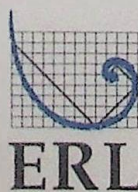


Falkland Islands Development Corporation

Falkland Islands Long Term Economic Development Study

November 1987

Environmental Resources Limited
106 Gloucester Place, London W1H 3DB
Telephone 01-486 1211
Telex 296359 ERL G
Facsimile 01-935 8355



DONATED TO
THE FALKLAND ISLANDS ARCHIVES
BY MR & MRS L G BLAKE
OF HILL COVE
MARCH 1999

Administrative
Falkland Islands
Government
St. John's
Road
St. John's
Antigua
Barbados
The Falkland Islands
Government
St. John's
Road
St. John's
Antigua
Barbados

The General Manager
Falkland Islands Development Corporation
Stanley
Falkland Islands

30 November 1987

FALKLAND ISLANDS LONG TERM
ECONOMIC DEVELOPMENT
STUDY



Dear Sir,

Long Term Economic Development Strategy
Interim Report

It is with great pleasure that we are sending you this Interim Report.

As you will recall, the purpose of this document is to examine the implications of a set of wide ranging possible "options" for the Falkland Islands. In this Interim Report, in very general terms and will, I hope, provide a stimulus for people in the Falkland Islands to think long and hard about the kind of future they would like to see for themselves. I shall be in the Falkland Islands again in January 1988 when I can listen to these thoughts and then produce a final Report which will incorporate these reactions and go into far greater detail about the implications for the very important issues which confront Government today.

OPTIONS

Finally, Hilary and I would like to thank you, the staff of FIDC, and all the very many people in both Stanley and Camp who we met, for making our stay in the Falkland Islands such a pleasant one.

Yours faithfully

Peter J. Fryer

Administrative
Falkland Islands
Government
St. John's
Road
St. John's
Antigua
Barbados
The Falkland Islands
Government
St. John's
Road
St. John's
Antigua
Barbados

The General Manager
Falkland Islands Development Corporation
Stanley
Falkland Islands

30 November 1987



Dear Sir

Long Term Economic Development Strategy
Interim Report

It is with great pleasure that we are sending you this Interim Report.

As you will recall, the purpose of this document is to examine the implications of a set of widely contrasted possible 'futures' for the Falkland Islands. It has been written in very general terms and will, I hope, provide a stimulus for people in the Falkland Islands to think long and hard about the kind of future they would like to see for themselves. I shall be in the Falkland Islands again in January 1988 when I can listen to these thoughts and then produce a Final Report which will incorporate these reactions and go into far greater detail about the implications for the many important issues which confront Government today.

Finally, Hilary and I would like to thank you, the staff of FIDC, and all the very many people in both Stanley and Camp who we met, for making our stay in the Falkland Islands such a pleasant one.

Yours faithfully

Peter J Prynn

Directors
Florence Fisher BSC Chairman
Robin Bidwell MA, PhD Managing
Paul H Woodruff PE
Colin I Parker BSC
Peter J Prynn MA

Technical directors
David C Wilson MA, D PHIL, C CH
Eric Turner MSC, C ENG
Karen Raymond MSC
Mark R Day BSC

Principal associates
W David Conn MA, D PHIL
Frank Dean BSC, C ENG
Dennis Gilbert MSC, C ENG
Anne EM Gordon MA
Brian W Gulley C ENG
Sandra Mason BA
Lawrence E Suskind PhD
Brenda Thake BSC
Alan H Williams BSC, C ENG

Registered office
100 Gloucester Place
London W1H 3DB

Registered number
1014022 England

Offices in
Hong Kong
USA
and Continental Europe

CONTENTS

	Page
EXECUTIVE SUMMARY	1
I THE CONTEXT FOR THE STUDY	4
1.1 Introduction	4
1.2 National Income	5
1.3 Structure of the Economy	7
1.4 Public Finances	10
II OBJECTIVES OF THE DEVELOPMENT STRATEGY	13
2.1 Introduction	13
2.2 Special Features of Falkland Economy	14
2.3 Parallels	15
2.4 Population and the Economic Viability of the Falkland Islands	16
2.5 Alternatives for the Falkland Islands	17
III ALTERNATIVE FUTURE DEVELOPMENT STRATEGIES	20
3.1 Introduction	20
3.2 The Methodology	21
3.3 The Scenarios	22
IV IMPLICATIONS FOR THE FUTURE	25
4.1 Gross National Product	25
4.2 Population and Employment	25
4.3 Housing and Development Investment	29
4.4 Social Issues	31
4.5 Development Projects	32
V THE WAY AHEAD	34
 <u>Appendices</u>	
APPENDIX ONE	
Methodology for Forecasting	38
APPENDIX TWO	
Final Report - Proposed Content	42
APPENDIX THREE	
List of People contacted during visit to Falkland Islands	43

SUMMARY

1. The Falkland Islands is in an historically unique situation. The potential annual yield of over £15 million revenue each year from fishing licenses has transformed the Islands overnight from a barely viable economy to one strong enough to determine its own economic and social priorities from a position of strength rather than dependency.
2. The past five years have already seen significant economic change. Aid inflows, structural changes through land redistribution programmes, and the injection of investment funds through FIDC have been overlaid by the presence of contract workers and the military garrison to give the economy a buoyancy which was unimaginable in the late 1970s.
3. GNP rose from £4.48 million in 1980 to £9.89 million in 1986 which represented a real growth of about 5 per cent per annum and a GNP per head of £5,200 by 1986. But this growth has been dwarfed by the impact of the economic rent deriving from the off shore fishery which has swept GNP in 1987 up to £30.7 million.
4. This upsurge has been already accompanied by a surge in public expenditure. Aid flows into the economy since 1982 of some £40 million (including rehabilitation funds) had supported a development expenditure programme of about £7 million per year to 1985/6. Now with the fishing revenues, government development expenditure rose to £10.3 million in 1986/7.

Table A

	1980	1986	1987
GNP (current prices)	4.48	9.89	30.20
GNP (constant 1986 prices)	7.02	9.89	29.8
Growth		5.3 % pa	+212 %
GDP per head (£) (constant prices)	3400	4140	8350

5. A consequence of increased investment expenditure between 1982-86 has been intense pressure on the labour force; new economic activities have drawn many women into the labour force and an acute shortage of personnel of all skill levels has led to a growing dependance on immigrants, and short term contract personnel.

6. The new economic climate offers many opportunities and risks. The Falkland Islands can make a genuine choice as to their future development strategy and in this exercise we have attempted to outline some of the implications of alternative growth strategies. Based on three scenarios, key implications in terms of population size, housing need, and development investments have been highlighted, each with quite distinct consequences.
7. The three scenarios are based on the following emphases of approach:
- Scenario I Continued high levels of investment in on-shore fisheries development - high growth
- Scenario II Investment emphasis on non fishery sectors-agriculture, tourism, etc., - while maintaining fisheries essentially as an off-shore enclave - medium high growth
- Scenario III Investment emphasis on infrastructure and social expenditure through Government, with the surplus invested in international financial markets to provide and secure funds - medium growth
8. Because of existing economic momentum in the Falkland Islands, economic and population growth over the next few years is likely to come in any case; overlaid on this, each scenario will impose further growth and constraints. The following table summarises the impact of each scenario after five and ten years.

Table B Impact of alternative growth scenarios							
	Estimated 1986	Scenario I		Scenario II		Scenario III	
		1992	1997	1992	1997	1992	1997
GNP £m	9.9	44.0	52.1	38.8	45.8	43.2	44.7
Population	1900	2800	3500	2800	3300	2500	2700
Average wages/ earnings £pa	6000	12500	13100	12300	13400	11800	12100
Annual housing programme (units)		70	40	70	40	30	15
Investment funds for development and infrastruc- ture p.a. ¹ £m	10.0	3.5	4.4	4.2	3.0	4.0	7.0
Development expenditure £ per capita p.a.	5250	1250	1250	1500	910	1600	2600

(1) After investment in housing and basic infrastructure to keep pace with population growth.

9. Investment will generate new jobs; because of the intense pressure on employment at present, dependence on immigrant and contract personnel will, if anything, increase, particularly in the high growth strategies.
10. Also the high growth strategies absorb a large proportion of potential development and infrastructure funds with the result that in fact the lower growth strategy yields greater aggregate development investment for a smaller population, ensuring that the benefits are more focussed on the indigenous Falkland Islands population.
11. High growth strategies are also high risk strategies; excessive investments in fisheries could merely shift the dependance of the Islands from one sector - sheep farming - to another - international fisheries - with the associated vulnerability of a mono-culture. But a lower growth path may offer too passive a development strategy - from the view point of the Islanders and HMG (who retain responsibility for defence of the Islands and have never yet asked for any contribution from the Falkland Islands for the cost of this). Nonetheless, a more cautious approach to the future may enable the Falkland Islanders to develop a more diverse and balanced and hence a stronger economy to provide at least an economic security undreamt of 10 years ago - and we think a combination of Scenarios II and III would best serve this end.
12. Nonetheless, the choice of economic development strategy belongs to the Falkland Islanders. It is our hope that this document will be distributed as widely as possible - reflecting at least our own attempts to canvass opinions and seek data from as many people in the Islands as possible. Out of this discussion will emerge, we hope, a consensus view embracing a high level of agreement on the way forward. Our next task will be to interpret this into a single development strategy in a readily implementable form within a clear policy framework.

1 THE CONTEXT FOR THE STUDY

1.1 Introduction

Many Reports have been written on the development of the Falkland Islands, most notably the two Shackleton Reports of 1976 and 1982, which set the tone for development over the past decade. These, previous studies have necessarily been set in a situation of limited opportunities, and plans have been based on the injection of aid funds from abroad into development projects of, at times, somewhat marginal economic viability.

Since the declaration of the Falklands Interim Conservation Zone (FICZ) in 1986, however, there has been a radical transformation of the economic scene in the Falklands, and a unique opportunity is presented to determine the future development pattern of the economy from a position of strength.

In very round terms, it would appear that Gross Domestic Product (GDP) has doubled between 1986 and 1987 from £8 million to some £16 million, that Gross National Product (GNP) has trebled, from £10 million to about £30 million and that Government revenue has increased nearly four fold, from £6 million to over £20 millions. Because of the speed at which this transformation has occurred, very little of the benefit has yet filtered down to affect the lives of ordinary people.

Equally, the speed of change, coupled with the necessity to make a whole range of urgent decisions on matters of immediate concern, means that very little thought has yet been given to the ultimate objectives to which this new found wealth should be applied, nor to the means of achieving those objectives, and many decisions have, perforce, been made on an ad hoc basis.

The purpose of the current study is to address these long term development objectives and set some policy framework for their achievement. As a first stage, this Interim Report merely examines widely contrasted scenarios for the future, and draws out some of their implications in economic, social and political terms. The Report is intended only as a discussion document and it is hoped that in the ensuing debate, opinion will crystallise around a widely held set of development objectives.

The Interim report is concerned with policy and strategy issues. It is drawn from visits to the Islands, some analysis and discussions with many people in the Islands. In embodying - hopefully - a consensus view of the way forward, the Final Report will contain more detailed sector by sector analysis as an essential component of a plan for implementation of the 'way forward'. Sectoral analysis is not the main purpose of this Interim Report.

