



Budget Analysis for Investments in Children in Virgin Islands (UK)



BUDGET ANALYSIS FOR INVESTMENTS IN CHILDREN IN VIRGIN ISLANDS (UK)
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ACRONYMS AND ABBREVIATIONS

BVI	British Virgin Islander
C-PEM	Child-focused public expenditure measurement
CRC	Convention on the Rights of the Child
CSEC	Caribbean Secondary Education Certificate
CSO	Central Statistical Office
CXC	Caribbean Examinations Council
DOCI	Development-Oriented Commodities Index
ECE	Early childhood education
ECD	Early childhood development
FY	Fiscal year
GDP	Gross Domestic Product
HLSCC	H.L. Stout Community College
HSA	Health Service Authority
ILO	International Labour Organization
IMF	International Monetary Fund
KPIs	Key Performance Indicators
MEC	Ministry of Education and Culture
MHSD	Ministry of Health and Social Development
MODA	Multiple Overlapping Deprivations Analysis
MOF	Ministry of Finance
MPI	Multi-Dimensional Poverty Index
NHI	National Health Insurance
OECS	Organization of the Eastern Caribbean States
OOPs	Out of Pocket Payments
PFM	Public Financial Management
PHC	Primary health care
SDD	Social Development Department
SDGs	Sustainable Development Goals
SEED	Social, Economic, Environmental and Direction/Governance
SitAn	Situation Analysis
SMART	Specific, Measurable, Achievable, Relevant Time-bound
UNICEF	United Nations Children's Fund
VAT	Value Added Tax
VI (UK)	Virgin Islands (United Kingdom)

The ***Budget Analysis for Investments in Children in Virgin Islands (UK)*** is authored by Arthur Van de Meerendonk and Zina Nimeh (lead authors) and Emma Van de Meerendonk and Valentina Perinetti (contributing authors) under the direct supervision and guidance of Ms Maya Faisal, Social and Economic Policy Specialist; Ms Muriel Mafico, Deputy Representative at UNICEF Office for the Eastern Caribbean; Ms Petrona Davies, Permanent Secretary at the Ministry of Health and Social Services; Dr Marcia Potter, Permanent Secretary at the Ministry of Education and Culture; Mr Neil Smith and Mr Glenroy Forbes, Financial Secretaries at Ministry of Finance, Government of Virgin Islands (UK).

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EXECUTIVE SUMMARY

Introduction

Article 4 of the Convention on the Rights of the Child calls on governments to plan and implement their budgets in the optimal interest of children. The Convention and the General Comment (19/2016) on public budgeting for the realisation of children's rights (UN, 2014) provide guidelines on how governments can ensure that their investments in children are sufficient, effective, efficient, equitable, transparent and sustainable.

The Government of the Virgin Islands (UK) (GoVI) has adopted programme-based budgeting to improve the effectiveness and efficiency of their budgets in terms of costs and allocation. While programme-based budgets provide less detail in the listing of economic line items, they are more stringent on the objectives, targets and milestones.

In line with the commitment of GoVI to invest in the future of its children, this report aims to provide tools to the Government to plan and execute its budget to the optimal benefit of its children. The analysis presented in the report demonstrates how essential proper allocation of public resources for children is in gaining high returns on investments towards the realisation of children's rights. Consolidating the budget data and information and reviewing how best to achieve strategic planning and budgeting for children can be a starting point for more advocacy on child investment oriented strategies with equitable and sustainable resource allocation.

This report is centred around three crucial steps. The first step involves a re-alignment of the budget, where the bottomline is the distinction between administrative and *programme* expenditure, that is, expenditure that directly benefit the target population. Re-alignment of the budget also implies that all health, education, child protection and social protection programmes will become visible.

The second step is '*child tagging*', which is an identification of the proportion of the budget that actually benefits children. Child tagging is a means of identifying whether there are mismatches in the allocation of resources and to achieve this the report examines the so-called utilisation profiles. These include the age and gender profile of users of the programme in terms of the proportion of spending that is allocated to children.

The third step entails an examination of the Key Performance Indicators (KPIs) and recommendations on how to refine those KPIs considering public finance for children. The aim here is to arrive at a concise set of KPIs that will enable senior government planners to manage and supervise the budget process with attention to investment in children's needs.

To support these three steps is a mapping of well-being. Here the report examines the well-being of households with children by examining the various dimensions of well-being in the context of Virgin Islands (UK) and the patterns of deprivations of the households.

Economic trends and public finances

Economic growth in Virgin Islands has been volatile in the past five years. The average real Gross Domestic Product (GDP) growth in 2010–2015 was 1 percent. The largest contributor to the GDP was commercial services with around 70 percent. Labour force participation was high especially among the prime age groups (25–55 years). There was unemployment among the youth, especially up to age 25, but the labour market seemed to be functioning relatively well.

Total government debt has increased since 2010, but at 18.92 percent of nominal GDP in 2016 it remains low from an international perspective. This is expected to reduce in the future. Tax revenues accounted for

approximately 95 percent of the total government revenue. Virgin Islands (UK) normally does not receive grants.

Child well-being

Available survey data indicates that children in the islands are the group most affected by poverty. Households that had children fared worse than households without children and female-headed households were poorer on average than male-headed households. This effect was greater in households with children. Non British Virgin Islanders (BVI) were fewer among the poor, but less so among households with children.

There were more households with Virgin Island (UK) nationality among the monetary poor considering their population, but this was different with other dimensions of deprivation. The situation was worse for both islander and non-islander households with children than for those without.

As the age of the household head increased, the household's probability of becoming poor decreased until a household head reached 40–49 when the pattern was reversed. In terms of multidimensional deprivation, particularly for children, the main indicator of concern was overcrowding; households with children were worse than those without. Deprivation in terms of health did not appear to be a problem. Although deprivation on the life/health insurance indicator was high for the whole population, it was fixed at the inception of the national health insurance (NHI) in January 2016. For education and development, children were mostly deprived in the constructed development-oriented commodities index, which examined different commodities needed to aid children development.

The most significant determinants of well-being were household size and number of children, both of which increased the probability of poverty. The

data showed that living in Jost Van Dyke or Anegada increased the likelihood of deprivation when compared to living in Tortola. Living in Anegada appeared to have the greatest negative impact out of all the household characteristics used to explain poverty. With regards to nationality, households headed by Caribbean nationals were more likely to be poorer than households headed by Virgin Island (UK) nationals while households headed by non-Caribbean nationals were more likely to be richer in terms of income/expenditure and poorer in terms of multidimensional well-being. The data also showed that having a disabled household member increased the likelihood of being poor and having a close relative living outside the island had a negative influence on the household poverty status.

Social budget

One of the result areas in government's strategic Social, Economic, Environmental and Direction/Governance (SEED) framework is a reformed public sector. Through its public financial management (PFM) reform, the Government of Virgin Islands (UK) aims to combine (priorities and performance indicators) all of its strategic plans and budget documents and ensure that they are coherent.

Table S-1 presents the social budget for the fiscal years (FYs) 2015 and 2016. Social spending represented 17.4 percent of the total government budget in 2015 (the FY with the most complete information), which was 5.7 percent of the GDP. The list focuses on programme spending from the budgets of two ministries, which we can genuinely classify as social protection or child protection. The total expenditure on health is included to show a descriptive comparison; however, programme expenditure data were not available in sufficient detail. Due to the absence of (age/gender specific) utilisation profiles for all programmes, it was not possible to have an accurate overview of the budget allocation to the various age categories, therefore, the table should be interpreted with

caution. However, it can still give an indication of how these priorities were operationalised and the extent that concrete, measurable and relevant KPIs were identified to measure progress and performance.

Table S-1: Overview of the social budget of Virgin Islands (UK)

Expenditure, 2016	1,000 US\$	% Gov't expenditure	% GDP
Health (all ages) - expenditure	22,687	6.8%	2.3%
Health (all ages) - budget allocation	50,254	15.0%	5.0%
Children	25,733	7.7%	2.6%
Education	25,074	7.5%	2.5%
ECE	7	0.0%	0.0%
Prim. Education	9,601	2.9%	1.0%
Sec. Education	11,286	3.4%	1.1%
Tert. Education	4,180	1.2%	0.4%
Child Protection	659	0.2%	0.1%
Social Protection	-	0.0%	0.0%
Working ages	279	0.1%	0.0%
ALMPs	64	0.0%	0.0%
Cash transfers, other services and subsidies	215	0.1%	0.0%
Elderly	1,329	0.4%	0.1%
Total Expenditure	50,029	14.9%	5.0%

Budget of the Ministry of Education and Culture

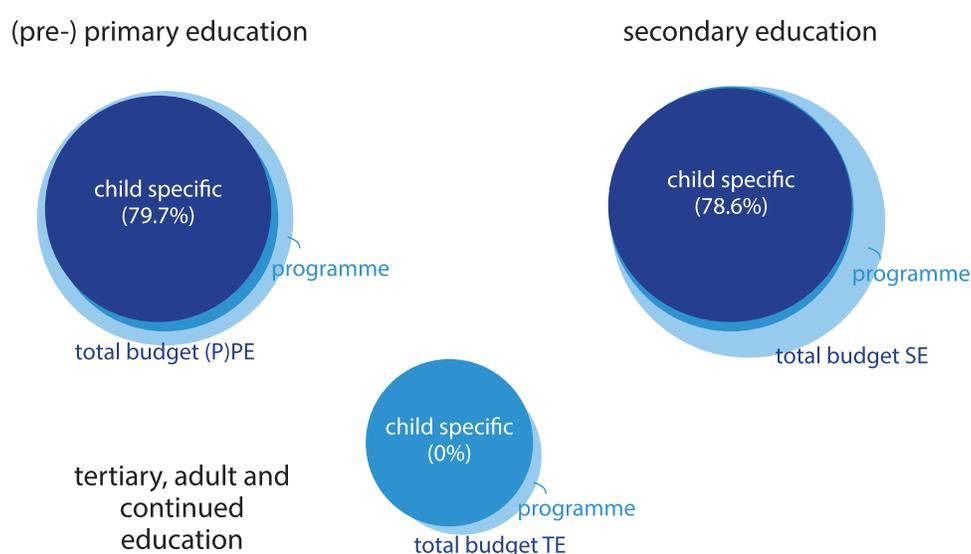
Expenditure on primary, secondary and tertiary education was a little above 50 percent of the total budget, but spending on early childhood development (ECD) was negligible. Expenditure on management and administration was high and it was the largest item in the education budget. Around 70

percent of the total expenditure can be classified as programme (in the definition of this report), meaning that a large share of the total expenditure did not directly benefit the target population. Less than 60 percent of the Ministry of Education (MEC) budget could be linked to individual children (up to the age of 17) (Table S-2 and Figure S-1).

