the shipping industry as much as possible by training Maldivians, so that foreign personnel could be replaced and increasing the total displacement of the fleet. In June 1981 Asian development Bank (ADB) approved a loan of US \$ 1 million to Maldives to develop the country's first commercial shipping services between Male' and the atolls. During the 1980s, however, the shipping sector, which is dependent on the third

¹² Ibid.

¹³ "Maldives"; Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

country for more than 90 per cent of its cargo earnings. Suffered by the world-wide shipping recession as well as from the effects of Iran-Iraq war¹⁴. Moreover, the UNCTAD code of conduct (effective from 1983) limiting third country carrier to 20 per cent of international sea-fright¹⁵, curtailed the lucrative trade of Maldivian vessels from Colombo. Because of the heavy losses incurred during 1982-1984, the Maldivian shipping industry was reorganised and both its fleet size and its levels of operations were substantially reduced. Maldives International Shipping sector, however, made a small profit in 1987 and 1988. In 1992, Maldives National Ship Management Limited operated a fleet of eight general cargo vessels and two container vessels and handled about 60 per cent of the Maldives total imports.

Tourism

Conscious steps to build up tourism industry began only as late as in 1972 with the setting of the quasi-government crescent Tourist Agency¹⁶. By mid-1981, 34 resort had come up which rose to 73 in 1994¹⁷, with total capacity of 9,500 hotel beds. In August 1987 the government announced that tourism would be discounted on Villingili upon the expiry of a private lease in 1990. The island would then be developed for private housing, to reduce congestion in Male'. According to second Tourism Master Plan, which was approved by the government in May 1996, number of tourist beds was to be increased by 10,000 within the next 10 years, and tourism

¹⁴ Least Developed Countries Report; 1983.

¹⁵ Maldives Mission to United Nations; [UNCTAD "40; 40; 20" resolution].

¹⁶ Andrew Forbes; "The Maldives: Supremo of an Atoll Empire"; *Far Eastern Economic Review*; Vol. 97; No. 3; 12 Aug 77; pp. 30-31.

¹⁷ "Maldives"; Ministry of Tourism : Male' : 1996.

was to be introduced in new areas, based on the existing transport and communication facilities.

The number of tourist visiting Maldives rose from 3,789 in 1972- 1973 to 324, 311 in 1995¹⁸. Tourism revenue are comparable to four fifth of visible export receipts and in 1992 receipts from tourism provided an estimated 198.2 million Rf (equivalent to about 17 per cent of total GDP)¹⁹. One result of this increase has been the development of the infrastructure in the country. Telephones were installed on several resort islands for the first time in 1977, and a Tourist Advisory Board was established in 1981 to expand the industry further. Initially tourism was affected by the civil disturbances in Sri Lanka, the usual embarkation point for Maldives. In 1986 there was 0.5 per cent decrease in number of arrivals, compared to 1985. However, the inauguration of direct charter flights carrying tourists from Europe to Male' as well as the establishment of three new domestic airports on. Kadhdhoo Island, Hadhdhummathi Atoll; Hanimaadhoo Island, South Thiladhummathi Atoll; Koodedhdhoo Island, South Huvadhu Atoll have increased Maldives share of market and ensured that revenue from tourism was sustained.

Infrastructure Development

It is recognised that the development of the industrial sector is important to meet the growing demands of the economy. Therefore, foreign investment is highly encouraged for initiating mutually beneficial investment projects.

¹⁸ "Maldives"; Statistical Year Book; Ministry of Information and Culture; Male'; 1995.

¹⁹ Ibid.

In an attempt to improve and diversify the domestic economy, particularly in less advanced outlying atolls, the government has, since the late 1970's, begun to establish a more modern infrastructure (including better communications systems, sanitation and water supply). One of the major infra-structural projects was the Male' – Land Reclamation Project, which was begun in 1979 and completed in 1986. As a result of this US \$ 6 million project, about 600,000 square meter of land was reclaimed, adding around 50 per cent to the total land area of the capital. In October 1987, the ADB granted a loan of US \$ 6.1 million for the construction of a 4000 kW power plant, which commenced operations in June, 1991.

In 1987, the government also announced plans to provide telephone facilities and postal services to all the inhabited islands over the next few years²⁰. By 1993, postal services were available in all the inhabited islands, telephone facilities were provided in seven of the southern atolls and three of the northern atolls, and facsimile (fax) services were available in some islands. By mid 1996, telephone services had been extended to 15 atolls, and the Maldives telecommunication company, DHIRAAGU, announced that its target was to provide telephone facilities to all inhabited islands by 2000.

It is expected that with the development of transport, communication and other infra-structural facilities, the economic base of the country will be further broadened.

Further, the education system in the Maldives is currently unable to meet the country's need for skilled personnel in key economic areas. The government aims at

²⁰ Least Developed Countries Report; 1988.

improving the capacity and cost effectiveness of education system. The idea is to educate and train local personnel for key sectors of the economy including education, health, public administration, tourism, maritime industry and technical training.

