Scale, Isolation and Dependence:

Educational Development in Island Developing and Other Specially Disadvantaged States

Commonwealth Secretariat

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Educational Development in Island Developing and Other Specially Disadvantaged States

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CONTENTS

LIST OF TABLES AND FIGURES

PREFACE

One of the characteristics of Commononwealth co-operation is its special concern for small states. Membership of the Commonwealth stands at 49 countries in 1984 of which 34 have a population of less then five million, and 29 under two million. Of those with under two million people, 22 are island nations. It is not surprising therefore, that the economic and social development of a group of countries, which in Commonwealth parlance are termed "Island Developing and Other Specially Disadvantaged States" should provide the focus for a number of Commonwealth programmes and projects.

At the meeting of Commonwealth Senior Education Officials held in London in 1979 it was recommended that a study on small states should be prepared for the consideration of Ministers of Education at the Eighth Commonwealth Education Conference (8CEC). It was further recommended that a special sub-committee should be set up at 8CEC to consider the study. During the early part of 1980 a questionnaire survey was carried out by the Commonwealth Secretariat's Education Division (which became the Education Programme in the Human Resource Development Group in January 1983). The information obtained in response to the survey provided the basis for the 8CEC paper "Education in the Island Developing and other Specially Disadvantaged States". One of the recommendations of the 8CEC was that the first part of the paper, which analysed the significance of scale, isolation and dependence on the development of education systems, should be supplemented and then published by the Commonwealth Secretariat. This study is the result of that recommendation.

Though based largely on the 1980 survey and on the Country Papers submitted to 8CEC, the study has been supplemented by sources from the as yet limited literature on education in small states. It is restricted to countries with a population of less than two million - an arbitrary boundary, but one which allows the vast majority of Island Developing and Other Specially Disadvantaged States in the Commonwealth to be included. Within this group the study concentrates upon a sample of 12 countries from the Caribbean, the Mediterranean, the Indian Ocean and the South Pacific.

It is hoped that member countries will find the analysis of scale, isolation and dependence in relation to educational provision one which contributes in a practical way to the national and international debate on policy development in relatively small countries. At the same time, as the study highlights, the diversity of geographical, historical and social contexts represented in even the small sample of countries that receive particular attention warns against over-hasty attempts to replicate apparently appropriate solutions to problems which in fact are directly specific to a community or to a country.

Special thanks are due to the author of the study, Mr. Colin Brock, Chairman of the International Education Unit in the Institute of Education at the University of Hull for his willingness to take on a difficult task in a relatively uncharted field. In addition, mention must be made of the officials in the Ministries of Education around the Commonwealth who provided the information on which this study is based. The Commonwealth Secretariat is conscious of the burden which is placed on relatively small Ministries when they are asked to provide detailed information for international surveys, and gratefully acknowledges their contribution to this study.

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CHAPTER 1: RATIONALE

1. Origins and aims

1.1 It is right and proper that the Commonwealth should take a particular interest in relatively small countries. Of its 47* independent member states, 32 have a population of less than five million. Of these, 27 are below two million and 17 have fewer than 250,000 people. This concern is reflected in publications (see, for example, Section B of Appendix C, Commonwealth Secretariat Publications), meetings and training activities prepared and organised by the Commonwealth Secretariat. There has emerged from these and other deliberations a generic term which it is now customary to use for Secretariat programmes - Island Developing and Other Specially Disadvantaged States - by which is meant, in general terms, small countries and their problems.

1.2 At the Eighth Commonwealth Education Conference (8CEC) held in Colombo, Sri Lanka 1980, consideration was given to a Secretariat discussion paper entitled **Education in the Island Developing and Other Specially Disadvantaged States (8CEC/WP/2) (1 - see references p.15)**. The paper was based upon responses to a questionnaire sent to 34 independent member states, associated states and dependent territories in 1980 by the Education Division** of the Secretariat.

1.3 Following discussion of the paper the Conference recommended that "... the first part of the Secretariat's survey which analyses the significance of scale, isolation and dependence upon the development of education systems should be supplemented and then published by the Commonwealth Secretariat." (8CEC **Report**, Para. 159) (2).

1.4 This monograph is the response to the 8CEC recommendation. Its main aim is to relate information on educational development provided by a sample of 12 Commonwealth countries, both from the questionnaire referred to in 1.2 above and from other sources, to considerations of national scale, isolation and dependency. It does so within the limits imposed by the Commonwealth Secretariat's questionnaire (Appendix A) and its discussion paper for 8CEC. These limits are explored in the sections which follow.

2. Scope and format

2.1 The monograph is based primarily on information provided by governments and, in particular, by Ministries of Education. This is of two main types. Of the 34 countries which received the Secretariat's questionnaire in the early part of 1980, 16 responded. Of these 16, 11 countries also presented a Country Paper to 8CEC. These two sets of documents provide the major resource for the monograph. Recourse has also been made to country papers presented to other meetings, to publications on the politics, economics and

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* The preparation of this monograph pre-dates the independence of St Christopher-Nevis in 1983 and Brunei in 1984.

** The Education Programme of the Human Resource Development Group since January 1983.

sociology of the countries in question as well as to the yet meagre amount of writing on the overall educational patterns and problems of small countries (see Appendix C).

2.2 The monograph consists of seven main parts:

(a) Sections 3 and 4 of this chapter provide the context for the main body of the study. Section 3 examines **national smallness** and looks especially at indices which may help clarify the concept and thereby assist more detailed sector studies such as education. Section 4 applies the synthesis developed in Section 3 to the sample of 12 Commonwealth countries which form the basis for the study.

(b) The second section is incorporated in Chapter 2 and is concerned with **education and national scale**. Six broad issues were set out in the Commonwealth Secretariat's questionnaire (Appendix A) and the discussion paper for 8CEC which resulted. These are considered in relation to the information derived from the 12 country sources. It relates closely to the contextual issues outlined in Chapter 1 and concludes with a summary of the question of scale and its relationship to educational development.

(c) The 8CEC discussion paper is almost entirely related to scale, the issues of isolation and dependence are much less developed. Consequently, in treating them more fully here, material and ideas other than those deriving from the 12 national sources become more evident. In the third section (Chapter 3), **isolation** is viewed in relation to a number of variables, political, social and cultural as well as the more usual spatial variant. Each variable is considered for its educational implications.

(d) In Chapter 4 on **dependence and education** in small Commonwealth countries a number of major issues are examined including the legacy of colonialism, post-independence pressures (especially trans-national co-operation), the role of the regional university, and curriculum and assessment problems in regions which encompass a number of small states.

(e) The fifth section (Chapter 5) - on the basis of the preceding analysis - seeks to point towards possible **conclusions** in areas of particular educational development concern and comments on selected initiatives in some small Commonwealth countries.

(f) There are three appendices. Appendix A is the Commonwealth Secretariat's 1980 questionnaire. Appendix B comprises 12 country profiles compiled from the documentary information provided by the sample states. This is paraphrased in each case under the six main headings used in the Commonwealth Secretariat questionnaire, namely: institutions, finance, employment, curriculum, expertise, and technology.

(g) The monograph concludes with a selected bibliography, Appendix C, listing all the sources utilised in addition to the documentary evidence from the sample states. References are listed at the end of each chapter.

3. National Smallness

3.1 Images and Perceptions: "Small is beautiful", so recently a bold rallying cry, is already a standard cliche, and when coupled with another western stereotype, "tropical paradise", can be little more than an escapist platitude. The world is a different place when perceived from say, Vanuatu, Swaziland or Belize, as opposed to Australia, Canada or Nigeria.

3.2 As the world is presently organised, politically and economically, there is in general a disadvantage attached to being a small unit. We live in a world of economies of scale, where the bulk buy and the early order are considered in principle positive, and are in practice very advantageous. They require, however, the backing of a large market and a clear credit-worthiness, and since educational activity is, in effect, subordinate to the wider economic, political and social context, if that context is severely constrained by smallness of scale then educational activity too may be disproportionately dysfunctional.

3.3 Despite the long-standing recognition of the multiple disadvantage affecting small countries, there has been an inevitable tendency for the political, demographic and economic scale of larger Commonwealth members to influence some of the deliberations and major activities of the group as a whole. In the field of education this is particularly unfortunate since it builds on the legacy of colonisation bequeathed by some of the larger members, mainly but not exclusively Britain, to the smaller. Indeed it may well be that Beckford was right to imply the comparatively invidious and pernicious quality of the educational legacy of colonialism when he stated that:

> "... the most intractable problem of dependent societies is the colonised condition of the minds of the people". (3)

3.4 And yet, is not education in reality one of the most individual of human acquisitions? One which is ultimately effective only at the smallest scale, in operational terms almost totally client controlled. That is to say, that the individual child, student and adult have both a clear perception of their learning needs and a related level of motivation that may be positive or negative in expression. This is not to say that such individual perceptions are necessarily either accurate or in the best interests, however defined, either of the client or the various human groups, local, national or international of which he or she forms a part.

3.5 Nonetheless, the providers and sometimes also the purveyors of formal, non-formal, and even to some considerable extent informal variants of education, predictably operate on a much larger and relatively impersonal scale. This is normally the national scale, but increasingly, and especially in the case of regions of small countries the international scale also. This is inevitable, given the roles ascribed to education systems in respect of the enhancement of national cohesion and identity, and the transmission of culture and ideology whether overt or covert.

3.6 Consequently, for small countries there is an increased tension between certain potential advantages of smallness and enforced localisation, and heavy demands for employment in the professions, politics and administration, relative to the size of the country. The educational memories of the clientele - of individual classes, classrooms, teachers and incidents - are on a very small scale. This is true in virtually all countries.

3.7 But this is not how the providers and purveyors of education visualise the intended outcomes of the exercise. Aims and objectives are often expressed at a high level of abstraction and generalisation, and followed by grand plans and strategies which may be difficult to implement in small political units. That such problems and tensions exist is largely due to the social, economic and political history experienced by individual former colonies, culminating in political independence and its attendant educational demands.

3.8 The Global View: Small may or may not be beautiful in the eye of the beholder, but in national political terms it can reasonably be described as normal. This is clearly the case whether geographical, demographic or economic criteria are employed, as Table 1 illustrates.

3.9 In general terms, it is the case that the majority of the national units of the world are small in surface area and/or population size, and are also relatively poor. It is true of course that these small countries contain only a very tiny percentage of the world's population, but they do represent over half the education systems in the world. The concern here is with the links between these inevitably small education systems and the individuals for whom they attempt to provide educational opportunities to meet their perceived needs.

3.10 Small Countries in the Commonwealth: At the beginning of 1983 the 47 independent member states of the Commonwealth represent approximately a quarter of the world's population. These nations exhibit a gradient of population size from gigantic (India - 730,000,000), to miniscule (Nauru 8,000). Along this gradient occurs a range of national sizes comparable to that of the world as a whole. Rather more than half (27) have populations of less than two million, 17 have less than 250,000 and six have less than 100,000 (see Table 2). To this list may be added a further 17 countries which are associated states or dependent territories, mostly in respect of Britain, but with several related to Australia or New Zealand. There are even dependencies of dependencies, as the gradient descends from miniscule to microscopic. With the exception of Hong Kong all 18 countries in this category have a population below 250,000 (see Table 3).

3.11 Small Country Typologies: Typologies seek to clarify data by classifying information according to selected criteria. For example, in Tables 2 and 3 Commonwealth countries with a population of less than two million people are ranked according to population size. Table 4 offers a simple grouping of countries by geographical region. Tables 2 and 3 also indicate whether the countries are islands, littoral, meaning that the country adjoins the sea whilst being part of a larger land mass, or land-locked. Examples of classification by geographical situation are provided in Figure 1.

3.12 A typology would also be possible by seeking comparability of social and cultural groupings, which within a country have clear implications for education policy. For example, the countries of Mauritius, Fiji and Trinidad and Tobago are characterised by similarities in their ethnic and religious composition (see Figure 1).

3.13 However a typology is arrived at, further sub-divisions within major groups are usually possible. For example, it is easy to formulate a simple division of island nations. Some countries in this group comprise one island only, for example, Barbados or Nauru, while others may consist of scores, even hundreds of islands such as The Bahamas, Seychelles, Tonga or Vanuatu. Obviously, such elementary topographical and spatial attributes have

Table 1

SURFACE AREA

Percentage of the nations of the world		
Over 1 million sq. km	Between 1 m and 100,00 sq. km	Less than 100,000 sq.km
13	35	52

POPULATION

Percentage of the nations of the world		
Over 50 million	Between 50 million and 5 million	Less than 5 million
7	38	54

GROSS NATIONAL PRODUCT (GNP) PER CAPITA

Percentage of the nations of the world		
Over US$ 5000	Between US$ 5000 and 1000	Less than US$ 1000
15	30	55

Notes:

1. These figures, compiled from United Nations and World Bank data for 1978, are for 'national units' responsible for their own education systems, and are not confined to territories designated as politically independent.

2. It is not implied that GNP reflects the living standards of the mass of the population.

Table 2

POPULATION, AREA AND GNP FOR COMMONWEALTH COUNTRIES WITH A POPULATION BELOW TWO MILLION (1980)

Country	Population		Area	GNP	Geographical Type		
	Total 000s 1980	Density per sq. km.	sq. km.	US$ per head (1980)	Island(s)	Littoral	Land-locked
1 Lesotho	1,341	44.2	30,355	390			*
2 Trinidad and Tobago	1,168	227.7	5,128	4,370	*		
3 Mauritius	958	513.7	1,865	1,060	*		
4 Botswana	800	1.3	600,372	910			*
5 Guyana	793	3.7	214,969	690		*	
6 Fiji	630	34.3	18,272	1,850	*		
7 Cyprus	620	67.0	9,251	3,560	*		
8 The Gambia	603	53.4	11,295	250		*	
9 Swaziland	557	32.0	17,365	680		*	
10 Malta	343	1085.4	316	3,470	*		
11 Barbados	249	577.7	431	3,040	*		
12 The Bahamas	241	17.3	13,395	3,300	*		
13 Solomon Is.	229	8.0	28,446	460	*		
14 W. Samoa	156	54.9	2,842	560	*		
15 Maldives	154	513.3	300	260	*		
16 Belize	145	6.3	22,964	1,080		*	
17 St. Lucia	124	201.3	616	850	*		
18 Vanuatu	117	7.9	14,763	530	*		
19 Grenada	110	319.8	344	690	*		
20 St. Vincent and the Grenadines	107	275.8	388	520	*		
21 Antigua and Barbuda	100	226.2	442	1,270	*		
22 Tonga	97	138.8	699	520	*		
23 Dominica	83	110.5	751	620	*		
24 Seychelles	60	214.3	280	1,770	*		
25 Kiribati	59	66.6	886	770	*		
26 Tuvalu	9	321.4	28	570	*		
27 Nauru	8	380.9	21	n.a.	*		

Table 3

THE ASSOCIATED STATES AND THE DEPENDENT TERRITORIES OF THE COMMONWEALTH (1980)*

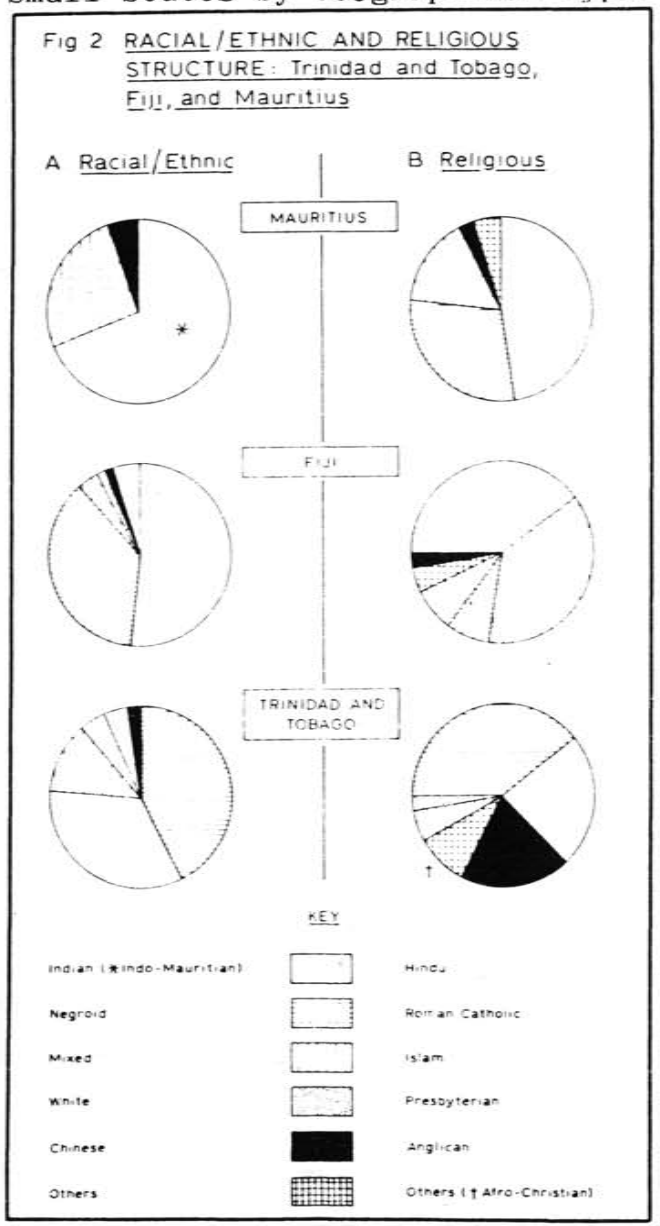
Country	Status	Population		Area	GNP	Geographical Type		
		Total (1980)	Density per sq. km.	sq. km	US$ per head (1980)	Island(s)	Littoral	Land-locked
1 Brunei	Associated State (UK)	220,000	38.2	3,765	2,620		*	
2 Bermuda	Dependency (UK)	59,000	1,113.2	53	9,440 (1979)	*		
3 St. Christopher-Nevis	Associated State (UK)	50,000	19.1	262	920	*		
4 Gibraltar	Dependency (UK)	30,000	5,000	6	4,320 (1979)		*	
5 Cook Is.	Associated State (NZ)	20,000	85.5	234	1,300	*		
6 Cayman Is.	Dependency (UK)	17,340	6,619	259	n.a.	*		
7 British Virgin Is.	Dependency (UK)	12,800 (1979)	81.7	153	n.a.	*		
8 Montserrat	Dependency (UK)	12,074	118.4	102	n.a.	*		
9 Turks & Caicos Is.	Dependency (UK)	7,400	14.83	499	n.a.	*		
10 Anguilla	Dependency (UK)	6,500	71.43	91	n.a.	*		
11 St Helena**	Dependency (UK)	5,216	42.7	122	n.a.	*		
12 Niue	Associated State (NZ)	3,600	13.90	259	n.a.	*		
13 Christmas Is.	External Territory (Australia)	3,184	23.59	135	n.a.	*		
14 Norfolk Is.	External Territory (Australia)	2,180	62.8	35	n.a.	*		
15 Falkland Is.	Dependency (UK)	1,890	1.47	1,287	n.a.	*		
16 Tokelau	Territory Overseas (NZ)	1,600	160	10	n.a.	*		
17 Cocos Is.	External Territory (Australia)	487	34.5	14	n.a.			
18 Pitcairn	Dependency (UK)	60	1.3	47	n.a.	*		

* The table excludes only Hong Kong (Population in 1980 - 5,147,900) and five dependent territories with no permanent population.

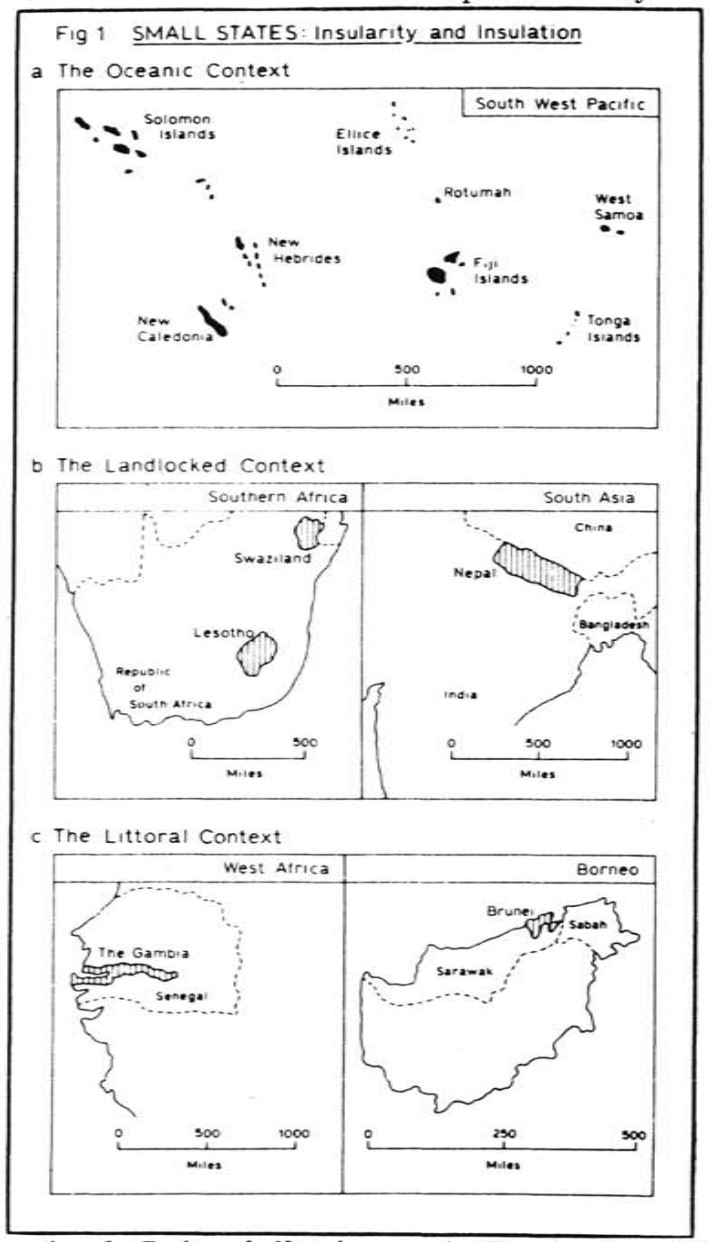
** St. Helena has administrative responsibility for Ascension Is.(Population 1,022) and Tristan da Cunha (Population 323).

Figure 1

A. Small States by Geographical Type



B. Cultural and Ethnic Comparability



Source: Brock, C.Problems of Education and Human Ecology in Small Tropical Island Nations, in Brock, C and Ryba, R (eds) A Volume of Essays for Elizabeth Halsall: Aspects of Education No.22. University of Hull. Institute of Education 1980, pp.71-83.

Table 4

A REGIONAL GROUPING OF SOME INDEPENDENT COUNTRIES, ASSOCIATED STATES AND DEPENDENT TERRITORIES WITHIN THE COMMONWEALTH

(Ranked According to Size of Population)

Africa	Caribbean	Indian Ocean	Mediterranean	South Atlantic	South Pacific
Independent Countries					
Lesotho Botswana The Gambia Swaziland	Trinidad & Tobago Guyana Barbados The Bahamas Belize St Lucia Grenada St Vincent and the Grenadines Antigua and Barbuda Dominica	Mauritius Maldives Seychelles	Cyprus Malta		Fiji Solomon Islands Western Samoa Vanuatu Tonga Kiribati Tuvalu
Associated States and Dependent Territories					
	Bermuda St Kitts-Nevis Cayman Is. British Virgin Is. Montserrat Turks & Caicos Anguilla	Christmas Is. Cocos Island	Gibraltar	St Helena (including Ascension Island and Tristan Da Cunha) Falkland Is.	Cook Islands Niue Norfolk Island Tokelau Pitcairn

considerable impact on the differential effectiveness of educational provision. However, this has not prevented many governments from operating highly centralised and supposedly homogeneous systems of education. The predictable outcome is that of extreme diversity and disparity in such basic areas as access to education at different levels, acquisition of teaching materials and other school supplies, and opportunities for in-service teacher education.

3.14 A more sophisticated approach to the classification of small states is to relate more than one set of the criteria by which 'smallness' is recognised. Shand (4) in his typology of selected Pacific and Indian Ocean states links size of population, land area and the domestic economy in one matrix (see Table 5). As Shand recognises, the divisions are arbitrary, with population figures, land area and Gross Domestic Product (GDP) figures broken into three groups, small, very small and micro. Whilst the number of conclusions which can be drawn are limited it would appear that there is a gradient of compounded disadvantage, with obvious implications for education.