Table S-2: Child tagging in MEC expenditure

Administrative classification	Actual	Estimated	Budget
	2014	2015	2016
Total budget (1,000 US\$)	42,804	53,248	49,019
Programme expenditure	32,177	38,811	35,959
Child-specific programme expenditure	22,298	29,708	28,232
<i>Share of child specific expenditure in programme expenditure</i>	69.3%	76.5%	78.5%
Share of child specific expenditure in the total budget (child tagging)	52.1%	55.8%	57.6%

Figure S-1: Child tagging in MEC expenditure



Budget of the Ministry of Health and Social Development

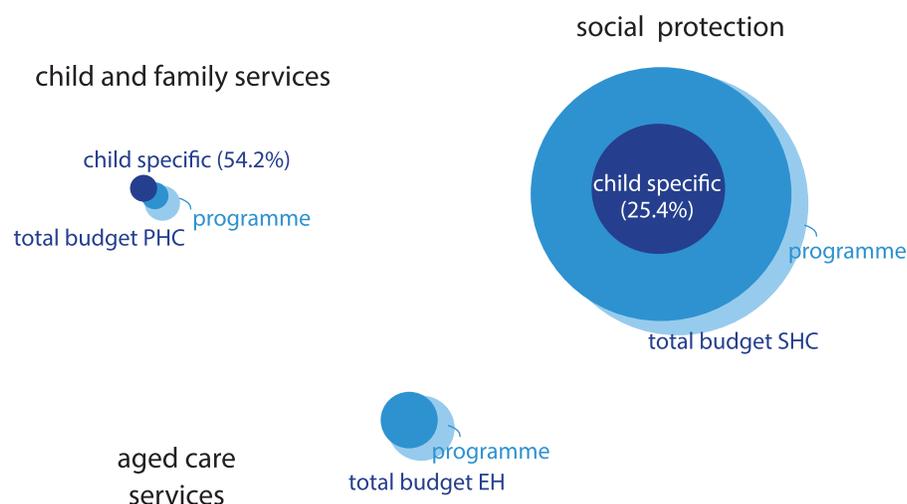
The programme expenditure was high and non-programme (administrative overhead) expenditure was less than 12 percent of the total budget. The largest proportion of programme expenditure was social protection, which was on National Health Insurance (NHI). On the other hand, children and family, disability and aged care services received very limited budget.

Two-thirds of the Health Services Authority (HSA)/NHI expenditure was for secondary health services while expenditure on primary health care (PHC) was low. Therefore, other programmes that could have been more cost-effective received far lesser resources. Only a limited proportion of the Ministry of Health and Social Development (MHSD) budget could be linked to individual children and this was diminishing (Table S-3 and Figure S-2). Child-specific spending was less than 7.3 percent of the total budget.

Table S-3: Child tagging in MHSD expenditure

Administrative classification	Actual	Estimated	Budget
	2014	2015	2016
Total budget (1,000 US\$)	32,525	49,698	53,237
Programme expenditure	24,045	42,171	46,709
Child-specific programme expenditure	8,134	12,867	14,049
<i>Proportion of child-specific expenditure in programme expenditure</i>	33.8%	30.5%	30.1%
Proportion of child-specific expenditure in the total budget (Child Tagging)	25.0%	25.9%	26.4%

Figure S-2: Child tagging in MHSD expenditure



Main conclusions: programme spending for children in Virgin Islands

From a methodological perspective, programme budgeting for education, and health and social services could be, and should be reviewed. The following are the main conclusions from this analysis:

- Strategic and operational programme objectives could and should be better aligned.
- MHSD and the Ministry of Education and Culture (MEC) must realign their programme objectives to the annual planning and budgeting process. Alternative strategic objectives for education, and health and social services could be:
 - ✓ universal coverage,

- ✓ equitable service delivery (specifically for disadvantaged children),
- ✓ effective service (delivering standard and high quality outcomes),
- ✓ efficient, well organized and well managed service.
- Strategic objectives can be translated into operational targets for the short- and medium-term and the KPIs can measure progress in achieving these targets.
- The current KPIs are too detailed; KPIs should align more with programme objectives and be SMART (Specific, Measurable, Achievable, Relevant and Timely).
- Information on utilisation profile should be

collected. In its current form, it is not possible to assess how much the budget allocation meets existing needs and whether allocation of resources is equitable.

- Programme-based budgeting has not been sufficiently transparent to date. For example, sub-programmes under social protection are not visible in the budget and the budget contains no information to assess expenditure on health care services. As an example, with the onset of NHI,

health was moved to social protection programme but there is no transparent indication of how much money was allocated to health services and performance indicators for health. Social protection has five sub-programmes – policy planning, housing, legal aid, other assistance and insurance. This structure was developed with MHSD but there is a need for further transparency regarding health.



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1 Introduction

Making public financial management (PFM) effective, efficient and oriented towards policy priorities is more relevant than ever in times of global financial crisis and processes of fiscal adjustment (Allen, Hemming and Potter, 2013). Strong policy action by governments is becoming critical amidst growing inequality and lower levels of well-being, particularly in policies towards children and the vulnerable. However, policy on any progressive human development agenda cannot be implemented without the financial resources.

Article 4 of the Convention on the Rights of the Child calls upon governments to plan and implement their budgets in the optimal interest of children. The Convention and the General Comment (19/2016) on public budgeting for the realisation of children's

rights provide guidelines on how governments can ensure that their investments in children are sufficient, effective, efficient, equitable, transparent and sustainable. Priorities in the budget must be set in a way to remove barriers that children, particularly vulnerable children, face in accessing their rights. It is the responsibility of government to allocate equitable public funds to realise the rights of children. The budget and budget decision-making and implementation processes should be transparent: it should be possible to scrutinise budget-making decisions and hold decision-makers accountable. In addition, investment in children should be sustainable. Budget management or PFM should be designed to enable government to deal with these challenges.

These recommendations align with the more encompassing Agenda 2030 for Sustainable Development, which was adopted in 2015, in particular Sustainable Development Goals (SDGs) 1–5, 8 and 10.¹ To achieve these SDGs it is important to understand the allocation and use of public funds to strengthen child-focused services. Without understanding the budget allocation practices and spending patterns for children, policy implementation will be a challenge. Leveraging national resources for children is an investment that will not only ensure a sustainable future for them but also an investment in human capital development to achieve the national socio-economic development objectives.

In addition to examining patterns, effectiveness and efficiency of budget and budget decision-making and implementation, an overview of the situation of children and mapping of their well-being, will provide a more in-depth understanding of current issues. The household survey data made it possible to conduct a microanalysis of the well-being of children,² and this analysis provides us with more information on the “needs” highlighted in the framework (Figure 1-1).

1.1 Programme-based budgeting

The government has adopted programme-based budgeting to improve the effectiveness of its budget and make them more cost- and allocation-efficient. The transition to programme-based budgeting is not an overnight process, it takes time to re-orientate stakeholders and change administrative procedures, but the process is well on course.

The main difference between traditional and programme budgets is that the former applies a

comprehensive set of economic line items and provides details of expenditure limits on economic inputs. The connection between these inputs and outputs or outcomes is not explicit and often remains vague. Traditional line item budgets do not encourage cost savings or the achievement of objectives. Programme-based budgets, on the other hand, define combinations of activities that meet certain objectives (Jacobs, Héris and Bouley, 2009). Budgets classified into programmes can be useful for the identification of (political) objectives and monitoring effectiveness and operational performance through performance indicators (KPIs) (Jacobs, Héris and Bouley, 2009). Programme-based budgets or programme budgets have the following three main characteristics (Robinson, 2013):

- Funds are allocated to specific programmes, representing outputs with shared outcomes,
- Line item controls are reduced,
- Performance information on the programmes is collected to allow for expenditure prioritisation.

Programme-based budgets are often less detailed in listing economic line items because budget decision-makers do need to know these. However, they are far more stringent on objectives, targets and milestones and should be SMART.

1.2 Data and methodology

This report aims to provide a framework and approach for analysing budgets for investments in children. The ambition is however broader. The ultimate objective is to institutionalise this framework and approach into the public financial management framework of the Government of Virgin Islands (UK) in support of an improved and sustained understanding of investment and budgeting for children.