A word of warning must be sounded at the outset. In the past, the Falkland Islands Government (FIG) has not maintained (nor, many would argue, has needed to maintain) even the most basic series of economic statistics. Thus, no figures exist on the value of imports

and exports, on national product, on disposable incomes and the many other factors which economic planners normally take for granted. The current study team has attempted to assemble sufficient data to estimate some of these figures but with limited success. In some cases adequate records simply have not been kept and in others, the pressures of day to day business are such that manpower could not be released to collate raw data existing only in confidential files. Thus, knowledge about the existing economy is sketchy and that about the interrelationship between economic variables is practically non-existent. Setting this situation to rights, is an urgent, though time consuming task.

In the remainder of this Section of the Report, we have briefly summarised such information as we have been able to glean on the current macro economic situation in the Falkland Islands. In Section 2, we have attempted to address the difficult issue of the appropriate philosophies which should underlie development in the very special circumstances of the Falkland Islands. Stemming from this discussion, Section 3 sets out three very sharply contrasted scenarios for future development strategy and in Section 4, the implication of these strategies are set out, in so far as they can be foreseen. Finally, in Section 5, we have made some suggestions as to how an acceptable strategy could be formulated from the three scenarios presented and have given some pointers to the way ahead.

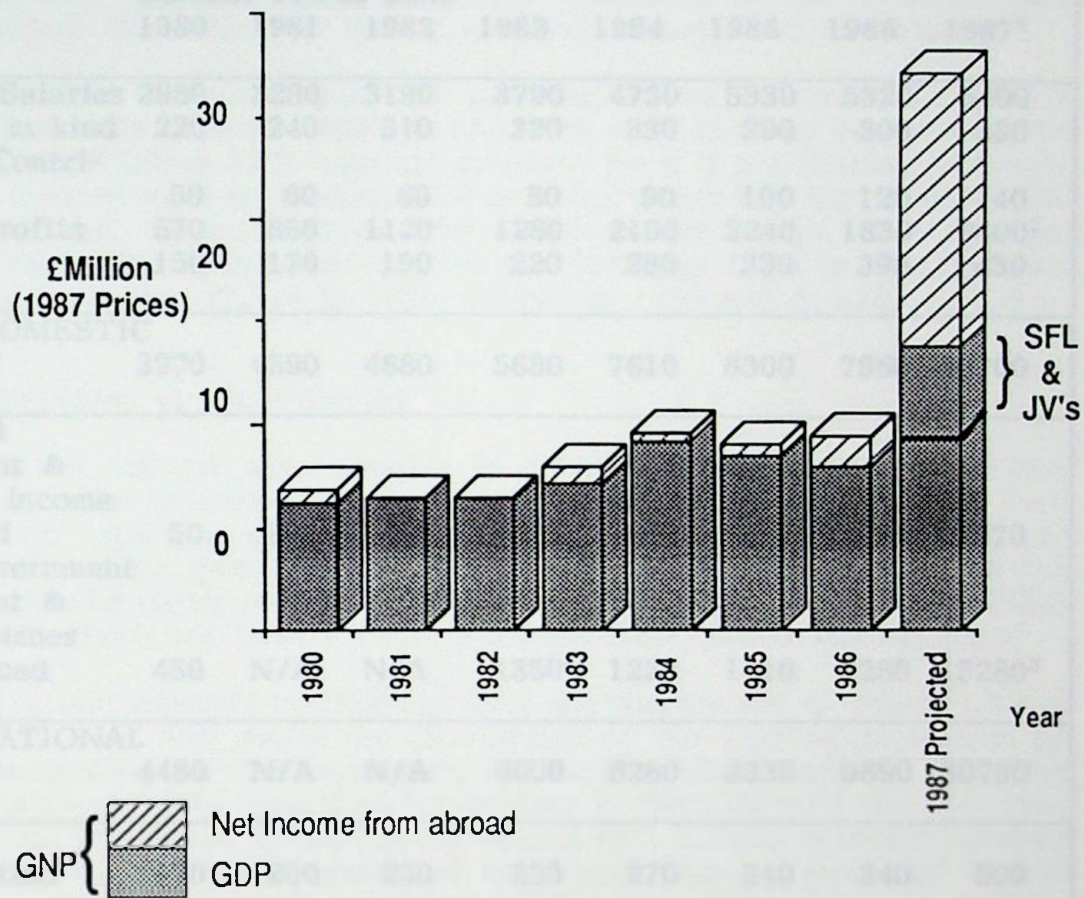
1.2 National Income

National Income is customarily measured in two ways: Gross Domestic Product (GDP), which is the sum of all incomes arising within a country from activities taking place within its territory; and Gross National Product (GNP) which adds to GDP the net incomes earned from abroad such as interest on investments, philatelic sales, etc. A further indicator, which can be important in the case of an economy such as the Falkland Islands which has in the past been a major recipient of overseas aid, adds aid flows onto GNP to give a measure of the total resources available.

Table 1.1 sets out our estimates of the current level of National Income, and its development over the past few years. It should be emphasised that these are very much estimates and are based on relatively fragmentary evidence and a number of rather heroic assumptions. The figures shown for 1986 are particularly suspect and those for 1987 are projections only and are included to give some idea of the relative impact of the revenues from fishing. These figures have been illustrated graphically in Figure 1.

This shows quite clearly that both GDP and GNP grew fairly steadily between 1980 and 1986 at average rates of about 4 per cent a year and 6 per cent a year respectively in real terms (i.e., with the effects of inflation eliminated). The rise was particularly marked between 1982 and 1984 and probably reflects the impact of the British garrison in Stanley and the construction workers at Mount Pleasant, both of whom injected substantial sums into the local

Figure 1
Falkland Islands National Income (Estimated)



Estimated National Income of the Falkland Islands								
Current Prices 1986								
	1980	1981	1982	1983	1984	1985	1986	1987*
Wages & Salaries	2900	3100	3190	3790	4730	5330	5500	10000
Payments in kind	200	240	310	320	330	290	300	300
Pension Contrib-								
utions	50	60	80	80	90	100	100	100
Trading Profits	570	580	1120	1280	2150	2240	1800	2000
Rent	70	100	190	220	280	330	300	300
GNP DOMESTIC	3970	4000	4580	5680	7610	8300	7900	13000
Less: Net								
Investment &								
property income								
in abroad	50	50	50	50	50	50	50	50
Plus: Government								
Investment &								
other income								
from abroad	430	430	430	430	430	430	430	430
CROSS NATIONAL								
PRODUCT	4480	N/A	N/A	6000	8090	8780	8760	13880
Less: Net								
Investment &								
property income								
in abroad	50	50	50	50	50	50	50	50
Plus: Government								
Investment &								
other income								
from abroad	430	430	430	430	430	430	430	430
NATIONAL								
INCOME	4310	N/A	N/A	6370	8510	9260	9640	14810
National Income								
per head	2350	N/A	N/A	3400	4260	4730	4980	10000
Aid Flow	N/A	N/A	N/A	8040	7000	8010	8500	8040
RESOURCES								
AVAILABLE	N/A	N/A	N/A	13410	15610	17490	19030	35340
In constant 1987 prices								
GDP	8210	8400	8450	7110	8990	8700	7940	14300
GDP per head	3400	3500	3470	3010	4720	4580	4140	5250
GNP	6730	-	-	7270	9390	9420	8900	30200
GNP per head	3730	-	-	4280	4970	4950	4970	13100

Sources: FIG, Consultants Estimates

Notes:

1. Projected
2. Includes £7.2 million for Stanley Fisheries and the Joint Ventures controlled by it
3. Includes £12.6 million of revenue from Stanley Harbour

Table 1.1 Estimated National Income of the Falkland Islands								
	Current Prices £000							
	1980	1981	1982	1983	1984	1985	1986	1987 ¹
Wages & Salaries	2980	3280	3190	3790	4730	5330	5320	6400
Payments in kind	220	240	310	320	330	290	300	330
Pensions Contri- butions	50	60	60	80	90	100	120	140
Trading Profits	570	850	1120	1280	2190	2240	1830	9400 ²
Rents	150	170	190	220	280	330	390	430
GROSS DOMESTIC PRODUCT	3970	4590	4880	5680	7610	8300	7960	16700
Less: Net investment & property income to abroad	50	360	480	420	550	390	350	1270
Plus: Government investment & other incomes from abroad	450	N/A	N/A	1350	1220	1410	2280	15280 ³
GROSS NATIONAL PRODUCT	4480	N/A	N/A	6600	8280	9330	9890	30700
Less: Depreciation	170	200	230	230	270	340	340	500
NATIONAL INCOME	4310	N/A	N/A	6370	8010	8980	9550	30200
National Income per head	2380	N/A	N/A	3420	4260	4730	4980	15000
Aid Flow	N/A	N/A	N/A	6040	7000	8510	9500	8040
RESOURCES AVAILABLE	N/A	N/A	N/A	12410	15010	17490	19650	38240
In constant 1987 prices								
GDP	6210	6400	6420	7110	8890	8700	7940	16700
GDP per head	3400	3500	3470	3810	4720	4580	4140	8350
GNP	6730	-	-	7970	9360	9420	9520	30200
GNP per head	3710	-	-	4280	4970	4960	4970	15100

Source: FIG, Consultants Estimates

Notes

1. Projected
2. Includes £7.2 million for Stanley Fisheries and the Joint Ventures controlled by it
3. Includes £12.0 million of revenue from fishing licenses

economy. Equally the efforts of the Falkland Islands Development Corporation (FIDC) in stimulating and assisting with productive investment in the Islands have had a significant effect. Thus there already appeared to be a definite momentum in the economy even before the impact of fishing revenues transformed the scene.

We have estimated that GDP per head in the Falkland Islands rose from some £3,400 in 1980 to £4,140 in 1986 and may be some £8,350 in 1987 (all in 1987 constant prices). Even if the Stanley Fisheries revenues were eliminated, GDP per head would still have been £4,700 in 1987. This compares with a current UK figure of £7,600 per head. The comparable figures for GNP per head in the Falkland Islands were £3,710 in 1980, £4,950 in 1986 and £15,100 in 1987.

1.3 Structure of the Economy

It has not yet been possible to disaggregate the National Income estimates in sectoral terms. Nevertheless, the broad picture is very clear and is, perhaps, illustrated best by the breakdown of occupations given in the successive Census Reports. Although the evidence needs careful interpretation, there are strong suggestions that there has been a real structural shift within the economy.

The two censuses of 1980 and 1986 are summarised in Tables 1.2 and 1.3. The first shows the distribution of the working population by occupation for the two years, for Stanley, East Falkland and West Falkland. The most striking feature is that, despite the fact that total population in the Islands showed only a small increase between the two dates, the number of occupations quoted increased overall by about 200 or 18 per cent, with most of the increase in Port Stanley and East Falkland.

Furthermore, the sharpest increase has been in managerial and clerical positions in Stanley; more detailed analysis revealed that the biggest single increase was among managers and employing proprietors, which may reflect increased economic activity with a number of new business start-ups. The other growth area was among clerks, typists and service sector. Also, there was a significant increase among certain types of professionals - nurses and medical staff, reflecting the opening of the new hospital; and other professionals such as accountants and book-keepers, again a professional service associated with increasing economic activity.