3.15 These and other ways of classifying small countries help both to identify means of comparability that may be of mutual or practical interest, and also to serve to illustrate the diversity that exists between and even within small scale national units.

4. A synthesis from twelve cases

4.1 Twelve independent Commonwealth countries form the basis for this study. Each country has a population of less than two million. They are in rank order of population size (1980), Botswana (800,000), Guyana (793,000), Fiji (630,000), Cyprus (620,000), Malta (343,000), Barbados (249,000), Western Samoa (156,000), Belize (145,000), Grenada (110,000), Seychelles (66,000), Kiribati (59,000) and Tuvalu (9,000). Each country responded to the Commonwealth Secretariat's questionnaire in 1980 (Appendix A) and, with the exception of Belize (not a member until 1981) presented a Country Paper to the Eighth Commonwealth Education Conference.

4.2 The twelve exhibit considerable variety when viewed in terms of different small country typologies. Between them they represent each of the five geographical areas containing small member states of the Commonwealth (see Table 4). They also cover the range of physical variants; large "empty" country (e.g. Belize, Botswana, Guyana); littoral country (e.g. Belize, Guyana); land-locked (e.g. Botswana); single-island country (e.g. Cyprus, Malta); multi-island country (e.g. Fiji, Kiribati, Seychelles, Tuvalu).

4.3 In Table 6 information on population (1980), area (sq. km) and Gross National Product (GNP) per capita (1980) is applied to a typology based on Shand (see Table 5). To encompass all twelve countries four categories are included under area and population.

4.4 The most obvious characteristic of the sample set of small Commonwealth countries is that of disparity. In general terms they are not comparable. This is mainly due to the relatively large difference in scale within the sample. However, this does not in itself invalidate the notion of scale in terms of a gradient across an arbitrary category of countries within any given demographic range as a possible factor influencing education, however it may be defined. In this case it is necessary to apply the notion of scale to education in the form of the six categories of information chosen by the

Table 5

CLASSIFICATION OF SELECTED PACIFIC AND INDIAN OCEAN STATES AND TERRITORIES BY SIZE OF POPULATION, LAND AREA AND DOMESTIC ECONOMY

Population	Land Area								
	Small 10,000-30,000 sq. km.			Very Small 500-10,000 sq. km.			Micro ‹500 sq. km.		
	Domestic Economy								
	GDP			GDP			GDP		
	Small $A100m**	Very Small $A25-100m	Micro ‹$A25m	Small $A100m	Very Small $A25-100m	Micro ‹A25m	Small $SA100m	Very Small $A25-100m	Micro ‹$A25m
Small ›250,000	Fiji			Mauritius					
Very Small 25,000-250,000	New Caledonia	Solomon Is. Vanuatu		French Polynesia Guam	W. Samoa TTIP* Tonga Kiribati		American Samoa	Seychelles	Maldives
Micro ‹25,000								Nauru	Cook Is. Wallis & Futuna Tuvalu Niue Tokelau

Source: Shand, R T **Island Smallness: Some Definitions and Implications** in Shand, R T (ed.), **The Island States of the Pacific and Indian Oceans: Anatomy of Development.** The Australian National University. Development Studies Centre. Monograph No.23, 1980, p.14.

* Trust Territory of the Pacific Islands. ** $A Australian Dollars.

Table 6

CLASSIFICATION OF TWELVE COMMONWEALTH COUNTRIES WITH A POPULATION OF LESS THAN TWO MILLION BY SIZE OF POPULATION, LAND AREA AND DOMESTIC ECONOMY (1980)

Population	Area											
	200,000-750,000 sq. km			1,000-200,000 sq. km			100-1,000 sq. km			‹100 sq. km		
	Domestic Economy GNP - US$											
	›3000	1000-3000	‹1000	›3000	1000-3000	‹1000	›3000	1000-3000	‹1000	›3000	1000-3000	‹1000
500,000-1m			Botswana Guyana	Cyprus	Fiji							
200,000-500,000							Barbados Malta					
10,000-200,000					Belize	W. Samoa		Seychelles	Kiribati Grenada			
‹10,000												Tuvalu

Commonwealth Secretariat for their 1980 questionnaire. The individuality and limitations of that particular exercise must be borne in mind when even tentative suggestions of apparent relationships are put forward below. This will be discussed further in Chapter 2.

4.5 Of the twelve countries in the sample six have a GNP (1980) of below US$1000 per capita. They are then some of the poorest countries in the world although it has to be remembered that such figures may seriously discount an important subsistence economy. Of the six, four are island countries, two of which are relatively compact, and two of which are spread across thousands of miles of ocean (see Table 6). In all four cases the population is well below 200,000. At the other extreme are two countries, Guyana and Botswana with a relatively large area, a low overall population density, with people clustered along the coastline or the line of rail. Belize with a significantly smaller population and area has these spatial characteristics as well.

4.6 Barbados and Malta, set in the Caribbean and the Mediterranean respectively, are readily comparable on the basis of the three sets of information used in the typology. They are small compact islands with a relatively high GNP. They both benefit from a central trading location and have a long history of regional economic influence. In such situations the need for an internal natural resource base for manufacturing is not so pressing. Opportunities for assembly, reprocessing and service activities relieve the constraints of a relatively small internal market on the development of a manufacturing sector. Fiji and Cyprus, although much larger in terms of population and area display similar characteristics. Fiji is a widely scattered archipelago but its main island of Vitu Levu performs many of the central regional functions associated with the other more compact countries. To go further in the recognition of categories or sets is to risk creating artificial groupings which lend little to the understanding of educational development which is the concern of this paper.

4.7 In a recent categorisation of developing countries in the Pacific, Fisk (5) recognises five main groups:

Category 1 Countries with large underdeveloped agricultural and mineral resources with good prospects of raising incomes to the point where they can stand independent of aid. Fisk cites Papua New Guinea as one example in this category.

Category 2 This category includes Fiji alone, which is characterised as being able to develop without aid except for the fact that its modern energy base is now dependent on imported oil.

Category 3 Countries which have a resource endowment adequate to sustain the population well above minimum subsistence but not at the levels to which they aspire and possibly not even at their present levels of income. Fisk includes Tonga and Western Samoa.

Category 4 The countries in this group are the poorest in the Pacific region and include the atoll countries of Tuvalu and Kiribati. Such countries have limited and poor agricultural resources and have a high population density relative to the resource base. Small size, internal dispersal over wide areas of ocean and remoteness

limit the possibilities for export-oriented industry. Migration is one partial solution.

Category 5 Fisk calls this a catch-all category and includes Nauru and American Samoa which have very special resource or historical characteristics.

4.8 Fisk's taxonomy is specifically designed to highlight the potential for aid to contribute to national economic development. It would be difficult to ascribe the twelve countries of this study to each of the categories. Nevertheless, Botswana and Guyana have some of the characteristics of category 1. Malta, Cyprus and Barbados are akin to Fiji in category 2. In category 3 Western Samoa might be associated with Belize, Seychelles and Grenada. Kiribati and Tuvalu are already assigned to category 4.

4.9 The exercise of classification of small countries brings forth some features of contextual significance for understanding education and its institutional development. The degree of correspondence between indices of scale; the degree of national compactness; the natural resource base; and regional location show considerable variation within the sample group of 12 countries and therefore limit the likelihood of a significant "small country solution" to the questions raised in the Commonwealth Secretariat questionnaire.

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CHAPTER 2: SIX QUESTIONS PERTAINING TO EDUCATION AND NATIONAL SCALE

1. What range of educational provision can small states support?

1.1 The questionnaire issued by the Commonwealth Secretariat in 1980 (Appendix A) included a section on institutions in which information was sought on current national educational provision and the prospects for institutional expansion in the 1980s. The responses to this section from the sample countries form the basis for an examination of the first of six major questions highlighted in the 8CEC paper relating to education and national scale. Although the term range has clear curricula implications these will be reserved for the third of the six questions discussed under section 3 of this chapter.

1.2 The question is initially political, dealing with the internal national control of educational policy. In some respects the key word in the question is support. Does it mean supported entirely from the domestic economy or is it to include educational sectors and institutions partially or wholly dependent on overseas aid? Does it mean buildings and physical facilities only, or is it to include staffing, in which case we become involved in the question of expertise.

1.3 An examination of what the nations in the sample and other comparable countries actually manage to offer in the way of educational provision indicates an impressive range in quantitative terms. The fact that universal primary education is a feature of all these countries clearly illustrates this, and places these small countries ahead of many larger developing countries in this respect. However, it has to be remembered that none of the small countries in the sample are classified in the Secretariat's **Basic Statistical Data on Selected Countries** (1) as being in the low income category (US$250 per capita income). Consequently their economic level allied to a small population and/or surface area makes universal primary education a fairly easy facility to provide, at least in terms of physical plant. Indeed some countries in the sample have also made the expansion of nursery or kindergarten provision one of their priorities: for example, Guyana, Cyprus (by lowering the age of entry to primary school), Malta and Seychelles.

1.4 It is at the secondary level that difficult choices have to be made between the local, national and international needs of the nation in manpower terms. Several countries in the sample, for example, Malta, Barbados and Cyprus, provide universal secondary education, and though it is not compulsory in the last-named, it is largely taken up. Guyana, Fiji and Seychelles are also near to providing a full secondary sector, though in different forms. However, in all countries in the sample there is a clear understanding of the need to develop more flexible systems so as to relate more closely to local needs without constraining the minority capable of high level expertise in academic terms. It is of course the old universal problem of selection, but more acutely felt as the scale of the nation descends the gradient of the sample. Partly because of the small scale of the commercial economy these nations cannot accommodate all secondary level leavers in employment. To deal with this problem and in an attempt to lesson its impact in the future most countries in the sample have produced new initiatives with institutional expression in the form of the High School Programme in Guyana; the Junior Secondary School thrusts in Botswana and Western Samoa; the Multi-Craft

Centres in Fiji; the Pupil-Workers Scheme in Malta; the Centre for Popular Education in Grenada; the National Youth Service in the Seychelles; the Community High Schools in Kiribati, and the Community Training Centres in Tuvalu.

1.5 Despite these initiatives the status and pull of academic secondary schooling remains high and in some cases invalidates or limits the effective operation of the new institutions. Some countries attack this problem after compulsory schooling, for example, Malta, Barbados (Community College) and Cyprus, but these are all compact islands and have relatively diversified economies where general academic education is a genuinely useful training for managerial and entrepreneurial opportunities. For the poorer countries in the sample, and especially the demographically smaller and/or 'empty' types, the secondary leavers who are unemployed are key targets for a re-orientation to the rural life - an ironic situation indeed! Despite the establishment, development and often keenly relevant work of technical colleges and other further education institutions the academic secondary school image remains deeply installed in the minds of the majority of citizens as the most desirable.

1.6 Many small states are developing some form of integrated post-compulsory provision, for example: the Community College in Barbados, the Belize College of Arts, Science and Technology and the College of The Bahamas. Similar schemes are evident in smaller countries such as a Junior College development in St. Christopher-Nevis, the integration of the Morne educational complex in Saint Lucia and the planned Polytechnic in Seychelles.

1.7 All save one of the sample states have teachers' colleges which until the recent technical thrust offered the first form of further education to become available. The colleges have enjoyed high status. Their training role expanded with the provision of universal primary education and the need for qualified teachers, and they often provide the stepping stone for university entrance and/or professional employment outside education. In some countries the role of the teachers' college is more diffuse and includes in-service education and curriculum development. However, when the presently young teaching force eventually retires or moves to other employment there could be a rapid return to initial training as a priority, at least for a period. By then it is possible that such colleges may be integrated with other tertiary institutions.

1.8 Like the academic secondary school, the university has a special status, but in terms of developing countries large and small, also a special identification with nationalism. Despite the various degrees of incompleteness evident in many small country systems it is not altogether surprising to find that seven had at least part of a university campus and two others had university extension centres. Again, it is necessary to view this from a political as well as an educational angle. To have control of ones own higher education is a significant component of independence, but it is also necessary for that university to be able to meet all professional and technological manpower needs to be really fulfilling its political function. The universities of, or shared by, the sample countries achieve this to varying degrees, and their capability in this respect is not unrelated to population size and/or compactness, and/or being a regional focus country. Both Malta and Guyana have independent universities catering for a wide range of manpower needs; Fiji shares a regional university, the University of the South Pacific but is its headquarters and therefore benefits considerably thereby; Barbados and Botswana have one of the campuses of a university, both of which are likely

to obtain total or increased independence in the not too distant future; Western Samoa has the second, but at present minor campus of the University of the South Pacific which also has extension centres in all parts of its constituent members in the South Pacific. The University of the West Indies has campuses in Jamaica, and Trinidad and Tobago, as well as Barbados, and extension centres in the smaller countries, including two countries in the sample group, Grenada and Belize. Other Commonwealth countries with less than 2 million population that have universities are Lesotho (independent university); Swaziland (shared with Botswana); Mauritius (independent university), and Cyprus is planning to establish an independent university. The last-named sees its university as becoming a regional focus. The issue of the problems of regional universities will be discussed further in the consideration of dependence in Chapter 4.

1.9 A summary response to the first of the six questions would seem to be that the 12 small countries sampled here offer a range of formal educational provision out of proportion to their scale. The countries choose to give priority to this particular form of social investment. Beyond a very low threshold of population size and economic development the political factor overrides all others. However for tertiary education and especially university education the demographic threshold is higher and some form of regional co-operation and sharing is necessary.

1.10 It is also clear that the ideological stance of the government of small countries varies considerably and that this will influence the detailed pattern of provision. For example the characteristics of social priority and centralised planning and control give a certain comparability to the educational thrust of the currently (1982) socialist members of the sample, namely Guyana, Malta, Grenada and Seychelles. Not surprisingly these are the countries with active programmes of pre-school education. Contrasting strongly with this are the equally vigorous but much more variable programmes of say, Botswana, Fiji and Barbados.

1.11 At the lower end of the sample demographically and economically, the high degree of educational aspiration is supported to a proportionally greater extent by overseas aid. This is simply another example of political priorities prevailing. After all, with reference to the section on our smallest sample representative, Tuvalu (see Appendix B), because of the virtual lack of any natural resource base on this tiny fragmented island group, the export of high level manpower is seen as a matter of genuine economic potential.

1.12 In conclusion, while certain elementary constraints on educational provision are obvious in relation to scale, whether economically, spatially or demographically applied, no clear pattern is observable due to the very strong and varied influence of political decisions, and the equally varied range of environmental and historical circumstances within the sample group. All countries in the group are very keen to meet both community needs, especially rural community development, and high level manpower needs. This creates a dilemma, but one which is felt in large countries also. However, this tension is certainly more acutely felt the smaller the country in question.

2. **How can the high cost of systems associated with the provision of traditional forms of education be reduced?**

2.1 The Commonwealth Secretariat's questionnaire (Appendix A) endeavoured to obtain information on the costs and the financing of the education system in small states and the major financial requirements for the 1980s.

2.2 As with the first of the six questions there is a clear political dimension to the concept of cost. Terms such as 'the high cost of systems' are subjective. Depending upon different political viewpoints the cost of educational provision may be reckoned to be on a gradient between high and low. This will often depend on whether one is examining capital expenditure or recurrent expenditure on education, and how each of these relates to other elements in the economy. Another dimension is whether the expected benefit to be derived is a short or long term objective. A further consideration is the proportion of educational expenditure derived from overseas aid and whether this is in any way constrained as to its use.

2.3 As predicted in respect of other aspects of the educational scene in small Commonwealth countries the picture of finance is similarly disparate. The percentage of the national budget spent on education runs from 30 per cent in Botswana through 20 per cent in Fiji and Barbados; 15 per cent in Belize and Grenada; 13 per cent in Seychelles and Cyprus; 12.5 per cent in Guyana; 12 per cent in Western Samoa, to 8 per cent in Malta. Much depends on the particular situation in the year of the survey (1980), as to whether any major initiative was being undertaken in any particular country. Certainly Botswana's very high rate may well be related to an upsurge in national income through mining and the concurrent thrust to provide Junior Secondary Schools in every area. There is also the question of the absolute sums being spent on education and its relation to the absolute number of pupils and students. In other words it could well be that the 8 per cent of Malta is in reality a larger expenditure per head than the 30 per cent of Botswana.

2.4 Given these qualifications, there are certain financial problems which tend to act adversely in respect of educational provision in smaller countries. For example, unit costs tend to be high especially in relation to the provision of specialist staff in secondary and tertiary fields where there tends to be a high staff:student ratio. If expatriate employment is deemed to be necessary, then the unit cost may be greater whether such people work in teaching or in administration. Even if expatriates are on local salary scales there often has to be a provision, or at least a subsidy on accommodation, family passages, and some sort of inducement such as terminal gratuity. Such items affect smaller developing countries more adversely than their larger counterparts because they are likely to contribute a larger part of the educational budget.

2.5 Of particular concern to small countries is the recurrent expenditure arising from an initiative funded by overseas aid, especially if this is a major institutional feature such as a college or university. Such major capital investments tend to institute a curricular inertia as well, so that it becomes very difficult to change direction until the initial holders of established positions retire. Some commentators look upon the University of the West Indies in this light, depicting it as an 'albatross' as far as regional tertiary initiative is concerned because of the very strongly metropolitan model of its foundation as a University College (of London), in 1948. This is not entirely fair, but has to be given some credence. More recent university foundations

in the tropical island zones, such as the University of the South Pacific, the University of Mauritius, the University of Guyana and the two universities in Papua New Guinea seem to have been directed from the outset towards perceived regional or local needs. However, even at other lower levels of educational operation, and especially in the primary sector the recurrent implications of innovation in financial terms can easily be under-estimated. Of course it sometimes happens, especially in the poorer countries that the aid agreement covers recurrent as well as capital costs. In these cases an important dependency element has to be considered.

2.6 Unless the small country is also compact then certain types of administrative cost can be very high indeed. This is especially true of widely scattered archipelago states, particularly if there is also a high level of overall remoteness in relation to sources of educational supplies from other countries. This is to some extent also true of the land based countries like Guyana, Botswana and Belize where the clusters of population are analogous to the islands of an archipelago and may be equally difficult of access. New and different systems of management can be evolved to ameliorate this type of problem, but these geographical difficulties will not go away.

2.7 It is clear then that in various ways, and even given the widely differing economic structures and levels of small Commonwealth countries, such countries tend to suffer from relatively high costs in providing education. The question as posed at the beginning of this section refers to the possibility of reducing expenditure on traditional forms of education - formal institutionalised education. It implies that this type of provision is to continue. One obvious and not necessarily facile answer is to reduce the provision of this type of education. This would not automatically mean that what replaced it would cost less, but given that many of the countries in our sample, and other comparable states, are initiating various forms of local community-based education, there is a possibility of some costs either not arising, or being borne by the community. This is already the case in some of the sample countries in the construction and maintenance of local educational plant, and could well operate more in the field of materials provision and even staffing if the local specific model is taken to its logical conclusion. Obviously the inertia of the teaching profession and the related notion of the 'qualified teacher' will act against such trends, but in view of the fact that even in the very small countries the cost of teachers' salaries constitutes nearly the entire recurrent cost of schooling, something has to be done in this area if the proportionally smaller absolute amount of money left over in such a country is to be enlarged.

2.8 Likewise, greater co-operation with industry, commerce and other private bodies in sandwich courses and other forms of sponsorship could reduce public sector costs in some sections of education, as could more inter-ministerial co-operation. It is clear from the survey that in several countries there is already such co-operation. However in others such as in The Gambia, there has been rivalry, duplication, or at best overlap in the provision of education in, for example, rural areas. If this happens then the overall cost of education to the national budget is likely to rise.

2.9 There has been a tendency in the developed countries for the inertia of the formal system to lumber on long after more effective informal influences have appropriated some of its functions. Clearly there are certain aspects of education for which formal institutions are essential, but smaller developing countries with incomplete systems have the opportunity to avail themselves of

means of distance communication which may assist in cutting costs. This would also mean a restructuring of certain basic assumptions about the efficiency and status of formal, especially secondary schooling and this requires a profound attitudinal change. The problems of acceptance of new initiatives such as Community High Schools in some small countries is an example of local conservatism derived from a colonial model, which if typical of other peripheral communities in small countries - and it may well be - points towards the continuation of a burden of disproportionately high educational expenditure for small countries.

3. **What is the education system's contribution to the development of a more broadly based economy?**

3.1 A third major issue in the Commonwealth Secretariat's questionnaire (Appendix A) was the relationship between education and employment. Information was sought on levels of employment and migration relative to educational attainment.

3.2 An examination of this third question requires initial reference to the variety of economic and occupational structures exhibited by the twelve sample nations and other small Commonwealth countries. It is well known that a strong economic characteristic of small countries is their concentration of output - a dependence on the export or provision of a very small range of goods or services.

3.3 Within the sample the more compact island nations and the land-based nations are the more economically diversified, and policies for furthering the process of diversification are likely to continue. The extent to which education has contributed and/or will contribute further to this process cannot be answered without a brief reference to the vexed issue of relationships between investment in education and the economic growth of a nation. This is pertinent here because whatever the correct theoretical outcome may be, the fact is that in the 1960s and 1970s many newly independent countries presumed a direct relationship. For small countries the heavy investment in education was a disproportionate burden, and now it is generally agreed that in practice educational investment must follow, or be carefully integrated with other infrastructural investment.

3.4 As can be seen under the individual country sections in Appendix B, small countries have, quantitatively, a remarkable level of education provision. The degree to which the manpower potential inherent in that provision can be enhanced in relation to economic growth varies from case to case. In the poorest economies, the concentration phenomenon is proportionally stronger. In Kiribati and Tuvalu much presently depends on marine employment for men and their resultant remittances. Not surprisingly in both countries there is a specialist marine training college to enhance the prospect of employment - clear correspondence between acute economic concentration and educational specialisation. Such economies have no leeway with which to adjust to sudden changes of fortune in the area of concentration. What are the prospects for diversification? In Tuvalu there is virtually no environmental resource except fish for subsistence use; even basic agriculture requires soils to be contrived (an art on the curriculum of the Marine Training School). Tertiary services such as offered by some very small countries, e.g. taxation and banking advantages in the Cayman Islands, are ruled out by the remoteness of such countries as Tuvalu. It may well be that in the not too

distant future, computer and satellite links may make such services possible, but the advantages of improved technology will most likely enable the few small countries already in this field to maintain their hold. So the export of educated manpower becomes an alternative - not always clearly articulated - but a practical response to a situation of limited opportunities. This in turn depends on host countries being willing to admit Tuvaluans to tertiary education and/or employment in competition with their own nationals and the basic educational provision in Tuvalu being able to provide a sufficiently strong academic base for successful entry to higher education.

3.5 Kiribati has somewhat similar economic problems, but there is also some prospect of subsistence affluence as a realistic objective provided population growth is held in check. Apart from this Kiribati is possibly in an inferior position to Tuvalu because of its significantly greater size. It is possible that relatively few successes in the field of educated manpower export could have a relatively large effect on Tuvaluan economic fortunes. For Kiribati, which is much more firmly involved in marine employment - to some extent at the expense of Tuvalu - the switch to academic exports would be more problematical. Consequently education must seek to adjust to the local resource base, and the Community High School scheme was an attempt to begin this adjustment (see Kiribati Country Profile, Appendix B).

3.6 Although the Seychelles is, like Kiribati and Tuvalu, a widely scattered archipelago, the permanently inhabited islands are quite close together. Ninety per cent of the population live on the main island, Mahe. This, plus the fact that Mahe is volcanically derived and fertile makes it more comparable to similar environments in the Windward Islands of the West Indies - Dominica, Saint Lucia, Saint Vincent and the Grenadines and, the sample representative in this survey, Grenada. These, countries like Seychelles, are gradually diversifying their economies and the most useful educational contribution to this process has been the enhancement of technical and vocational education. Given political independence and the virtual, and to some extent related disappearance of emigration possibilities, the task facing education is of helping to bring about a change in attitude towards working the local environment, rural and urban, for economic ends. It is doubtful whether existing formal educational structures and curricula are useful for such a task, hence the radical alternatives proposed by Seychelles and Grenada following their respective socialist coups in 1977 and 1979. It remains to be seen whether these community orientated approaches will work, and much will depend on local political will and skill to translate rhetoric into manifest local improvements that will maintain momentum and support. Education is vital to the ultimate success of both these revolutions. The Windward Islands and Seychelles (Mahe) are clearly capable of 'subsistence affluence', plus a significant diversified sector. Their individual compactness and the interconnection of urban and rural life could be an advantage provided - and this is a key question for this particular group of small countries - that presently high rates of population growth are reduced. Herein lies another role for education, and for political will.