Conceptual framework for the analysis

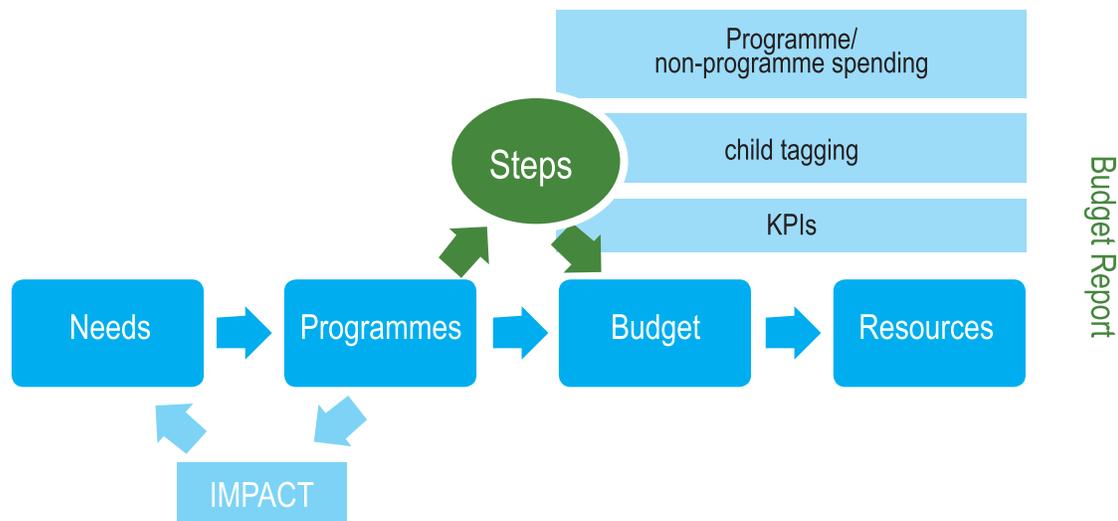
Figure 1-1 demonstrates the conceptual framework that underlies this analysis. Programme-based

1 Sustainable Development Goals (SDGs) which are most directly related are: 1. Ending poverty, 2. Zero hunger, 3. Good health and well-being, 4. Inclusive and equitable quality education and promoting life-long learning, 5. Gender equality and empowerment of women and girls, 8. Sustainable and inclusive economic growth and decent work, and 10. Reduced inequalities. Obviously, there are indirect linkages with other SDGs as well.

2 The annex provides an explanation of the methodology and the data used in the report sections that look at the well-being of household

budgeting, as compared to ‘traditional’ budgeting, ‘reverses’ the planning sequence (left to right in the figure), and it puts the needs first.

Figure 1-1: Conceptual framework for the analysis



Existing programmes should meet the identified needs, with budgets and resources properly allocated. To the extent that some needs remain unmet, there is scope to either improve the existing programmes (this entails considering design or implementation gaps) or design additional ones. Resources should be available for and this means considering the fiscal space – now and in the future – for government to finance the additional programmes. A Fiscal Space Review for a Social Protection Floor for Virgin Islands (UK) will provide insight on the cost of the additional programmes and show whether there is fiscal space to finance those costs.

Currently, in Virgin Islands (UK) the main two ministries involved predominantly in administering social programmes for children are the Ministry of Education and Culture and the Ministry of Health and Social Development. Analysis of the budget for children by these two ministries will enable a better understanding of how government allocates and spends money for education, health and social

services. A distinction between social protection and child protection programmes are still not visible in the current public finance management practice, but an in-depth analysis will provide the basis for re-alignment given the reform in public sector. An analysis of child protection is presented under the programme budget for Social Development since the Ministry is the main custodian of children’s issues. The following section describes in more detail how the objective was achieved.

Re-alignment of the budget

The first step is to re-align the budget. With a view to programme-based budgeting, the government has taken major steps to re-align its budget with functional classification according to programmes that have been implemented. We propose further action on this. For this exercise, the economic classification can be further summarised gradually since our bottomline is the distinction between administrative costs and programme expenditure. The latter will directly benefit the target population while the former will

do so only indirectly. Programme expenditure in our definition will also include salaries of frontline staff, for example, teachers, medical personnel, counsellors working with deprived families, etc. This means that for this exercise salaries of frontline staff must be distinguished from salaries of staff working in administrative units. The categorisation of staff as listed in the budget will enable us to do this.

Re-alignment of the budget also implies that all health, education, child protection and social protection programmes must become visible, but to date the budget is not organized in this manner. Under the line item social protection, for example, subventions to cash transfer programmes and social services are comprised. These programmes are therefore not separately visible in the budget. The report recommends a structure where all the programmes will become transparent so that targets can be set on each of them and achievements monitored.

Child tagging

Once programme expenditure has been derived and the relevant programmes identified, the second step is child tagging, which is the identification of the proportion of the budget of a certain programme that is actually allocated to the (direct) benefit of children. There are various approaches to this and the first is the most straightforward. If a programme is designed exclusively for children and programme expenditure and administration costs have been derived (from the first step above), the entire expenditure can be perceived as being allocated to the benefit of children. Therefore, the child tag can be applied to the entire programme expenditure, and this, for example, would be the case for most education programmes. On the other hand, if a programme is designed to serve not only children but also adults, the specific budget component for children should be determined and the approach to achieve this is to consider the utilisation profiles. Once the age and gender profiles of users of the programme are known they can guide the application of a child tag in terms of the proportion of spending that is allocated to children.

Child tagging or child-focused public expenditure measurement (C-PEM) is a relatively new approach but it has been successfully applied in several countries, mostly in South America and The Caribbean.³ The objectives of child tagging are to:

- i. guide decision-making and allocation of resources,
- ii. track specific expenditures down to line agencies and frontline service providers whose behaviour is critical to ensuring greater and more equitable results for children,
- iii. facilitate impact evaluation and identification of challenges, and
- iv. monitor overall financial efforts of the government and institutionalise reporting on expenditure on child rights (Cummins, 2016).

This analysis can be perceived as a partial C-PEM, not a complete one, because its scope is limited to the budgets of three ministries (Education, Health and Social Services). It was not feasible to conduct a complete C-PEM.

It considers allocation and economic (in-) efficiencies. Child tagging is also a means to discover whether there are mismatches in the allocation of resources and whether children received less than their due. Ideally, a benefit incidence analysis would be conducted to enable the examination of the re-distributive impact of each of the programmes. However, given the data limitations (see further below) this type of analysis was not possible; there were no data on public utilisation of services and the socioeconomic characteristics of the children using them.

³ See also a recent UNICEF publication: Child-Focused Public Expenditure Measurement: a Compendium of Country Initiatives, Matthew Cummins, PF4C Working Paper Series, No. 2, New York, 2016 – further referred to as: Cummins, 2016. The two methods applied for child-tagging in this report correspond to the 'direct' (the programme is exclusive in its targeting children and adolescents) and 'expanded' categories (the programme benefits a wider beneficiary group of which children are a sub-group). In this report's methodology, the child-tag in advanced category is the estimated share of the budget that is specifically accruing to children. This is estimated with the help of utilization profiles.

It also considers the actual outturns vis-à-vis the budget estimates pertaining to the same FY. Major and structural outturn deviations would thus indicate that something is not right in budget planning.

Economic (in-) efficiencies relate to budget implementation. The analysis considers several items, including the allocation of spending towards administration vis-à-vis programme spending, per capita staff costs and, to the extent feasible given available data, the cost-effectiveness of the spending portfolio.

Mapping of multidimensional well-being

Using UNICEF's Multiple Overlapping Deprivations Analysis (MODA) techniques, this report adopts a holistic definition of child well-being, which focuses on access to various goods and services that are essential to children's survival and development. MODA acknowledges that a child's experience of deprivations is inherently multidimensional and interrelated, and that multiple and overlapping deprivations are very likely to occur simultaneously. While ideally this type of analysis would be done on an individual level, available data only permits a household level analysis. Thus, through the mapping of household well-being, the analysis examines the well-being of households with children by looking at various dimensions of well-being separately (such as overcrowded households) and collectively through created composite indices. Conducting this type of analysis gives more context to our recommendations and provides us with the perspective of what is taking place on the micro level.

Key Performance Indicators

Finally, the report discusses the existing key performance indicators and recommends ways to refine these with a view to public finance for children. The aim is to have a set of KPIs that would be useful to senior government planners. This aligns with the

General Comment (GC19/2016, para 68d) which calls upon governments "to establish and maintain a database of all policies and resources affecting children so that those involved in implementing and monitoring the corresponding programmes and services have ongoing access to objective and reliable information." It also aligns well with government's aim to promote accountability by senior programme managers for achieving specified targets for the KPIs (output and outcome indicators). The report seeks to strike a balance between the various programmes and chapters of the budget by clustering KPIs under a limited number of headings, for example, financial resources, process, service quality and impact. It acknowledges that the current budget applies the output and outcome categories, which is an excellent starting point from where line ministries can advance their implementation process and further refine the categories.

Sources of data

This analysis used primary and secondary information from multiple sources. Key sources for the budget analysis are official government budgets, which include recurrent expenditure and capital policy and planning documents as well as detailed budgets from sector ministries and specific publicly financed children programmes. Data for the multi-dimensional child well-being was from the Survey of Living Conditions Survey 2002. In close collaboration with the relevant ministries and with UNICEF support, the team collected detailed budget information during field visits to Virgin Islands (UK). Other sources include secondary data published by the Central Statistical Office; existing publications, such as journal articles, working papers, project and policy reports; and other general and legal documents. A list of the sources of data and information is presented in the annexes to the report.

1.3 Limitations

Ideally, a benefit incidence analysis should have been part of each sector chapter to allow for the assessment of the extent budgetary allocations were redistributive and the extent different population groups benefited from government spending. A benefit incidence analysis requires information at the individual level regarding the actual use of government services and on the welfare level of households and individuals to assess whether a certain policy or programme is pro-poor. It also requires information on government spending per capita, which was only systematically available for education, where allocations to schools were based on the principle of per-capita funding.

For the other social sectors, available data was insufficient to assess whether allocations matched the needs and rights of children and other vulnerable groups, and how far the commitments made to children's rights through policy and programmes were being translated into reality. It was not possible to assess whether allocations were equitable from a gender perspective. Other missing data that severely affected the depth of analysis include age-specific health care utilisation statistics; except for a few health programmes, it was not possible to link budget allocations or expenditure to children. Available data on social protection was collected from numerous sources but there was limited data on specific budget allocation and spending for child protection programmes. Available information for all programmes was not sufficient for the desired depth of analysis and this is reflected in the discussion of the various social development programmes.

In addition, analysis was based on recurrent figures because information on capital expenditure provided in the budget was too limited to justify an in-depth analysis of capital spending. Tables 2-3, 3-8 and 4-6 present an overview of recurrent and capital spending by the relevant ministries. The authors are extremely grateful to all the people who gave their time and effort in collecting and providing these data. Despite the limitations they made the analysis and the report possible. The data gaps could be taken as an agenda for government action in the near future.