The other major shift has been in the agricultural sector. The numbers of agricultural workers increased by 12 per cent over the period; in particular, the category described as 'farmers' more than doubled, from 21 to 59, an interesting measure of the impact of land redistribution. The only sector to show a decline has been among general laborers; it may be that with increasing opportunities some general laborers have moved into small businesses or have become more specialised.

Table 1.3 is even more interesting; overall, the economic activity rates among people in the Falkland Islands has increased quite strikingly, with males' participation rates reaching astonishingly high

Table 1.2
Falkland Islands: Occupations and Economic Activity, 1980, 1986

Activity/Occupation	Stanley 1980	1986	East Falkland 1980	1986	West Falkland 1980	1986	Total 1980	1986	% change
1. Professionnal & technical	75	98	10	15	10	13	95	126	+33
2. Managerial & Admin, Clerical, Govt	111	194	4	12	4	1	119	207	+74
3. Sales workers	35	40	6	-	1	-	42	40	-
4. Agricultural workers	16	13	114	133	76	85	286	231	+12
5. Craft & tradesmen	113	146	35	39	26	22	174	207	+19
6. Other workers	143	150	64	63	46	28	253	241	-5
Total Economically Active	493	641	233	262	163	149	889	1052	+18.2

Source: FIG Census Reports, 1980, 1986

Table 1.3
Economic Participation Rates in the Falkland Islands

	Stanley 1980	1986	East Falkland 1980	1986	West Falkland 1980	1986	Total 1980	1986
<u>FEMALE</u>								
Economically active	134	273	36	71	30	40	200	384
Total Population	500	605	186	158	135	121	821	884
ACTIVITY RATE	26.8%	45.1%	9.4%	44.9%	22.2%	33%	24.4%	43.4%
<u>MALE</u>								
Economically active	405	461	197	202	135	116	737	779
Total Population	550	626	255	228	187	140	992	994
ACTIVITY RATE	73.6%	73.6%	77.3%	88.6%	72.2%	82.9%	74.3%	78.4%

Source: FIG Census Reports, 1980, 1986

levels of nearly 80 per cent, and women's participation almost doubling from an average of around 25 per cent to over 40 per cent. There is a widespread phenomenon of dual employment in the Falkland Islands, and the absolute numbers do not necessarily reflect actual numbers of full time positions; but the shift in emphasis by sector, and the startling increase throughout the Islands of implied participation rates speaks of an economy where pressures of full employment are becoming more intense and the society appears to be working at some sort of saturation level.

There are no detailed breakdowns available of employment by sector (although we have made a broad estimate, see Section 4 below), but the increasingly intense activity levels and the structural shifts reinforce the evidence of a growing and dynamic economy which emerged from the National Income estimates.

1.4

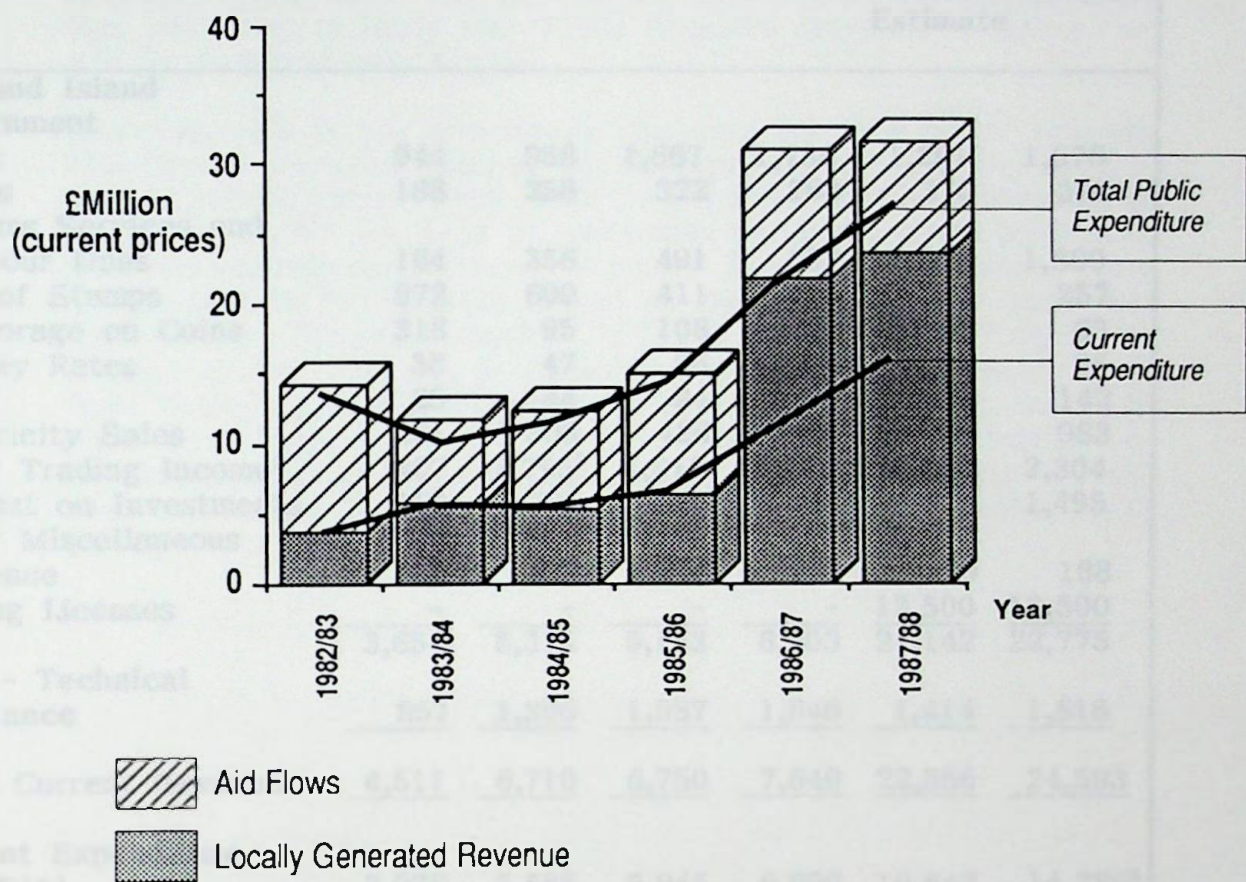
Public Finances

The impact of the FICZ and the subsequent inflow of revenue to the Falkland Islands has been even more dramatic in terms of Government Revenues than on any other sector. In the recent past, revenues have been sufficient to cover only a part of current public expenditures, the balance being provided in the form of OSAS supplements and direct technical assistance by the British Government through ODA. Capital expenditure has been at a high level throughout the period since the 1982 conflict, and this has been financed very largely by ODA through both the £15 million Rehabilitation Grant and later through the £31 million Development Aid Grant. These sources of aid have now been very largely used up and it is clear that, in future, the Falkland Islands will have to finance its development from its own sources of revenue.

Table 1.4 attempts to summarise the overall balance of public revenues and expenditures since 1982 in both current and capital accounts and the salient points are summarised in Figure 2. These show that in the early 1980s, FIG current revenue was insufficient to meet even all its current costs and technical assistance was required to meet the deficit. The level of capital expenditure was extremely high (in relation to resources available) averaging some £3,000-£4,000 per head of population per year. This reflected both the need to rehabilitate the damage caused during the conflict and a deliberate policy of trying to catch up on infrastructural needs which had been neglected for some time past.

In 1986/7 current public revenues increased dramatically from £6m to an estimated £21m and current expenditure also increased sharply, if not quite so dramatically from £6.7m in 1985/6, to £10.8m estimated for 1986/7 and £14.8m estimated for 1987/8. In large part, of course, this increase in current expenditure is accounted for by the need to administer and patrol the fishing zone (at an estimated cost of £4.6m in 1987/8). Even so, the underlying trend of current public expenditure is sharply rising, reflecting to some extent a release from a period of considerable stringency, partly the operating and maintenance costs of the new facilities being constructed (e.g., the hospital) and partly an increased level of payments to pensioners

Figure 2
Public Revenues and Expenditure in the Falkland Islands



Sources: FIC, Consultants Estimates
Notes:

1. Includes some internal Government sales from one Department to another
2. Includes final profit from Savings Bank
3. Excludes purchase of Dornier aircraft as shown in official estimates

Table 1.4 Public Expenditures and Revenues in the Falkland Islands						
	£000					
	1982/3	1983/4	1984/5	1985/6	1986/7 Revised Estimate	1987/8 Estimate
Falkland Island Government						
Taxes	944	958	1,667	1,736	1,291	1,578
Duties	188	258	322	268	370	370
Customs Services and Harbour Dues	164	356	491	692	1,802	1,800
Sale of Stamps	972	609	411	415	271	257
Seignorage on Coins	318	95	108	95	88	63
Stanley Rates	38	47	56	68	86	95
Rents	23	44	94	137	133	142
Electricity Sales	251	509	426	607	1,000	983
Other Trading Income ¹	407	1,795 ²	1,018	1,171	1,455	2,304
Interest on Investments	169	221	366	491	922	1,495
Other Miscellaneous Revenue	180	422	204	323	229	188
Fishing Licenses	-	-	-	-	13,500	13,500
	<u>3,654</u>	<u>5,314</u>	<u>5,163</u>	<u>6,003</u>	<u>21,142</u>	<u>22,775</u>
ODA - Technical Assistance	<u>857</u>	<u>1,396</u>	<u>1,587</u>	<u>1,646</u>	<u>1,414</u>	<u>1,818</u>
Total Current Revenue	<u>4,511</u>	<u>6,710</u>	<u>6,750</u>	<u>7,649</u>	<u>22,556</u>	<u>24,593</u>
Current Expenditure (inc T/A)	<u>3,976</u>	<u>5,585</u>	<u>5,945</u>	<u>6,690</u>	<u>10,842</u>	<u>14,785³</u>
Current Account Surplus	535	1,125	805	959	11,714	9,808
Capital Flows						
Falkland Islands Government	147	420	125	205	722	1,052
Capital Aid	<u>9,519</u>	<u>4,641</u>	<u>5,418</u>	<u>6,866</u>	<u>8,089</u>	<u>6,217</u>
Development Funds Available	<u>10,201</u>	<u>6,186</u>	<u>6,348</u>	<u>8,030</u>	<u>20,525</u>	<u>17,077</u>
Development Expenditure						
Locally Financed	268	556	378	680	2,175	5,915
Externally Financed	<u>9,519</u>	<u>4,641</u>	<u>5,418</u>	<u>6,866</u>	<u>8,089</u>	<u>6,217</u>
	<u>9,787</u>	<u>4,997</u>	<u>5,796</u>	<u>7,546</u>	<u>10,264</u>	<u>12,132</u>
Surplus Overall	<u>414</u>	<u>1,189</u>	<u>552</u>	<u>484</u>	<u>10,261</u>	<u>4,945</u>
Total Aid Flow	<u>10,376</u>	<u>6,037</u>	<u>7,005</u>	<u>8,512</u>	<u>9,503</u>	<u>8,035</u>
Surplus Without Aid	(9,962)	(4,848)	(6,453)	(8,028)	758	(3,090)

Source: FIG, Consultants Estimates

Notes:

1. Includes some internal Government sales from one Department to another
2. Includes final profit from Savings Bank
3. Excludes purchase of Dornier aircraft as shown in official estimates

and others in receipt of welfare payments.