3.7 Belize, Guyana and Botswana, the three land-based countries, face a different type of challenge. They already have significant manufacturing developments as well as different forms of agricultural potential. Although Belize is demographically very small, its surface area it is out of all proportion to the island nations, with the exception of Fiji. All three members of this group are geopolitcally constrained, being bordered by 'opposing' countries. They cannot, therefore, play the role of regional focus

as Fiji does, and this limits the possibilities for the development of a large managerial, service and entrepreneurial sector which is the area of the economy most suited to receiving the output of general formal education. However, in the case of Botswana and Guyana the size of the national population is sufficient to contain such a sector within the internal economy provided the basis of that economy at the primary levels of agriculture and extractive industry is sufficiently strong. But we have already seen that the national economic index of these two nations is lower than even most of the smaller islands of the sample. And yet their potential is obviously much greater than the islands, so we must ask not only, how can education assist the diversification of the economy but also, how can education assist the growth of the basic economy? The answer is not at all clear.

3.8 In Guyana, for example, we find one of the most complete of the educational systems in the sample, one of only two countries on the list to have its own independent university. It has already been commented that the University of Guyana has adopted a very flexible approach in relation to perceived manpower development needs, and that elsewhere in the system there is diversification and an enhancement of technical education. What more can be done? Perhaps too much has been done, and the level of public spending has already outrun the present capacity of the economy? Perhaps the potential for human resource development has been constrained by social division and conflict, and an overbearing bureaucracy? It does not seem that smallness of scale per se has very much to do with this situation, but it could well be that the mismatch of different scales is significant. In other words the three indices of scale, geographic, demographic and economic do not accord. The population, while the largest absolute total in our sample, is clearly inadequate for the exploitation of the vast interior, but too large it seems for present economic levels to cope with. To the extent that there is some economic diversification already in key areas of the country, the existing educational provision would seem to be sufficiently well developed to service these needs.

3.9 Botswana also exhibits a mismatch of scales. The relatively small population is mostly clustered along the border with the Republic of South Africa, and there has long been a flow of male labour from Botswana to work in the mines of the Republic. The level of the national economy is very similar to that of Guyana, but its recent rate of growth is greater, due mainly to vigorous mineral exploitation. The education system is less developed than Guyana but is the recipient of a considerable portion of this new income. Is such a policy in respect of educational investment ill-conceived at this stage? Should more be done instead to concentrate on certain areas and sectors where economic diversification seems possible? The style of educational expansion is certainly much more locally adaptable and less centrally planned than in Guyana, but investment in its growth is on a national scale. It would seem that Botswana's economic and educational problems probably relate more to questions of isolation and dependence than to scale per se.

3.10 Applying the question to Malta, Cyprus, Barbados and Fiji, this group contains the members of the sample with the greatest degree of correspondence between economic diversification and educational provision. The phenomenon of economic concentration is less marked, and there are well developed trading, service and manufacturing sectors in each. Educational provision is correspondingly well developed, though there is not a direct match between the output of the system and changing manpower needs, these being free market countries. All four countries recognise the need for

improvement in the technical and vocational fields and all have programmes for this purpose. Why should these four small countries have achieved a relatively higher level of economic diversification than other countries in the sample? Did their education systems, as they developed, help to engender diversity in the economy; and if so is there any message here for other small Commonwealth countries?

3.11 All four countries enjoy a relatively good match between their three indices of scale. Although Malta and Barbados are rather constrained in surface area, this in itself greatly assists the flow of information and the ease of administration necessary in a complex economy. It helps promote closer urban-rural inter-relationships. With the exception of Fiji (unless we treat the outer islands distinctly), these countries are compact. Fiji included, they occupy historically developed trading positions in their respective regions. The long-standing development of trade through, across and between the Mediterranean area, its many components, and its long-standing association with European, Asian and African civilisations have certainly beneffited Malta and Cyprus. Barbados has always been the entrepot for the Eastern Caribbean Commonwealth islands. Usefully detached, about 100 miles into the Atlantic to the east of the Lesser Antilles it enjoyed a much more peaceful colonial history than its neighbours and never changed hands - not an insignificant legacy in education terms. Although not without obvious social problems arising from the experience of slavery, the relatively early introduction of educational opportunity and its subsequent development have certainly enhanced the quality of human resources in accordance with the rapid growth of trading, services and manufacturing, favoured by its regional position. Fiji, though less compact, also has a regional role in the South Pacific, not unlike that of Barbados but on a larger geographical scale. It is the focus of communications, and has within its own considerable land area a capacity for agricultural production unmatched in the region, except for the potential evident in Western Samoa.

3.12 It would seem therefore that the more developed countries in the sample are characterised by a relatively diversified economy and that the relative completeness and flexibility of their educational systems fits well with this. This state of affairs seems to relate to scale only in the relatively high degree of matching between the three indices of scale which leads to a compactness that has a number of practical benefits. It does not seem that any general educational lessons can be usefully transmitted to the other types of small countries in the sample or beyond. They have much less favoured locations in respect of trading, some have problems associated with underpopulation, geopolitical conflict, remoteness and fragmentation.

4. How can the development of an appropriate curriculum for the school system be best initiated and sustained?

4.1. The fourth section in the Commonwealth Secretariat's questionnaire (Appendix A) concentrated upon the curriculum especially as this relates to first and second level education. It sought too to elicit information on the main curriculum initiatives upon which countries are embarking in the 1980s.

4.2 The curriculum, in its various forms - content, method, visible and hidden - is the crux of any educational operation. Whatever the broad objective, it is individually received to an extent which is very difficult to quantify, especially in the long term view of its possible contribution to the

development of each member of the group, community or nation. Claims and assumptions as to the likely outcomes of curricula initiatives in detail are therefore often exaggerated. This being so, it is necessary to be extremely circumspect about the use of words such as appropriate and relevant, unless linked with some proven method of ascertaining appropriateness according to a range of criteria which are themselves grounded in the needs of the country in question. It is self evident that there can be no question of suggesting that there could be a certain type of curriculum that would suit the range of scales evident even in our sample group. It must also be clearly recognised that although the Commonwealth Secretariat's questionnaire concentrated on the school system this is a very narrow view of education, and may be unnecessarily restrictive in considering the overall needs of education in very small countries. This is not a case for de-schooling but rather for close co-operation, even integration between schooling, other formal sectors, and non-formal and informal educational providers in the best use of scarce facilities and resources.

4.3 Most small countries, including nearly all the sample states, have added to their educational costs in recent times by establishing some sort of curriculum development centre or department. Such institutions spring partly from the new orthodoxy syndrome in educational provision determined by trends in metropolitan countries, and partly from the apparent need in a post-independent context to utilise the education system in enhancing, even in some cases effecting, a national cohesion and identity.

4.4 However, in very small countries especially, and developing countries in general, the outside origins of much of the material - particularly books - does not assist the task of relating to and surviving in the sometimes very limited environmental context concerned. To this extent the materials production aspect of curriculum centres can play a vital role. This is more a question of educational technology (see section 6 of this chapter) than of curriculum, which has to do with the perceived learning needs of the population. In a small country there is an increased tension at the interface between locale specific needs and the wider needs of nationhood and its associated, nationalised bureaucracy.

4.5 Given the strong influence of informal educational processes, and especially where materials and expertise are at a premium, it would seem to be sensible to include in the formal curriculum only those elements which cannot be learned or learned so effectively, outside of the institutional context (2). It is a curious state of affairs when contemporary curriculum designers are being urged to include on the formal timetable areas of local culture that owe their endangered state largely to the the effects of metropolitan schooling.

4.6 Too great an identification between curriculum and formal educational structures also invites the flawed strategy of attempting a curriculum reform, however desirable, through the device of structural reform. The creation of new structures is not only disproportionately costly for many small states, but induces reaction if they seem to conflict with the conventional wisdom that generally equates educational propriety and status with formal academic learning. In the range of small countries we have considered above, the model of the academic school has been firmly implanted by the colonial, and especially, mission experience. Most members of the educated elites achieved their current status, and related benefits through success in this type of schooling. Consequently, to expect the mass of the population, be they

urban or rural, to accept radically different structures is naive in the extreme. But curriculum change does not necessarily involve radical structural reform. There can be, indeed has to be an accommodation between formal notions of school and the informal education derived from living. The establishment and operation of a curriculum unit staffed by returnees from curriculum courses overseas is not necessarily the most effective way of achieving this accommodation.

4.7 A good example of this is in the technical and vocational area where the setting up of new structures - and there are several examples listed below - may in itself hinder the popular acceptance of this area of education quite correctly identified by the Commonwealth Secretariat in its 8CEC papers as being one of priority for small member states.

4.8 It should be possible to utilise curriculum design skills to fuse technical and vocational aspects of education with the so-called academic model already operating. One way to achieve this is to give priority to adult education and attempt to get across at this level the range of economic options open to the country in question, particularly if it is a small island nation where before political independence formal academic education was a preparation for emigration. Such an option is no longer open in most cases, and the most imaginative and realistic innovations in curricula reform in the sample countries reviewed above are those attempting to relate to local environmental constraints and opportunities. The liberal use of labels such as technical, vocational and polytechnic in a spurious and polemical way can endanger the possibility of these potentially very useful areas of educational experience being accepted by local communities.

4.9 A particularly important area of the local environment that has received effective support from curriculum units in small countries is that of language. In many cases, small developing countries are remarkably internally diverse in this respect (3). They are always at the least bilingual, as between the metropolitan colonial language and the social language of the people which, in turn may be at least partially derived from the former - as with West Indian and Seychelles creole languages and S.E. Asian and Pacific pidgin. Localisation of primary level texts and other materials has rightly been a priority concern in several of the sample states, most notably in Western Samoa.

4.10 Many of the small countries in this sample, and comparable Commonwealth counterparts happen to be regionally grouped, and major curriculum initiatives have been attempted through links with developed countries in the given region - such as Australia and New Zealand in the case of the South Pacific and USA and Canada in the Caribbean and/or through new regional institutions such as examination boards and universities. More detailed consideration of the curricula implications of regional co-operation between groups of small countries is given in Chapter 4 but one very useful service provided by such links is that of the dissemination of information on particular curriculum innovations in individual countries (4).

4.11 The main curricula initiatives of individual sample states are mentioned under various sections of Appendix B. Also, the Commonwealth Secretariat has recently published an account of curriculum change at secondary level in member states (5). The chapters below (3 and 4) on Isolation and Dependence inevitably include further treatment of curriculum issues. In consequence of these three facts, this particular section has been confined to

a discussion of the question as posed in the 8CEC paper. The very narrow interpretation of curriculum implied in the parameter of 'school system', and the dubious predictive power implied in the use of the word 'appropriate' may be revealing in themselves. The mystique of a science of education has costs which can affect small countries disproportionately. It would seem that in such countries there is a particular need for the integration of effort and approach involving all sections of educational provision. A more useful question to have posed in respect of the outcome of the Commonwealth Secretariat's survey, bearing in mind its specific concern with scale, would have been: "How can curricula concepts and practices developed in respect of schooling in large developed countries be adopted for application to the holistic perception of education necessitated by national smallness?"

5. How can local expertise be developed and encouraged?

5.1 In the Commonwealth Secretariat questionnaire (Appendix A) which preceded the 8CEC paper the notion of expertise was applied to the manpower available to the education system of small member states. Since the character and operation of such systems is broadly determined by the political, commercial and in some cases spiritual leadership of each small nation, the sort of education experienced by these elites, especially in the post-independence era is also relevant.

5.2 Consequently there are at least five areas of local expertise to be considered in relation to this question: national leadership expertise as exhibited or required by politicans, civil servants and leaders in other walks of life; expertise in educational administration; expertise in the teaching force; expertise in support services including for example curriculum advisers and reprographic operatives; and expertise in the various areas of non-formal and informal educational provision.

5.3 One of the few obvious effects of national smallness of scale defined demographically is the limited pool of human talent available. Before independence, when in many such countries the emigration often necessitated by progress up the ladder of formal education tended to become permanent, disproportionately large numbers of talented individuals were lost. That is not to say that those who returned and remained were in any way inferior, but they were certainly fewer than they might have been. At the level of national leadership in several key areas therefore the potential pool of talent has been reduced both quantitatively and qualitatively, and one of the main agents of this process has been the accessibility and nature of formal education itself - an ironical but not unpredictable outcome of the combination of smallness and colonialism.

5.4 At the present very difficult time for small independent countries, economically and politically exceptional talent and the acquisition by national elites, however selected or identified, of the range and flexibility of expertise inherent in the highest levels of leadership should be a priority consideration.

5.5 For the education system itself such qualities are also needed in the leadership of its various components and at all levels of educational administration. In general the qualities required when national parameters are significantly limited are those associated with adaptability and the polymath. It is therefore particularly difficult for such countries to promote these

objectives through an inherited philosophy of education that favours extreme specialisation. And yet it would appear that education policies in small countries will increasingly need to reduce disparities between urban and rural education through increased and sophisticated integration between formal, non-formal and informal sources of education.

5.6 The administration of education is a daunting and difficult task in such circumstances, and because of the necessarily limited pool of human talent, there is a sharper fall in the gradient of expertise in this field as between smaller and larger countries. Even within regions of small countries such difficulties of comparability occur in this field that there exists a constraint on the potential for regional co-operation in education, though in terms of particular individual personnel it is self-evidently not the case that a direct correspondence exists between administrative talent and size of the country. However, this is evident in terms of a pool of administrative expertise. Staff development programmes in educational administration should include a large number of short experiences and workshops designed to promote immediate expertise needs, rather than concentrating on sending a few administrators on long-term courses of educational administration in metropolitan countries. This question is also linked with the trend towards localisation of manpower in educational administration and changing patterns of expatriate manpower needs.

5.7 Expatriates, and this is clear from many of the sample states, still tend to be disproportionately evident not only in educational administration, but also in school administration and specialist teaching roles in secondary schools. This is related not only to expertise but also to the career aspirations of the relatively limited number of local graduates in small countries, most of whom prefer work outside formal education - a factor inhibiting localisation of high level educational expertise. Expatriates in education in small countries tend to be concentrated in the academic secondary sector as specialist teachers, particularly in science subjects. This is a reflection of the inertia of curriculum development at this level as part and parcel of the inherited metropolitan model of schooling. Is the type of specialisation in individual sciences at this level a vital aspect of the formal education of small country children? This question is also relevant to large countries, developed as well as developing, but in small countries it is a disproportionatley urgent issue. If it is not then curriculum reform can cope with the problem. Unless and until that occurs, and it will be a difficult reform in terms of inherited perceptions of curriculur propriety, then the heavy cost of expatriate labour* will continue to be a problem for small Commonwealth countries. Several of the countries in the sample have of course been able and/or willing to invest heavily in the localisation of expertise in such areas. There is then no expatriate problem, but a different one of the internalising of specialisation in the local education system.

5.8 In some small Commonwealth countries which are compact and enjoy entrepreneurial or other economic opportunities formal educational investment and quality tend to be at high levels. The content and output of the system corresponds well with employment stuctures and opportunities, so the quality of expertise tends to be very high. Paradoxically this causes other problems

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* Expatriates are often now on local salary scales, but there are also the questions of passages, accommodation and sometimes extra inducements such as terminal gratuities.

of lack of promotion opportunities due to the scale of the country which if very small may also have very few opportunities for talented and ambitious educationalists in educational administration or tertiary education. In such circumstances there might be some value to be gained by a special Commonwealth scheme of staff development involving exchanges and other movements between small member states sharing similar problems of educational expertise.

5.9 However, the most general problem of expertise is that of the nature of training and certification of teachers for the primary schools, given that universal primary education is now a reality in most small Commonwealth countries. Our sample set of twelve countries range in this respect from several with a 100 per cent qualified teaching force at this level to a few with only about half the force trained. There is of course a considerable problem as to what constitutes qualified in any respect of comparability. All members of the sample now see in-service training as an important on-going operation capable of supporting plans for curriculum change. In at least one case, Grenada, there has been a fusion between initial and in-service training so as to hasten the day of a fully qualified teaching force, and also provide a form of training less divorced from local realities. The Grenada scheme, backed by the University of the West Indies is one that other small countries may well find attractive as a model.

5.10 Secondary school teacher training is much less well developed in small countries. Academic secondary schools often employ untrained graduates, and junior secondary schools take primary trained teachers in several countries. It may well be that in the junior secondary sector, a development favoured by many Commonwealth countries, lies the greatest mismatch between training and task. Although usually conceived as ultimately being a universal sector, the junior secondary schools are as yet unable to accept the entire age range of the sector in most small countries. This has translated them into the situation of being regarded as second choice selective schools, and in this context the specialist capability of many staff members is found wanting.

5.11 The many teachers colleges established in the 1960s in small countries have played in fact a much wider role as often the only facility for further and higher education, and a route to almost any tertiary career. This role has declined as other tertiary institutions have emerged, especially in the technical field. For small countries there is always the problem of a lower margin of error in planning staff development needs, and a proportionally heavy cost to be borne in providing cover for staff away on further training. There are, however, some quantitative advantages of smallness in this respect, and the main problem is a qualitative one, especially in terms of the content of teacher education. Problems of accessibility of workshops and other in-service provisions are very severe in multi-island countries and it would probably be better for there to be more frequent visitations of short duration to outlying areas by outside advisers who can provide a comparative dimension. If the opposite method is used, some small countries find it impossible to afford the cost of sufficient numbers attending a centralised or regional meeting to make it worthwhile. On the other hand if the small country is compact, the take-up for in-service opportunities tends to be high, and as flexibility and adaptability become increasingly important the required transformation of teacher attitudes and capabilities in terms of local parameters and resource development is more likely to be achieved.

5.12 The smaller the scale of the country the more the significance of a good understanding of the components of the local environment and the patterns of

human ecology that have developed there. The most valuable additions to teacher and leadership expertise alike will be those enabling the use of the total environment as a resource for learning.

6. **How can small states increase the level of self-reliance in the production and servicing of school buildings and equipment?**

6.1 This pertains to the section of the Commonwealth Secretariat questionnaire (Appendix A) which requested information on the capital equipment and the hardware of education systems. These are two distinct elements although there are some important links between them.

6.2 First there is the question of the construction and maintenance of school buildings. In small countries the Ministry of Education rarely has the capacity to carry out either of these tasks, and there are many examples of inadequate structure and design. Clearly there is a need for inter-ministerial co-operation. The school building is the local symbol of education, and a pattern adopted in some parts of rural Mexico may be of interest to small Commonwealth countries. That is, the building department provides proper foundations and reliable structures but the local community clothes these in the accepted style of the area, including roofing. Thus the goodwill and effort of the local community is supported by appropriate levels of technology, and a structure that is culturally acceptable. Something along these lines, though more locally controlled, is taking place in rural Botswana. Possibly of more significance in small and otherwise disadvantaged countries is the physical construction and maintenance of links between individual schools and the Ministry of Education, by which is meant systems of transportation and communication supporting information and basic supplies. This is a particular problem in the large area/low population density states and in the multi-island states. In both cases considerable disparities of accessibility and provision tend to occur.

6.3 Educational technology may be considered from two different angles, institutional and spatial: in other words, the two extremes of scale. At the institutional level, that is in the individual school, if self-reliance is to be the objective then the level of technology inherent in any given piece of apparatus must not exceed the level of capacity in that institution to maintain it, store it securely and operate it effectively. Many small Commonwealth countries are in tropical locations and the atmospheric toll on electrical and mechanical devices is severe. The scale of complexity of the technology must therefore correspond with the scale of other resources needed to utilise it effectively, the most important of which is the human resource. Given that the capacity to handle this aspect of educational support was by far the weakest of the six areas comprising the Commonwealth Secretariat survey, this implies a considerable challenge for technical education in the countries concerned. It is likely that in small countries the technical college will be the main repository of expertise able to assist with the maintenance and repair of apparatus. This capacity could be formalised into an official role, and incorporated in the training courses for college students.

6.4 In the field of science some very good work has been done, notably at Njala University College, Sierra Leone, on the utilisation of local environmental resources for both the construction of pieces of apparatus, and also the general exemplification of concepts and processes. Much could be gained from the wider dissemination of this work and its possible extension into the area of appropriate educational technology.

6.5 The spatial aspect of educational technology has to do with distance learning, and is particularly useful in large sparsely populated countries, multi-island countries and regional links in education. Thus its role is directly concerned with problems of scale by, in effect, reducing vast distances to the scale of individual human contact. One of the earlier forms of distance learning, correspondence courses, can now be associated with modern means of telecommunication, and if some of the basic problems of technical expertise can be resolved, then there is no reason why even the smallest country should not provide an educational service out of all proportion to its limited scale. Of particular note in this field among the countries in the sample are the Botswana Extension College and the use of satellite communications by the University of the South Pacific Extension Service. The latter, together with the two universities in Papua New Guinea operates an enormous range of contacts from the resolution of individual personal problems to the provision of mass lectures to an audience scattered across the region (6).

6.6 It is obvious that any development in educational technology, institutional or spatial, brings with it, especially for a small country, issues of interdependence which must somehow, in their resolution, meet with local needs and with the maintenance of the cultural integrity of the human groups involved. Provided this can be done then even the smallest country's educational provision can include high quality audio-visual material at a very modest cost.

7. The question of scale reviewed

7.1 Further comments on scale in relation to isolation and dependence will be made in the concluding section of this paper. Suffice it here to discuss briefly the evident relationships between scale and education that have emerged thus far.

7.2 In general it would appear to be the case that, while there must obviously be educational implications of extremes of scale, however defined as between the giant nations of the Commonwealth (i.e. India, Canada, Nigeria and Australia) and the microstate (e.g. Gibraltar, Montserrat and Tuvalu), there is no regular gradient or obvious cut-off point as between 'small' and other relative terms typifying notional national scale. Consequently the idea of setting an arbitrary demographic threshold such as 2 million as a parameter for 'smallness' places serious intellectual constraints on any attempt to analyse a presumed relationship between 'smallness of national scale' and the 'nature and operation of educational systems'. The fact that the concept of scale is capable of definition by at least three sets of indices, namely demographic, economic and spatial, and that they rarely correspond in respect of actual national units also makes the idea of some sort of composite national scale difficult to determine. It would require considerably more analysis than the remit for this paper will allow. However two concepts emerge with which to attempt further analysis: correspondence of measures of scale as between the three sets of indices, and national compactness, also according to the concordance of selected variables.

7.3 It was found above that correspondence between two of the variables of national scale was not unusual, but between all three it was rare. The fact that one of the variables, population size, had been ascribed greater status by its identification with the remit of the paper somewhat increased the problems of comparison. Nonetheless it became fairly clear that a high level

of correspondence was evident only between the lower ranges of each variable: at the microstate level. In other words if the general concept of 'smallness' has any validity it seems that it could not be applied to any state with more than about 100,000 population, an economic level by GNP per capita of approximately US$1,000 p.a., and a surface area of 1,000 sq. km. These are very subjective thresholds of smallness and further research would be needed including a disaggregation of each variable on a qualitative basis. However, above these general levels there seemed to be increasingly less correspondence, so that at the top of the sample list we find Guyana and Botswana with enormous land areas relative to population and very low economic levels.

7.4 Compactness requires of a state that there can be a combination of territorial unification, and no empty land; economic diversity by sector and occupation; high population density and a degree of social cohesion. It became clear above that where the conditions for compactness were best satisfied in the sample (Barbados, Cyprus, Malta and to a considerably lesser extent, Fiji), the operation of formal education systems seemed most in tune with the other systems comprising the nation. This is simply because the more diversified and 'modern' the economy, the greater the potential usefulness of traditional institutionalised learning. Conversely the poorer the index of compactness the greater the likelihood of serious disparity in educational provision and consequent need for radical compensatory measures of some sort. Before leaving the concept of compactness it must also be noted that the nations in the sample exhibiting this characteristic have all been, historically and geographically, favourably placed in terms of opportunities for trading and the resulting capacity for reprocessing of materials for valued added outcomes.

7.5 It must not be forgotten that the provision of education is ultimately an outcome of political decision. If we were to add variables in this field, further significant relationships between scales of population size, economy and surface area might become evident. As Chick, quoted by Kay, has stated in respect of the use of modern technology for distance learning (i.e, scale adjustment) in the South Pacific:

> "A statellite system could help overcome the communications problems that face the Pacific Islands. The trouble that stands in the way of better communication between island nations is political and commercial rather than technological. The links exist and the governments can utilise them if the will is there". (7).