The over all goal of the policy is to reduce the supply – demand gap for educated labour in key economic sector. It will include establishment of the Maldives College of Higher Education (MCHE) as an umbrella organisation to manage and coordinate post – secondary administration and academic programme for seven institutes. The motive is to achieve economies of scale and economies of scope by extending the level and duration of advanced diploma programs and the monitoring of supply and demands for educated labour²¹.

Alongside, the Maldives has been trying to find ways and means to blend economic growth with social justice. It is confronted with the task of maximum utilisation of under utilised resources. Maldives has shed its age long isolation and is gradually getting enmeshed in the vortex of international politico – economic systems to meet developmental goals.

Strategies to overcome Environmental Vulnerability

Besides the economic vulnerability the country is facing the problem of sustaining environmental security from the threats of sea – level rise due to global warming and climatic change. The problem assumed by the serious dimensions with catastrophic implications because of country's absolute inability to manage environmental hazards²².

²¹ [http:// www.adb.org/work/projects/profiles/loan/28161013.ASP? cd=MLD](http://www.adb.org/work/projects/profiles/loan/28161013.ASP?cd=MLD)

²² P. Sahadevan; "Maldives Search for Security" ; Dipankar Benerjee (ed.) "Comprehensive and Cooperative Security in South Asia" ; Institute of Peace and Conflict Studies; New Delhi; 1998; PP. 207-237.

In November 1989, Maldives hosted an international conference with delegates from other small island developing states, to discuss the threat posed to low lying island countries by the predicted rise in sea – level caused by heating of earth's atmosphere as a result of pollution (the green house effect). In June 1990, an Environmental Research Unit, which was to operate under the Ministry of Planning and the Environment (now the Ministry of Planning, Resources and Environments), was established in Maldives²³.

In the regional context, the Maldives has participated in a wide ranging discussion in the SAARC forum, and has been instrumental in designating 1992 as the SAARC year of environment. The SAARC study on green house effect was carried out at the initiatives of Maldives. On the recommendation of Maldivian government to the Common Wealth Heads of Government Meeting in Vancouver in 1987, a comprehensive study on climatic change was carried out by a group of Common Wealth experts. To enhance further commitment to international cooperation in the field of environmental protection, Maldives has signed the Vienna Convention for the Protection of Ozone Layer, the Montreal Protocol on the substances that deplete the Ozone Layer and the Basel Convention on the control of trans-boundary movement of hazardous waste and their disposal²⁴.

The government has embarked on an intense diplomatic derive to generate large scale additional resources from both bilateral and multinational sources. Whatever, may be the inadequacies in the United Nation's strategy and initiatives,

²³ B.H. Farmer; " Physical and Social Geography" ; Chapter on Maldives.

²⁴ Address By His Excellency Mr. Maumoon Abdul Gayoom, President of the Republic of Maldives, at the United Nations Conference on Environment and Development, Rio de Janeiro, Brazil, 12 June 1992.

Maldives faith in the world body to protect its environmental security is unalterably strong²⁵.

To counter the threats posed by the ecological hazards, Maldives has been engaged in various environmental up gradation projects. These projects are pastly financed by international organisations such as UNEP and pastly by Maldivian government. This has put a great burden on the fiscal, which is already facing deficits. This economic burden has further make it more economic vulnerable.

Mobilisation of Foreign Economic Assistance

Maldives seeks to maintain and develop a strong and varied foreign relations in order to secure more aid and to ensure its security. The country participate in numerous international organisations; it has been a member of the Colombo Plan since 1963 and of the UN, since 1965. It joined the IMF, the World Bank and the Asian Development Bank (ADB) in 1978 and has been a full member of the Common Wealth, since 1985. Maldives is also a founder member of the South Asian Association of Regional Cooperation (SAARC). Maldives international standing was enhanced in November 1990, when it successfully hosted the fifth SAARC summit meeting, which has held in Male'. In March 1996, Maldives has diplomatic relations with 125 countries. In October 1995, Maldives opened its third resident diplomatic mission, (in addition to those in Sri Lanka and at the UN Headquarters in New York, USA) in London.

²⁵ P. Sahadevan, "Maldives Search for Security" ; Dipankar Benerjee (ed.) "Comprehensive and Cooperative Security in South Asia" ; Institute of Peace and Conflict Studies, New Delhi; 1998; PP. 207-237.

Conclusion

Maldivian Government pursued development objectives envisaging the high economic growth rate so that the overall standard of living could be achieved. The strategies were in line with the commitment to establish an economic policy environment which the free play of competitive forces will determine the character of economic development. The continuing reforms to the fiscal and monetary system are aimed at further empowering the private sector. The continuing reforms to the legal structure of trade and investment are aimed at providing a transparent economic and legal climate.