Thus, the estimated position for 1987/8 shows total expenditure (including development expenditure) at a level considerably in excess (£3m or so) of total domestic revenues. With the tail off and eventual cessation of aid flow to be expected in the near future, this may seem to imply that FIG's financial freedom to manoeuvre will be comparatively limited.

However, this is not necessarily the case for two major reasons. The first is precisely because development expenditure has been so high in recent years. Even in 1987/8, a development programme of £5m (i.e., £2,500 per head of population per year) could have been financed entirely out of current income. Secondly, the figures given do not include the revenue earned by the Joint Venture companies controlled by Stanley Fisheries Ltd (SFL) which in 1986/7 amounted to some £7.2m. This may be regarded as part of the 'economic rent' from fishing (i.e., the difference between what is being and what could be charged for fishing licenses) and thus gives a measure of the minimum level of additional income which FIG could extract from the fishing industry, if it were decided to channel these funds through FIG rather than SFL.

2 OBJECTIVES OF THE DEVELOPMENT STRATEGY

2.1 Introduction

Whatever happens, the Falkland Islands in 1992 will be very different from 1986. The process of change is not new to Falkland Islanders - indeed there have been many structural changes in the economy and society since the 1970s. Erupting into a static, possibly declining society, the Conflict of 1982 with its dangers and loss of life forced individuals to re-appraise the meaning of being Falkland Islanders, and a new self confidence seems to have arisen from the successful outcome of the war.

Since 1982 fundamental social and economic developments have meant major changes in Falkland life, most specially in Camp, with the land redistribution programme. Overlaid on this have been other events which have had a strong impact on day to day life: the presence of many hundreds of construction workers on contracts to build the Mount Pleasant Airport and the road to Stanley: the garrison of several thousand men, which even though they are now moved out of Stanley give the place a very different atmosphere to the days when the defence force consisted of a handful of marines. And now the fisheries already have an impact - in the presence of Far Eastern fishermen in the streets of Stanley, in the dramatically higher wages which essentially unskilled labour can now attract through stevedoring and similar support services: in the expectations of the Falkland Islanders in the face of this extraordinary shift in their economic fortune.

But the changes of the past five years could be totally overshadowed by the changes to come - depending on the economic strategies to be pursued by the Falkland Islands. Reinvestment of a significant proportion of the fishing 'economic rent' into productive economic activities, whether this is on-shore fishery development or investment in the other economic sectors, could easily result in a near doubling of the population of the islands over the decade, with much of the increase within the next five years. Even with a more conservative strategy, where saving and reinvesting in infrastructure plays a more important role, the Islands' population is likely to increase by over 40 per cent over the decade.

With prospects as dramatic yet divergent as this, it is important to examine carefully what is meant by development and what are the objectives underlying the process. The Falkland Islands situation is probably unique, yet there are parallels from which lessons can be drawn. These allow a clearer look at development objectives, the extent to which there are alternative routes for attaining them, and the choices open to the Falkland Islands, and these issues are discussed in the rest of this section.

2.2 Special Features of Falkland Economy

Seen in a development context, there are a number of characteristics of the Falkland economy which combine to render the current situation virtually unique:

- the very small population base (still less than 2000) combined with over full employment mean that there are virtually no free labour resources to undertake the development task;
- immigrants with the appropriate skills could probably be attracted if sufficiently attractive incentives were offered, but this would imply a major programme of housing construction and other associated social and infrastructural facilities which would mop up a lot of the available investment funds for many years to come. Equally, such an influx of immigrants could have a major impact on the existing community and set up a whole series of social tensions;
- the major traditional economic activity, raising sheep for wool, is, at best, financially marginal and the impact of widely available, relatively highly paid jobs in Stanley together with attractive investment opportunities in the service sector could be the final blow to an industry which gives much of the underpinning to the traditional 'quality of life' enjoyed in the Falkland Islands in the past;
- the isolation of the Falkland Islands from major world markets and the long and inevitably expensive supply lines (given the comparatively small volumes of freight involved) mean that any economic activities based on imported raw materials have very little chance of success and even activities based on naturally occurring local resources have severe economic penalties when competing in world markets;
- the past history of a single crop economy, straightened economic circumstances and a widely dispersed population has resulted in a highly versatile work force, though with a relatively low level of skills appropriate to the new opportunities which now present themselves. Even those skills which exist are highly concentrated in specific sectors.

The implication is that it will be impossible for the Falkland Islands to undertake 'development' in the conventional sense without massive disruption to society, the economy and traditional values, and with the grave risk that many of the fruits of that development may accrue to newcomers, leaving the existing Falkland Islands as (admittedly rather well paid) 'drawers of water and hewers of wood'. In so far as parallels can be drawn, experiences elsewhere suggest that this is a real possibility.

2.3 Parallels

Although care must be taken in pursuing these parallels too far, since the situations are certainly not precisely the same, the experiences of the Gulf States and the impact of oil on their economies offer some insights. Here too, were a series of economically backward communities, with small populations, an underdeveloped infrastructure, an unskilled labour force, but with a strong cultural identity and a distinct and valued 'way of life'.

In almost all cases, the Gulf oil states have done three things with their new found wealth, with some differences of emphasis between the three strands from state to state: investment in downstream oil activities; investment in non oil activities such as agriculture and manufacturing industry, as well as a massive build up in housing and infrastructure; and accumulation of large funds invested in the major world financial centres, designed to provide a continuing income stream when oil resources are exhausted or to supplement income when oil prices are low.

These development strategies have only been made possible through the massive inflow of labour into the region: high level technical experts and technocrats from Western developed countries; management, supervisory and professional expatriates, typically from neighboring Arab countries; and, in vastly greater numbers, immigrants from India, Pakistan, Thailand and the Philippines on short term contracts housed, typically, in camps on bachelor status. The Gulf states are still, fifteen years on, quite highly dependent on a foreign labour force in almost all sectors of the economies.

An important consequence is that traditional cultural values have been severely eroded by the impact of Western values both in terms of consumerism and life styles. Traditional forces in society particularly the established religion, are extremely strong, however, and have to some extent acted as a brake. Even so, severe conflicts have broken out from time to time, which it has been possible to contain only because strong, authoritarian states have been able to take draconian actions without having to account to an electorate.

Another parallel is provided by the Shetland Islands and the impact of North Sea oil exploitation and, more specifically, of the construction of the oil terminal at Sullom Voe. In some ways this offers a closer parallel to the Falkland Islands than Gulf states, because of the similarity of cultural values, the sheep farming economy and the previous dependence on British Government funds. However, here too comparisons must not be pressed too far because of the completely different relationship of the Shetland Islands to HMG and central Government finances and because of the quite different population levels, state of infrastructure and ease of communication with major European markets.

The initial impact of Sullom Voe, in spite of vigorous and largely successful efforts to segregate construction and other workers on the site from the local community, was a substantial increase in employment opportunities, particularly for women, which had a

somewhat negative effect on local agriculture and traditional activities such as home knitting and fish processing. Women's participation in the Falkland labour force has already increased significantly. There was also a significant movement of population, with some 6,000 migrants largely from the mainland of UK moving into Shetland on a permanent or semi permanent basis. The Shetland local authority also created a Special Fund into which funds were paid to be used for longer term development activities.

As the effects of Sullom Voe have started to decline in recent years, these development funds have been applied to development projects such as knitting centres and fish processing plants, designed to restart traditional activities on a more modern and efficient basis and some success has been achieved here. More interestingly, surplus money earned by locally based workers during the boom years has been saved and is now being invested back into the local economy, often into agriculture, which is now enjoying a resurgence and a significant diversification out of sheep into higher value added activities.

In both the Gulf and Shetland, the ability to translate a new economic resource into development has depended on large scale immigration, which in itself can have as profound an impact on people's lives as a sudden increase in wealth. The impact is not necessarily negative - in the Shetland Islands it is felt that new immigrants are bringing a vitality and quality of leadership to local social and recreational activities, which have given a measurable improvement to the quality of life. But changing the long term structure of the population will inevitably have an impact on the prevailing value systems, expectations and culture of the society.

2.4 Population and the Economic Viability of the Falkland Islands

Indeed, the question of population size is widely perceived as crucial for the Falkland Islands. A central objective of development strategy must be economic viability, and this is often linked with the population level. The question is often posed in the form 'Can a territory with a population of less than 2,000 be viable?' or 'How big do we have to become to be viable?'.

This is a difficult question to address since it clearly encompasses more than pure economic viability in its strictest form. In purely economic terms viability refers only to the ability of a community to generate sufficient income to provide its citizens with an acceptable way of life and its Government with sufficient revenue to finance the services demanded by those citizens. Prior to 1986, it was indeed debatable as to whether the economy was viable in this sense, as evidenced by the large in- flow of aid funds and the relatively low level of incomes. Since the declaration of the FICZ, though, the additional revenues flowing into the territory from fishing licenses provide more than enough to satisfy the reasonable needs of the population.

This does not make the economy self sufficient, but that is an entirely different question. Virtually all economies purchase from

other countries those goods which can be produced more efficiently and cheaply elsewhere. The Falkland Islands will continue to require to import large proportions of its food, energy, consumer goods and construction materials, as well as a wide variety of specialist skills and services. But the funds are now being generated within the domestic economy to afford this.

Thus economic viability is no longer a problem. What may be behind the question though, is the equally important issue of political viability. The Falkland Islands as a Dependent Territory still relies heavily on the British Government for its defence needs and for its international representation. These are burdens which a community of less than 2,000 could hardly assume on its own, given the nature of the on going dispute with Argentina concerning the sovereignty of the Falklands. The extent to which the size of the population of the Islands and its degree of economic viability bears on these wider issues, is a matter of political judgement beyond the competence of the current writers.

Suffice it to say that some commentators have linked the overall level of population with the legitimacy of British sovereignty and with the determination of the British Government to defend these rights. To that extent the growth of population in itself could be seen as a development objective. Equally, the form of future development could be seen as having a political dimension. The greater the degree to which Falkland Islanders were earning their own living from the natural resources of the Islands, the stronger would be their claim to legitimacy. On the other hand, if in order to exploit these resources, it were necessary to introduce a large number of expatriate workers then it is hard to see in which way the claim is reinforced.

It is certain that development in the Falkland Islands could draw in immigrants of all three types - professional and technical, management and supervisory (a middle class) and less skilled laborers, domestics, etc. But the numbers are directly linked to the economic strategy followed rather than any notion of viability, and indeed the question of population size may be seen as a crucial factor in opting for a particular set of development strategies.

2.5

Alternatives for the Falkland Islands

A set of objectives for economic development might incorporate all of the following proposals:

- maximise growth of national income
- maximise growth of per capita income
- ensure an equitable distribution of incomes
- ensure a stable and secure future development path
- preservation and enhancement of quality of life
- conservation of the natural environment
- preservation and enhancement of Falklands cultural values
- to ensure viability of the islands.
- broaden the diversity of economic activity

Other specific objectives could include maintaining a balance between Camp and Stanley; improving social welfare and providing better care for the elderly and a more certain welfare safety net to cope with illness, accident or other chances of fate.

In the space of less than a year, the barely viable Falkland Islands economy has been transformed by a massive flow of funds from overseas accruing from the exploitation by foreigners of a Falkland Islands natural resource. The key questions now facing the Islands are how best to use these resources in order to achieve the development objectives which are seen as having the greatest importance. The choices encompass both the objectives and the means of realising them.