7.6. This brings us to another aspect of scale and education, namely that formal institutionalised education systems are normally closely associated with national identity. The frame of reference is national - there are very few other activities that citizens of most nations are positively required by law to undertake. This being so, the scale of perception may bear some relationship to the other variants of scale insofar as they influence educational provision and practice. We are talking here about smallness of outlook which is not necessarily a negative thing. In as much as small nations experience difficulties in providing a range of educational provision comparable to that of larger countries, then the outcome is not directly a result of scale per se, but of a mismatch between the scale of national resources and the scale of national policies in respect of education.

7.7 In conclusion, it may be stated that at the level of generalisation ascribed to this exercise, there does not seem to be a firm relationship between education and scale other than a fairly obvious finding that smaller nations tend to encounter similar educational problems to larger nations, but to an intensified degree. Also, at the extremes of correspondence of smallness variables, education systems become increasingly incomplete as the terminal level of provision drops. If, however, we were to go beyond the scope of this paper and ask a different set of questions relating to detailed components of each of the questions above and their patterns of operations, we might well find some relationships with the concept of scale per se. That would require considerable research, but is politically worthy of the undertaking.

7.8 It would seem therefore that in somewhat the same way as education appears to have more indirect than direct relationships to scale, so scale becomes more meaningful when considered in harness with two other variables tending to disadvantage small countries, namely isolation and dependence.

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CHAPTER 3: EDUCATION AND ISOLATION

1. Variations on the theme of isolation in relation to education

1.1 In the Commonwealth Secretariat discussion paper, for 8CEC of which the present monograph is a development, the issue of isolation is afforded only five paragraphs out of 41. Given that the remit for this essay also places a greater emphasis on scale by setting a population, (under 2 million), rather than any other criterion for inclusion, isolation is examined mainly in terms of its links with the issue of scale, through which multiple disadvantage for many small countries is engendered.

1.2 However, it is necessary to consider first the concept of isolation according to more than just the customary spatial variant, significant though it obviously is. In other words, it is important to discuss isolation as well as remoteness. Both of course are relative indices per se, but also relate to each other, not necessarily with a high level of correlation. In addition to the spatial variants of isolation, it may also be useful to select political, social, and cultural variants for consideration.

2. The spatial variant

2.1 Within the spatial variant of isolation there are at least four components that have actual or potential relevance to the provision of educational services. First, there is distance, the element which relates to the idea of remoteness. Some of the countries in the sample have vast land areas to administer, and despite the very low density of population encountered in the interiors of Belize, Botswana and Guyana, the provision and administration of education has still to take place. The distances involved give rise not only to high transportation costs, but also permit of numerous hazards constraining the efficiency of distribution not only of materials, but also staff, information, ideas and sometimes even pupils. In addition to the propriety of providing educational facilities and opportunities to all citizens, however remote from the main clusters of population, there is also a question of national security. It was noted in Chapter 2 that all three countries face geopolitical pressures, so that in addition to the problem of basic provision, it is felt necessary to involve educational expertise in opening up and then 'controlling' the interior and peripheral zones of the country. Guyana's Hinterland Development Programme for young adults, Botswana's various non-formal programmes, and Belizean involvement in the United States aided Rural Education and Agricultural Project are all educational contributions to meeting these objectives.

2.2 Large distances in absolute terms are also encountered in widely dispersed multi-island nations like Fiji, Kiribati, Tuvalu, Tonga and The Bahamas. Even using sea transport the costs of educational administration and provision are significantly increased, and in the Pacific the state of the ocean sometimes inhibits inter-island contact for considerable periods of time. Air transport has in some instances substituted for shipping and given its greater restrictions and cost has often engendered rather than reduced personal isolation as far as rural communities are concerned.

2.3 Distance is also a factor increasing potential co-operation between as well as within nations. In the South Pacific and Caribbean regions the smaller

Commonwealth nations have established regional programmes and institutions of education. The large distances involved greatly increase operating costs in comparison with their counterparts in more developed or compact countries. The logistical problems facing such bodies as the Universities of the West Indies and the South Pacific, and the Caribbean Examinations Council are extremely challenging and place a premium on individual and national expertise and commitment. Problems of separation and distance have contributed to difficulties in effecting and maintaining educational co-operation between Botswana, Lesotho and Swaziland.

2.4 There are also extra-national and extra-regional distances to be considered. Small Commonwealth countries continue to maintain and sometimes rely on educational links with metropolitan and other developed countries. In general long distances and high costs are involved, but nearer sources of support may be either inferior in quality or unacceptable for political reasons.

2.5 Distance is a relative term, and what may be small in some countries may be large in others. Within small mountainous island nations such as Dominica and Saint Lucia, actual journey distances may exceed the straight line distance by more than double, and at the scale of individual pupils' walk to school may be inhibiting. This level of isolation occurs of course in larger nations also, but when compounded with the national and international dimensions can be disproportionately influential.

2.6 The second spatial component is aerial insulation or constriction. All nations have boundaries, but in the case of Island Developing and Other Specially Disadvantaged States the possibilities for cross-border interaction are limited. This is one of those matters, like most aspects of scale where small countries encounter a greater degree of constraint than do larger countries. Nonetheless it is ironical that national education systems are so tied up with national identity and political control mechanisms as to be a major factoring fostering insularity of outlook within any particular country. The fact that small island nations are at the end of an international continuum of insularity is of universal significance in that:

> "How they approach and adjust to this problem, and the role they variously assign to education in relation to ecology (human and otherwise), could be of more than academic interest to those of us whose insularity is more continentally based". (1)

2.7 This strong association between formal educational systems and the national spatial parameter is particularly inappropriate for very small countries whose concerns have increasingly to be with the local and international dimensions, at the interface between internal needs and external influences and systems.

2.8 Isolation, it has been remarked above, is a relative term. There are degrees of isolation even within small countries; within regions such as the Caribbean, the Mediterranean, the Indian Ocean, the South Pacific and Southern Africa whence our sample countries come; and within the world as a whole. Relative isolation is merely another way of describing the third spatial component, namely disparties in the distribution and density of human population. This is not exactly the same as saying that there are the same disparities in the distribution of primary education provision, at least in the small countries of the Commonwealth where universal primary provision is commonplace. There may well be disparities in the location of primary

schools for historical reasons such as differential mission activity. However at secondary level where, in underdeveloped economies it is not yet possible to provide a complete system, and even more at tertiary level, there are marked disparities in the accessibility of education. In small countries with large land areas and low population density, and in multi-island states, distance problems render the disparities of access even more irregular and extreme. This is not to say that political decisions play no part in the disparity - the political variant is considered below - but rather the more extreme demographic and geographic disparities found in small disadvantaged countries pose almost impossible problems for those charged with the provision and administration of education.

2.9 One of the most obvious manifestations of this phenomenon is that of the dichotomy between urban and rural sectors of countries in respect of access to post-primary education. Formal education is an essentially urban phenomenon in its origins and evolution that has been transmitted to rural areas. Be that as it may towns and cities have the concentration of post-compulsory educational facilities. In the small island nations exhibiting compactness (e.g., Barbados and Malta), there is no significant problem. In the low density, littoral countries many rural areas are isolated in respect of secondary and tertiary education, but given a willingness to migrate, it is possible to reach facilities by one of the basic modes of land transport - it is within the orbit of individual capability, though often very difficult. But in the multi-island nations the logistics of migration are more considerable as insularity intervenes. Nonetheless in such countries in the South Pacific, plus The Bahamas and Seychelles urbanisation is proceeding apace, even to the extent of some outer islands becoming rapidly depopulated.

2.10 The fourth and final spatial aspect pertaining to degree of isolation is that of networks of movement. This means that direct distance is not always accurate as an indication of degree of isolation, and this applies to movements of people, school materials, advisory services, and so on. Comment was made in Chapter 2 on the significance of the convergence of trading routes for corresponding economic growth and diversification in Malta, Barbados and Fiji. Many small countries are less fortunate, and there has often been a paradoxical increase in isolation as air transport has taken over from sea transport. Quite apart from the small inter-island movements of boats and ships providing relatively easy intra-regional migration, even the largest ship can anchor offshore and offload via local craft. There is no such equivalent in air transport.

2.11 Inside each country, even those with large land areas, the level of economy and technology does not permit more than a skeleton network of good roads outside of the main city, within which there may well have been disproportionate levels of public spending in view of its status and the life style of the urban elite. The smaller the country, the starker the contrast, unless the country is compact like Malta and Barbados, remembering that compactness is an economic and demographic as well as a geographic indicator. Barbados has been described as: "... a city where sugar grows in the suburbs" (2), and the sophistication and condition of the road network plus the efficient bus service enables journeys to school to take place in virtually any direction that may be necessary. Such a combination of international route focus and internal network is unusual and greatly assists the development and operation of educational services. By contrast, within the nearby islands of the Commonwealth Eastern Caribbean there are many locally isolated areas despite the relatively small scale of each country.

Those with genuine international airports and related tourist sectors (Antigua and Barbuda and Saint Lucia) are clearly less isolated, and the localised improvement of internal road networks is not unrelated. Hence Grenada's drive to gain an airport of this stature-one which is now nearing completion.

3. Political isolation

3.1 The second variant, political isolation has already been touched on in terms of aerial insulation and its educational implications. It is not only a question of political geography, but also of political status. Tables 2 and 3 in Chapter 1 give brief details of the independent, associated and dependent states of the Commonwealth. Even the dependent states have internal responsibility for educational provision, but in the last resort the responsibility for the maintenance of all services bear upon the overseeing power and there is a good chance of supplementary support from that source for education. Increased independence and in due course a fully independent status has obviously increased the degree of political isolation in terms of the cessation of metropolitan responsibility. For the economically poorer and/or low density politically independent nations new challenges have arisen in relation to this.

3.2 The most obvious is the cost of providing educational opportunities from within the national economy. Viewed from the perspective of the inevitably highly personalised world of the internal politics of a small state, educational decision-making and planning tend to take on a disproportionately high status. Not only is it taken to be the responsibility of the government to increase educational opportunity, but some sort of curriculum change becomes necessary to reflect the new national status and also to enable the government to effect whatever ideological influence it deems appropriate. Since very small countries in particular have few alternative sources of employment for formally educated manpower, teaching and other appointments in education are often highly prized opportunities. This has created a self-perpetuating mechanism but with diminishing opportunities for educational employment, due to the various constraints of scale. The world of education in a small country carries political muscle undreamed of by its counterparts in larger, especially developed countries. This heightened situation, despite, or perhaps because of the general interest in educational opportunity tends to operate as a conservative force. Consequently the sort of radical rethinking necessary to provide locally relevant educational support for the often very distinctive communities comprising small Commonwealth countries is not put to the test, unless a radically orientated government forces itself into power. If such a government has a strong ideological commitment - of whatever type - then there is merely a new orthodoxy for education to contend with. If the government is more open, it will have to confront the key issue of somehow educating the attitudes of its adult community to be willing to try out reforms, the objectives of which are to link the very local learning needs with the skills required for international co-operation. Unfortunately the political isolation of independent status seems to focus attention and effort at the conceptual level of the state.

3.3 In addition to the effect of political isolation on internal political pressures in respect of the administration and content of education, there is also the question of its effect on bilateral, multilateral or regional co-operation between groups of small nations. With reference to the regions whence come the sample nations there have been clear difficulties of co-operation in

southern Africa, the Commonwealth Caribbean and the South Pacific due in part to the close identification between education and national identify. This has to do with interdependency between small nations and will be discussed further under the heading of dependency in Chapter 4. Suffice it to say here that the coming into play of the full apparatus of political independence, however desirable that may be in itself, does not necessarily assist the successful development and operation of regional initiatives in education.

3.4 Some small states find themselves in the situation of being a political enclave isolated from their Commonwealth partners, and with rather overbearing neighbours. Candidates for this category are Lesotho, Botswana, Swaziland, The Gambia, Malta, The Bahamas, Belize, Gibraltar, British Virgin Islands, and the Falkland Islands. In some cases of course, such as The Bahamas and the British Virgin Islands, there is not so much a political as a cultural and administrative problem for education. In these two countries there is a direct link between local systems and those of the USA - in Florida and the US Virgin Islands respectively. The Southern African trio have obvious problems in relation to the Republic of South Africa, and their own relatively new universities are particularly important in providing an independent facility for high level human resource development. The Gambia, almost surrounded by Senegal has, since the abortive coup of 1981, moved politically closer to its neighbour, and this may have educational implications. Malta's situation is an intriguing one, bearing in mind the historical relationship between its nearest neighbours Italy and Libya, as well as the current regional significance of the latter. Not surprisingly then, in addition to the use of education in maintaining its longstanding nationality and unique language, both Italian and Arabic are important subjects in Malta. At it happens, and this has been clearly illustrated above, Malta has the most compact and well developed pattern of human ecology of all small Commonwealth countries, to which the various strands of educational activity contribute most significantly.

3.5 The cases of Belize, Gibraltar and the Falkland Islands are the most problematical, all being subject to territorial claims by neighbouring countries. Belize is a large area low density country with a high proportion of its population in Belize City. In order to stimulate colonisation and development of the interior the seat of government was removed some years ago to the new capital of Belmopan, located as near as possible to the centre of the territory. The Belizean authorities are very much aware of the need to maintain educational services in communities close to the boundaries with Guatemala and Mexico, especially as some ethnic groups, notably the Mayans straddle the border. Spanish is clearly important here, as it is in Gibraltar, a country where political isolation, combined in this case with very small physical and demographic scale has had important efforts in educational terms. Gibraltar's strategic status has supported a major garrison and the dockyard facility has been the mainstay of its economy and the source of considerable aid from Britain for educational development. The system is English, even to the extent of all initial teacher training being undertaken in England, as well as other areas of professional training. The only post-compulsory facility in the country is the Dockyard Technical College.

3.6 With the severe reductions in Britain teaching force, there can no longer be the confident expectation of employment there for the excess production of the Gibraltar system; likewise in the other professions. Following the closure of the naval dockyard there will be the possibility of its re-development as an area of manufacturing, processing and service industries, and if this happens a new direction in attitude as well as in organisation may have to be

taken by the administration. The border with Spain has been closed since 1969, and during that period subjective observations claim a noticeable decline in the standard of Spanish and of English. If this is so, it is due to the lack of day to day intercourse in good Spanish which being the language of the home then has a constraining effect on the standard of linguistic usage in general, including English. In this case the problem that is appearing is due to an intensification of political isolation due to the border closure by Spain, but somewhat similar problems also arise as a result of other forms of isolation.

4. Social and cultural isolation

4.1 Language problems are part of the general issue of social and cultural isolation, in respect of which education again stands in a paradoxical position. Smallness is not necessarily correlated with monolingualism. To take an extreme case, Vanuatu is estimated to have about 200 recognisable linguistic systems in a population of about 105,000.

4.2 Most of the small countries of the Commonwealth exist in their present form as a result of colonisation, and therefore this issue relates also to aspects of dependency. In some such countries the indigenous culture has been strong enough to survive, at least linguistically, alongside the versions of British culture imparted by colonising influences, and has reasserted itself after the achievement of independence. Malta has already been mentioned in this respect, and the Southern African trio, while using English for most formal education purposes, strongly retain their various local languages for social life and therefore informal education. The Gambia is similar in this respect, there being five or six main languages used, all indigenous.

4.3 It is in the small Commonwealth countries of the tropical island zones that a socio-cultural isolation is particularly evident. In all three cases, Caribbean, Indian Ocean and South Pacific, the contemporary appearance on the international political scene of a significant number of microstates is the outcome of the maritime nature and global logistics of the British Imperial system of a past age. During that period the general pattern of indirect rule and in many cases crown colony government greatly enhanced the idiosyncracy of each island territory. In the case of the South Pacific, due to the results of previous colonisations, voyages and conflicts involving the various peoples of Micronesia, Polynesia and Melanesia, as well as to the comparatively greater distances between island clusters, there was by the time of European colonisation a fairly well established pattern of cultures. British administration seemed merely to freeze the pattern and add whatever idiosyncracies emerged from individual governors and officers of the colonial service. In other words the particular style of colonialism adopted served to enhance rather than reduce the relative isolation of island cultures one from another. The particular character of the infusion of a British element into the evolving culture of each emerging nation of what is now the Commonwealth South Pacific, depended very much on the particular mix of Christian mission involvement. Given that the matter of formal educational provision was left almost entirely in the hands of these various missions, and bearing in mind the distinctiveness of the island cultures, a legacy of national idiosyncracy was bequeathed that has proved a troublesome legacy for regional educational initiatives in the South Pacific to cope with.

4.4 Variations on a general theme of unity and diversity continue within the

sometimes numerous components of multi-island states. At the very local level many of these Pacific communities run economies on a very limited natural resource base and in subtle adjustment to the island ecosystem (3). Any pattern of education that is not able to itself adjust to such circumstances is unlikely to be helpful to the economic survival and development of such groups.

4.5 The broad case of the Commonwealth Caribbean, Mauritius, Seychelles and to some extent the major islands of Fiji is somewhat different. While sharing with the South Pacific islands the same style of colonial administration with its idiosyncracies and differential mission involvement in education, this set of territories was much more involved in the mainstream of colonial exploitation through the plantation system, and to a considerable extent still is. Some economic consequences of this will be mentioned in Chapter 4 under dependency, but there are also important social and cultural implications for education.

4.6 In this group of territories the history of plantations has involved the immigration, often in conditions of slavery, of a labour force from outside the area. With the exception of Fiji, and possibly Mauritius, the original inhabitants of these places, sometimes very few, were eliminated, and a mainly negro slave labour force traded in from Africa. Vestiges of African culture and language were suppressed, and on the abolition of slavery, the freed slaves established new communities outside of the plantations for which in several islands indentured labour from the Indian Sub-Continent was subsequently brought in. The result is a variety of multicultural settings, each distinctive, but in a number of cases remarkably comparable across the island zones.

4.7 For example, given the ethnic composition of contemporary Mauritius, Fiji and Trinidad and Tobago, illustrated in Chapter 1, Figure 1, it is not surprising to find today very similar social tensions appearing in respect of the generally superior educational achievements of the sector of the population of Indian origin. So, in addition to a national or island socio-cultural isolation, there tends to be very distinct internal disparities related to multi-variate relationships of colour, class, religion/denomination, as the following quotation in respect of Port-of-Spain in Trinidad illustrates:

> "The social structure that emerges from the (1960) analysis is composed of a segmented Creole group with the Indian and other minorities aligning themselves with the upper portion or stratum of the Creoles. The Creole upper stratum is characterised by a division into two parts, the upper part being associated with professional status, university education and Presbyterianism; and the lower part correlating more closely with non-manual status, secondary levels of education, and Roman Catholicism, and reflecting the coloured middle class ... the low status sub-group is characterised by skilled or unskilled status, employment as domestics, the practice of common law and visiting unions and achievement of low educational levels. It is also closely associated with the Anglican Church and representative of the status of the majority of the Negro population." (4)

4.8 If we add to the linguistic diversity of a multicultural community, the particular linguistic situation of the mass of the negro population of most Caribbean Commonwealth states we encounter another feature of cultural isolation of great significance for education. The ancestors of these people were prevented from using their African languages and from learning English during the long period of slavery. The result has been that in each island there has developed a largely unwritten and relatively limited creole or patois as the social language. In other words the legacy of colonisation has been to isolate people linguistically and put them in a position where, unlike in the majority of Pacific islands, the mother tongue may place considerable constraints on general linguistic and educational development.

4.9 In summary then, most tropical island nations of the Commonwealth exhibit an individual and unique mix of cultural and social structures placing each nation in a position of socio-cultural isolation. That most of these countries are now politically independent and require of their educational systems an enhancement of national identity merely compounds the challenge of isolation.

5. Summary

5.1 In summary it can clearly be seen that isolation for small Commonwealth countries takes several forms, any of which will tend to compound problems of scale. Isolation is not just a question of remoteness with increased transport costs and logistical problems of educational administration. It is a relative not an absolute matter, in which political, geographical, socio-cultural and biological variants combine to create not only patterns of disparity in educational provision but also individual, community and national perspectives on the outside world. The fact that an education system with an approved structure and content is part of the regulatory apparatus of the modern state, and that many small countries are now politically independent, clearly illustrates the isolationist potential of formal education. Paradoxically it, together with non-formal and informal education has also the potential to combat isolation, both in technological capabilities - such as distance teaching by satellite - and in the promotion of integrationist attitudes at all levels from the individual school curriculum to international co-operation involving small countries. It is paradoxical that when a small country administration does attempt an integrationist solution to the problem of educational disadvantage in the more isolated outlying components of any nation, it may well be rebuffed by the received image and status of education already held by the remote communities involved. It is access to the highly selective, socially desirable academic secondary school with its fragmented curriculum of isolated subjects that is desired. Such is the influence of informal conventional wisdom that it has found no difficulty in reaching even the most remote regions and does not require literacy for its message to be accepted.

5.2 Isolation is most potent not in physical terms but in its contribution to valued notions of individual and national identity which form part of the dependency legacy of colonialism, and its model of schooling in particular.

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CHAPTER 4: DIMENSIONS OF DEPENDENCY: EDUCATIONAL IMPLICATIONS FOR SMALL COMMONWEALTH COUNTRIES

1. The concept of dependency

Dependency, like scale and isolation, is a relative matter and a composite concept. In other words there are degrees and variants of dependency. Academic discussion has been considerable, but focussed mainly on the question of economic dependency (1). This is of course very important to developing nations of all sizes, but the task here is to consider the educational implications of dependency in a positive way, especially as far as small countries are concerned. This means that variants and implications such as interdependency and international co-operation come to the fore.

1.2 As with scale and isolation the Commonwealth countries considered in this monograph vary too greatly to be considered as one group in respect of a discussion of the dimensions of dependency. On the other hand, in one important respect for the examination of educational issues, they are quite comparable in the style of the educational legacy of colonisation. Nonetheless the emphasis in this section will be on the two main regional clusters of small Commonwealth states, the Caribbean and the South Pacific, though not to the total exclusion of others. One of the consequences of smallness occuring in the context of island clusters is the obvious opportunity for co-operation that is presented in each area. The more negative way of viewing this - and one which is certainly taken by some countries in each region - is that one of the problems associated with the regional concentration of small island nations is that co-operation with one's neighbours is difficult to avoid.

2. Economic dependency and educational provision

2.1 The small countries of the Commonwealth result from the Imperial adventures of Britain which centred around maritime strategy and sea borne trade. In the case of small island colonies in particular, some were taken as potentially useful additions to the Imperial plantations, others for their prime strategic locations, and yet others merely to deny them to rival powers.

2.2 For small nations associated with plantations there are important differential effects of the Imperial system for human ecology and educational development. Plantations with or without slavery have major consequences for land ownership, population distribution and related accessability of schooling. For example, in many small Caribbean countries this means that the bulk of the rural population is concentrated on marginal hilly land, unable to reach the levels of subsistence affluence that the prime valleys could support if they were not occupied by plantations. So in general, the plantation system heightens rural disadvantage and promotes internal disparities within small countries. At a national level, the overwhelming concentration of economic activity into one or two areas of primary production creates a vulnerable and inflexible economy unable to respond effectively to adverse economic or physical pressures. The employment structure is correspondingly undifferentiated and almost completely unrelated to the content of formal education, which as has been noted in respect of Malta and Barbados is best suited as a general preparation for work in a diversified and compact economic situation. Furthermore the instability of such economies does not make them attractive partners in bilateral or regional financial commitments to educational projects.

2.3 Despite the brittle basis of limited and vulnerable economies these small countries have, as newly independent nations, felt it necessary to expand their formal systems of education in accordance with the growth of their populations.

3. Dimensions of educational dependency

3.1 Three main dimensions have been selected for discussion here: old metropolitan, new metropolitan and new regional.

3.2 Old metropolitan influences comprise the various on-going educational links between small Commonwealth countries and their former colonial masters. They are a form of neo-colonialism, but are on the whole welcome and necessary components of small country systems. Such influences take three main forms. The first is the continued operation of denominational schools, especially in the secondary sector. Such schools are often highly esteemed in the countries concerned and provide an educational route to higher education and professional careers. Although the governments of small countries now provide some of the funding, these schools are usually subsidised to some extent by their sponsors. More significant perhaps is the continued existence of a model of schooling to which most parents subscribe even if their children are unable to secure a place by selection. As Kennedy (2) rightly indicates, the original staffing of such schools had no real apppreciation of the local communities and cultures and to that extent the schools remain alien. However, they have provided a valuable general education for those indigenous people now governing and administering small Commonwealth countries in an increasingly complex international situation.