In the context of its strategic location and economic vulnerability, Maldivian Development Process has served the three – fold foreign policy objectives of national security, stability and status. In the process while expanding its external relations, it has also succeeded in enhancing its maneuverability by diversifying its foreign economic relations. The leadership thus, has kept away from international power politics and has taken a foreign policy approach to conduct smooth economic relations. Such a pragmatic approach has paid dividends to the small atoll states.

CHAPTER 5.

Conclusion

Economic vulnerability refers to a condition which threatens their economic viability. There are many disadvantages of small states which make them vulnerable.

Natural and environmental disasters cause severe damage to which the island states have limited capacity to respond. Small island developing states are among those that contribute least to global climatic change and sea level rise, they are the ones who suffer a lot. These states are small in size and, have vulnerable economies and are dependent both upon narrow resource base and international trade, making them unable to influence the terms of trade.

Maldives like others small island developing state face problems associated with its small size, remoteness and insularity and disaster processes and environmental fragility.

Maldives is built on coral reefs and scope for mineral wealth is almost rare because coral reefs are made up of lime stone. Mineral such as lime, cement, plastering material may be available but not other important minerals such as ferrous and non ferrous metals. The absence of mineral base creates constraints in large scale industrialisation in Maldives.

Its land is characterises with sandy soil having very low water retention capacity which makes it less fertile.

Quality of land coupled with poor institutional framework and unscientific methods of cultivation, makes agriculture an insignificant factor in Maldivian economy. All the main food staples such as rice, wheat and sugar for consumption have to be imported, which can never be considered good for the health of Maldivian economy and its standing in the world polity.

In the absence of sound mineral base and agricultural capabilities, industries in Maldives are least diversified restricted mainly to fisheries and shipping. There are only a few modern industries in Maldives such as fish canning, garment making and soft drink bottling. Maldives has to import many essential manufacturing goods which makes it dependent on other countries and thus, economically vulnerable.

Further sound infra-structure base required to facilitate economic development is missing in Maldives. At energy front only potential for indigenous development is solar energy or tidal energy. For petroleum products it mainly relies on exports. Communication and transportation models are also underdeveloped in Maldives, making its distribution network very weak and vulnerable.

Foreign trade plays a significant role in Maldivian economy. It depends on very wide range of imported goods. Approximately one half of the import bill is for essential consumer items. A little over one third of the import expenditure is incurred on the importation intermediate and capital goods.

For export earnings the country depends on narrow range of goods and services viz. fishing, tourism etc. Due to the nature of Maldives foreign trade, its balance of trade has been consistently negative which has serious repercussions for its development. In the absence of favourable balance of trade, Maldives has to borrow money from IMF and World Bank which increase the debt burden on the economy.

Besides the above mentioned factors, other indicators of development such as trained men power, literacy, health facility and availability of other social amenities are also not encouraging which further fuel the inefficiency in the economic system and make it vulnerable.

Despite its impressive economic performance over the past decade, in 1996 Maldives was confronted with problem of serious macro-economic imbalances, which have resulted in rising debt, a high rate of inflation, low level of foreign exchange reserves. Another issue that needs to be addressed is the high rate of population growth, which has placed a heavy burden on the economy in general and one of the main reasons why Maldives has experienced difficulties in encouraging levels of domestic savings.

Maldives has tried to diversify its foreign economic relations. Diversification of export commodities, countries of export and import and aid programmes have been the main plank of Maldivian foreign economic policy. The main objectives are creation of favourable conditions for effective use of trade and aid. This relationship between donor countries and small recipient countries is characterised by the dependency syndrome. Multinational corporation also exploit small countries to their advantage. Thus, trade deficit and aid assistance plays a role in making the economy more vulnerable.

In the context of its strategic location and economic vulnerability, Maldivian Development Process has served the three – fold foreign policy objectives of national security, stability and status. In the process while expanding its external relations, it has also succeeded in enhancing its maneuverability by diversifying its foreign economic relations. The leadership thus, has kept away from international power politics and has taken a foreign policy approach to conduct a smooth economic relations. Such a pragmatic approach has paid dividends to the small atoll

states. In the light of above discussion our hypothesis that dependency on foreign trade and aid makes Maldives vulnerable is holds good.

The study proposed a hypothesis that ^{the} more small Island State^s depend on foreign trade and external aid flow, the more they are economically vulnerable. The hypothesis is true in the case of Maldives. As we have seen, in the process of economic development of state, economy tends to become more and more depend on external sources and aid givers. In most cases, such countries happen to be developed one^s. This, in turn, reduces their economic levels and spoils their autonomy in political decision making. In the present case study of Maldives, we have seen that country has developed several policy measures, which pushed it and become dependent on other countries.

Further, it is true that economically weak island states have an in built structure of vulnerability. As we have seen in the case of Maldives, the very economic and geographical ^{constants} ~~constants~~ it has faced are the major factors which make it vulnerable.

This present study is based on an nomothetic approach towards studying the problem of small island states. So, our hypothesis can be substantiated by similar research on other small island states. This will help us to generate more insights and theoretical formulations of the economic vulnerability of small island states.

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