The data set used for mapping child well-being and MODA is not recent and this represents a clear limitation of the accuracy and relevance of the analysis – especially if its purpose was ultimately to inform future policy decisions on child well-being. However, this is not the case here.

1.4 Process

This analysis had two objectives. The first was to analyse existing national budget policies, social expenditures and investment in social policies for children needs in Virgin Islands (UK). The second was to analyse the 'allocation and operational' effectiveness and efficiency of direct and indirect public allocations for children and make recommendations to improve them; and review the impact on public finance of national development policies for children. Table 1-1 presents an overview of the activities and outputs for this analysis.

Table 1-1: Analysis work plan

Phase	Activities	Outputs
Mapping of existing programmes and analysis of the administrative and allocation efficiency of existing education, health, child protection and social protection programmes, related to children	<ul style="list-style-type: none"> • Conduct interviews with ministries and other agencies and collect information • Compile an inventory of social protection and child protection programmes in Virgin Islands (UK) • Assess the financial governance framework • Review expenditure on social expenditure relevant for children, with a focus on health, education, child protection and social protection • Assess benefit incidence focusing on public allocations (to the extent feasible, given data limitations) • Assess the needs and impact of social expenditures for children • Assess the planning and implementation framework for children • Assess the allocation of budget resources towards their stated objectives • Assess the 'economics' of spending and develop benchmarks to assess inputs related to programmes for children • Conduct literature review of available publications relating to social protection in Virgin Islands (UK) from a child focused angle 	<ul style="list-style-type: none"> • Inception report • 'Assessment matrix', this is an overview of relevant programmes: design, implementation and challenges • Draft budget report (end-August 2016)
Report writing	<ul style="list-style-type: none"> • Incorporate comments from UNICEF, OECS and government counterparts and produce a final report 	<ul style="list-style-type: none"> • Seminar with government partners to discuss the draft report and work with the costing model (October 2016) • Final budget report
Recommendations and dissemination		<ul style="list-style-type: none"> • Final version of the report (November 2016)

The analysis team conducted two missions to Virgin Islands (UK). The first was in April 2016 during which interviews were conducted and information collected for the analysis and for developing an assessment matrix that would provide an overview of relevant programmes and their design and implementation challenges. The second mission (September 2016) was to present the results to government and stakeholders.

1.5 Structure of the report

Chapter 2 sets the stage for the subsequent analyses by providing an overview of recent economic, social

and demographic developments and discussing developments in PFM. It then provides an in-depth analysis of the specific budgets relevant for the development and well-being of children: **Chapter 3** focuses on education, **Chapter 4** on health and social services, both of which have a similar structure. Each chapter begins with an introduction to the topic, an examination of the policies and planning (and legislation when relevant), followed by a general programmes overview, a section on child protection, and discussion and conclusions. The report concludes with **Chapter 5** and presents key recommendations.



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2 Economic and social context

The Public Finance Management (Amendment) Act, 2012 stipulates:

- The Minister shall, within six months after a General Election, cause to be prepared and published a Strategic Plan for the term of office of the Government, which relates to the financial affairs of the Government. (Section 6)
- The budget policy statement shall set out the overarching policy goals that will guide the Government's priorities for the forthcoming budget term. (Section 8)
- The Medium-Term Fiscal Plan shall include a summary of the broad outcomes, the specific outcomes, and the links between them, that the Cabinet intends to achieve in the next financial year and for at least the next two financial years. (Section 8).

This is being addressed by the Public Financial Management reform of the Government of Virgin Islands and strategic priorities have been outlined in four crucial areas of development: social, economic, environment and governance (direction) – SEED 2015. SEED has four strategic priorities:

1. **SOCIAL:** We are a healthy, vibrant and engaged populace, well-prepared to fully participate in the development of the Territory.
2. **ECONOMIC:** Our economy is thriving and buoyant, fostering growth through entrepreneurship and trade.
3. **ENVIRONMENT:** We value our natural resources and promote sustainability in physical planning and management.
4. **DIRECTION/GOVERNANCE:** We govern transparently, ensuring the safety, security and cohesion of our populace.

Section 2.1 highlights some key characteristics of the macroeconomy, labour market and fiscal environment. Section 2.2 discusses public financial management and the ongoing reform towards programme-based budgeting and highlights the roadmap towards anchoring outputs/outcomes and performance indicators more firmly in government's encompassing strategic agenda.

2.1 Public financial management and programme budgeting in Virgin Islands

"We govern transparently, ensuring the safety, security and cohesion of our populace." (Government of Virgin Islands, SEED – strategic priorities, 2015)

"Ensure sound public financial management through strong budgeting and comprehensive financial management procedures." (Government Virgin Islands, SEED – Strategic priorities, 2015)

One of the result areas in the SEED framework is a reformed public sector with the following strategic priorities relevant to this report: *"Reform policies to ensure relevance and benchmark to best practices, ... collect data to inform the policy and decision-making process, ... and promote transparency, good governance and effective and efficient management of fiscal resources."*

The Convention on the Rights of the Child and the General Comment (19/2016) on public budgeting for the realisation of children's rights that was introduced in the first chapter provides guidance to governments on ensuring that their investments in children are sufficient, effective, efficient, equitable, transparent and sustainable. The requirements following from the Convention stipulates that governments should be able to continuously assess how budget allocations impact children and whether their budget decisions lead to the best possible outcomes for the largest number of children, with special attention to children in vulnerable situations.

It also stipulates that government should monitor, evaluate and audit public funds for children to provide checks and balances that promote sound financial management (GC19/2016). Moreover, the General Comment prescribes that governments should "establish and maintain a database of all policies and resources affecting children so that those involved in implementing and monitoring the corresponding programmes and services have continuous access to objective and reliable information, ... and investigate past and potential impacts of budget decisions on children." (GC19/2016, para 67)

This encompassing agenda aligns well with the ambitions of the Government of Virgin Islands (UK) as already mentioned in this report. Programme-based budgeting or programme budgeting helps structure policies according to their objectives, but it is crucial to establish the right controls so as to be able to hold programme managers accountable for their performance. This requires a re-design of the traditional line item budget classification.

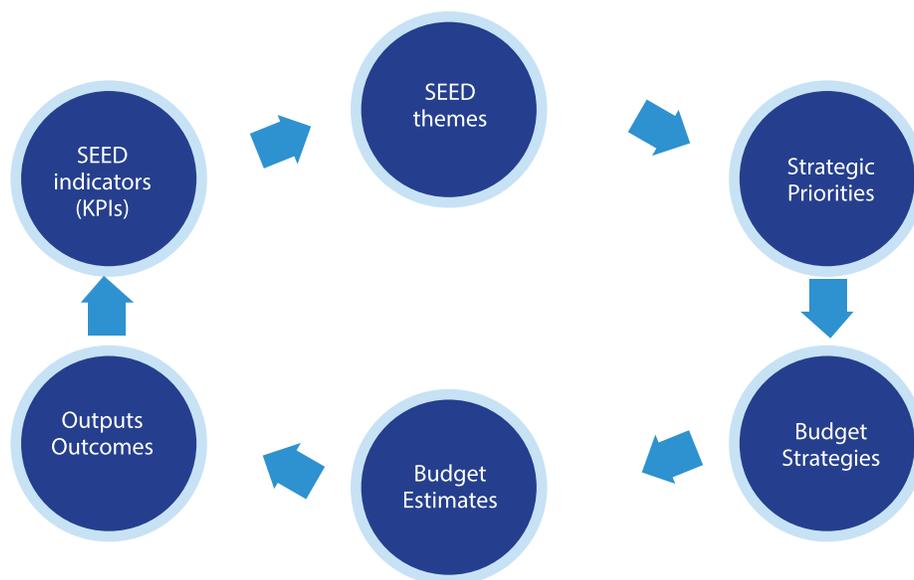
The following are the main conditions for a successful programme budgeting:

- Link operational targets individually to the strategic (longer-term) objectives.
- Identify and translate needs into measures or policies that help overcome the gap between what exists in terms of policies and what is required.
- Define the performance indicators (in a SMART manner).
- Set milestones to measure progress against a pre-defined timetable.
- Clear links between inputs (budget resources) and programme outputs and identify outcomes.

This is reflected in the architecture of the budget of Virgin Islands (UK). The aim of the Government in its PFM reform is to 'bring (priorities and performance indicators) together under one umbrella and ensure

that all strategic plans and budget documents are coherent within this framework. Figure 2-1 illustrates government’s ground plan for this.

Figure 2-1: Linkages between strategic priorities, budget and performance indicators



Source: Government of Virgin Islands (UK), 2015

Subsequent chapters discuss programme budgeting in more detail on education, health and social development, and child protection.

2.2 Current macro-economic and fiscal environment

The KPIs (economic Indicators) the government focuses on in this area are:

- GDP growth and composition
- Inflation rate
- EP (employment-to-population) ratio
- Tourism expenditure
- Financial services revenue

This section discusses these and other crucial economic, labour market and fiscal indicators.

2.2.1 Population growth and structure

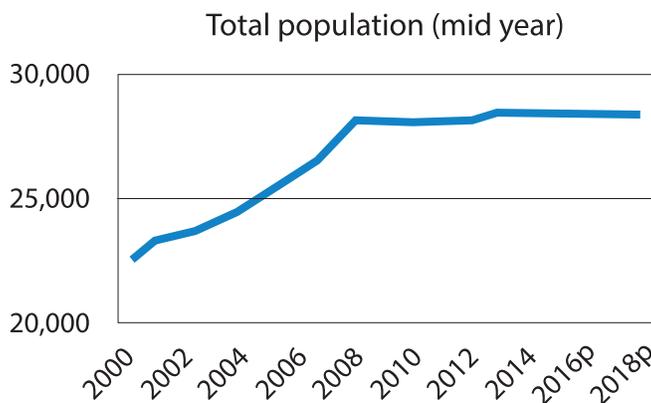
The World Bank defines Virgin Islands (UK) as a mid-income small island State with a relatively high GDP per capita (around US\$33,000 in 2015), but UNICEF’s SitAn (UNICEF, 2016) reports that inequalities and inequities persist in the territory. The Gini coefficient was 0.364 for households and 0.327 for individuals in the 2010 Census and the economy faces challenges such as limited resources, remoteness, susceptibility to natural disasters, vulnerability to external shocks, excessive dependence on international economies, and fragile environments.