3.3 Secondly, these old metropolitan influences are maintained by the continued utilisation of external examination agencies especially in technical and vocational fields. It is difficult to cater for such examinations locally or even regionally. This may serve the purpose of maintaining known standards but in many areas it also requires a study of skills well above those required by the national employment market. It is quite commonly found that holders of British and similar metropolitan qualifications are unwilling to accept lower level jobs. They may possibly find employment in another country, but what is increasingly needed in small island nations are inventive workers at the level of technology appropriate to local needs and resources.

3.4 The third old metropolitan link is that of providing staff development opportunities in colleges and universities. Students return home with more than just an enhanced education and a certificate. Obviously it is the very small countries which need these aid programmes most, because of their 'topless' education systems, and a significant proportion of scholarships and bursaries go to such countries.

3.5 New metropolitan influences in education come in the form of interest shown by nearby countries or others seeking potential gain in offering assistance of one kind or another. This may be felt in terms of employment opportunities, higher education outlets (e.g., the training of some Seychelles doctors in the USSR), or more direct political overtures. In the Caribbean for example one may cite the keen interest of the USA, Canada, Venezuela and Cuba in the educational programmes of various Commonwealth nations. In the South Pacific the involvement of Australia and New Zealand is of longer standing, while in the Indian Ocean, Australian, Indian and East African links operate at individual and official levels.

3.6 New regional influences, perhaps paradoxically, seem to pose more difficult problems. This is understandable when the close relationship between the formal system of education and national identity is remembered.

3.7 Regional co-operation is self-evidently desirable, but in the South Pacific, the Caribbean and the three Southern African landlocked states there is enormous disparity between the various members of the group, not least in education. This leads to micro-hierarchies, bilateral dependency and the operation of a core-periphery model whereby the regional focus sucks in most of the benefits. Outlying members of the regional grouping are placed in a quasi-colonial relationship to the centre, and this offends against national identity with which individual systems of education are closely associated. In the Indian Ocean the weaker and by far the smaller of the small Commonwealth nations, the Seychelles, steers carefully clear of Mauritius and is adopting a policy of maintaining links with France and Britain, plus new links with other socialist nations throughout the world. In the Caribbean and South Africa, however, there is a great deal to be gained from schemes of mutual educational self-interest, and it is important to examine a number of distinctive sectors of regional co-operation.

4. Key areas of regional co-operation in education

4.1 Many of the key areas of co-operation are associated with the university which, of course, has to be a federal institution. Both the Caribbean (UWI) and the South Pacific (USP) have federal universities. The former has campuses on Jamaica, Trinidad and Barbados, the latter on Fiji (Viti Levu) and Western Samoa. There was a third example in the form of the University of Botswana, Lesotho and Swaziland (UBLS), but Lesotho seceded from the Federation, taking the largest campus with it. There is a distinct possibility of the remaining two campuses becoming national universities in due course. This may well happen also to UWI.

4.2 The presence of a regional university campus on what is already likely to be a core, rather than peripheral territory, obviously provides relative ease of access for students from the same island. This is due to the increased cost of travel for those from remote fringes of the catchment area, and also to the larger number of applicants coming from the main islands. Nonetheless a proportionally large amount of intellectual talent has been drained from the smaller to the larger islands and boosts the reservoir of high level manpower at the core. Quite apart from academic considerations, these regional university campuses represent a growth industry providing many auxiliary jobs for the people of the main island(s). Add to all this the probably inappropriate structural and functional model for the university and its role in any developing country, let alone a loosely limbed chain of small independent island nations, and the whole operation appears to be dysfunctional, even socially divisive as far as the students' home communities are concerned.

4.3 This need not be so, provided the universities are willing to rethink their role. Consider for example the recently expressed views of Dr Ian Michael on the role of universities in developing countries. In view of the constraints on funding, he contends that such universities must choose clearly between attempting to meet international academic standards - which he rightly states are largely a fiction - and making their role more relevant to local needs. Of course local needs, including learning needs, may be differentially perceived as between academics, local politicians, parents, students and

communities. Nonetheless, Michael contends that a more vocational role for universities does not necessarily violate academic standards. Distinguishing between standards and levels, Michael states:

> "Academic standards are expressed in the form of qualities such as intellectual integrity, mastery of facts, understanding of processes. Academic levels are expressed in terms of difficulty, complexity, abstraction, specialisation. The work of children at the primary level of schooling can possess (in the forms appropriate to it) the qualities which express standards. The academic standards commonly thought distinctive of university work are in fact levels: real academic standards can be obtained through good teaching at any level. To lower the level of academic work is not therefore to lower its standard. The enduring benefits to an individual of academic work include the development of analytical skill. The development of imagination, ingenuity and creativity; knowing when information is needed and how to set about finding it. A university can, without shame, undertake the education (not just the training) of competent and thoughtful craftsmen because their work, though at a low level, can be analytical, imaginative and well informed, and thus of good academic standard".(3)

4.4 This view would seem to express what is needed from the federal universities of small country consortia, but it will be very difficult to achieve in view of all the traditional and political pressures placed upon them by the expectation and aspirations of various social groups, not the least being their own academic staff. However, in the field of educational studies, through various extension services and other regional devices both USP and UWI are beginning to relate more closely to local needs. The very supportive attitude of the School of Eduction in UWI to the radical restructuring of teacher education in Grenada is a case in point. Numerous country papers from South Pacific nations involved in the Regional Advisory Workshops of the USP Institute of Education praise the efforts of the university to identify and confront local needs in education. But just as inter-ministerial co-operation is needed in national administration of educational provision, so inter-faculty co-operation in researching and developing new locally adaptive forms of education is also needed.

4.5 One important initiative in island regions would be to use distance teaching methods to allow degree and diploma students to follow as much of their course as possible in their home country. This could be boosted by regular short visits of tutors to individual country locations rather than very long periods of time spent away from home by students. Indeed the Open University model operated in Britain might well be worthy of consideration in such regions - though not of course its materials. It would be equally applicable to large low-density countries like Guyana and Botswana. Indeed the University of Guyana has already developed a system of shorter diploma and certificate courses to meet specific manpower needs; what such institutions need now is the technology and the political support - in the case of regional institutions - from member governments.

4.6 If the universities were willing to develop more flexible courses and study methods, they would also have to be acutely aware of the constraints of smallness of scale on the employment capabilities of contributing nations. The first wave of skilled local manpower will occupy key positions for possibly decades ahead, and courses will have to be discontinued whenever necessary. As Kennedy's analogy has it, the universities must not:

> "... continue to teach fish spearing long after the lagoons have become clouded by pollution." (4).

4.7 The combination of local and internationally significant scales of educational operations can only be handled by a university, but a university wholly committed to the region it serves - a community school writ large. Just as community schools have been difficult for local groups to understand and accept, so the universities may well face opposition at all levels. Their traditional elitism is highly valued by significant sections of society in small countries as well as large. They would not be asked to discard the pursuit of excellence, merely to direct that excellence of standard to urgent issues of the day.

4.8 Although most small Commonwealth countries have developed some sort of curriculum unit, and remarkably useful work is being done at the primary level on the basis of scarce expertise and extremely limited resources, the regional universities have a vital role to play in stimulating, supporting and indeed recording local curricula initiatives. In all the small countries of the Commonwealth there are, hidden away, many self-effacing sometimes unqualified teachers who have for decades been using the local environment as a resource for learning. The term curriculum development is not preferred here in view of its connotations of a spurious orthodoxy of procedure that merely needs to be carried through. The particular context of groups of individual island nations has taken its toll of projects in both the South Pacific and the Caribbean. It is not only the close association between national identity and formal education systems that has caused problems of co-operation, but also the genuine individuality of each nation, even parts of nations, in terms of language, culture and economy. As the Terminal Report of the UNDP Secondary Curriculum Project somewhat ruefully observed in 1976:

> "The existing project was designed to create a self-sustaining Curriculum Development Unit (at USP), and, after six years of activity, has not achieved that particular objective .... A new spirit of independence in these islands seems to have emerged since 1970, judging from the desire of several countries to take responsibility for their own curriculum at primary and secondary levels. Therefore it may be more useful to decentralise future assistance to the on-going work of local curriculum development units in several countries." (5)

4.9 This seems a sound reaction to the outcome of this particular project, but there arises a general question as to what sort of assistance is envisaged. What local units, administrations and individual teachers need is a new information base, not more curriculum theory. One of the problems

associated with small scale and isolation is the poor data base from which to proceed to construct a locally meaningful curriculum. The need is for the expertise to research and collect such a base, and present it at the appropriate level to link local and external systems. Some of this research could be done by pupils following simple tasks in a specially constructed social and environmental studies text developed between teachers and the university adviser in workshop sessions.

4.10 Another aspect of curriculum development that would require regional co-operation is the infusion of technical education into the curriculum of primary and secondary schools. It was clear from the survey of small Commonwealth states that the technological and technical expertise and capacity was the weakest strand of most systems. Developing separate technical institutions is an unnecessary cost and also maintains the image of technical education as separate and consequently inferior to academic. Better to effect the curriculum change and leave the superficial image of the school as it is - generally acceptable to local communities. At post-school level, the technical facility could be merged with the academic sixth form and whatever other tertiary elements exist (e.g., catering school, marine training college, teachers' college) to create a junior college affiliated to the regional university - another example of interdependence and co-operation in a small scale context, but linking local and external systems.

4.11 In order to gain control over the secondary school curriculum it is necessary for external validation and certification from outside the region to be replaced by local assessment procedures. This requires a great deal of co-operation and trust between the small countries concerned, and a considerable amount of expertise, and in view of this the creation and operation of the Caribbean Examinations Council (CXC) to date has on balance been a success. CXC began in 1974 with the object of replacing 'O' level GCE (Cambridge) and in the much longer term 'A' level also. The first examinations were held in 1979 in Caribbean History, English, Geography, Integrated Science and Mathematics. In 1980 Agricultural Science, Office Procedures, Principles of Accounts, Principles of Business, Typewriting and Spanish were added, and in 1981 English Literature and Social Studies. The following subjects will become available during the early 1980s: Industrial Arts, Physical Sciences, Music, Art and Craft, French, Home Economics and Business Education.

4.12 The lower 'basic' level of CXC is designed to link with the world of work and provide a suitable basis for employment at 15/16 plus. The higher 'general' level is intended as a foundation for further study. Predictably there has been a concern over equivalence of standard with the GCE 'O' level, and the readiness of employees and universities to accept CXC. The procrastination of the UWI in respect of recognition did not engender confidence in overseas universities and did the CXC an unnecessary disservice.

4.13 The problem now is the cost of recurrent expenditure on maintaining the considerable bureaucratic and technical support systems in both Barbados and Jamaica. In 1979 an agreement was signed with USAID to run the joint 'Caribbean Educational Development Project', which should maintain and considerably develop the system at least to 1983. It includes financial and staffing support for in-service curriculum renewal workshops throughout the region, with considerable teacher involvement. There is still some concern that in its need to exhibit equivalance, CXC has been pitched at too high a

level. On the basis of 1979 results of pupils taking both CXC and GCE, the former proved to be more difficult than the latter in all subjects taken, excepting Geography.

4.14 By any standards CXC has been a major achievement of regional co-operation within the Commonwealth Caribbean, but it must be remembered that it is mainly for the academic minority, and yet exerts pressures downwards throughout lower secondary and primary education that influence curriculum thinking away from the local concerns of the mass of the population in each country concerned.

4.15 In the South Pacific the aforementioned UNDP Secondary Curriculum Project did not result in an equivalent of CXC, and the region has continued with external validation, mainly New Zealand 'South Pacific Option' papers in the various subjects. However, in view of the reaction of member states to the UNDP project and the development of local secondary curricula in several countries it was felt necessary to have some sort of regional co-ordination and equivalence. Hence the establishment of the South Pacific Board of Educational Assessment in 1980. This is quite different from CXC in that the main objective is to provide training skills in assessment procedures. The headquarters facilities for the Board are provided by the South Pacific Commission and the cost is borne by New Zealand, Australia and Britain, in addition to local inputs by the island countries of the region.

4.16 That this is a service facility and not, as yet, envisaged as a regional examination board is a reflection both of the wider cultural range and greater geographic distance between component nations of the region. The options are still open for multi-national co-operation in the generation of a local and regional information base from which to build new curricula in each island state. Satellite communications across the region, if maintained and developed could greatly assist both general courses at tertiary level and individualised staff development. It could well be that the greater external and internal isolation of the South Pacific has provided the stimulus to involve the high technology that can simultaneously serve the local and international dimensions of island based survival and development.

5. Summary

5.1 A number of areas and degrees of dependency have been mentioned here in relation to the educational problems and initiatives of the small Commonwealth nations of the South Pacific and Caribbean regions in particular. Although strong legacies of colonial dependency remain, especially in the economic and cultural fields, the dimension of dependency which is of most significant now, in such clusters of small nations, is that of regional interdependence and co-operation. This carries with it areas of tension and rivalry, the full extent and effect of which have yet to be seen, but at the centre of the web stands the set of issues associated with the regional university.

5.2 Guyana has long since developed its own university, but is in any case a large land based nation on the periphery of the island zone of the West Indies. However, it is not at all unlikely that the three existing campuses of the University of the West Indies will become independent national universities. Trinidad and Tobago is on its way to achieving this particular goal, utilising its oil wealth to establish second schools of medicine and law

within UWI. The original plan of the regional institution was to concentrate highly technical and/or professional subjects at one or other of the three campuses - medicine in Jamaica, engineering and agriculture in Trinidad and law in Barbados. It would seem that the federal co-operation necessary to sustain the institution as a fully regional facility is breaking down, and this will of course hit the small island nations hardest by placing them in a more dependent position than previously. Maintaining and developing CXC will continue to be a considerable burden in terms of finance and expertise, unless the current assistance from the USA becomes indefinite, in which case a new dependency is created in that area.

5.3 In the South Pacific, not without similar tensions in some areas, regional co-operation and curricula flexibility seems more likely to develop, with USP playing a crucial role in providing technical services and assistance to enhance local expertise even in the remotest locations.

5.4 Elsewhere among the small nations of the Commonwealth, the question of higher education dependency crops up in different forms. The countries of Southern Africa have employment links with the Republic of South Africa that affect their entire educational situation including the potential role of the two universities. In the Indian Ocean, Mauritius and Seychelles exhibit little co-operation - they are neither geographically nor ideologically close - and Seychelles being very much the smaller is anxious to avoid a regionally dependent position. It prefers instead to adopt a policy of multi-dependency in higher education as a means of avoiding too much control by any one outside power. Mauritius is dependent on the outside world only for the highly technical area of human resource development. There is already established both a university and an Institute of Education. A full, if complex, educational infrastructure is in operation but the relatively modest level of the national economy constrains further sophistication in terms of both finance and relevance. Cyprus has until recently adopted a policy of dependence in higher education, probably arising from its cultural identities being so strongly and divergent as between Greece, Turkey and Britain. However there is to be a national university, envisaged by the Cyprus authorities as becoming an institution of regional importance. Once again Malta comes top of the league illustrating that small geographic size can be an advantage if combined with a good location and a diversified economy. The rationalisation of the two universities, while probably in the main a political move, will nonetheless be able to respond even more effectively to the employment needs of this compact nation, which even enjoys the cultural security of a unique yet serviceable language.

5.5 The question of clear political direction is very important, and for very small countries this must incorporate the local culture and language in a positive way. As Carrington has rightly stated in respect of the Commonwealth Caribbean culture's continued reliance on externally derived models of education:

> "The philosophical vacuum reduces educational planning to an exercise in arithmetic".(6)

5.6 If indeed, through the educational neglect of genuine local cultures, closely related to delicate ecosystems, the approach to educational provision became a merely quantitative exercise then, by definition, the problems of scale, isolation and dependency would be endemic and insoluble.

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CHAPTER 5: CONCLUSIONS AND COMMENTS

1. Introduction

1.1 The remit for this monograph was to develop Part A of the 8CEC paper presented by the Commonwealth Secretariat under the title of **Education in the Island Developing and Other Specially Disadvantaged States, (1)** without departing significantly from the structure of the original paper. The survey on which that paper was based was returned by less than half the countries to which it was sent, and in fact only 11 small Commonwealth countries both returned survey information and prepared a country paper for 8CEC. Consequently these 11, with the addition of Belize, have been used as a sample for the bulk of this essay which, like its precursor, necessarily attempts to confront the issue of scale. Questions of isolation and dependence were also introduced to the original discussion and therefore have been developed here. Some extension has been possible through the utilisation of other documentation on these issues, and a list of these sources comprises the bibliography. It is hoped that the way in which the extension has been effected will provide a certain amount of basic information to readers not familiar with the nations involved. This basic information, summarised and synthesised, comprises a substantial appendix (Appendix B) to this monograph and is presented in relation to the six headings used in the Commonwealth Secretariat's survey questionnaire (Appendix A) namely institutions, finance, employment, curriculum, expertise, and technology.

1.2 Since 8CEC a number of meetings have taken place on small country issues and two in particular relating to education*. Information from papers submitted on these occasions has proved useful in the preparation of this paper.

1.3 The first observation to be made is that the concepts of scale, isolation and dependence are relative and composite. At the level of generalisation of the original 8CEC paper they have little meaning. The degree of disaggregation permitted by the increased scale of this monograph merely illustrates the fact that very much more research, conducted on a more sophisticated data base, is needed in order to identify elements and combinations of each of the three concepts that could be of practical value to educational planners and administrators in the countries concerned.

2. The concept of smallness

2.1 Indeed, the concept of smallness itself seems not to have engaged those concerned with educational provision, despite the problems attending it. As a past Vice-Chancellor of the University of Guyana has observed in respect of the educational policies of small Caribbean states:

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* Commonwealth Secretariat: Commonwealth Regional Meeting on Innovation in Technical and Vocational Education and Training in Island Developing and other Specially Disadvantaged States, Nassau, The Bahamas, 26-30 April, 1982.

The Commonwealth Foundation: Seminar on the Development of Appropriate Skills and Qualifications Required to Serve the Community in Small Island States, Barbados, 2-7 May 1982.

> "... they present few features that particularly distinguish them from the educational policies of much larger countries. This is somewhat surprising in a sense, in view of the recognition by policy makers in other contexts of the special problems and needs of the small LDCs, and only serves to illustrate the serious lack of integration of educational policies in their overall development policies. It is hardly surprising that the problems which beset much larger countries such as over-qualification for jobs and the brain drain, assume such greater proportions in these island states".(2)

2.2 Bennell and Oxenham take these points a stage further by making a general recommendation:

> "The small society then should be prepared to foster few specialists and large numbers of polyvalent handymen. Since the SIS (Small Island States) are by definition small and since their export/haemorrhage of skills suggest that indeed they cannot support certain specialists (at least in the style the specialists feel they deserve), it can be reasonably expected that they would have turned their minds to encouraging substitutability and polyvalence. This does not appear to be the case. Manpower planning adheres to the specialisation of the larger societies and seems unwilling to accept the implications of smallness. In this it is urged and abetted by the professions". (3)

3. National co-operation and co-ordination

3.1 In the Country Papers of the small Commonwealth nations presented to international conferences one often finds reference to an obvious concommitant of smallness, and that is the potential of inter-ministerial and inter-institutional co-operation and co-ordination. More often than not the comment is in respect of the lack of such linkage, and it is quite clear that not only do several ministries have some sort of role in educational provision but also that in theory small countries often provide an ideal context for co-operation of this type. However, there are some prominent examples of initiatives in this area. Take for example the way in which the two major new institutions in the area of technical and vocational education in Barbados - the Samuel Jackman Prescod Polytechnic and the Barbados Community College - are both departments of the Ministry of Education. Also in Barbados, the Ministry of Labour and Social Security has since 1979 been responsible for a Skills Training Programme. This is run under the overall auspices of the National Training Board on which is represented not only this particular Ministry, but also the Ministry of Education, employers, employees and trades unions. As a recent Barbados country paper has observed:

> "The courses are decentralised and community-based requiring light equipment and reaching young people in or near where they live. Such training is

offered mainly in existing accommodation in local communities". (4)

4. Reform

4.1 The intention of the Barbados programme to reach young people in their home areas touches on a crucial aspect of this whole problem, namely youth unemployment. As it happens, the percentage of those of working age who are unemployed in Barbados is, at about six per cent, relatively low. In many small countries it is very much higher and is linked with another phenomenon, migration to urban areas, sometimes associated with the increased incidence of delinquency and crime. It is indeed paradoxical that in these small countries high levels of youth unemployment exist in association with a shortage of labour in selected occupations, normally skilled. Most countries in our survey make mention of this issue, and a number of them have taken initiatives. Some of these are within the formal system of education, others are non-formal schemes.

4.2 Within the formal education system, a considerable effort seems to have been made. In Guyana, for example, a nationwide system of Community High Schools has been established, each one attempting to provide an experience relevant to the employment structure in its locality. The Adult Education Association of Guyana works with the schools on developing suitable skills - a good example of cross-sectoral co-ordination. St. Vincent, and the Grenadines, in keeping with many small Caribbean states, considered its Junior Secondary School Programme to be associated with the acquisition of relevant skills, but as in neighbouring St. Lucia, such schools have in practice become appropriated by the general educational tradition based on book learning and non-manual occupational aspirations. This is because parity of esteem is not afforded to parallel strands of a selective system, and one of the outcomes of national smallness is that the matter of selection becomes more acute in quantitative terms and more obvious in personal terms.

4.3 Nonetheless, some small countries have attempted a more thorough-going revision at the junior secondary level. For example, Dominica which has experimented with the village polytechnic model, sees this level as the focus of a community education initiative supporting objectives of self-employment and self-reliance. Multiple use is made of the physical facilities and the activities cut across the formal, non-formal divide. For such a model to succeed, the new sector must be nationwide in access in order to overcome the selection issue. It is also clear that all age groups need to be involved and that an adult education thrust is at least as important if not more so than school based innovation.

4.4 One of the most interesting small country innovations in respect of youth is that of the Seychelles National Youth Service. Indeed, the radical nature of this scheme was and is assisted by the smallness of the country. Even here, the major stumbling block is the need for a parallel transformation of the examination system without which the issue of correspondence between the means of the education system and the values underlying it cannot be resolved. Strongly expressed ideology, together with the boarding element with limited parental access have led to predictable unease and opposition in this case. Nonetheless, the experiment is clearly deserving of serious attention on educational grounds. A genuine attempt has been made to reform the curriculum in accordance with perceived local needs, with a relatively

small core of academic subjects and sport, and a rotating block system of vocational groupings such as agriculture, health and culture. A further development has been to institute the crop production and agricultural block as a village co-operative activity. Whether this can be developed throughout a difficult geographical context is questionable, but the possibilities, indeed imperatives of closer school-community integration in a very small country are at least being radically examined here and should be of interest to comparable states whether they are political bedfellows or not. Of course, this experiment would need to be extended to link with all communities in the country to be effective.

5. Attitudinal change

5.1 Clearly something more than a reform of schooling as such is required, in fact nothing less than a profound attitudinal change in respect of both education and the economy. With certain well known exceptions such as the Cayman Islands and Nauru, there has to be a coming to terms with the fact that agriculture and rural life form the basis of foreseeable fortunes. Throughout the small country sector of the Commonwealth as indeed with their large counterparts in the developing world, the style of colonial education and the temporary opportunities created by colonial society for clerical employment were a major force engendering disaffection with agricultural work, and rural living in general. Consequently, as the St. Lucia Country Paper to a Commonwealth Caribbean regional meeting puts it:

> "... an eradication of the view that some traditional forms or levels of work are undignified". (5)

5.2 The Kiribati Country Paper at the same meeting takes a similar view in declaring that rural development is synonymous with national development. Here a labour rotation programme has been introduced for unskilled and semi-skilled workers as an attempt to cope with unemployment both in rural and urban areas. In addition, a focus on village-level technology is in hand. Such initiatives are part of the Government's response to the need for attitudinal changes outlined in the Country Paper:

> "Introduction of new technology and skills training at village level is not to be seen as an easy task. Many cultural factors tend to work against the concept of change. Sharing or exchange of skills at village level is alien to Kiribati culture. These facts are mentioned to illustrate that the rate at which change takes place is an indeterminate variable, very much dependent on individual attitudes". (6)

5.3 Kiribati has the extra problems of island scatter and a relatively poor national resource base, but is nonetheless grasping the nettle of local rural economic improvement.