To put these issues in their starkest light, it may be worth considering, if only briefly, another, non development orientated scenario. Current Government revenues from fishing amount to £12 million a year, and it seems fairly clear from looking at the Joint Venture revenues controlled by SFL, that this could be raised to £20 million a year, if it were thought to be appropriate. Together with other external sources of revenue, this would give FIG a total disposable sum of some £25 million pounds a year.

It would be at least theoretically possible for FIG to retain, say, £14 million a year to maintain the services it already provides, and distribute the other £12 million a year on a pro rata basis to all citizens. This would give the current population a tax free, unearned income of some £6,000 per head, or say £24,000 a year to a typical family of two adults and two children.

Now, this scenario is totally theoretical, and probably quite unacceptable for a whole variety of reasons. An indolent society, serviced by the labour of immigrant third country nationals, may well be seen as morally abhorrent, ethically vacuous and certainly not worth defending free of charge by the British Government. But it perhaps underlines the importance of the balance between social, economic and political factors, and sets some kind of benchmark against which other scenarios should be measured.

So far the new funds have remained largely in the Government sector. Thus, the key questions for the future are: How should Government deal with its massive surplus on current account? and, What are the implications of the various alternatives open to it?

In principle, there are four things which a Government can do with a current account surplus:

- o Reduce revenues - for example, by reducing taxation or by supplying services at less than cost e.g., transport, housing, electricity, telephones, etc.
- o Increase current expenditure - this would encompass a wide range of measures from increasing transfer payments such as pensions, family allowances and other welfare payments, to raising the quality of social services provided (health, education, etc.), to increasing grants and subsidies

of local industries, through ultimately to simply distributing money (in the form of some sort of 'social dividend') to all citizens.

- o Increase capital expenditure - this could be either by investing in a wide range of much needed infrastructure (e.g., roads, airstrips, telecommunications, schools, leisure and recreation facilities, etc., etc.) or by channelling capital into productive investment either in the fisheries sector itself or in agriculture and agriculture related activities.
- o Accumulate a surplus fund, which could be placed in the financial markets of the world to provide both a further source of income and a buffer against unforeseen incidents in the future which may reduce income from fishing.

At the moment, Government is doing all four of these things simultaneously and undoubtedly any sensible strategy for the future will continue to draw on elements of all four of these strands. The decisions which need to be made concern the balance between the four, and these will have major differences in the social, political and economic future of the Islands.

The Falkland Islands are indeed uniquely placed in having a real opportunity to shape their economic future from a position of strength. In order to help in confronting the bewildering variety of choices which are available as between these various options, this Report has concentrated on examining the likely consequences of three widely contrasted strategies which focus largely on the different emphases to be given to the money available for investment. Three different scenarios have been developed with respect to the capital expenditure:

- The major thrust is investment in the commercial development of the fisheries sector and the infrastructure required to develop it.
- The major thrust is investment in the commercial development of the non fisheries sector in the Falkland Islands and the infrastructure necessary to support this.
- There is a substantial investment in infrastructure, but the balance of funds are retained and invested in the London market.

These three scenarios are developed in some greater detail in Section 3 below and their implications traced out and discussed in Section 4.

3 ALTERNATIVE FUTURE DEVELOPMENT STRATEGIES

3.1 Introduction

Crystal ball gazing is the name of this particular exercise; bits of the future will remain hazy, and like all stories of the future it will be impossible to see all the ramifications, but the broad outlines of the story stand out clearly even in a simplified form, a schematic representation of how things will really turn out under alternative strategies.

Thus, although not all the details are clear, it is possible to paint a plausible picture of the Falkland Islands in five or ten years time depending on the types of policies followed and the priority given to alternative aspects of development - long term financial security, or perhaps high growth, the wish to build a diverse economy against the desire to maximise the development and integration of the fisheries sector: the need for improved social services and other infrastructure and real concern about the impact of rapidly increasing population in the islands. The importance of these issues underlies the selection of the three schematic development strategies for the Islands, which attempt to describe the relationships between decision and outcome, and provide a framework for deciding on the optimal combination of policies and priorities for the Falkland Islands in this unusual historical circumstance.

The three scenarios each propose a concentration on a different aspect of potential economic development:

Scenario I looks at likely development in the Falkland Islands if a major portion of private sector investment is retained in the private sector for reinvestment in on-shore fisheries, processing and support plant and in off-shore developments including a Falkland Islands fleet. In broad terms, this represents a continuation of the policies which have been pursued since the declaration of the FICZ, with a significant proportion of the potential revenues being channelled into the private sector for reinvestment in the fisheries sector, with Stanley Fisheries Ltd providing the mechanism.

Scenario II retains a major role for the private sector but concentrates in investment in non-fisheries sectors - in traditional agriculture, in industrial development, tourism and in fisheries only as a part of a more diversified approach.

Finally, Scenario III retains the driving power in the hands of the Government sector, using a part of the fisheries revenue for a programme of infrastructure development but investing the balance in international markets in order to provide a regular investment income and a growing fund for the financial security of the Islands. In this third case, the private sector has a less dynamic role and overall this scenario offers slower growth prospects.

Because the funds stimulating economic growth are common to all three strategies, and in terms of their absolute magnitude dominate the economy, the overall growth prospects, in terms of say GNP per head,

are fairly similar; the differences between the three strategies in the distribution of this resource, which can be assessed by looking at, for example:

- number of jobs generated by the investment in the economy;
- whether these jobs are likely to be filled by local or immigrant labour;
- the housing requirements for a growing labour force;
- the average wages/earnings accruing to Falkland Islanders;
- the range of infrastructure and social investments that are needed for the new population level and can be afforded;
- the resources available for infrastructure development after the immediate needs of a growing population have been met.

It is important to remember that there have already been many economic and social changes since 1982. As we have noted earlier, development expenditure per capital reached nearly £6,000 in 1987, a phenomenally high figure: and over the next five years, the momentum built up from past development expenditures will raise incomes locally and generate new economic activity independently of the impact of the new injection of finances from the fisheries sector. Furthermore, some decisions - and actions - have already been taken in respect of the fishery revenues whose effects must be incorporated into our look into the future

3.2

The Methodology

Before describing the assumptions defining the three scenarios and developing the pictures associated with each, we should explain the 'model' and the common factors taken to underlie all three situations. The paucity of economic and statistical data in the Falklands has imposed real constraints on our ability to model the economy, and on the level of sophistication brought into play, as discussed in our introductory chapter. But, we have developed a picture of GNP based on wages and profits earned in the Islands plus net Government revenues from abroad, and this has formed the base case for the projections into the future.

The growth in the economy derives from productive investments, and the value of trading profits retained in the economy is taken as a measure of the investible resource. All investments will in turn generate jobs. This is important, as the size of the labour force is, as is widely recognised, a major constraint on increased economic activity. Nonetheless, it is not possible to invest money without some jobs being generated, however hard one tries to bias the investment to more capital intensive projects. From analysis of, for example, planned investments in the fisheries sector, and of historical investments in the Falkland Islands, one can say that in round terms every £100,000 invested generates at least one full time job.

For each of the three scenarios, likely trading profits and reinvested funds are projected and the additional jobs generated by the investment calculated. Based on the estimate of GDP shown in Section 1, the overall resources in the economy are forecast, taking into account government revenues through license fees and harbour dues, investments

by fishery companies in joint ventures and revenues raised by government through personal and corporation tax. The forecasts are adjusted to take account of rising earnings by Falklanders and immigrants or contract employees, and yield a picture for each scenario of the Falkland Island economy in 1992 and in 1997. (The methodology is described in greater detail in Appendix 1.)

The final stage of the analysis is to consider the total investible resources in the economy; a mixture of public and private funds. The private sector investible funds are derived from the trading profits retained in the Falkland Islands; investible funds in the Government sector are estimated from the level of overseas revenues (fishing licenses, plus taxation revenues plus other revenues less Government's operating costs).

The size of development fund remaining after necessary housing and infrastructure investment directly associated with population growth can then be compared with the cost of development projects considered desirable in the Falklands - such as the projects in the present development pipeline - and with other ways of spending government revenues, through for example subsidies to agriculture or internal transport, or to tax reductions and increased pension payments. The model thus allows us to look at fundamental questions like - how much money is available? and how many people will there be? in a reasonably coherent and consistent way.

3.3 The Three Scenarios

Scenario I: Maximum development in the fisheries sector

The main features of this scenario are:

- maintain income from fishing licenses at about the current level;
- extract maximum 'economic rent' from fishing through joint venture fees, up to say £10 million per annum from 1988 onwards, for say five years;
- invest this income (via Stanley Fisheries and joint venture partners) in:
 - o shore based fishery development such as:
 - Adaptation of FIPASS and dredging Stanley harbour (£7-9 million)
 - Fish processing plants (£1 million)
 - Cold Storage (£2 million)
 - Bunkering, chandlery, water supply, lock up facilities etc. (say £2 million)
 - Ship repair yard and dry dock (£5 million)
 - Fishermans mission, hostels, stevedoring companies etc.

A total investment of £15 million plus

- o purchase or charter of trawlers and jiggers at around £2.5 million each
- the investment programme would concentrate on high yielding projects, earning an average of perhaps 20 per cent over the first five years, although the yield will decline to 12-15 per cent subsequently.
- because of the intense pressure on housing it is proposed that the fishery companies continue to invest a certain proportion of funds in housing at a rate of perhaps 20 units per year.
- the balance of the fishing license revenues remain in the government sector, as at present, and may be used, if available, for development expenditure or for revenue account transfers.
- total private sector investment over the next five years would be of the order of £47 million, net of housing, and about £30 million of this would be in the fisheries sector.
- this level of investment would generate between 400-500 new jobs in the Falkland Islands over the first five year period, resulting in a population of about 3,000 (excluding contract construction workers).

Scenario II: maintain fisheries as an enclave/off shore activity; concentrate investment on other economic sectors

In place of investment in the fisheries sector through Stanley Fisheries or similar mechanism, the equivalent funds are channelled into private sector productive investment in other economic sectors. The main features of this scenario are:

- the level of fishing license charges are adjusted upwards in place of the joint venture fee. The equivalent value to the joint venture fee is disbursed as investment funds for the private sector through an appropriate mechanism - such as FIDC or perhaps a Development Bank.
- the yield on investment would be lower than in Scenario 1, reflecting the longer term nature of investments in say agriculture, but it should still be possible to obtain real yield of 10 per cent, perhaps declining to 8 per cent over the decade.
- the balance of fisheries revenue accrues to the government sector, and the residual after other outgoings represents the potential fund for development expenditure.
- the total productive investment over five years would generate perhaps 400 new jobs; parallel to Scenario 1, some of the housing need would be met by the private sector,

again at a rate of about 20 dwelling units per year.

- over the period, some additional £29 million would be available for investment into traditional sectors: it is difficult to be precise about a sectoral split at this stage, but at least half this resource should be reinvested in agriculture. The areas and types of investment could include:
 - subsidies on inputs, particularly associated with re-seeding (fertiliser etc.)
 - higher grant assistance on capital equipment, from tractors to fencing
 - financial support for employing labour associated with increased productivity or diversification
 - investment in new products (market gardening, chickens, other products to supply off shore fishery market)
 - improvements and subsidy on internal transport
 - direct investment in new products.