The SitAn (UNICEF, 2016) and the 2010 Census estimates that the island has a population of 28,054 with children population (0–19 years) of about 8,035 (29 percent) of the total population.

Figure 2-2 presents the demographic development between 2000 and 2013, and projections for 2014 to 2018. The population increased rapidly between 2000 and 2008, with an average 3 percent growth per year.

In 2009–2013, however, average population growth was much lower at 0.6 percent. Between 1990 and 2010, the population increased by 82.2 percent, of which 80 percent was due to immigration (UNICEF, 2016).

Figure 2-2: Population growth in Virgin Islands (UK), 2000–2013, and 2014–2018 (projections)

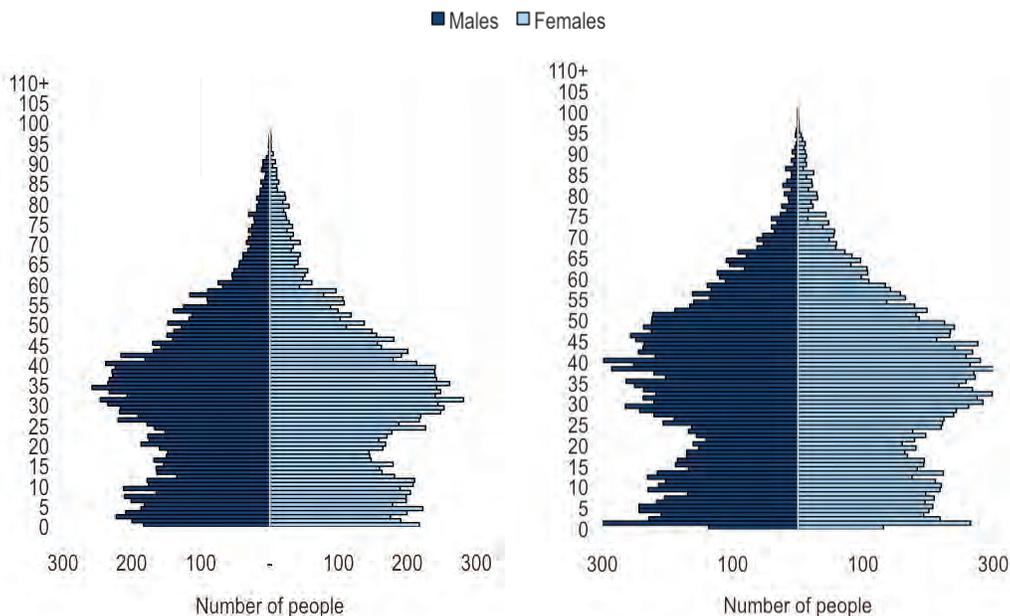


Source: CSO (2016), Ministry of Planning Unit (2016), team's projections

Figure 2-3 presents the gender and age distribution of the population for the last two Censuses (2001 and 2010). A large proportion of the population was in the

working age group and children made up a significant part. Only a small proportion was aged 65+.

Figure 2-3: Population structure of Virgin Islands (UK), 2001 (left) and 2010 (right)



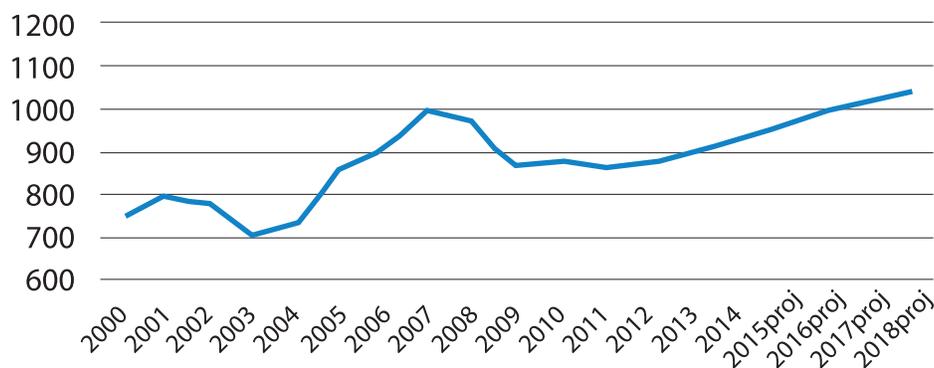
Source: CSO (2016)

2.2.2 Economic growth

Economic growth has been volatile in the past five years (Figure 2-4). Data on real GDP before 2010 was not available but Ministry of Finance officials said the pattern of GDP growth tends to be similar with global developments. The global economic crisis

of 2008–2009 affected GDP growth and, according to the Caribbean Development Bank, Virgin Islands stagnated for the seventh consecutive year in 2014⁴. Average real GDP growth in 2010–2015 was 1 percent and real GDP growth per capita over the same period was approximately zero percent.

Figure 2-4: (Nominal) GDP, 2000-2015 (left) and real GDP Growth (%) – right, 2010–2015



Source: CSO (2016), team's calculations

Table 2-1 below highlights some important economic and social indicators for the Virgin Islands (UK) since the beginning of this century. Unfortunately, data from the Statistics Office on the labour market were

not available. The SitAn reports, from the 2010 census, an unemployment rate of 2,8 per cent, which is quite low by international standards.

Table 2-1: Selected economic and social indicators for Virgin Islands (UK), 2000–2015

	2000	2005	2010	2015
Nominal GDP, Million US\$	736.3	853.4	877.4	968.7
Real GDP, Million US\$ (2015 prices)	948.2	968.7
GDP deflator, index (2015=100)	91.4	100.0
Population size	22,408	25,220	28,054	29,299
Real GDP per Capita, US\$ (2015 prices)	33,801	33,064
Labour Force Participation rate
Female labour Force Participation rate
Unemployment rate, per cent	2.8	..
Female unemployment rate, per cent
Debt/GDP Ratio, per cent	12.0	18.0

Source: CSO (2016), MOF (2016), UNICEF (2016) and team's calculations.

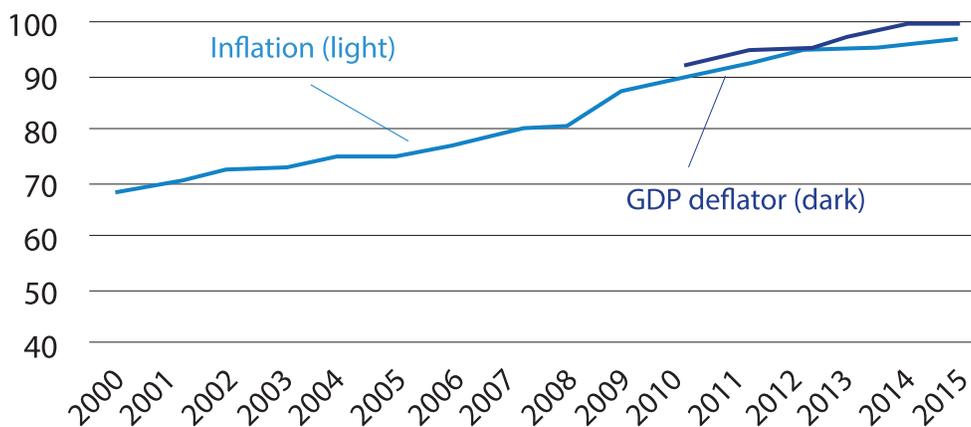
⁴ SitAn, UNICEF

2.2.3 Inflation

Virgin Islands (UK)'s low inflation rate, averaging 2.6 per cent over 2000–2015, is positive news. Figure 2-5 shows a relatively smooth development over time in

the consumer price index. The development in the GDP deflator follows a similar path (since data on real GDP prior to 2010 are not available, the time series for the GDP deflator only starts in 2010).

Figure 2-5: Inflation, CPI and GDP deflator, 1995–2015



Source: CSO (2016) and East Caribbean Central Bank (2016), team's calculations

2.2.4 Sector composition and trends in Virgin Islands (UK)

Some of the government's strategic economic sector priorities are (SEED, 2015):

- Grow the tourism sector to maximise economic output for Virgin Island (UK) in a manner that balances economic opportunity with environmental sustainability and social harmony.
- Build a thriving and sustainable financial services sector where Virgin Island (UK) remains a world leading corporate domicile, expands value added services and build best in class enabling mechanisms to facilitate the sector's continued growth
- Promote a prosperous and diversified small business sector that drives greater economic output and provides opportunities for Virgin Islanders

- Review agricultural legislation and policy frameworks to ensure vibrant sector.

The island's economy is based mainly on tourism and financial services and the World Travel and Tourism Council reported in 2014 that around 90 percent of the jobs were tourism related (UNICEF, 2016).