5.4 While most of the small Commonwealth countries in the Pacific do have a tradition of small family communities, the Caribbean experience of having been established from the outset as plantation estate economies based on slave labour presents an extra dimension of challenge to the requirement of

an attitudinal change in favour of the rural sector. Nonetheless, in the context of rising population totals, constraints on emigration and a small finite land area, options are beginning to sharpen, and a refocussing on agriculture is inevitable. Both Montserrat and Dominica are seeking to enhance the export agriculture sector, the former in terms of regenerating the Sea-Island cotton industry and the latter with respect to bananas. In both cases the aim is to modernise the technique of production and increase the output. The educational implications of this type of agricultural initiative are obviously different from, though not necessarily at odds with, the smallholding and semi-subsistence element of the rural economy. There are other initiatives in this area too, for example the Agro-based School Co-operative Project in Saint Lucia, which:

> "... arose out of a general need to relate the educational provision for final year students in the primary and junior secondary schools more closely with the world of work, thereby enhancing their employment prospects". (7)

5.5 Whilst remaining mindful of the over-riding importance of improving the primary sectors of small country economies, a task requiring profound educational reform and support, the other sectors of these economies must also be recognised. Bennell and Oxenham categorise these as being productive activities generating wage and salaried employment, public sector employment, and the urban informal sector. The last named is, they suggest, particularly significant and they claim could have some effect on vocational training policies in small island states (SIS):

> "The primary mode of skill acquisition in the informal section is 'learning by doing' on the job and the success of this informal training process has helped to counteract to some extent the tendency towards excessive formalisation and institutionalisation in the provision of training facilities by SIS governments". (8)

5.6 Given the proportionally high incidence of urbanisation in what are in many cases rapidly becoming 'City States', any desired attitudinal shift must not be simplistically rural. Non-primary sectors in small insular countries may be extremely volatile and geographically clustered, but this demands flexibility in education not just at the vocational level of employment opportunity, but also at an earlier stage of focus in the primary curriculum. Localisation, with the environment, physical and human, as a resource for learning would help, but this requires a different type of teacher education and training to provide the necessary skills of personal research and materials production. A re-orientation of teacher education and training, initial and in-service, could provide the sharp end of curriculum change.

6. Indigenous resources and structural change

6.1 It is clear that in a world of individual political units with their errant systems of education, small states have a particular need to generate much more and accurate information on their own resources. Given increasing populations and less opportunity for emigration, the pressure on these basic resources will increase most urgently in the smaller nations. So curriculum

renewal based on the local circumstances of economy, society and culture is urgently in need of indigenous information. It is not only the expertise to gather and integrate this information that is needed, but also the technical skills and facilities to reproduce and disseminate it. To this end the integration of teacher training institutions with technical colleges and other post-compulsory elements into a tertiary college at the apex of the educational pyramid of small country systems is a promising trend.

6.2 The College of the Bahamas has given a lead in this direction and the Morne Complex of tertiary institutions in St. Lucia has great potential for further integration and localisation.

6.3 It is important that localisation and small scale operation should be viewed as positive trends open to what the Swedes have termed 'rolling reform'. To be constrained by a new orthodoxy could be just as damaging as failing to challenge the inherited colonial model of schooling. The cult of appropriate technology is a case in point, which as a recent country paper contribution from Guyana points out is in need of re-orientation and integration with education and training:

> "Under existing circumstances only a few kinds of items of appropriate technology are manufactured and sold in kits and these are relatively few in number and expensive. The vast majority are either designed and built by farmers and other rural folk or designed by persons in university departments of technology and similar institutions, to be built, used and maintained by farmers and members of rural communities. It appears that as a generality, attention is given to getting the thing to work and little or none to explaining the underlying scientific principles. This omission is lamentable particularly with respect to young persons who otherwise get no science education, and amongst whom are included the potential innovators of these generations." (9)

6.4 Unlike in their larger and more diversified counterparts, for most small countries it is the case that the best available technical expertise is in the education system itself, but is not locally orientated. Rather it is striving towards the preparation of students and pupils for metropolitan examinations and qualifications. It is a direct consequence of the lower status of technical education in the legacy of the colonial model that while schooling is becoming subject to local and regional validation, craft skills are still in a state of dependency. In fact in many small countries the technical college, however modest, could cope with many of the skills problems of local communities and individual families. It could become the core rather than the periphery of the educational scene, with a corresponding increase in popular esteem, which links back to the issue raised earlier of the need for profound attitudinal change.

6.5 In the same way that inter-ministerial co-operation is particularly important in small countries, so also is that between technical education and economic activity in the 'real world'. Certain institutional obstacles need to be overcome, for as Franklin rightly points out:

> "There is an urgent need to examine the remuneration levels and career opportunities for technical and vocational education and training staff to ensure that the movement of key personnel between training institutions and industry is a two-way process which will bring the greatest benefit to national development strategies." (10)

6.6 This is of course a need in large countries too but smallness engenders wider disparities and differentials as well as inviting co-operation by virtue of geographical proximity - archipelago nations apart. There is no doubt that one very clear outcome of the survey (from which this monograph derives), identifies the technical sector as at the same time the weakest and the most needed dimension of small country educational provision.

7. Regional co-operation

7.1 Widening the scale, and recognising the geographical and historical clustering of many of the small states in question, both the survey and the Country Papers express a recognition of the vital role of regional co-operation. While an increased localisation of curriculum is required, there is the juxtaposition of local and international frames of reference to be coped with. The resolution of these competing claims is a task for which the university, whether national or regional, should be concerned to equip itself. Given the inertia effect on the school system arising from the demands of traditional modes of selection and preparation for university entry, there needs to be a reappraisal of the role of a university in this context along the lines of Michael's proposals referred to above (Chapter 4). The detailed role, structure and operation of a university serving small countries should be more in the line of a high expertise supporting service rather than a repository of disinterested scholarship. Changes of approach at this level need not prevent the genuine maintenance of standards for which universities are most properly responsible.

7.2 In particular the regional network of a university could greatly assist the sort of local research mentioned above as being necessary to generate a locally oriented and resource based curriculum at the school level. It can be especially effective in the field of adult education. The department of extra-mural studies should be elevated to a position of prime significance. This would require a major shift in attitudes and resources within the institution itself. Regional governments are the paymasters and as such should be able to exert pressure for innovation and development.

7.3 Regional co-operation is not confined to the university, but is also a ministerial responsibility. The post-independence picture of increasing disparities between small countries is evident from the survey above and would certainly increase if the regional university split up into a number of separate institutions. This has long threatened the Commonwealth Caribbean and could arise in the South Pacific also.

8. Comparative studies

8.1 This previous point leads directly to the potential interest of a series of comparative studies of educational patterns and problems. This relates to the elementary fact that one of the obvious problems arising from a combination of smallness of scale, isolation and dependence is that of obtaining information on educational and other developments elsewhere.

8.2 It would, for example, be of some potential interest and value to compare and attempt to evaluate the response to the problems posed for education by island scatter in say, The Bahamas, Tonga and the Seychelles, or by land based insulation in Guyana, Botswana, Belize and Brunei. Another dimension of comparison that might be informative would be to consider the educational problems and responses in small island communities of the British Isles such as selected Hebridean Islands or the Isle of Man, in relation to small Commonwealth countries. A third possibility for comparative study would be to consider educational patterns in small highly developed countries outside the Commonwealth for example Iceland or Luxembourg, or selected components of France d'Outre Mer such as Martinique, Reunion or New Caledonia. Supportive international agencies or consortia such as the Association of Caribbean Universities (UNICA) and the South Pacific Commission (SPC) already exist as potential facilitators of cross-national small country comparative study.

8.3 Not surprisingly in the circumstances, the limitations of the 8CEC exercise and of any study developed from it are such as to uncover rather more problems than solutions. The essential disparity of the sample set of 12 small nations analysed above shows that the chances of formulating a magic equation for the resolution of problems of smallness, isolation and dependence are exceedingly remote. However, it has been shown that a number of recognisable types of small country do exist within the Commonwealth and elsewhere, and it is at this level of comparability (e.g. Fiji/Trinidad/Mauritius or Kiribati/Turks and Caicos/Seychelles) that cross-national study could be mutually beneficial.

8.4 The study above also indicates that the relativity of the concepts of scale, isolation and dependence per se, as well as various relationships between them, provide for a balance to be achieved through a degree of correspondence between the differential properties of each. Some small countries in our sample, such as Malta and Barbados are fortunate in having this sort of correspondence enhanced by the legacy of their history and geography. Despite the considerable skill and enterprise evident in the development of the educational systems of such examples, it would be a serious error for other currently less fortunate small countries to regard them as models to be followed as far as education is concerned. Each small Commonwealth country has its own individual permutation and combination of the various indices of scale, isolation and dependence, and a particular pattern of educational imbalance which results. Some of the policies and initiatives taken by individual countries in response to their particular situation have been mentioned in this paper. The identification of existing ideas and sources from which further information about them may be obtained should be of practical assistance to others and this monograph has made a start in the direction of a discussion of issues of mutual concern for small Commonwealth countries. It is itself intended primarily as an educational exercise leading to more detailed researches and comparisons of direct practical potential.

9. Conclusion

9.1 Education in its widest sense, including a general awareness of the issues discussed in this monograph, has an important part to play in identifying crucial policy options available to those responsible for educational provision in small countries. Even when this point is reached, the resolution of the problem will still be subject to the political considerations of the day. For example, Bennell and Oxenham state that:

> "While its objectives are remarkably similar to those declared by many other SIS States, it is apparent that the zeal with which the Grenadian Government proposes to implement them is not shared by the majority of SIS States in the Commonwealth - with the possible exception of the Seychelles. The point is, of course, that education reform and appropriate manpower strategies have to do with life chances and income. They are intensely political. It is the constraints imposed by the political process itself that are usually underestimated in the discussions on this subject." (11)

9.2 Given that we are only just beginning to enquire seriously into the comparative educational problems of small countries, those who will make the significant political decisions are most likely still in the schools of the countries concerned. Such is the political contribution of education to inertia; but it is hoped that this monograph will make a small contribution to the eventual localisation of educational styles in small Commonwealth countries. It is a matter of some urgency to many such countries that educational provision should be designed which is more conducive to achieving and maintaining human and physical ecological stability within their borders. Given that some small Commonwealth countries are not so small, perhaps the sort of research, comparisons and co-operation suggested above should begin with the category facing the most difficult problems, namely the poorer archipelago nations. Their own regional links would inevitably lead to comparisons at that level and the crucial role of the regional university in particular.

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APPENDIX A

EDUCATION IN THE ISLAND DEVELOPING AND OTHER SPECIALLY DISADVANTAGED STATES

A Commonwealth Secretariat Survey 1980

Guidance Notes

1. This enquiry consists of three parts:

   A. A questionnaire to establish the major issues and characteristics of the current educational scene.

   B. A short series of questions which seek to establish policy directions in the 1980s.

   C. A specific proposal for Commonwealth action on which your critical comment is sought.

2. From information available to the Commonwealth Secretariat including reports from liaison visits made this year by members of the Education Division, it appears that the educational systems of Island Developing and Other Specially Disadvantaged States are confronted with a number of major concerns, six of the more important of which form the framework for Sections A and B:

   (a) Institutions; the level of institutional provision which is desirable and possible.

   (b) Finance; high unit costs.

   (c) Employment; the balance between employment opportunity and the expectations aroused by formal education.

   (d) Curriculum; the development of curricula appropriate to national needs and objectives.

   (e) Expertise; the shortage of trained staff.

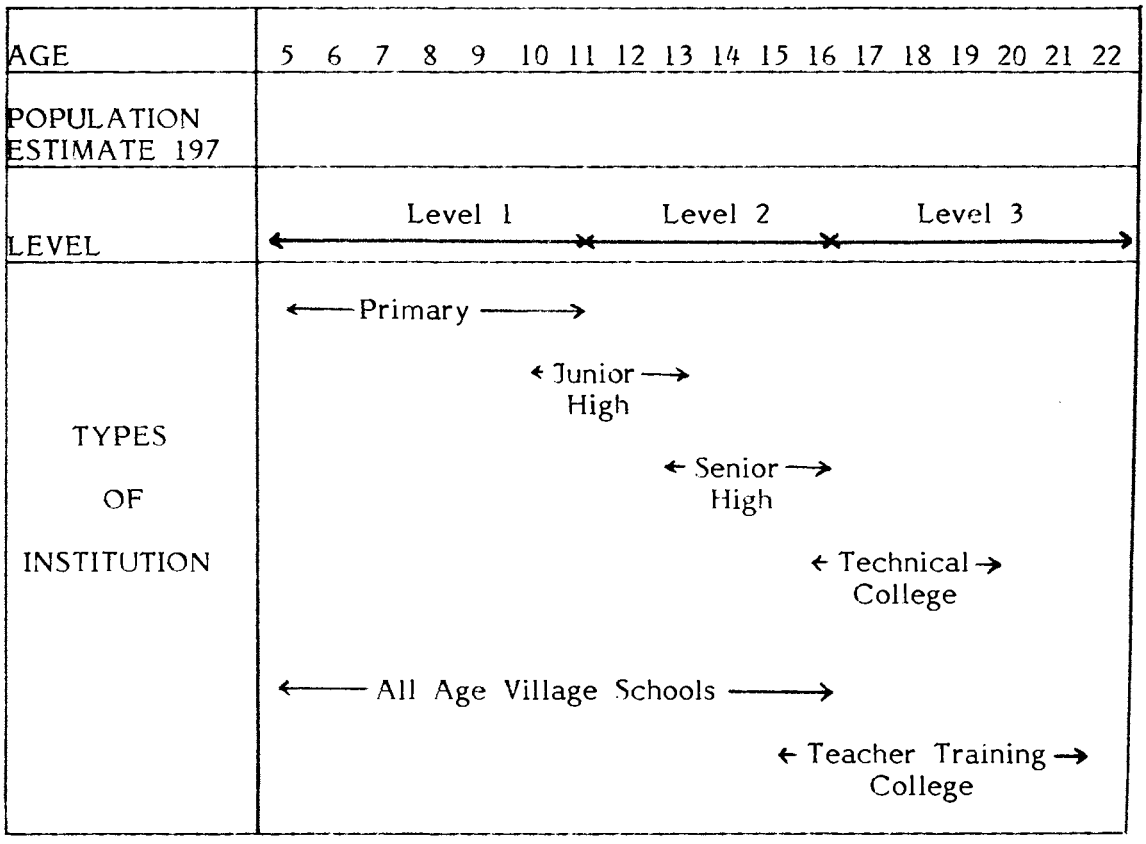
   (f) Technology; the level and cost of imports for buildings, equipment and services.

3. Each of these concerns is not necessarily applicable to each of the smaller states of the Commonwealth neither are these issues peculiar to the island nations of the world. It is perhaps the degree to which these factors are significant relative to the wealth and aspirations of a country that may distinguish the Island Developing and Other Specially Disadvantaged States from their larger neighbours.

4. The Commonwealth Secretariat would appreciate any additional comments if it is thought that central issues have been neglected.

STRUCTURE OF THE EDUCATION SYSTEM

Because of the difficulties in developing a comparative terminology for the levels and stages of an educational system for the purposes of this enquiry you are requested to complete the diagram on the next page. This will indicate the levels and institutions which in total compose the education system of your country. The diagram on this page provides a hypothetical example, and does not necessarily include all types of educational institutions e.g. nursing colleges, agricultural colleges, etc.



1. Insert the latest population estimate for each year.

2. Divide the level bar into Levels 1, 2 and 3.

3. Add arrows and bars to show the relative position in the age structure for each type of institution.

Ages: It is appreciated that in many instances this can only provide an approximate guide.

Levels: Countries have different conceptions of primary, secondary and tertiary levels of education and of the stages which they include. However, it is generally accepted that the primary level refers to the provision of basic educational needs as defined by the country in question, that the secondary level provides general or specialized instruction after at least four

years first level education and that tertiary level education, which offers a range of specialized courses, requires as a minimum condition of admission, completion of second level courses or their equivalent.

Institutions: Within each country there are a variety of educational institutions. Entry, exit and transfer from these institutions mark specific stages of education.

AGE	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
POPULATION ESTIMATE 197																		
LEVEL																		
TYPES OF INSTITUTION																		

PART A

THE CURRENT SITUATION

The questions in this section seek information under six heads. Wherever possible please indicate the year for which the statistics apply.

1. Institutions

(a) Please complete the table below for each of the types of institutions which have been indicated on the diagram on page 3.

Type of Institution	Year	*Students in their terminal year		Number of Institutions		Year	Foreign students in their terminal year
		Male	Female	Govt.	Private		
1.	19					19	
2.	19					19	
3.	19					19	
4.	19					19	
5.	19					19	
6.	19					19	
7.	19					19	
8.	19					19	
9.	19					19	
10.	19					19	
11.	19					19	
12.	19					19	

* In institutions offering courses of different lengths such as teacher training colleges, please indicate the number of students in their terminal year on all certificated courses.

(b) How many students are following second level courses overseas? [ ] [197]

(c) How many third level students are overseas? [ ] [197]

(d) In rank order, which three countries or regional institutions are most important in offering third level opportunities to your country?

	No. of students	Year
1.		
2.		
3.		

(e) Briefly outline government policy on the award of overseas scholarships. How are awards related to manpower needs and is there a bonding requirement on the part of students to return to employment after their studies?

(f) Non-formal education

Briefly outline the educational services provided by your ministry outside the formal education system.

---

2. **Finance**

(a) Provide the latest figure for annual educational expenditure [ ] [197]

(b) What percentage of the country's total annual budget is set aside for education? [ ] [197]

(c) Provide a breakdown of recurrent educational expenditure including, if possible, the five items which are listed.

i.		[ ]	[197]
ii.		[ ]	
iii.		[ ]	
iv.		[ ]	
v.		[ ]	
vi.	Subsidy for private educational institutions.	[ ]	
vii.	Support for nationals studying overseas.	[ ]	
viii.	Salaries of expatriate staff serving in your country.	[ ]	
ix.	Housing and other allowances for expatriate staff.	[ ]	
x.	The cost of imported educational materials and equipment.	[ ]	

(d) What sum is available for capital expenditure? Please indicate whether this is for a one year period or for a development plan period. [ ] [ ]

(e) What percentage of capital funds comes from overseas sources? [ ] [197]

3. **Employment**

(a) What percentage of the country's population is classed as earning a regular wage or salary? [ ] [ ]

(b) Quantify or comment upon the proportion of second level leavers going into regular, paid employment.

(c) Quantify or comment upon the migration of first and second level school leavers to seek employment within the country. If there is migration of this type, what are the major benefits and problems?

(d) What is the most recent figure for emigration from your country? [ ] [197]

(e) Quantify or comment upon the levels of schooling and training of those seeking to emigrate.

(f) Quantify or comment upon the importance to the economy of financial remittances from overseas.

---

4. Curriculum

(a) List the public examinations undertaken within the first and second levels of the school system. Against each examination indicate whether the examination is based upon a LOCAL syllabus, a REGIONAL syllabus or a syllabus developed by a METROPOLITAN BOARD.

	Examining Authority
i.	
ii.	
iii.	
iv.	

(b) Describe briefly the machinery which exists within the country for curriculum innovation and revision at the first and second stage of schooling. Indicate, if appropriate, links with curriculum bodies outside the country.

(c) How are courses determined and examinations set in teacher training colleges?

(d) Briefly outline language policy at the first and second levels of schooling.

5. **Expertise**

(a) National

i. What percentage of first level school teachers have followed a recognised training course? [ ] [ ]

ii. What percentage of second level school teachers have followed a recognised training course? [ ] [ ] 197

(b) Expatriate

i. What percentage of the total second level teaching force is expatriate? [ ] [ ] 197

ii. What percentage of the total third level teaching force is expatriate? [ ] [ ] 197

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iii. List the non-teaching, educational professional posts occupied by expatriates, indicating with a cross where these posts have a national counterpart.

---

6. **Technology**

(a) Who is responsible for the design, construction and maintenance of educational buildings? Distinguish provision at different levels if appropriate.

(b) Describe the ability of the national system to produce and publish teaching materials. Comment on the level of dependence upon overseas sources.

(c) Describe the ability of the national system to service and maintain educational equipment and hardware. If there are bodies with specific responsibilities in this area please list them.

PART B

POLICY IN THE 1980s

For many countries of the Commonwealth, the end of the 1970s has been a time of review. The ability of the formal education system to match development aspirations is under scrutiny in some quarters. This section, under the same broad heads as section A, seeks comment on educational policy for the 1980s.

1. Institutions

Is an increase in the number of educational institutions anticipated and if so, at which level or stage will the expansion be concentrated?

---

2. Finance

(a) What expansion of the educational budget is planned over and above a requirement to match inflation?

(b) In what main areas is future capital expenditure to be concentrated?

(c) Indicate firm aid commitments for educational projects.

i.

ii.

iii.

iv.

v.

vi.

vii.

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3. Employment

Briefly outline plans which exist for the formal education system to match more readily the employment needs of the nation.

---

4. Curriculum

(a) Briefly indicate the main curriculum development priorities for the 1980s.

(b) What changes are anticipated for language policy in schools?

---

5. **Expertise**

(a) What plans exist for the localisation of educational employment?

i. the teaching force

ii. educational administrators

(b) Indicate the main training requirements in the 1980s. Rank the areas in order of importance.

Pre-service primary teacher training	Educational Planners
Pre-service secondary teacher training	Inspectors
Technical teacher training	Principals
In-Service teacher training	District Education Staff
Training of teacher trainers	Ministry Officers
Training for technical teachers' trainers	Others

---

6. **Technology**

Describe plans to develop the local production of educational equipment, materials and plant.

PART C

CENTRES FOR TECHNICAL INNOVATION - AN IMPORTANT ROLE FOR TECHNICAL EDUCATION INSITUTIONS

During the last twenty years a number of Commonwealth countries have etablished technical education systems to provide skilled manpower at craft and technical levels. These systems are usually based on technical colleges, training centres and secondary school technical departments, offering technical and vocational courses leading to local, regional or international examinations.

The prime function of such institutions is to educate and train students to meet the skilled manpower needs of the country. However, there is a possible secondary role - to provide a development service to the community by making full use of an institution's technical, scientific and commercial resources. Such resources usually include engineering and construction workshops, drawing offices, science laboratories and commercial office machinery.

Human resources include the specialist teaching staff - a body of qualified and experienced technologists - and a student manpower force to service projects under the close supervision of staff, thus gaining valuable experience to complement technical studies. In total, these resources add up to a considerable development potential - a capability to carry out simple research and design, to manufacture and repair equipment and to offer expert advice and assistance to the community on matters of a technical, scientific and commercial nature.

A wide range of development work could be undertaken by a technical college, operating as a source of innovation. Some examples are:

(a) The design, manufacture and repair of school equipment, furniture and visual aids.

(b) The design and manufacture of tools for industry.

(c) Technical and commercial consultancy services for small companies and individual entrepreneurs.

(d) Consultancy and assistance to the building trade, to introduce safe and efficient work practices.

(e) Assistance to government departments, e.g. public works, on special problems arising from the servicing of plant and equipment.

(f) Field training sections in rural industry for the maintenance of agricultural equipment.

(g) Assistance to local fishermen on boat and engine repair work.

(h) Co-operative development ventures with local chambers of commerce, employer and employee organisations.

Co-operation between technical colleges and the outside community is not a one-way process - staff and students have much to gain from an experience of problems affecting industry and commerce. Such experience adds a new dimension to the

technical education and vocational work programmes and helps students in the transition from college to employment.

Although a centre of technical innovation will be primarily concerned with local needs, there is considerable scope for regional co-operation with sister institutions in neighbouring countries. A natural development in regional co-operation might be the creation of a pipeline system between centres - to exchange information and prototype material of common interest and need. For example, master stencils for simple publications could be made in one centre and distributed to several other centres for production runs.

A number of small state technical colleges already offer some development assistance to their communities and in these situations there are good foundations for extending the technical innovation service provided by the institution. It may be possible, after a feasibility study, to mount a pilot scheme at a college to provide a full scale, operational test structure to develop ideas, methods and programmes for a centre of technical innovation. A pilot scheme would need the active support of a government, full co-operation and participation by the college and its community and additional human and material resources from developmental agencies.

Your critical reaction is sought to the questions which follow:

In what ways is technical education in your country undertaking some or all of the functions outlined in the proposal?

Comment upon the practicality of developing centres of innovation in technical institutions or departments within your country.