Scenario III: investment fund placed in international markets

This scenario moves sharply away from the first two:

- fishing license fees are increased to replace the joint venture premium; a sum of about £10 million per year is invested overseas in international markets, and the balance retained in the economy for infrastructure investment or direct redistribution through revenue account, welfare supports, tax cuts, etc.
- the international investment fund earns a return of 8 per cent.
- because of the underlying momentum in the economy and the fisheries investment of 1986/7 there would still be an increase in employment, of about 200, over the first five years. Housing would be provided through government funds.
- with the increase in employment, the population in the Islands would rise to about 2,500 by 1992.
- over the period 1992-97, the same underlying patterns would be maintained, but generally there would be a slowing down in growth, a declining yield on productive investment and a slowing down of population growth.

By 1997, the population in the Islands would be of the order of 3,300-3,500 in Scenarios I and II, or 2,700 in Scenario III. Thus, whatever strategic decisions are taken at this stage, there will be dramatic changes in the Falkland Islands over the coming decade. In the next section we examine the implications of these scenarios in greater detail, and it becomes clear that the impact on the quality of life and indeed the nature of the Falkland Islands in each case is very different.

4 IMPLICATIONS FOR THE FUTURE

In this Section, we have set out the implications of the three scenarios under the following main headings:

- GNP and disposable incomes
- population and employment growth
- investment in housing and development
- social and political impacts

4.1 Gross National Product

The major implications of the three alternatives are spelt out in the Tables. Table 4.1 shows that although overall GNP grows rapidly in all three cases, to between £45-50 million by 1997, (compared with about £10 million in 1986), there are differences in its distribution. In Scenario I, GNP per head of population reaches £15,000 by 1997; in Scenario II, with a similar population growth and a similar emphasis on private sector productive investment in the domestic economy (but lower yields), per capita GNP is a little lower at around £14,000. By contrast, the lower population growth in Scenario III is reflected in higher per capita GNP of £17,000 rising to £18,000.

This only tells part of the story. The slower population growth of Scenario III results from saving a major proportion of the fisheries revenue in lower yielding international funds overseas, rather than investing in the productive sectors, as in Scenarios I and II. Less of the money is thus injected into the domestic economy, population increases to only 2,700 over the decade, and whereas average wages/earnings in the Islands may rise to over £13,000 in Scenarios I and II, in Scenario III the ceiling on average earnings is around £12,000. In other words, a greater proportion of the yield from the fisheries 'nest egg' is available for consumption in Scenarios I and II. But, against this must be set the value of the investment fund which by 1997 stands at nearly £100 million, a major safety net in case of a rainy day - or decade.

4.2 Population and Employment

Tables 4.2 and 4.3 compare the structure and distribution of the labour force and the population of the Islands under the three scenarios. In 1986, roughly a quarter of the working population were directly involved in agriculture, while fisheries accounted for a mere 4 per cent. If a fast growth, fishery maximising strategy is followed, the share of agriculture in employment declines to less than 20 per cent over the decade, while the dynamic fishery sector increases its relative share to nearly 25 per cent; the Falkland Islands may have become a fisheries economy rather than a predominantly agricultural one. This relative shift has a direct effect on the distribution of population in the Islands, as shown in Table 4.3. In 1986, 65 per cent of the population lived in Port Stanley, but the share could rise to 74 per cent within 5 years and

80 per cent within ten years. This does not have to imply depopulation from Camp - indeed the overall activity in the economy

Table 4.1
GNP and earnings under alternative scenarios £000

	Estimated 1986	Scenario I 1992 1997	Scenario II 1992 1997	Scenario III 1992 1997
GNP	9890	44050 52135	38765 45775	43235 44695
Wages, salaries and other remuneration	6130	17750 22200	17500 21000	13200 14800
Government revenues from overseas				
- fishing licenses	-	13800 13800	13800 19800	19800 19800
- investment and other income	2280	1600 1600	1600 1600	5360 5360
Value of Invest- ment Fund	-	- -	- -	47000 97000
Population	1920	2800 3500	2800 3300	2500 2700
Labour force (full time equivalent)	1000	1420 1695	1420 1570	1120 1220
GNP per capita	£5150	£15740 £14900	£13845 £13870	£17300 £18400
Average wages/ earnings in FI	£6000	£12500 £13100	£12300 £13400	£11800 £12135

and the demands for agricultural produce which this growth in population will stimulate means that there may be some increase in Camp population - but Camp dwellers will find it increasingly hard to sustain a voice in the Islands, and there will inevitably be a relative shift of development resources away from Camp in favour of Stanley.

This pattern would be less pronounced in the other two Scenarios: indeed, under Scenario II where resources are invested in large quantities into the traditional economic sectors Camp population may be expected to rise and could perhaps reach 1,000 by the end of a decade. Scenario II would also retain a more balanced structure within the work force, with agriculture maintaining its share of 27 per cent and growth in the fisheries sector - mainly through support

services to the off-shore industry - growing to about 10 per cent, roughly the same as manufacturing.

This assumes that investment in the agricultural sector would indeed have a major impact on productivity: the assumption needs testing, for the agricultural sector has for so long been constrained and under resourced that there has to date been little experience of the impact of major - rather than just marginal - investments. If the investment of say £2 million increases the eventual value of output by say £400,000, then the sector may well repay renewed attention. But, hitherto, the notion of a farming community whose gross output is worth between £3-4 million investing £2 million per year on a sustained basis has simply not been realistic. This is in fact a central weakness to the Scenario II strategy, since the constrained pattern of the economy during much of its recent history does not give much indication of the absorptive capacity of the traditional economy in terms of potentially massive new investment.

Although Scenario III offers a lower growth strategy, there would still be an increase in population and the labour force, partly because of the on-going momentum from investments made in 1986 and 1987, and partly because a sustained programme of expenditure on infrastructure would in itself generate jobs. But the growth would be less dramatic, and the distribution of employment by sector would parallel Scenario II rather than make any more dramatic shift.

The growth in population and employment is in many ways the key issue underlying the choices for the future, with implications for earnings, immigration, social structure, training and skills, wages, housing and infrastructure needs. With the growth in jobs generated by the investment resources available, there will be an increased demand for all levels and skills of labour. Much of this demand will obviously have to be met by immigration; even with the more conservative Scenario III there is a need to increase the labour force by over 20 per cent or by 25-30 positions per year. In the higher growth scenarios, the demand for labour will grow by up to 100 jobs per year.

Some of this demand will be for workers with relatively low skill levels and could be met by importing contract labour from - say - St Helena: and it may be expected that longer term immigrants to the Islands will be from more skilled backgrounds, though for the foreseeable future, teaching posts, many medical positions and probably government administrators too will or necessity be filled by overseas contract labour.

Not only is there not a pool of skilled - or any - labour in the Falkland Islands available for work, the general level of skills among the work force is inappropriate to the changing circumstances and reflects a non-specialist 'self sufficient' type labour force. There will inevitably be new pressure to bring in contract personnel and attract skills from immigrants - at the expense of the Falkland Islanders who will not be able to offer the range and quality of skills and professions required in an economy which has quadrupled in size in a decade.

Table 4.2

Employment structure under alternative scenarios

Sector	1986 (est.)		Scenario I 1992		1997		Scenario II 1992		1997		Scenario III 1992		1997	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Agriculture	270	27	310	22	200	18	385	27	425	27	310	27	320	26
Fisheries	40	4	310	22	415	23	155	11	165	10	110	9	115	9
Manufacturing	100	10	130	9	170	10	140	10	150	9	105	9	115	9
Services	590	59	665	47	815	48	740	52	830	54	595	55	670	56
TOTAL ¹	1000	100	1420	100	1700	100	1420	100	1570	100	1120	100	1230	100

(1) Total in 1986 derived from the number of tax payers from the 1986 Census returns

Table 4.3

Geographical distribution of population

Sector	1986 (est.)		Scenario I 1992		1997		Scenario II 1992		1997		Scenario III 1992		1997	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Stanley	1230	65	2080	74	2725	78	1920	69	2300	70	1780	71	1950	72
Camp	650	35	720	26	775	22	880	31	1000	30	720	29	750	28
TOTAL	1880	100	2800	100	3500	100	2800	100	3300	100	2500	100	2700	100

To put this into perspective, there are at present about 16 apprentices in the Islands; 23 candidates a year for CSE examinations, fewer for GCE 'O' levels and fewer still for 'A' levels. Under all three scenarios, a major drive to improve the skills and quality of the labour force immediately is essential if the Falkland Islands population is not to become the lower paid, lower status stratum of the labour force. Under Scenarios I and II growth would be so rapid that it would be very difficult for the population to keep up.

The use of lower paid contract labour is likely to raise as many problems as it solves. There is considerable anecdotal evidence of the tensions which have arisen from the import of less than 50 of St Helenan workers at MPA.

4.3 Housing and Development Investment

This analysis also highlights, not surprisingly, the critical importance of housing in the Falkland Islands, and provides a further argument against too rapid an increase in population. Table 4.4 lays out the housing need tied to the projected population growth. Both Scenarios I and II foresee a rapid growth in population which will require between 300 and 400 additional dwelling units to house them.

Table 4.4 Housing need for growing population						
	Scenario I		Scenario II		Scenario III	
	1986-92	1992-97	1986-92	1992-97	1986-92	1992-97
Additional population	+920	+700	+920	+500	+620	+200
Additional housing need (no. units)	300-400	250-300	300-400	250-300	150	75
Total investment cost	£30-40m	£25-30m	£30-40m	£25-30m	£15m	£7.5m
Of which						
- private sector:	£10m	£5-10m	£10m	£5-10m	-	-
- Govt sector:	£20-30m	£15-20m	£20-30m	£15-20m	£15m	£7.5m

Notes:

- (1) Housing waiting list in 1987 is around 50
- (2) Fisheries are building own housing - 20 units

Based on recent experience of an average cost per unit of £100,000 (including site preparation and services), the total cost of providing the additional housing needed in Scenario I - above and beyond that already planned or in the budget - lies between £30-40 million in the coming five years, and between £20-30 million between 1992 and 1997. This figure assumes some decrease in unit construction costs,

as volumes rise, but also includes an element for associated infrastructural costs, which may include increasing the capacity of the overall systems. Some of this housing need will doubtless be met by the private sector - on present patterns at about 20 units per year; if this rate of building is maintained, the public sector would be responsible for the construction of 200-300 dwellings over the next five years. The total housing need implies an annual build of 70 houses. Given the particular problems of construction in the Falkland Islands, this is a daunting prospect. If some of the growth is in Camp - as it would be the case in Scenario II - then the problem becomes even more acute and expensive given the notorious transport problem. Scenario III implies a much less ambitious house building programme of 30 units per year - but this is far higher than anything previously achieved on a sustained basis.

Not only is the physical house building programme very difficult to envisage, the cost is high too and ties up investible resources which could be used to serve other development priorities. The implications are summarised in Table 4.5 which shows the total investible resources available in the economy under each scenario in the context of the housing - and other infrastructural investments needed to support rapid population growth.