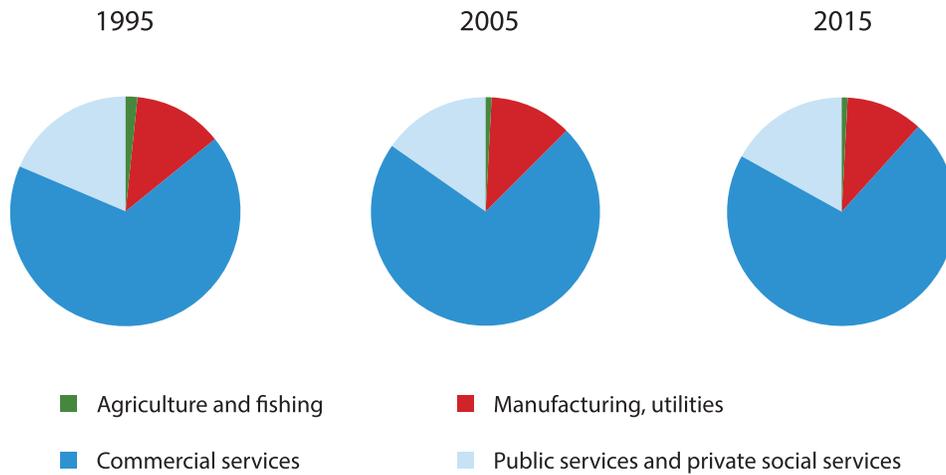
Figure 2-6 presents the GDP by sector. Agriculture and fishing had the smallest proportion and this seems to have further declined (from 2 percent in 1995 to 1 percent in 2013). Manufacturing and utilities contributed 13 percent in 1995 and 11 percent in 2013. Public services and private social services remained constant around 17 percent. Commercial services made the largest contribution to the GDP, around 70 percent, in all the years. If we consider indirect contributions, tourism accounted for 77 percent of the GDP in 2013 (UNICEF, 2016). Tourism development

had been volatile in the past decade (Figure 2-7) and financial services have been on a steady increase.

caused tourism to decline with temporary stagnation in the volume increase of financial services, and this had a large impact on local economy.

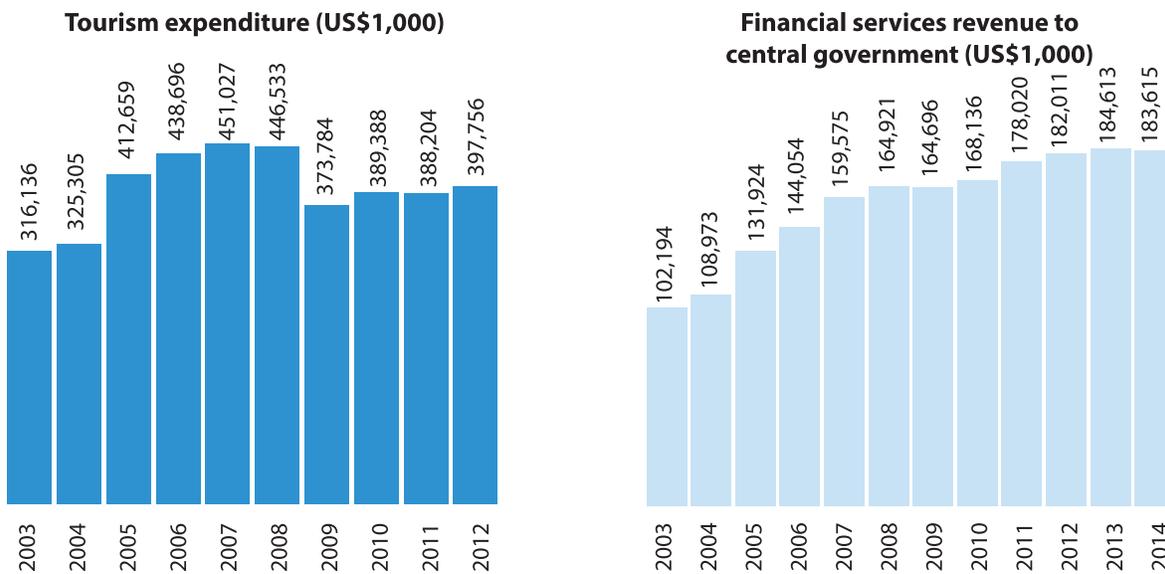
It appears that the economy was highly dependent on the world economy because the 2008–2009 recession

Figure 2-6: GDP per sector (%), 2000 and 2013



Source: Central Statistics Office, team's calculations

Figure 2-7: Volume trends in the tourism and financial services sectors



Source: Government of Virgin Islands

2.2.5 The labour market

Table 2-2 present the situation of the labour market in 2010. Labour force participation particularly among the prime age groups (25–55 years) and employment to population ratios were high. Unemployment rate

was 2.8 percent, which was low from an international perspective. Unfortunately, there was no gender breakdown of the available statistics were, so it is not clear whether there was a significant difference between male and female rates⁵.

Table 2-2: Labour market in Virgin Islands (UK), 2010

Age group	Labour force		Employed		Unemployed	
	number	rate	number	ratio	number	rate
15-19 Years	349	19.8	272	15.4	77	22.1
20-24 Years	1,341	78.0	1,221	71.0	120	8.9
25-29 Years	2,118	91.5	2,036	87.9	82	3.9
30-34 Years	2,373	93.5	2,321	91.5	52	2.2
35-39 Years	2,449	94.2	2,417	93.0	32	1.3
40-44 Years	2,394	93.6	2,361	92.3	33	1.4
45-49 Years	2,184	93.4	2,160	92.4	24	1.1
50-54 Years	1,662	90.2	1,633	88.7	29	1.7
55-59 Years	1,172	84.5	1,156	83.3	16	1.4
60-64 Years	752	73.2	739	71.9	13	1.7
Total	17,325	79.5	16,845	77.3	480	2.8

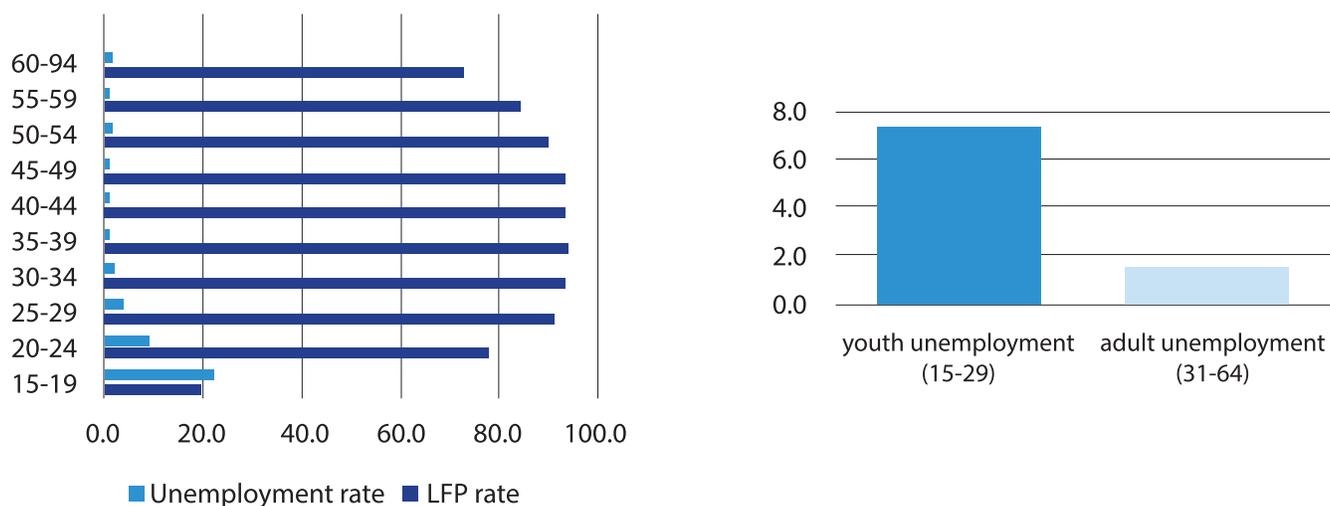
Source: calculated from CSO statistics received, September 2016

⁵ While not available at the time of the finalization of this report, 2015 LFS updates to these figures are available from the 2 CSO

Figure 2-8 shows the high labour force participation and low unemployment rates. Unemployment was highest among youths especially up to age 25. At 7.3 percent, youth unemployment (15–29) was nearly five

times higher than adult unemployment (1.5 percent for age 30 and above), however, the labour market seems to have been functioning well.

Figure 2-8: Employed and employed-to-population ratios in Virgin Islands (UK), 2010



Source: Calculated from data received from CSO, 2016

2.2.6 Public finances

Table 2-3 presents an overview of the public expenditure (administrative classification, recurrent and capital expenditure).

Table 2-3: Government expenditure in Virgin Islands (administrative classification), 2016 (US\$1,000)

Constitutionally established	Governor's Group	Premier's Office	Finance	Communication and Works	Natural Resources and Labour	Education and Culture	Health and Social Development
<i>Recurrent</i>							
7,810	33,266	26,726	30,291	47,791	12,603	49,016	58,104
<i>Capital</i>							
	575	1,395	558	6,240	3,050	3,000	5,100
<i>Total</i>							
7,810	33,841	28,121	30,849	52,031	15,653	52,017	63,204
2.75%	11.94%	9.92%	10.88%	18.35%	5.52%	18.35%	22.29%

Total government debt, including parastatals, has increased since 2010, but remained at 18.92 percent of the nominal GDP in 2016, which is low from an international perspective and is expected to grow in the future.

Table 2-4 presents highlights of government's revenues and expenditures. Tax revenues accounted for 95 percent of the total. Virgin Islands (UK) normally does not receive grants, but in 2014 it received US\$2.5 million from international sponsors. Current expenditure is volatile.

Table 2-4: Government revenue and expenditure in Virgin Islands (UK), 2010–2015 (outturns)

	2010	2011	2012	2013	2014	2015
Total revenues, million US\$	273.9	284.0	292.8	302.4	318.6	317.6
(% GDP)	31.2	33.1	33.6	33.7	34.1	32.8
Tax revenues, million US\$	259.9	269.3	277.5	281.4	298.5	297.8
(% GDP)	29.6	31.3	31.8	31.4	32.0	30.7
Grants, million US\$	0.0	0.0	0.0	3.3	2.5	3.0
(% GDP)	0.0	0.0	0.0	0.4	0.3	0.3
Total expenditure, million US\$	279.3	279.8	304.7	299.7	282.8	320.2
(% GDP)	31.8	32.6	35.0	33.4	30.3	33.1
Fiscal balance, million US\$	5.5	1.8	27.0	12.3	-28.8	7.6
(% GDP)	0.6	0.2	3.1	1.4	-3.1	0.8
Debt/GDP Ratio (% GDP)	11.7	15.7	13.9	12.0	14.4	18.2

Source: MOF (2016) and team's calculations.