Please specify any other proposals which you believe the Commonwealth Secretariat could beneficially pursue in the interests of educational development in the island developing and other specially disadvantaged countries of the Commonwealth.

APPENDIX B

COUNTRY PROFILES

1. Botswana
2. Guyana
3. Fiji
4 Cyprus
5. Malta
6. Barbados
7. Western Samoa
8. Belize
9. Grenada
10. Seychelles
11. Kiribati
12. Tuvalu

Notes:

The profiles have been compiled by the writer mainly from information provided by two sources:

(a) Responses to the Commonwealth Secretariat questionnaire of 1980 (Appendix A)

(b) 8CEC Country Papers (with the exception of Belize)

Each profile is sub-divided into the six sub-headings, which were used in the Commonwealth Secretariat questionnaire, namely:

Institutions
Finance
Employment
Curriculum
Expertise
Technology

The countries are listed in descending order of population size.

1. BOTSWANA

A vast country in Southern Africa (600,372 sq km) Botswana nonetheless qualifies for inclusion in terms of its landlocked version of insularity - even more acute before the Independence of Zimbabwe - its relatively small population (800,000) which is clustered on the eastern periphery of the country, and its very modest economic level, US$910 per head GNP.

Institutions

Since gaining Independence in 1966, Botswana has maintained a consistent policy of expanding educational provision at all levels. Clear priority has been given to primary education. The proportion of the primary age range in school has risen from under 50 per cent to the present figure of about 80 per

cent. In terms of schools at this level, there were approximately 250 in 1966 and 420 in 1980.

There has been a related expansion of secondary provision, but not at the same rate, with a major thrust aimed at the junior secondary sector, now able to take about half the output of the primary schools. About 30 per cent of the output from the 40 or so junior secondary schools (government and private) proceed to senior secondary schools, of which there are 15 government and one private school. The academic nature of this final phase of schooling, and its small scale in relation to the size of the population of the country can be gauged from the fact that about one-third of its leavers enter university, an increasing proportion attending the University of Botswana and Swaziland.

In addition to the extraordinary expansion of schooling, especially in the primary sector, possibly even greater effort has been applied to the development of various forms of non-formal, further and adult education. A number of organisations are involved: the Botswana Extension College (1973) developing out of the correspondence wing of the Francistown Teacher Training College (1968-73) provides widespread radio and correspondence facilities for formal and non-formal courses at all levels; the famous Botswana Brigades - community based private organisations assisting the primary school leaver - have greatly enhanced access to vocational and technical skills, and are now adapting and applying their expertise to rural and agricultural issues; the Department of Non-Formal Education, established in 1978 has made its priority the National Literacy Initiative, but is also active in community oriented programmes involving environmental and commercial training and bringing secondary school leavers into the ambiance of community development.

These, and other vigorous non-formal schemes are particularly keen to bridge the gap between traditional academic learning and the pressing need for skilled community manpower. This involves a considerable and on the whole successful liaison with other government ministries in inter-ministerial district extension schemes. Such efforts to involve primary and early secondary school leavers may well be an important attitudinal and motivational initiative. Parity of esteem for all forms of educational development is a basic aim in Botswana.

Tertiary education is proving much more problematical. Recruitment to teaching and teachers colleges is now a problem and there is a dearth of science staff in particular. The development of technician level training is another major concern. Key manpower skills still require training outside the country despite the vigorous development of the Polytechnic. The University College of Botswana is in the process of adjusting to the succession of Lesotho from the University of Botswana, Lesotho and Swaziland, taking with it the major campus. It is likely that the University Colleges of Botswana and Swaziland will become separate national universities in due course. This will add to the financial burden of education. It will also focus more sharply the need to ensure that the output of the University relates closely to national high-level manpower requirements.

Finance

Not surprisingly in view of the wide-ranging nature and vigour of Botswana's educational expansion, education takes about 30 per cent of the recurrent budget and 15 per cent of the development (capital) budget. This may appear extreme, but it must be placed in the context of Botswana's very rapid rate of national economic growth which has been greatly assisted by the discovery and exploitation of minerals, of good rains, and favourable customs connections.

A problem is building up, however, in that the rate of economic growth will certainly decline at a time when the massive educational efforts will have greatly enhanced both the supply of skilled manpower and general aspirations in respect of employment. Indeed the National Commission on Education in Botswana which reported in 1977 strongly advocated a reduction of public subsidy to education. It also recommended a narrowing of the income differentials of people with different levels of formal educational attainment. The National Commission report was accepted by the Government, and its recommendations form the guidelines for official policy into the 1980s.

Employment

Despite the high level of economic growth it must be remembered that the base level of the economy is still very low, especially in terms of individual employment and income for the majority of the population. Only about 10 per cent are classified as wage or salary earners. Forty-five per cent of the rural population is estimated to be in poverty. Another important element of Botswana's employment pattern is the very high level of migration among males to work in the mines of the Republic of South Africa. About 20 per cent of the citizen labour force works abroad, their remittances being vital to the survival of the poorest sections of Botswana's rural population.

Migration within the country from rural to urban areas has produced an even greater rural-urban dichotomy than many other developing countries. This is related of course to the extreme nature of settlement clustering in one small part of an otherwise very low density, in places even empty, territory.

Curriculum

Primary education expansion has been accompanied by curriculum renewal, well integrated with developments in initial and in-service teacher education. The secondary school curriculum is largely constrained by the requirements of external examinations. Given the high level of activity in the various formal and non-formal components of educational provision in Botswana, the problem is much more to do with logistics and co-operation than with motivation. The localised activities of, for example, individual Brigades and individual District Adult Education Officers need to link effectively not only with each other, but also the content and level of other parties involved in the total educational effort of the country.

There is a Department of Curriculum and Evaluation in the Ministry of Education, but in the context of Botswana curriculum planning would seem to need a stronger inter-ministry and inter-departmental system of co-ordination.

Expertise

As a result of some of the influences already mentioned there is a dearth of expertise at almost every level, so that a relatively high level of expatriate employment is still necessary. There is a problem of containing the results of well-meaning educational initiatives such as the up-grading of the National College of Vocational Training to Polytechnic status - an immediate result of which has been to deplete craft level training. There are also deficiencies of expertise and training in the railway sector (very significant in Botswana's case), and in customs administration. The great education expansion does not yet seem to have accommodated sufficient specific initial training and staff development in a few key areas of employment. At the highest level of need such as medicine and electrical engineering, it would appear that only regional co-operation in Southern Africa or continued reliance on developed country training will suffice, the choice between the two containing difficult political considerations.

Within the education service the great primary thrust was accompanied by a further development of teacher training so that about 70 per cent of the teachers are trained. Secondary school staffing is one of those areas very heavily reliant on expatriates, especially in the sciences, as are senior levels of school and Ministry administration. Clearly, there is a need for staff development in educational administration.

Technology

A number of state and private agencies are involved in the maintenance of building and equipment within the educational system of Botswana. In the area of non-formal education especially in the rural areas, self-help schemes are significant. At the level of technology for teaching and learning there is a major problem of equipment and expertise, though a Teaching Aids Production Unit has been set up. It is obvious that inability to control and develop this aspect of educational support leads to continued, even deeper dependency on outside sources. This obviously relates to policies and programmes at technician level.

2. GUYANA

Guyana, a republic on the north-east littoral of South America is the second largest of our sample in terms of population (c. 793,000), second in land area (214,969 km^2), and ninth in G.N.P. per capita (c. U.S.$ 690).

Institutions

The Government of Guyana, in accordance with its general philosophy provides free education from nursery to university, though the post-compulsory stages are not of course of open access.

There is a very keen commitment to early childhood education, and a total of about 400 nursery schools is a high figure for a developing country of any scale. Primary education has been compulsory since 1976, and the attendance rate at the 430 or so schools is about 80 per cent, a remarkable achievement, especially in comparison with most other countries of South America.

About 75,000 children are enrolled at secondary level, divided 4:3 as between the Community High School and the Multilateral School, the latter being a more traditional variant. Although there are only about 30 Community High Schools as such the Community High School Programme operates in a further 325 primary schools, offering pre-vocational and vocational training. Practical forms of education continue their availability beyond the school sector in the form of five technical and vocational colleges. The development of this type of opportunity may well be the main reason for a relatively low take up of teacher training, normally an attractive avenue of advancement in developing countries. However the three colleges are active, and operate joint programmes with the Canadian Organisation for Co-operation in Overseas Development (OCOD). The University of Guyana, established in 1963, now has about 2,000 students in its five Faculties (Arts, Education, Natural Sciences, Social Sciences and Technology). Two indications here of social commitment are the relatively high proportion of students on certificate and diploma courses in areas related to current economic need, and the interconnection between the expertise of the University and the staff development objectives of the Government. The short courses are especially useful in relation to meeting specific development needs, especially in low density rural areas. Despite the presence in the region of the earlier established University of the West Indies, the University of Guyana, through its more flexible approach is playing an increasingly significant regional role. One example of this is the validation of sub-degree level courses comprising the Caribbean work of the Pan-American Health Organisation.

In addition to the large provision of formal education, Guyana also boasts an impressive range of non-formal schemes, including a country-wide agricultural extension programme run by the Ministry of Agriculture and an active contribution from the Department of Culture in a number of creative fields.

Finance

Considering the impressive range of opportunity offered in a relatively poor country the figure of about 12.5 per cent (1979) of the national budget spent on education seems a modest one. There is still a considerable input of overseas funds into capital projects (42.38 per cent of capital funds in 1979), and very little spent on the employment of expatriates (0.8 per cent of the total), possibly a function of scale as well as of policy. Investment in teacher training seems to be a relatively low priority, although this may be due to investment in the education faculty of the University instead.

Employment

The economy of Guyana is still predominantly primary with the emerging manufacturing sector having slipped somewhat in its proportion of the total employed. Agriculture, however, now employs less than 20 per cent of the working population. This may be due to improved efficiency in this sector in some regions, and a flight from the land in others. Not surprisingly the major growth area in employment over the last two decades has been in public administration, always a keen customer for the type of product emerging from a major investment in formal education.

Curriculum

Curriculum initiatives have not been lacking in Guyana, there being two centres for curriculum development - one in the University of Guyana, the other in the Ministry of Education. The country participates in the work of the Caribbean Examinations Council (CXC) which is a regional body replacing the 'Cambridge Overseas'. CXC is regarded as being a useful body in engendering re-thinking among teachers, though the outcome is not noticeably radical.

Outside the formal secondary sector there are a number of interesting initiatives, such as the Hinterland Development Programme - an alternative to the traditional sixth form - which concentrates on human ecology, agriculture and technology in respect of such activities as forest clearance, water supply and lighting systems. There is a real attempt to integrate the academic and the practical here, while at the other end of the ability range the Low Achievers Programme combines extra vacation work for slow learners with the In-Service Education (INSET) programmes of the University and Teachers' Colleges.

Expertise

Recent initiatives in the education system reflect a range of indigenous expertise. However the availability of expertise at different levels and its geographical spread indicates many disparities. Although there is little need of qualified expatriates, the teaching force is about 50 per cent unqualified. Official policies for staff development in education concentrate heavily on improving planning, inspection and teacher training.

Technology

Despite a keen thrust to localise school materials, especially in mathematics and English, there is a lack of technical, especially printing, capacity to cope with this. Technical institutions play a modest maintenance role, and there is a Low Cost Equipment Production Unit. Nonetheless this is probably the weakest part of the system, a situation which probably reflects the limited capacity of the economy to provide appropriate support services.

3. FIJI

Third in the rank order of the sample by population (630,000), Fiji provides another geographical variant, the multi-island small state. By comparison with other South Pacific island nations, however, Fiji is large. Its land area alone (18,272 sq km) makes it the fourth largest of the twelve, and if intervening areas of ocean are included, for purposes of comparing intra-national distances, then Fiji may be visualised on a spatial par with Botswana and Guyana. Economically though Fiji is more than twice as strong as either, having a GNP per capita of approximately US $1,850, although this is significantly below the corresponding figure for Cyprus.

Institutions

Post-Independence (1970) educational provision in Fiji has been considerably expanded from an already strong local base. The vast majority of primary and secondary schools are private (627 to 19 and 118 to 10 respectively), and are run by churches or committees. As a result educational administration at school level exhibits a pattern of institutional individuality. This in turn enhances the possibility of disparity and in particular a dichotomy between urban and rural areas.

The expansion of primary and secondary provision has been in accordance with two development plans aiming at ten years of schooling for all children. Enrolment throughout this age range is virtually 100 per cent, but due to a decline in the birth rate since the mid-seventies some spare capacity is available. Secondary schooling comprises junior and senior high schools, but there is a differential provision of these as between urban and rural areas, also between smaller and larger islands in the Fiji group.

The tertiary sector is active and varied. Technical education at this level is served by two colleges, the Fiji Institute of Technology (FIT) and the Western Division Technical Centre - a third, the Northern Division Technical Centre, is planned. Multi-Craft Centres are attached to about a quarter of the secondary schools and their staff are trained at FIT. The Fiji Institute of Technology is a major facility not only nationally but regionally, having nine constituent schools providing for about 2,000 full-time and 1,500 part-time students, the vast majority of whom have no problem in finding employment after graduation. There are normally about 100 students from other Pacific islands.

Nasinu Teachers College established in 1947 is moving towards an in-service training function. This change reflects the decline in the school age birth rate, but there is still a problem of untrained teachers especially in rural areas and outer islands. Although the University of the South Pacific is a regional institution the location of its main campus in Fiji with the majority of its students from that country does have the effect of completing the educational system.

Finance

The Government of Fiji retains financial responsibility for schooling, which in effect means the provision of teachers salaries, and a substantial budget for the committee-run schools. Over all, the government expenditure on education takes about one-fifth to one-quarter of the national budget. A capital development programme includes the funding of more technical, vocational and Multi-Craft facilities and a consolidation programme for the junior secondary sector. It is intended that more money should be used to decrease the marked geographical disparities in provision at all levels, co-ordinating government expenditure and private sources of finance.

Employment

About 50 per cent of the population is reckoned to be in employment, of which about a half are in agriculture and other areas of primary employment. The manufacturing sector is growing as is transportation, and both are absorbers of the products of technical education, as is government employment. An effort is being made to effect a closer match between education and training and the nature of employment growth areas. The phenomenon of unemployment among qualified people is beginning to be an important issue, and is related to aspects of rural to urban migration. There is also a regular emigration of mainly skilled workers. The location of the main campus of the University of the South Pacific near Suva has had a multiplier effect in respect of various non-academic employment opportunities, though this was more marked in the period of the development of the campus.

Curriculum

Curriculum is probably the crucial area of educational change in contemporary Fiji. Central to this is a strong move to promote technical and vocational education; indeed this is now part of the curriculum of all secondary schools, constituting one-eighth of class time. The Ministry of Education Curriculum Development Unit has taken over responsibility from the former Technical Vocational Unit. The rapidly developing programme of Multi-Craft Centres aims at 50 such units by 1985. It has been evaluated recently by ILO.

However the curriculum of basic primary and secondary schooling remains a traditional one, related as it is to the demands of local certification and the entrance requirements of higher education not only in Fiji, but also in New Zealand. There is a Curriculum Development Unit of the Ministry of Education, and a related Resource Centre based at Nasinu Teachers College, but these again operate in a largely conventional, though active, manner. The most acute need is in relation to educational disparities, the curricula needs of rural societies and particular ethnic groups - in other words very local issues which may be connected with economic and employment initiatives in these communities such as the cottage industry movement.

Expertise

Most teachers are trained at primary level, also about three-quarters of those in secondary schools. There tends however to be a greater concentration of untrained teachers in rural areas and on the outer islands of the group. Expatriates are only really significant at the tertiary level, and even then are a small minority.

The main thrust of staff development is in technical and vocational education with technical teacher training under the auspices of the University of the South Pacific which operates a diploma course as well as conversion courses. It is expected that full staffing requirements in this growing sector will be met by 1986/87.

With a growing, disparate and widely dispersed national system such as operates in Fiji, and given its being the regional focus of education in the South Pacific, various forms of senior administrative staff development are a priority consideration.

Technology

There is probably a larger capability for educational technology in Fiji than in Guyana, Botswana and Cyprus, especially in the local production of teaching materials. The level of technical training is sufficient to cope with the majority of maintenance problems, but this is progressively less so in the outer islands. Some technical education schemes include the production of hardware materials for schools.

4. CYPRUS

Fourth in the sample by population size (620,000), Cyprus, is fifth by land area (9,251 sq km), and first by GNP per capita (US$3,560). Located in the Eastern Mediterranean, Cyprus has always had a strategic significance, and as such has been subject to a succession of colonial occupations, most recently by Britain. Two earlier colonial relationships with Greece and Turkey have, however, contributed much more deeply to the culture, even to the extent that Cyprus is now a divided island. The following paragraphs refer only to the Greek portion of the island.

Institutions

The age of entry to primary school has been lowered from five years to three years, there being a keen interest in nursery schooling. Primary education has been compulsory since 1962. It is free and co-educational and lasts for six years.

Secondary schooling is not compulsory, but is keenly sought, comprising a lower cycle and an upper cycle, each of three years' duration. It is free to the age of 15 and means-tested thereafter. Foreign languages and economics appear to be favoured subject areas at least as far as the clients are concerned. By 1978 about one-fifth of the secondary school population were in technical schools, with electrical engineering the most popular area. Arising from an ILO project, a Higher Technical Institute has been established, and there are also hotel, forestry and nursing courses. The Forestry College has an international reputation and always includes other Commonwealth students. The College of Higher Education is a private institution, and there is also an 'American style' Institute of Management. In 1978 the Council of Ministers agreed on the establishment of a university, following UNESCO advice, the reasons being to save foreign exchange, to complete the educational system, to give access to higher education for a wider socio-economic sector, and to "render Cyprus an educational centre of the surrounding geographical region." Teacher training is well established and active.

Finance

Approximately 13 per cent of the national budget is allocated to education, but there is also a substantial private sector. Most of the public money goes to the primary sector. With a predominantly rural economy and a well established rural society it is possible to levy local taxes for rural primary schools. Government subsidies assist the poorer areas. Assistance from overseas comes in the form of a very large number of remittances and a good share of scholarships, especially from Greece, USA and Britain.

Employment

The economy of Cyprus is well developed by contrast with most other states in the sample group, though the Turkish part of the island is comparatively depressed. There is a small and growing secondary sector, stable and diversified agriculture, and a popular tourist component. This variety of employment opportunity links well with the output of the technical sector, but there is a disproportionately high rate of unemployment among the other secondary school leavers. Many of the academically able leavers proceed to universities overseas and eventually become emigrants, hence the call for a university. Some of the nascent industries such as electronics, building trades and furniture manufacture have forged mutually beneficial links with technical institutions. Industrialisation and tourism have encouraged rural to urban migration.

Curriculum

The formal system, public and private, works very closely to the demands of external examinations from Greece and Britain. Curriculum content is firmly controlled from the Ministry of Education, or from the Ministries of Labour and Agriculture in respect of technical and forestry institutions.

Expertise

The majority of primary and secondary school teachers are qualified and trained, but there is still a considerable need for expatriates in specialist secondary fields. This is somewhat strange in view of the emigration of Cypriot graduates unless of course the subject areas do not match up with school staffing needs. A strong centralised interest in in-service training regularly reinforces the expertise of most teachers.

Technology

As with Guyana and Botswana, educational technology is the weakest area of provision. Technical support is almost always limited to construction and maintenance of premises. This may well be related to the conservatism of methodology and curriculum in association with overseas examinations and related imported texts.

5. MALTA

In terms of population size there is a more distinct gap between Malta and Fiji than between the first four in the succession of the sample. Malta has a population of about 343,000. In terms of surface area Malta is one of the smallest of the twelve (316 km^2), but in economic level by G.N.P. per capita, it is second on the list with about US$ 3,470 p.a. Malta is also distinctive in being the only member of the sample comprising two islands.

Institutions

Primary schooling has been mixed since 1976 and the kindergarten system continues its steady development, following its formalisation in 1975, so that by 1980 there were about 4,000 kindergarten pupils in the public sector and a similar number in private institutions. At the same time about 9,000 of the 33,000 primary pupils were in private schools. Through this dual system, universal primary education is already well established, and there is now also a compulsory secondary sector up to the age of 16. This comprises 'traditional'secondary schools with a five year course and trade schools with a three to four year course. The 'traditional' secondary schools are both private (c 700 pupils) and public (c 14,000 pupils), while trade schools (c 3,700 pupils) are public only.

The upper secondary or sixth form level is not classified as secondary education, being considered alongside technical institutes and secretarial schools. This is part of a 1979 reform of the upper secondary cycle involving a pupil-workers sponsorship scheme, and an upgrading of technical education. By 1980 there were about 1200 pupil workers and an enrolment of 5000 at technical institutes - 4300 craft, 600 technician and 100 secretarial.

The higher education sector has also undergone considerable reform since 1978 when a new university was created from the former polytechnic. The following areas of study were assigned to this institution: accountancy; administration; business administration; engineering; medicine/surgery; domestic science; pharmacy; education. Many students study on a part-time basis. The old university retains arts, law and science, numbering 350 students as against its modern counterpart's 750. About 50 students are studying overseas.

The post-compulsory sector also contains institutions for technical, nautical, commercial, electronic, nursing and hotel studies, while other ministries and government departments provide relevant training institutions, for example in agriculture and catering. A very significant number of students (5000) enrol for evening classes.

Finance

Education is currently assigned about 8 per cent of the national budget, with about half of this directed towards second level provision and a very low proportion towards the administration of the system as a whole, probably due to the compact nature of the islands. The involvement of the commercial sector in the pupil worker scheme and in technical education, and of other ministries are also factors helping to make the budget a relatively modest one for the range of facilities provided. The considerable private investment in schooling is also very significant in this respect.

Employment

Much effort has been made to effect closer links between education and employment, as the structural reforms illustrate. Given modest natural resources, the idea is to concentrate on the development of human resources in a number of key areas. The kindergarten thrust is partly to do with a policy of creating more employment opportunities for working women, and there is also a desire to create more openings for the handicapped groups.

Neither unemployment nor internal migration are real problems, and there are still significant opportunities for Maltese to work overseas and send back remittances.

Curriculum

Malta has not as yet established a curriculum development unit. Many of the courses in secondary and technical education are externally examined and this constrains such reforms. However there has been a clear support for physics and Arabic, both of which are now needed to proceed into the sixth form. There has also been increasing localisation of school texts in several subjects. The worker-pupil schemes, and also the sandwich course developments are in effect also curriculum development initiatives.

Expertise

All primary and secondary school teachers are qualified and the already modest proportion of expatriate expertise is being steadily reduced. Effort is now being concentrated on in-service education, and the institution of the BA Education Programme at the new University of Malta is seen as a major contribution to the level of teacher expertise.

Technology

Virtually all construction and maintenance of buildings and basic equipment is handled locally. Increasingly teaching materials are home grown, though foreign textbooks still dominate. The expertise for self-sufficiency in this area, except for the manufacture of sophisticated aids is clearly going to become available soon.

6. BARBADOS

Barbados is in some respects comparable with Malta, having a population of about 250,000, a surface area of 430 sq km, and a GNP per capita of about US$3040. It has too a long established educational tradition.

Institutions

There is a complete education system available from the age of two-three onwards, with about 30 per cent of the population in full-time education at one level or another. Universal primary education has long been established and secondary provision is available through a range of institutions. There are grammar schools, comprehensive schools, and technical and vocational institutions. The school leaving age was raised to 16 in 1976.

In the post-compulsory sector there is a national community college (1977), catering for a wide range of technical, commercial and social studies, a polytechnic, a teacher training college, and one of the three campuses of the University of the West Indies. Not surprisingly, the majority of Barbadian undergraduates are at this campus (Cave Hill), where they form by far the largest national contingent within the student body.

Finance

Approximately 20 per cent of the national budget goes to education, nearly half of which is spent on the compulsory sector. There is a relatively modest level of expenditure on the administration of the system which, though not as proportionally low as Malta, probably has some relation to the compactness of the human ecology. There is a strong Government subsidy to private education, mainly to the more established and prestigious secondary schools. Two other characteristics of the financing here are a fairly high expenditure on imported materials and a constraining burden of recurrent expenditure, though significant assistance has been received from aid sources for primary school renewal.