As described in the previous Section, the investible resource available from the Government sector for development purposes is calculated in this 'model' as the balance from total government revenues - internally generated plus those from overseas i.e., fishing licenses and investment income - after government's basic costs of running and providing services have been met. The first line in the Table shows the total capital sum available for each five year period for the three scenarios. All three include about £10 million per year from fisheries licenses plus harbour dues, plus income and corporation tax, and it is this which largely accounts for the difference between the three. In the first five year period however, the yield on Scenario II is higher than in Scenario I because of the advantageous tax regime for the Stanley Fisheries companies (this regime could equally apply to Scenario II). Subsequently, the investible resource relates to total taxable income. In Scenario III government revenues depend far less on income and corporation tax, and the aggregate resource is 20 per cent less than the Scenario I picture.

However, there is a direct trade off between the higher value of investible funds in Scenarios I and II and the costs of providing housing and expanding other infrastructure to accommodate the growing population. After allowing £25 million for housing, £5-10 million for the general upgrading of infrastructure - water, electricity, roads etc., etc., as well as £5 million for a substantial expansion to the hospital - the balance for development between 1992-97 in Scenario I is reduced from £55.5 million to between £15-20 million. Similarly, the high growth pattern of Scenario II takes its toll in the use of development resources, and leaves a balance of between £18-23 million, over the five years 1992-97.

Scenario III similarly shows a balance of only about £20 million over the first five year period, but this increases to £35 million by the

second five years as the value of investment income in the Investment Fund rises. This in itself has increased in value from £47 million in 1992 to nearly £100 million in 1997.

Table 4.5
Potential Development/Infrastructure Investment (£ million)

	Scenario I		Scenario II		Scenario III	
	1987-92	1992-97	1987-92	1992-97	1987-92	1992-97
Available investment resource from government	55.5	52.0	58.8	45.0	37.9	48.5
<u>Investments related to economic growth path</u>						
Housing	25	20	25	20	15	7.5
General infrastructure	5-10	5	5-10	5	2-3	2
Expansion of hospital	5	5	5	5	-	2
<u>Balance for development projects</u>	£15-20m	£22m	£18-23m	£15m	£20m	£35m
Value of investment fund	-	-	-	-	£47m	£97
Average annual development outlay	£3-4m	£4m	£3.6-£4.6m	£3m	£4m	£7m

The 'development pipeline' in the Falkland Islands, as expressed in the Budget Estimates for 1987/8 show about £25 million of projects which have been approved and are confirmed for implementation. These include the new secondary school, camp track improvements, improvements and upgrading of Stanley Roads and the new telecommunications network. There are barely enough funds in the three scenarios to cover this, either because a cautious strategy has been followed, or because the infrastructure costs of rapid growth themselves eradicate the associated benefits.

4.4

Social Issues

The changes in the society can also lead to social dislocations of various types. A robust society with a strong value system can withstand social shocks but there are areas of weakness within the Falkland Islands society which could develop into genuine social problems. Notably, the young people in Stanley are a slightly disenchanted group who until recently have seen few opportunities in the Islands; and although this is changing, as education is increasingly seen as important, there is a danger that youth who are

not particularly ambitious will get swept into higher short term earnings at the expense of longer term vocational training which could contribute more to the developing society. Furthermore, sudden access to higher earnings can lead to social stress, to aberrant behaviour and undermine ambitions for the future.

There has been little formal social welfare support in the Falkland Islands and this weakness may become more critical. A society offering opportunities also offers risks - which in turn lead to their share of casualties. There will be a need for greater social and welfare support, both in terms of a financial safety net (particularly to support loss of earnings through accident, illness or other misfortune) and in terms of counselling and personal assistance. There is only one social worker, non established, in the Islands, who has very little financial support. Her role will undoubtedly need to be strengthened to help cope with social disruption.

Another group which will increasingly need support is the elderly. The indigenous population is an ageing one and, as the proportion of immigrants rises the old informal family and social supports - never very strong in the Islands - will become further diluted and weakened with the changing social structure.

Not all the consequences of a growing population and changing social structure will be negative. An immigrant population has, typically, considerable vitality and as was found in the Shetland Islands, the changing social structure can bring a new energy to social and cultural life.

4.5

Development Projects

The following table indicates some additional development projects which might well be undertaken, and for which there is a strong perceived need within the Falkland Islands. The list includes annual expenditures on for example social welfare as well as capital projects. It is important to consider the resources available within the alternative growth strategies in terms of the needs and wishes which this list expresses. It is clear that while in one sense (e.g., per capita GNP) the Falkland Islands are being catapulted to near the top of the world league, yet in absolute terms the sums of money are small in terms of the needs arising from a backing of development expenditure foregone during the 1970s and early 1980s and the particularly high costs of doing anything in the Falkland Islands exacerbate the situation.

Once again, it is worth emphasising that these pictures of the future are very schematic, yet the numbers show a structure which we believe indicates the consequences of selecting alternative paths for development. Naturally, being schematic, there are many variations between them which could be assessed: the division between public and private sector investment in infrastructure is in a sense arbitrary, selected for illustrative purposes. But the important issue

Table 4.6
Possible Development Projects¹

<u>Current development pipeline</u>	<u>Approximate cost</u>
Secondary school	£ 5.0m
Camp tracks	£10.0m
Telecommunications	£ 4-6.0m
Stanley roads	£ 2.0m
Inter Island ferry	£ 1.0m
<u>Other investment projects could include:</u>	
Stanley environmental improvements	£ 1-2.0m
New government/public buildings	£ 5-10m
Sports centre, leisure facilities	£ 3-5.0m
Jetty and harbour improvements	£ 2.0m
Camp air strips	£ 0.5m
<u>Welfare</u>	
Home for the elderly	£ 0.5m
Social welfare payments and support)	
Increased old age pensions)	£ 1.0m pa
Social workers etc.)	
<u>Training and Research</u>	
ARC	£ 1.0m
Fisheries laboratory	£ 1.0m pa
Agricultural extension	£ 0.25m pa
Training programmes	£ 0.5m pa
<u>Subsidies</u>	
Inputs to agriculture	£ 0.5m pa
Internal freight	£ 0.5m pa
Notes:	
1.	The list is by no means exclusive and the costings are very broad estimates where available.

here is the infrastructure need associated with alternative growth strategies. It does not much matter whether infrastructure investments are undertaken in the public or private sector, except that those which are not directly productive, such as roads or electricity generation, are unlikely to be undertaken by the private sector because they do not show a commercially attractive return on investment. The point is that there rapid growth carries with it major infrastructure and capital needs, and these can in fact erode some of the apparent advantages of rapid growth.

THE WAY AHEAD

The analysis presented in Section 4 above is, as we have already said, highly schematic, and designed purely to illustrate the essential features of three sharply differentiated strategies. It is up to the people of the Falkland Islands to ponder on these possible visions of the future and to decide which of the three they would prefer, or whether to opt for some quite different picture which might conceivably draw on elements of each of the three scenarios.

The analysis has been couched essentially in terms of economic trade-offs, but there are other extremely important areas of trade off, which have been touched on earlier and which raise the question of what development is for. Changing the balance of employment such that agriculture - extensive sheep farming - is no longer the core of the culture would fundamentally alter the nature of the Islands and the particular qualities which have drawn people to them - and sent them away in prolonged out migration over decades. There are attractions and disadvantages to all three scenarios and the priorities which they express, which must be carefully considered:

- Scenario I offers the ability to exploit to the maximum the fishery resource with an investment programme which ties the main protagonists into a long term investment programme on the Islands and gives them a financial interest in the Falkland Islands. It allows for rapid economic growth, a doubling of Stanley's population. It profoundly alters the employment structure of the Islands, and relies on a major influx of immigrants and contract personnel who in turn need housing and associated services. Meeting this need cuts deeply into the surplus which might otherwise be available for development expenditure, but real increases in wages and earnings in the Islands may reduce the dependence on the public sector to provide these things. However, the speed of change and rate of growth means that it is unlikely that the small Falkland Island population would be able to take sufficient advantage of the development opportunities offered as overall skill levels are low. Equally, it may be seen as a somewhat risky strategy. If the fishery should decline in the future, for whatever reason, there could be a great deal of wasted investment in assets with little alternative use.

- Scenario II similarly offers rapid growth and requires high immigration rates with the associated social and economic costs, although immigrant populations are typically energetic and dynamic and may prove very stimulating to the Falkland Islands. But in contrast to Scenario I, it builds upon the existing economic structure with a strong emphasis on the agricultural sector which could lead to a population increase in Camp and arrest the swing to dominance by Stanley which would be a consequence of Scenario I. However, Scenario II may also be seen as

involving a level of risk. The response of agriculture to high levels of investment is not known and will, any case, probably take some time to materialise. If, in fact, the response is low, there could be the danger that a high cost, low viability industry emerges which can only be sustained by continuing subsidy - a subsidy which may not be affordable if, in the future, a decline in fishery revenue were experienced.

- Scenario III plays a more cautious hand, requiring lower immigration and lower associated costs. Less productive investment may reinforce some of the dependent characteristics of the Falkland Islands. But it is a security conscious option, and by the end of a decade the investment income from the international fund would equal the aid flows of the past five years irrespective of the long term success or failure of the fishery.

As we have said, it is up to the Falkland Islanders themselves to decide on the strategy that they would most like to follow in the future and one of the authors of the Report will be visiting the Falklands in January 1988 to listen to these views and reactions to this Report.

Our current view, as non Falklanders, but as observers who have already listened to the opinions of many Islanders, inclines towards caution, and the avoidance of making too many commitments too early.

We are concerned that an all out investment in on shore fishery related activities carries too many risks: risks in terms of a lack of certainty about the future productivity and value of the fisheries themselves, in terms of the social impacts of large numbers of immigrants and in terms of the ability of Falkland Islanders to benefit in full measure from the prosperity created by fishing.

Equally, we are concerned about too great an emphasis on investment off shore in trawlers and other fishing vessels. The history of the fishing industry is one of considerable recurring vicissitudes and to put too much reliance on a notoriously fickle industry in which the Falkland Islands has little experience to date may be offering a hostage to fortune.

Thus we think that, while it would be sensible to reinvest some money into a Falklands fishing fleet, this should be seen as only one element of a balanced investment policy and we would not advocate any substantial investment in on shore facilities at this stage, until the future prospects of the fishing industry in the Falklands become clearer and the potential profitability of such investments can be more reliably assessed.

In the meantime, we would favour a combination of Scenarios II and III which might include:

- the abandonment at least temporarily, of the system of collecting Joint Venture premiums

- the increase in fishing license rates so as to allow all revenues from the fisheries to accrue to the Falkland Islands Government
- the use of these revenues to fund
 - o an investment programme in agriculture and other non fishing industries in the Falkland Islands
 - o a house building programme at a rate of, say, 40 units a year
 - o a programme of infrastructure development, at a rate of, say, £5-7 million a year
 - o the accumulation of a financial reserve fund which could be used either to provide a supplementary income in the future, or as a source of investment capital when the opportunities became clear
 - o some improvements in social welfare provision
 - o rapid training and longer term vocational training programmes for Falkland Islanders
 - o increased emphasis on educational priorities to maximise Falkland Islanders' ability to contribute to and participate in economic growth
 - o steady rather than rapid investment in fisheries support from funds already invested in SFL.

Detailed preparation of a plan will follow our return visit in early 1988. This will aim to construct and transform a consensus view of the way forward for the Falkland Islands into a programme for implementation which can provide coherent guidelines to government and implementing agencies in the Islands. (An outline of the contents of the Final Report is shown in Appendix II.)