Tables 2-6 and 2-7 present more details on tax revenues. Table 2-5 shows that nominal revenues from taxes in all four categories have increased in recent years. Real revenues from income/payroll tax

increased by 4 percent (Table 2-6). Taxes on property increased by 3.7 percent and on international trade by 6.8 percent. However, tax revenues from goods and services remained constant in real terms.

Table 2-5: Government revenue and expenditure in Virgin Islands (UK), 2016–2018 (projections)

	2016	2017	2018
Total revenues, million US\$	330.9	337.9	339.8
(% GDP)	32.9	33.1	32.8
Tax revenues, million US\$	313.9	320.8	322.4
(% GDP)	31.3	31.4	31.1
Grants, million US\$	0.0	0.0	0.0
(% GDP)	0.0	0.0	0.0
Total expenditure, million US\$	331.2	331.3	325.8
(% GDP)	33.0	32.5	31.4
Fiscal balance, million US\$	15.3	8.4	-11.0
(% GDP)	1.5	0.8	-1.1
Debt/GDP Ratio (% GDP)	20.7	18.2	15.8

Source: MOF (2016) and team's calculations.

Table 2-6: Tax revenue in Virgin Islands (UK), 2010–2016

(in million US\$)	2010	2011	2012	2013	2014	2015	2016
Tax on income	38.1	39.2	40.8	44.3	47.4	49.5	50.9
Tax on property	2.6	2.5	2.8	2.7	2.7	3.2	3.5
Tax on goods and services	184.0	191.2	195.1	198.1	198.5	196.6	202.2
Tax on international trade	30.3	30.1	29.6	29.2	33.6	36.2	46.0

Source: MOF (2016) and team's calculations. Note: 2010-2015 are actual outturns, whereas 2016 are projections.

Table 2-7: Proportion of tax revenue in GDP and real growth in Virgin Islands (UK) (constant prices)

	share of GDP (2010)	share of GDP (2015)	annual growth 2010-2015
Tax on income	4.3%	5.1%	4.1
Tax on property	0.3%	0.3%	3.7
Tax on goods and services	21.0%	20.1%	0.1
Tax on international trade	3.5%	4.6%	6.8

Source: MOF (2016) and team's calculations.

On (recurrent) expenditure, public sector wages and salaries remained stable. The second largest item in the budget (at least in 2010) – expenditures on goods and services – decreased by 0.4 percent, whereas

subsidies increased by 7.2 percent in real terms. Interests have been modest and decreased (Tables 2-8 and 2-9).

Table 2-8: Recurrent expenditure in Virgin Islands (UK), 2010–2016

(in million US\$)	2010	2011	2012	2013	2014	2015	2016
Wages and Compensation of Employees	104.9	104.3	106.0	114.3	113.2	120.2	120.4
Purchases of Goods and services	63.9	53.3	65.1	62.2	57.4	67.7	68.6
Subsidies, Grants and Social Benefits	59.7	63.2	61.9	64.5	64.2	67.5	92.3
Interests	4.4	4.2	5.2	4.5	4.2	4.1	4.7

Source: MOF (2016) and team's calculations. Note: 2010-2015 are actual outturns, whereas 2016 are projections.

Table 2-9: Proportion of recurrent expenditure in GDP and real growth in Virgin Islands (UK), (constant prices)

(in million US\$)	share of GDP (2010)	share of GDP (2015)	annual growth 2010-2015
Wages and Compensation of Employees	12.0%	12.0%	1.0
Purchases of Goods and services	7.3%	6.8%	-0.4
Subsidies, Grants and Social Benefits	6.8%	9.2%	7.2
Interests	0.5%	0.5%	-5.8

Source: MOF (2016) and team's calculations.

Social budget

One of the result areas in the government's strategic SEED framework was a reformed public sector. Government's aim in its PFM reform was to "bring (priorities and performance indicators] together under one umbrella and ensure that all strategic plans and budget documents are coherent within this framework."

Table 2-10 presents the social budget for FYs 2015 and 2016. Social spending represented 17.4 percent of the total government budget in 2015 (this is the FY with the most complete information), corresponding to

5.7 percent of the GDP. Programme expenditure data were not available in sufficient detail and due to the absence of (age/gender specific) utilisation profiles for all programmes, it was not possible to establish an accurate overview of budget allocation to the various age categories. The table should, therefore, be interpreted with some caution but it can still give an indication of how these priorities were operationalised and to what extent concrete, measurable and relevant KPIs were identified to measure progress and performance.

Table 2-10: Overview of the social budget of Virgin Islands (UK)

Expenditure 2016	1,000 US\$	% Gov't expenditure	%GDP
Health (all ages) - expenditure	22,687	6.8%	2.3%
<i>Health (all ages) - budget allocation</i>	<i>50,254</i>	<i>15.0%</i>	<i>5.0%</i>
Children	25,733	7.7%	2.6%
Education	25,074	7.5%	2.5%
ECCE	7	0.0%	0.0%
Prim. Education	9,601	2.9%	1.0%
Sec. Education	11,286	3.4%	1.1%
Tert. Education	4,180	1.2%	0.4%
Child Protection	659	0.2%	0.1%
Social Protection	-	0.0%	0.0%
Working ages	279	0.1%	0.0%
ALMPs	64	0.0%	0.0%
Cash transfers, other services and subs	215	0.1%	0.0%
Elderly	1,329	0.4%	0.1%
Total Expenditure	50,029	14.9%	5.0%

2.3 Overview of child well-being

We have seen a review of the economic, social and demographic developments, as well as public financial management in Virgin Islands. This section examines the individual/household level and the implications of the socio-economic situation with particular focus on children. It presents evidence on the needs of children given the conceptual framework of analysis provided in the introduction.

2.3.1 Monetary poverty

The analysis in this section was based on the 2002⁶ Survey of Living Conditions using the poverty line of US\$6,617 per adult per annum⁷. Household poverty

lines were equivalised to account for household size and composition. See Annex A for more detailed explanation on the calculations.

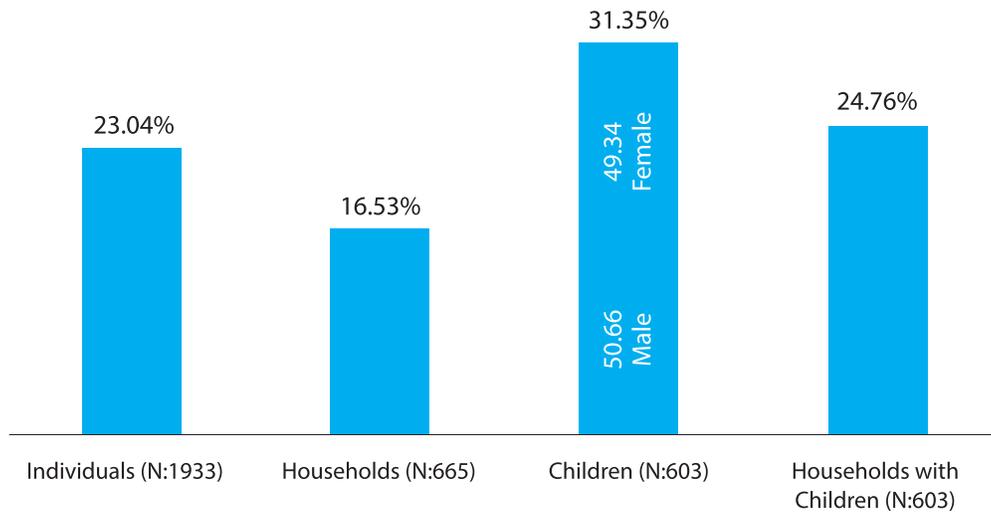
Twenty-three per cent of individuals were considered poor versus 16.5 percent of all households surveyed (Figure 2-9). The proportion increased significantly among children, as over 31% of them were poor. Households with children were significantly more likely to fall below the poverty line than households without.

⁶ The authors acknowledge that the data set is rather old, however it was the only available dataset that would allow us to conduct the needed analysis. At the time this report went to print the new survey data of 2015 was being discussed in the legislative assembly. This analysis can be a starting point for conducting further (and comparative analysis) with the new data.

⁷ These measures are obtained by weighting the sample on an ED

(Enumeration District) basis using the Visitation Record from the 2001 Census.

Figure 2-9: Monetary poverty among individuals, households and children

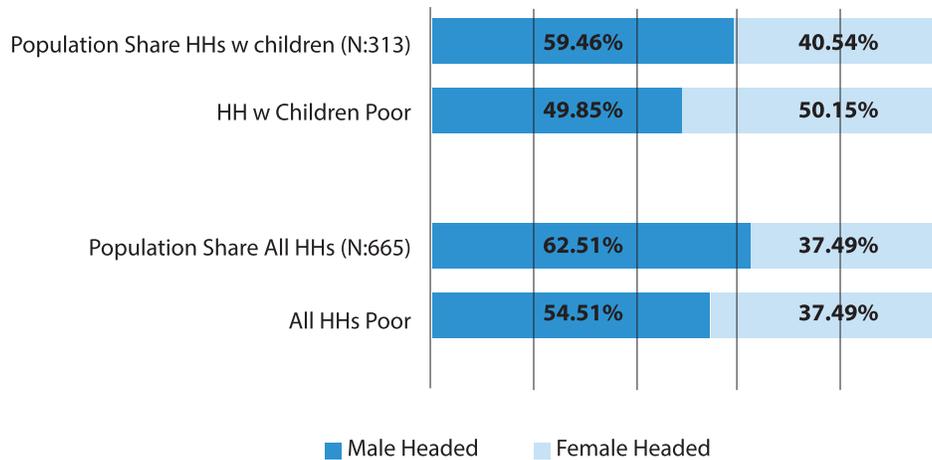


Source: Authors' calculations

Figure 2-10 shows the gender dimension of poverty; households headed by females were poorer on average than households headed by males, and this was greater for households with children. Female-

headed households with children made up 40 percent of the population and they were the largest (50 per cent) among poor households with children.