Employment

Barbados has a more diversified economy than most Caribbean islands, despite having been essentially a sugar producer for hundreds of years. Sugar is still important, but apart from tourism, a major and well established component, the country has developed into the entrepreneurial and service centre for the Eastern Commonwealth Caribbean. Light industrial processing and the distributive trades are fairly strong here. The large tertiary sector fits well with the relatively formal and substantial output of the education system. Some of the less attractive manual occupations are filled by migrant labour from poorer islands in the region, but there is a relatively high level of unemployment among the 15-19 age group in Barbados.

Curriculum

Although schooling remains "traditional" in Barbados, there is a keen interest in improving the content and quality in general through the National Curriculum Development Council. Being one of the two headquarters of the Caribbean Examinations Council has enabled local teachers in many subjects to participate in the workshops and other activities associated with the substitution of the metropolitan external examinations. The raising of the school leaving age and the rapid diversification of the secondary sector have also provided a curricula challenge. The location of one of the branches of the School of Education of the University of the West Indies on the Cave Hill Campus has meant that a number of regional curriculum projects have been based in Barbados, and this has been nationally advantageous.

Expertise

The majority of teachers have some training and about two-thirds of primary and secondary teachers are fully trained. Expatriate employment is relatively low, as high levels of local expertise cater for administrative development as well as in most of the key subject areas.

The University, Erdiston Teachers College, and the Caribbean Examinations Council provide many opportunities for in-service education and training, and there are a number of other regional institutions based here such as the Pan-American Health Organisation and the Caribbean Conservation Association to which enterprising teachers can turn for ideas and information.

Technology

Given that primary education has been very long established there is some strain on the departments dealing with renovation and maintenance of basic facilities. A major effort has been made to provide the technical back-up for the popular tertiary sector, especially at the Community College and this may have led to a relative neglect of lower age groups for a period. There is now, however, a thrust to support school science, including the primary level.

7. WESTERN SAMOA

Western Samoa (population 156,000) is the first representative in this section of the very small island nations which comprise the second half of the sample. However, the surface area is comparatively large at 2,840 sq km. Western Samoa's GNP at US$560 per capita is the lowest in the sample.

Institutions

Most of the primary age range attend the 130 or so government schools or the 22 private schools. The nine year course is to be reduced eight, with admittance normally at the age of six. Senior secondary education is carried out mainly in mission schools which have about 80 per cent of the pupils, but between this level and the primary sector are the very rapidly developing Junior High Schools of which there are now about 27. These schools are highly selective, but operate a locally based curriculum as compared with the New Zealand syllabuses in the Senior High Schools. Nineteen Junior High Schools are government funded, and their establishment has affected an overall balance in secondary enrolment in favour of the public sector (60:40). They are locally constructed using village funds. There are plans to develop this sector further so as to be a universal facility serving community needs. It will mean a postponement of selection procedures.

Beyond schooling there exist several small further education institutions: the primary and secondary teachers colleges, the technical college, the School of Nursing and four theological colleges. At Alafua, there is the second campus of the University of the South Pacific, based on an existing agricultural college and dealing initially with that area of training, but a branch of the School of Education has also been developed there. Consequently Western Samoa has, albeit in a limited sense, a complete education system. Nevertheless most senior secondary school graduates moving on to university tend still to go to Australia and New Zealand.

Finance

About 12 per cent of the national budget goes to education, with very little being spent on imported materials or expertise. It is planned that there will be a strong concentraiton of educational investment in the areas of teacher training, technical and vocational education, and adult and community education.

Employment

Employment of the products of the education system is a severe problem in Western Samoa, hence the very keen desire to effect a change of attitude towards working in the rural context. Only about one-quarter of the population is employed in terms of wage earning, and the majority of unemployed school leavers drift into the capital, Apia. There is limited opportunity for emigration to paid employment, and the remittances arising therefrom contribute about 10 per cent of national income.

Curriculum

Clearly there is a need to modify educational provision in relation to the problems of economy and employment, and an attempt has been made at primary and secondary level to develop new curricula and methods, in co-operation with both Tonga and Macquarie University in Australia. There is a strongly expressed desire to generate curriculum renewal locally, and Samoan is now the medium for the first seven years of schooling.

Expertise

All primary teachers are qualified, but there is an acute shortage of trained secondary school teachers. Although localisation of educational expertise is a strong and consistent policy in Western Samoa, much of the task of up-grading local expertise devolves upon Macquarie University in Sydney. There may be some contradiction of objectives here, but the need for staff development especially in teacher training and educational administration is very pressing. This policy is preferred to a temporary dependence on expatriate expertise in Samoa itself.

Technology

There is local commitment to the building and maintaining of schools, the production of books and other materials, though the technical capacity to sustain and develop this support needs to be enhanced.

8. BELIZE

Belize is a littoral country comparable in geographical terms with Guyana although on a smaller scale. This newly independent country, a Commonwealth enclave in Central America, is in terms of surface area out of all proportion to the other states at this end of the sample. In a land area of 22,946 sq km the population of 145,000 provides a density statistic only marginally greater than that of Botswana, though the economic level expressed in GNP per capita is, at US$1080 per annum, significantly higher.

Institutions

Belize exhibits a well established though somewhat disparate pattern of primary provision strongly affected in its location and character by the vagaries of denominational proliferation and competition. Nonetheless this sector provides 11 years of schooling in many parts of the country, overlapping in its upper years with both junior and senior high schools in the few areas where these occur, as well as with the technical college. The last-named institution is by far the most developed in Belize with 600 full-time and 400 part-time students in its four departments - building, business studies, engineering, and general studies.

There is also a teachers college, but the leading academic institution of the country is probably the sixth form college from which students proceed to tertiary courses at the University of the West Indies (mainly in Jamaica), Britain and Canada. The new (1979) Belize College of Arts, Science and Technology (BELCAST) has links with several government ministries and in effect 'tops up' and applies the educational experience of the sixth form college and the technical college. The college includes provision for the training of secondary school teachers.

Finance

About 15 per cent of the national budget of Belize is directed towards education. Almost the entire capital expenditure on education derives from overseas aid.

Grant-aided primary schools account for about half the recurrent expenditure, and grant-aided secondary schools for a further tenth - a measure of the high level of denominational involvement. After that the main thrust is in technical education.

Employment

Employment for products of the education system is very limited, and emigration for work has long been a fact of Belizean life. The resultant remittances are very important to the national economy. In such a context any effort to link the content and operation of education with economic development must look carefully at the economic potential of Belize.

Agriculture has the greatest potential as the lands of the vast interior are as yet relatively untapped, and a steady drift of people to Belize City continues.

Curriculum

Despite the very apparent problems of developing the country's economic potential, Belize has been active in promoting its own local curricula initiatives as well as also playing a full part in regional schemes. Given the political geography of Central America, Belize looks strongly towards the rest of the Commonwealth Caribbean, as well as continuing to retain strong links with British validating bodies. Indeed a considerable amount of testing and certification is a feature of the system.

There has been strong participation in a number of University of the West Indies (UWI) based curriculum projects, and Belize is now involved in the UWI/USAID Caribbean Regional Development Project (1980). This project relates to the Caribbean Examinations Council (CXC) which has had a more difficult implantation in Belize than in most other participating countries, especially in the science area. Both the teachers college and the Curriculum Development Unit are involved in the improvement of the primary curriculum, and the former is also associated with a USA aided programme, the Rural Education and Agricultural Project involving eight pilot schools.

Belize is a multicultural country with Mestizo and Amerindian components in much greater proportions than elsewhere in the Commonwealth Caribbean. A complicated linguistic and cultural heritage, including some areas of Mayan civilisation, has yet to be revealed and exploited in the curriculum. Spanish is becoming an increasingly important subject.

Expertise

Compared with most countries in the sample, Belize has a low proportion of qualified teachers - barely one-third at both primary and secondary level. There is, predictably, a heavy reliance on expatriate staff at secondary level. The teachers college has a small capacity, but BELCAST now provides secondary training for school teachers.

Technology

Capacity for coping with support systems through educational technology is very limited. The Curriculum Development Unit is constrained by its own small scale and problems of equipment maintenance. Nonetheless some very useful developments in local teaching materials have been achieved. Distances and poor interior communications combine to restrict the quality of dissemination of schemes and materials, and Belize is certainly of a scale potentially appropriate for distance learning techniques as yet undeveloped.

9. GRENADA

Grenada, mainly consisting of the southernmost islands of the mountainous Windward group in the Eastern Caribbean, also includes the nearby Grenadine islands of Cameacon and Petite Martinique. Roughly comparable to Malta in area (344 sq km), its GNP per capita stands at about US$690 with a population of 110,000.

Institutions

Since the socialist revolution of 1979 new institutions have been introduced to the education system, mostly additional to, but in some cases modifying existing institutions. The basic structure of schooling comprises: a newly enlarged pre-primary sector of about 3,000 pupils; a primary and extended primary sector (5-16) of about 23,000; and a junior secondary and senior secondary sector (12-19+) of about 6,000. There is also the Technical Centre (post-primary) and the General Technical and Vocational Institute (post-secondary). Important post-revolutionary structures are: The National

In-Service Teacher Education Programme; the Community School Day Programme; the Curriculum Development Unit; the Institute of Further Education; and the Centre for Popular Education (CPE). These are co-ordinated thrusts towards the creation of a more accessible and locally relevant and popular educational provision, and have already brought many more Grenadians into contact with learning possibilities than ever existed before.

Finance

About 15 per cent of the national budget goes to education of which about two thirds is spent on the salaries of teachers and administrators - a rather lower figure than for some small countries. Much of the capital expenditure derives from overseas sources - international, regional and bilateral.

Employment

Grenada's economy is based mainly on agricultural exports, especially cocoa, bananas and nutmegs, nearly half of which go to Britain. The employment pattern reflects this, but there is also a growing tourist industry which should be further enhanced by the imminent completion of an international airport, and an emerging manufacturing sector. More than one-fifth of Grenada's imports come from the neighouring nation, Trinidad and Tobago, to which there has long been a pattern of emigration. From here and elsewhere come remittances which constitute a very significant 17 per cent of the GNP. Although there is certainly a discernable growth in secondary and tertiary employment, the majority of work opportunities remain in the rural sector.

Curriculum

Not surprisingly the revolution has brought about considerable activity in the area of curriculum. Only in the formal secondary sector has the existing pattern been retained - in this case the programme of studies leading to certification by the Caribbean Examinations Council. Elsewhere the loosely co-ordinated activities of the new organisations are bringing about considerable curricula change. The main thrust of the Curriculum Development Unit has been in the primary sector and especially in the area of language. Both an increased respect for Creole, and carefully organised renewal of the English language component of the primary curriculum have received the committed attention of the most talented educational expertise available to the Ministry of Education and much dedicated work has been done to back the planning with frequent workshops throughout the country and with new locally produced materials. Primary curricula development is part of a community orientated drive involving both the National In-Service Teacher Education Programme, and the Community School Day Programme. Both involve much greater use of the local environment, physical and human, linked with a sort of 'sandwich' element of formal learning. The Junior Secondary Schools fall between the existing local curriculum and evaluations originally designed for them and the desire in some cases to offer CXC courses.

At the upper secondary level, the Institute for Further Education combines 'A' level work for overseas external examinations with the opportunity for

secondary teacher training, and new community orientated programmes. Work Study Camps have been introduced, involving weekend programmes in rural areas and seem to have been well received by secondary school students and local people alike. The Centre for Popular Education (CPE) has been operating in two phases: (a) a mass literacy programme, (b) an adult education programme, though in practice these objectives overlap. This initiative has been the vehicle for publicising other educational reforms so as to explain their objectives, and gather public undertaking and support. This was much boosted by a workshop run by Paulo Freire in 1980 under the title of work Study Approach for Community Education, which served to illustrate the essential integration of all the new initiatives as well as most of the old.

Expertise

Expertise is clearly at a premium, especially when so many reforms are being attempted, and it was deemed necessary to completely restructure the teacher education process in Grenada. The National In-Service Teacher Education Programme (NISTEP) works under the slogan "A new kind of teacher for the new society", and operates a three-year programme of one day per week in college and four in the school and community. This has replaced the two year full-time college based course plus periods of teaching practice. It is expected that the new programme will not only bring about a fully qualified teaching force more quickly than the old, by being able to cater for larger numbers, but also a new knowledge of and attitude to the rural environment. The Curriculum Development Unit is now housed in the College where one year full-time programmes for unqualified teachers over the age of 40 top up the expertise of that sector of the workforce. Some priority has been given to maintaining the traditional academic standards of the main secondary schools so as to provide a pool of higher level expertise for various sectors of the economy. Meantime much effort has been made to persuade Grenadian professionals overseas to return and lend their skills to the post-revolutionary programme.

Technology

There is also a premium on educational and other technology. The basic school fabric outside the secondary sector is very modest, but technical back-up for curriculum innovation at all levels from primary to adult is a priority in terms of stimulating attitudinal change and the acquisition of basic skills. The Curriculum Development Unit has produced much effective material on basic reprographic equipment, but for the wider thrusts such as the CPE, the printing and production of Grenadian materials in Cuba has been a major support. Within Grenada itself a considerable improvement of local expertise and an injection of new hardware is urgently needed, though the newly established local television service is of good technical quality and could become a valuable resource, given more reliable capacity for the generation of electricity.

10. SEYCHELLES

Seychelles is a multi-island republic scattered over the Indian Ocean but with a land area itself of only 280 sq km. Most of the population of 60,000 is on the main island of Mahe, the remaining few on neighbouring islands such as

Praslin, La Digue and Silhouette. Most of the archipelago is uninhabited. Despite being the second smallest of the sample in area and third smallest by population, Seychelles is about half way on the ranking of GNP per capita (US$1770 GNP per capita).

Institutions

A pre-school sector is developing for the four to five year olds, followed by the existing basic provision of nine years of schooling from 6-15. This is free but not yet fully compulsory because of the lack of facilities on some of the very small islands, and comprises 24 Government and one private school. Education from 15 plus is provided in a number of institutions, including the basic secondary school, teachers college, technical school and the National Youth Service. The last named is a controversial move designed to engender greater community and ideological commitment to the creation of a socialist society, whereby children of 15 plus are set apart in a special residential establishment. The curriculum of this exercise is very traditional and the facilities so far inadequate. Also in formation is a Polytechnic complex in which current secondary, technical, teacher education, maritime and nursing schools will be combined. There are also four craft training centres with the duel objective of responding to the tourist market and supporting the survival and revival of local culture.

Finance

Expenditure on education forms about 13 per cent of the national budget, more than half of which goes to the basic educational institutions. About 90 per cent of capital funds come from overseas aid sources.

Employment

Seychelles relies mainly on agriculture and tourism for its income, though there are small but developing manufacturing and service sectors. Altogether wage-earning employment is available for about 40 per cent of the population. The development of the Polytechnic and the National Youth Service should improve employment opportunities, at least in the short-term, and there have been some interesting initiatives such as the Dominic Savio Pilot Work Experience Scheme with a view to combating unemployment. There is little opportunity for emigration to work, though some Seychellois do go to India, East Africa and Australia. However, remittances are a very minor feature of the economy. Education has, therefore, to adjust swiftly to total employment possibilities.

Curriculum

The Ministry of Education is responsible for the primary curriculum and the certification of basic schooling. The country is trilingual (English, French and Creole), and so some subjects are taught in English (general science, mathematics and English itself), others in French (history, geography and French). Creole is increasingly accepted in the early years of schooling. There is a Research and Programmes Unit, and considerable interest in curriculum renewal, but local initiatives have been somewhat curtailed by

central editing and supervision. Attempts have been made to up-grade science syllabuses and methods, but island teachers are little involved thus illustrating the isolation of smaller components of a multi-island state. Otherwise In Service Education of Teachers (INSET) seems to have been neglected, despite the under-utilisation of the teachers college for initial training. While the curriculum of the work experience scheme already mentioned is enriched by the sandwich structure of the course, that of the National Youth Service appears to be very traditional and restrictive. Most secondary level programmes work to external examinations based in the Britain.

Expertise

Most primary and secondary teachers are trained, but there are some gaps in key subjects at the secondary and further education levels necessitating the use of expatriate expertise. The Ministry of Education sees further training for heads of schools and teacher trainers as a priority, linked with an INSET thrust. Liaison is replacing inspection. The overall aim is to develop sufficient local expertise to create and maintain comprehensive bilingual education. Overseas scholarships are now taken up in a wide range of donor countries, thus enriching the national stock of expertise. Teachers are a relatively small group - entire force being about 700 - so that staff development should be capable of speedy realisation.

Technology

Considerable effort has been made to improve technological back-up for schooling, as well as to develop technical and vocational education per se. Localisation of teaching material has begun at primary level. There is a Resource Centre, a Schools Broadcasting Unit in operation and a TV Unit developing, and a system of school libraries. Clearly this is an area of priority, but there are major problems in the maintenance and expert operation of electronic equipment, given the rapid obsolescence of such hardware.

11. KIRIBATI

Similar in population total (c 59,000) to Seychelles, Kiribati is also an archepelago state, though with a land area (886 sq km) three times the size of Seychelles . Its economic level is very modest at about US$770 per capita per annum.

Institutions

Primary education is now available from the age of 6 to 11, but the figures are distorted by repeaters. All but five of the 100 or so primary schools are now government owned and run. More than 50 of these are single teacher schools with an average of over 45 pupils each - a result of extreme island scatter and isolation. About 85 per cent of the 12-14 age group continue in primary school, the others having been selected for one of the secondary schools.

Selection for secondary school takes place at 11 plus, there being five such schools, with a combined enrolment of about 950 pupils. By far the largest

and most prestigious is the King George V/Elaine Bernacchi School with a roll of nearly 400. It is the only secondary school with a sixth year.

In 1977 the Community High School Project began with the aim of providing post-primary practical education for those not selected for secondary schools. On the few islands involved in the project - Makin, Maiana, Tabiteuea N. and Tamana - the initiative was rejected. The islands saw these schools as being inadequate, both in relation to the academic secondary schools and in respect of local community needs. The schools now offer a mixture of post-primary courses some traditionally academic, some more practically oriented.

Post-school provision comprises Tarawa Teachers College, a boarding college with very limited capacity (about 100 students and ten staff); Tarawa Technical Institute (Betio), with about 500 students mostly on short courses; and the Marine Training School (Betio), which provides short courses for three intakes per annum of about 70 each. Higher education has to be sought overseas, mainly in Fiji. It is estimated that by 1988 Kiribati needs to have produced 325 people with higher education qualifications for its higher level manpower requirements.

Finance

Overseas aid comprises a high percentage of the education budget, but it is sometimes considered that this is disproportionately spent on the prestigious secondary sector. With the development of universal primary education, a trained teaching force, and a high birth rate, teachers' salaries are becoming an increasing burden.

Employment

Kiribati has little soil, an unreliable rainfall, and limited scope for entrpreneurial activity. Most of its income is derived from fish, coconuts, tourism and the remittances of seamen, of whom there are 1,200 working mainly in the Pacific. Remittances are much favoured by the mass of the population because they come direct from the wage earner to the family without Government intervention. Hence the strong support evident in the community for the Marine Training School. A German consortium of shipping lines serving the area takes nearly all the output of the school. The only possible potential for further economic development are the marine resources - there being very few modern sector jobs and virtually no scope for manufacturing or agriculuture. Tarawa Technical Institute is placing particular emphasis on island community needs. A Rural Training Centre is being developed by the Institute to respond to these needs.

Curriculum

There is a curriculum development unit in Tarawa Teacher Training College, advised by the college staff, whose main thrust is towards providing materials for the upper primary level. The unit has a useful capacity for the size of the country, but little or no contact with similar units elsewhere in the South Pacific. The few one week courses offered for teachers in the outer islands present a major logistical problem in getting new ideas and materials across, physically and pedagogically. The elders of local communities in Kiribati are

very influential and may constrain educational officials and initiatives, including new components of curricula. In this way the locally orientated curricula suggested for the Community High School was rejected in favour of the distant but prestigious academicism of the main secondary school.

Expertise

The teachers college is very small, with a target of 25 students for each year of its new three year course. This was extended from two years to slow the rate of production and improve the quality. There is also a one year upgrading course for unqualified teachers, and a one year conversion course from primary to high school teaching. Only about 45 per cent of primary teachers are fully trained and a further 30 per cent partially so. In addition to the problems facing the single teacher school in terms of range of expertise required, the secondary schools also require most of their staff to operate in several subject areas.

In-service training is very difficult to operate, though the newly developed Rural Training and Development Centre at the Tarawa Technical Institute has been established to help train out-island community leaders and may be seen as an in-service exercise in non-formal education.

Technology

Quite apart from the usual problems of maintaining facilities and equipment, there arises in the case of Kiribati extreme problems of supply. There is a very long delay in receiving vital spare parts, and even books. However, the Tarawa Technical Institute has a language learning facility, and distance teaching is being considered within the island group and the region.

12. TUVALU

Tuvalu, like Kiribati a multi-island nation in the South Pacific, is the final country in the sample. Smallest by far in population total (9,000) it represents a demographic scale tiny even by contrast with Kiribati and Seychelles, but which has other representatives in the non-Independent Commonwealth such as the Cayman islands, Montserrat and the Turks and Caicos Islands. In terms of economic level, Tuvalu is also near the bottom of the sample at about US$570 GNP per annum. It has a surface area of only 28 sq km. Nonetheless this nation of nine island communities has a keen and active involvement in education.

Institutions

Each community in Tuvalu has a primary school to which is or will be attached a Community Training Centre (CTC). Most primary pupils do not proceed to the secondary school, but stay for CTC courses. These new courses have required curriculum innovation. Each CTC is constructed on a standard pattern: multi-purpose workshop (boys), housecraft room (girls), and a storeroom. The first opened on Vaitapu in 1981 and by the end of 1983 they should all be in operation.

The secondary sector, to which about 20 per cent of primary pupils proceed, aims to meet government manpower needs especially at middle management level. There is also a Marine Training School preparing boys for a career with shipping lines. The small number of graduates who emerge from the secondary sector enter the University of the South Pacific or universities in Australia and New Zealand.

Finance

Not surprisingly most of the education budget goes to primary education, and the major item overall is teachers' salaries. The Community Training Centres are being funded by New Zealand, following an ILO feasibility survey. Indeed all capital expenditure throughout the system derives from aid sources, likewise scholarships for higher education overseas.

Employment

Employment in Tuvalu is very restricted in its range. The environment provides a low resource endownment and this engenders a keen interest in education as a potential resolver of the problem, either by assisting the realisation of a locally based subsistence economy at as high a level as possible, or by assisting the possibilities for emigration. Both aspects are clearly reflected in educational policy, the former in respect of the Community Training Centres, the latter as stated in the Country Paper presented by Tuvalu to the Eighth Commonwealth Education Conference in 1980 in respect of educated manpower:

> "Efforts are being made to seek overseas employment for them, thus making our educated manpower force a potential commodity for export".

In fact only about 12 per cent of the population is wage-earning, the most important area being seamanship, with nearly one-quarter of the national income derived from remittances, mostly of sailors. The capital, Funafuti, contains comparatively large numbers of young unemployed persons, hence the very keen efforts to develop and concentrate on rural skills in the CTCs.

Curriculum

Concentration on rural life and culture is to be enhanced by the decision to use the vernacular for primary classes 1 - 5. However this then conflicts with external forces when the class 6 entrance examination to secondary school has to be taken in English, thus favouring students in Funafuti. The secondary curriculum content is almost totally dependent, using the Kiribati Programme for classes 1 and 2 and the Fiji School Certificate thereafter. In the CTCs there is a strong emphasis on skills training relevant to the particular local environment, though some local resistance to this idea is evident.

It would appear that a series of short-term initiatives works best both at school level curriculum change and also in the non-formal sphere; successful workshops have been held for example on welfare, garbage and sanitation.

The Ministry of Education has set up a curriculum unit which has tended to concentrate on school subjects rather than the wider issue of the relationship between curriculum and economy. The lack of a teachers college also works against curriculum change in association with INSET.

Expertise

There are only about 40 teachers, all qualified and nearly a third of whom are expatriates operating in the one secondary school. It is intended to localise the secondary teaching force. Expertise for INSET comes from periodic involvement with the University of the South Pacific, though INSET has been provided for the staff of the eight CTCs in advance of their opening. Given the objectives of development, the local expertise of small remote communities and families will, hopefully, be utilised to maximum effect.

Technology

Not surprisingly the level of technological back-up for education is extremely limited, and a high level of dependency exists for both books and equipment. The curriculum unit is unable to produce its own materials. Most materials are imported and take an inordinately long time to reach Tuvalu. There is a small library on each island.

APPENDIX C

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B. Commonwealth Secretariat publications

C. Other publications

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