But finally we must emphasise that the responsibility for choice and of priorities for the future rests with the Falkland Islanders. The aim of this Study is to interpret their needs and develop a realisable programme for the implementation of the plan - not to impose a series of externally held views.

Methodology for Forecasting

The growth in the economy derives from productive businesses and the value of trading profits retained in the economy. It takes as a measure of the investible resource. All investment will in some generate jobs, however hard investment is concentrated in the capital intensive projects and activities. From analysis of, for example, planned investments in the fisheries sector, and of historical investments in the Falkland Islands, one can say that in recent times every £100,000 invested generates at least one full time job.

This simple relationship lies at the heart of our methodology. The level of external trade in the economy for reinvestment in the economy provides a measure of the number of jobs generated. This relationship also holds for the number of jobs generated. The increase in the aggregate wage and salary earned and the increase in the tax base for government revenue. Gross Domestic Product equals total wages earned in the economy plus associated payments (pension payments, payments in kind), plus retained trading profits plus rents.

The government sector obtains income from license fees and taxation on profits as well as on going investments and profits and dividends. Going out overseas are trading profits retained. GDP less overseas retained profits plus government revenue from overseas complete the calculation and give a figure for GDP. This pattern forms the basis of the forecasting exercise.

The injection of resources first through the Govt and in the past twelve months from fisheries has stimulated growth in the economy. In 1988/9 Stanley Fisheries and its associated Joint Ventures earned £7 million, and projecting on the basis of earlier years trading profits from existing and other new activities are estimated at around £2 million. These resources are in the economy whatever reinvestment decisions are taken about the future development strategy, and with no reinvestment in the economy the total resources available for investment in the economy would be £9 million. This investment in the economy would be £9 million.

In all three scenarios we are assuming that substantial flows of funds are available from the fisheries sector, even what may be these funds will have a strong impact on the economy which again will be broadly common to all three strategies. Most notably, there will be an upward pressure on wages, partly because of the pressures already being felt in the labour market and partly because the need to attract immigrant labour will require that wages approach UK levels, and it is unreasonable to assume a two tier wage structure in the economy or a long term prospect. Equalisation of wages will cause an underlying rise in average earnings, which we have taken as averaging 10 per cent per year, in real terms, at least for the next five years. The value of payments in kind will also rise in parallel, but we have assumed that overall they will play a declining role in the total remuneration package. Rents too are likely to rise and again we have assumed a steady 10

APPENDICES

APPENDIX I

Methodology for Forecasting

The growth in the economy derives from productive investments and the value of trading profits retained in the economy is taken as a measure of the investible resource. All investment will in turn generate jobs, however hard investment is concentrated in the capital intensive projects and activities. From analysis of, for example, planned investments in the fisheries sector, and of historical investments in the Falkland Islands, one can say that in round terms every £100,000 invested generates at least one full time job.

This simple relationship lies at the heart of our methodology. The level of retained trading profits in the economy for reinvestment in one year provides a measure of the number of jobs generated. This in turn increases the aggregate wages and salaries earned and consequently the tax base for government revenues. Gross Domestic Product equals total wages earned in the economy plus associated payments (pension payments, payments in kind), plus retained trading profits plus rents.

The government sector obtains income from license fees and harbour dues as well as on going investments overseas and philately and seigneurage. Going out overseas are trading profits remitted. GDP less overseas remittances plus government revenues from overseas complete the calculation and give a figure for GNP. This pattern forms the basis of the forecasting exercise.

The injection of resources first through aid flows and in the past twelve months from fisheries has stimulated growth in the economy: in 1986/7 Stanley Fisheries and its associated Joint Ventures earned £7 million, and projecting on the basis of earlier years, trading profits from existing and other new activities are estimated at around £2 million. These resources are in the economy whatever decisions are taken about the future development strategy, and with no additional emphasis on private sector investment, there will be an underlying growth in the labour force because of this investment.

In all three scenarios, we are assuming that substantial flows of funds are available from the fisheries sector, come what may: and these funds will have a strong impact on the economy which again will be broadly common to all three strategies. Most notably, there will be an upward pressure on wages, partly because of the pressures already being felt in the labour market and partly because the need to attract immigrant labour will require that wages approach UK levels; and it is unreasonable to assume a two tier wage structure in the economy as a long term prospect. Equalisation of wages will cause an underlying rise in average earnings, which we have taken as averaging 10 per cent per year, in real terms, at least for the next five years. The value of payments in kind will also rise in parallel, but we have assumed that overall they will play a declining role in the total remuneration package. Rents too are likely to rise and again we have assumed a steady 10

per cent per year for at least five years.

Fisheries revenues are an exogenous part of the equation, not dependent on activities within the economy, and we assume that the Falkland Islands will wish to extract the maximum revenue possible from the fishery, whether this is taken purely as a license fee or whether, as at present, it is partly taken as a 'joint venture fee' for reinvestment in the sector on shore. On the basis of the last season, this is likely to be around £20 million per year.

These are the common features underlying all three strategies. It must again be emphasised that these are not precise forecasts. The data do not permit overly sophisticated analysis, and some of the more subtle inter-relationships within the economy may have been glossed over. Nonetheless, we believe that they provide a sufficiently reliable framework for assessing the impact on the economy - and more importantly, on the lives of people in the Falkland Islands - and that the pictures drawn in this exercise are coherent enough to provide a useful basis for Falkland Islanders to confront the challenge of determining the optimal economic and social strategy.

For each of the three scenarios, a likely investment stream is projected (detailed assumptions are listed below), which in turn generates a picture of the number of jobs required as a result of the investment. These data are incorporated into the model to give an estimate of GDP and GNP. Thus we have an idea of the employment implications of the three scenarios, and consequently the population present in the Islands. This in turn provides a basis for establishing the housing required to accommodate the growing population. The importance of housing as a constraint is as well known and widely recognised as the shortage of labour in the Islands: and the concomitant of significant increase in immigration is the need for increased investment in housing - there was already a waiting list of about 50 in Stanley at the end of 1987. This housing investment can of course be made either by the private sector, or by Government, but at an average cost in Stanley of around £100,000 per dwelling, it represents a significant drain on available investment resources.

The next stage in the analysis is to consider the total investible resources in the economy: a mixture of public and private sector. The private sector's contribution has already been assessed as the retained trading profits retained in the Falkland Islands, with a small element from personal savings, which is assumed at around 5 per cent of earnings. Government funds available for development provide the indicator of the potential infrastructure investment which may be made in addition to that which must be made to keep pace with the growing population. Section 1.4 dealt at some length with the issue of public finance and development funds. Briefly, to recap, government funds available for development are calculated, for each scenario as:

	government revenue from abroad
+	taxation revenues
+	other government revenues
LESS	government costs

With a generally expanding economy, sources of government revenue and the costs of running the government and goods and services provided by government will both rise and for this exercise the rate of increase of each has been taken at 10 per cent per annum for the first five years. The size of the development fund remaining after necessary housing investment and infrastructure investment directly related to population growth can then be compared with development projects which are desirable in the Falklands - such as the present development pipeline; and with other ways of spending government revenues, through for example subsidies to agriculture, to internal freight and transport or to tax reductions and increased pension payments. The model thus allows us to look at fundamental questions like - how much money? and how many people? in a reasonably coherent and consistent way.

Social and Economic Priorities

Implementation and Implementation of Development Plan

Appendix/Supporting Papers to Final Report

Structure of the Economy

- Total Income
- Exports and Imports
- Distribution of Economic Activity
- Government Expenditure
- Savings and Investment

Fishing

Stock as Capital

Agriculture

- Existing resources
- Natural resources
- Development potential
- Requirements

Tourism

- o Investment
- o Manpower
- o Infrastructure

Other Productive Activities

Physical Infrastructure

Social Infrastructure

Population and Manpower

Investment Programme

APPENDIX II

Final Report - Proposed Content

1. Introduction and Context for the Study
2. Existing Economic Situation
3. Resources and Opportunities for Development
4. Evaluation of Development Strategies
5. Financial and Economic Implications
6. Social and Political Priorities
7. Recommendations and Implementation of Development Plan

Annexes/Sector Working Papers to Final Report

1. Structure of the Economy
 - National Income
 - External Trade
 - Distribution of Economic Activity
 - Government Finances
 - Savings of Investment
2. Fishing) Each to include:
-))
-))
3. Agriculture) - Existing situation
-)) - Natural resources
-)) - Development potential
-)) - Requirements
4. Tourism) o Investment
-) o Manpower
-) o Infrastructure
5. Other Productive Activities
6. Physical Infrastructure
7. Social Infrastructure
8. Population and Manpower
9. Investment Programme

APPENDIX III

List of People contacted during visit to Falkland Islands1. Government

His Excellency the Governor, Gordon Jewkes Esq
 Legislative Councillors - Hon John Cheek, Charles Keenleyside, Robin Lee, Tim Blake
 Brian Cummings - Chief Executive
 David Lang - Attorney General
 Harold Rowlands - Financial Secretary
 Colin Redstone - Government Secretary
 John Jackson - Director of Fishery Operations
 John Barton - Chief Fishery Scientist
 Ken Greenland - Chief of Police
 Owen Summers - Agricultural Officer
 Les Halliday - Harbour Master and Customs Officer
 Dr Murphy, Dr McIlroy - Chief Medical Officer and Deputy
 Gerald Cheek - Director of Civil Aviation
 Charles Carter - Director of Public Works
 Manfred Keenleyside - Deputy Director of Public Works
 Bill Ethridge - Portmaster General
 Ian Dickson - Head of Agricultural Research Centre
 FIDC Board Members - Stuart Wallace, Stuart Booth
 FIDC - Simon Armstrong, Shane Wolsey
 Graham Bound - Falkland Islands Tourism
 Mrs Eileen Murphy - Chief Education Officer
 Mrs Phyllis Rendell - Head of Camp Education
 Mrs Alice Ethridge - Social Worker
 Mrs Eileen Davis - Government Secretariat

2. Businesses in Stanley

Tom Swales - Stanley Services Ltd
 Joe Marsh - Manager, Standard Chartered Bank
 Terry Spruce - General Manager, Falkland Islands Co
 Gavin Short, Wallace Hirtle - General Employees Union
 Ian Strange - Naturalist
 Ms Norma Thorn - Co-operative Society
 Ms Rowena Summers - Falkland Farmers
 Harry Milne - Milnes Stamps
 Shane Wolsey, John Pollard - Stanley Fisheries Ltd
 Mike Rendell - Malvina House Hotel
 Arthur Wright - LMA
 Fred Harper - Fairclough Miller
 Brian Harvey - Falkland Seafoods Ltd
 Peter Henderson - Stanley Growers Ltd
 Malcolm Ashworth - Stanley Dairy
 Cecil Swinton - Macadam Designs

3. Camp VisitsPort Howard

Public meeting

Also:

Rodney and Carol Lee
Jimmy and Ginnie Forster
Tim MillerPebble IslandJohn and Ann Reid
Raymond Evans
Nobby Clark, Tony HirtleFox Bay

Public meeting

Also:

Richard and Grizelda Cockrell

Hill CoveTim and Sally Blake
Peter and Shelley Nightingale
Paul and Davinia Peck
Ian Hanson
Bernard BettsGoose Green

Public meeting

Also:

Brook and Eileen Hardcastle

Sea Lion IslandDave and Pat Grey, Lodge
Terry Clifton