Figure 2-10: Household poverty status by gender



Source: Based on authors' calculations

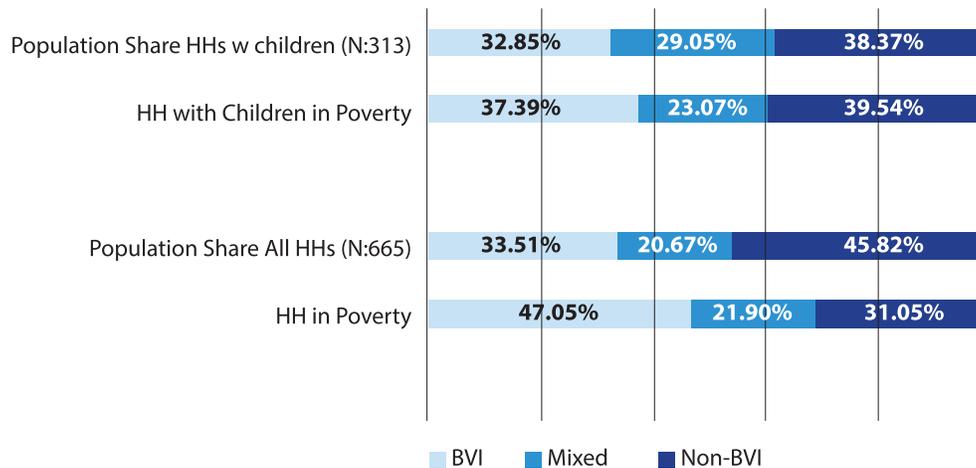
Considering nationality, a lower proportion of non-BVI islanders than BVI islanders were poor, but this increased in households with children (Figure 2-11). The situation of households with children was worse than those without for islanders and non-islanders. However, when incorporated into the regression model of determining poverty in section 2.3.2, the effects changed when other indicators were taken into consideration.

Households with children who lived with a couple were less likely to be poor than those who lived with

single parents or extended family. It is therefore clear that household compositions made a difference for child poverty, especially with children who lived in households with multi-generations, extended families and grandparents (Figure 2-12).

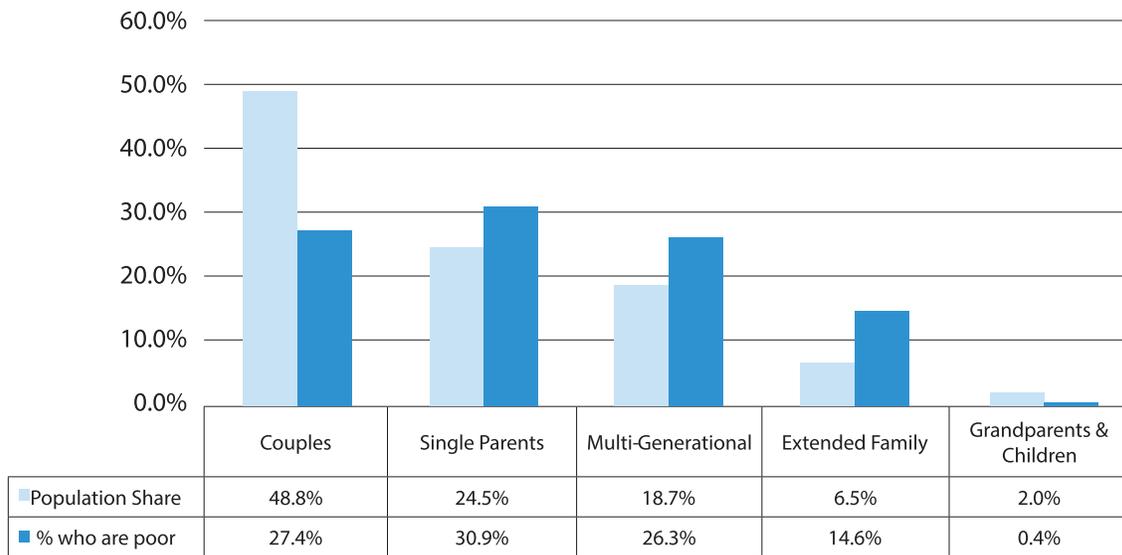
The age of the household head had a negative association with well-being until they reached age 40–49, when it started becoming positive. Thus, when household heads were 50 or older, there was a positive association between the age of the household head and poverty (Figure 2-13).

Figure 2-11: Poverty status by Nationality



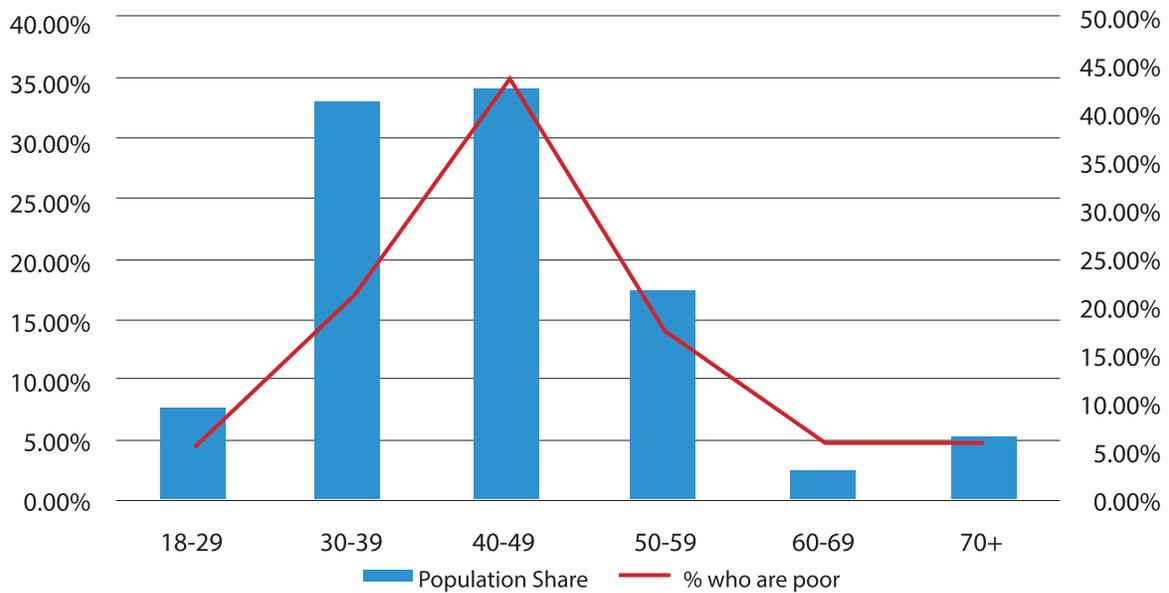
Source: Author's calculations

Figure 2-12: Poverty status by household composition



Source: Authors' calculations

Figure 2-13: Poverty status by age of household head (proportion of population)



Source: Authors' calculations

2.3.2 Multidimensional poverty and the MPI

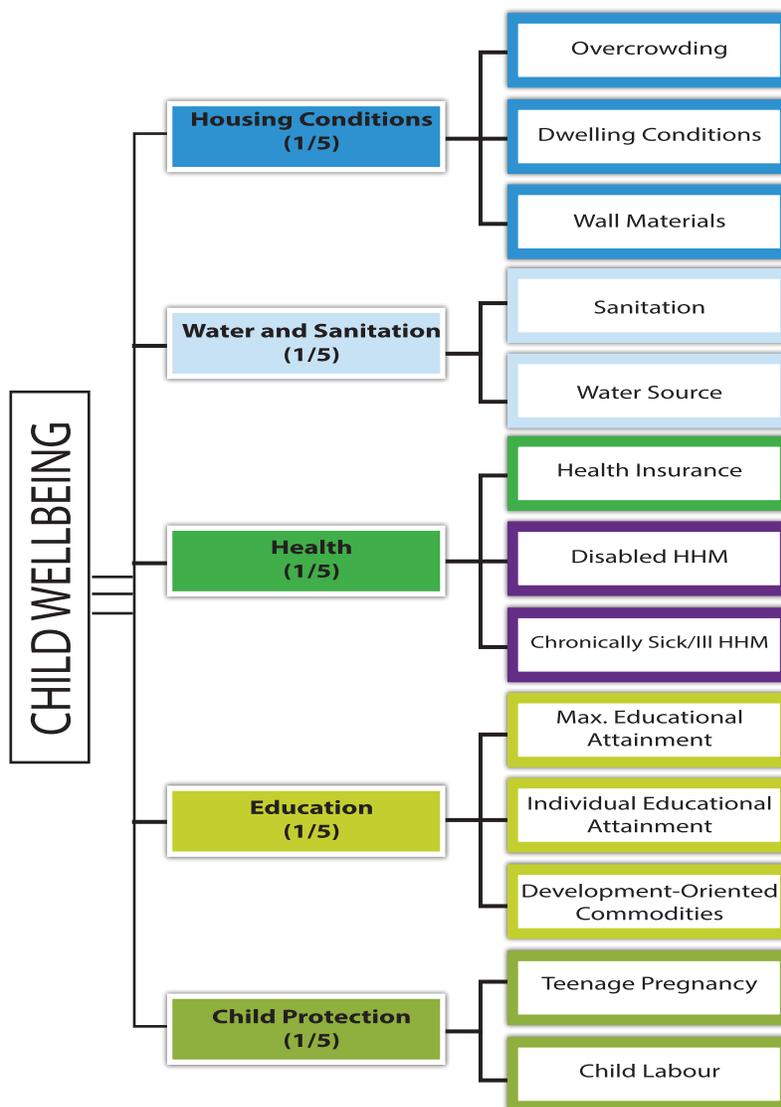
Identifying, locating and profiling poor and deprived individuals in a society are the most basic imperatives for good social policy design (De Neubourg, De Milliano, and Plavgo, 2014). To investigate the incidence of poverty in the Virgin Island (UK), a Child Well-being Index was created using the UNICEF MODA Framework, to the extent that available data allowed. The index assessed the operationalisation of well-being, specifically child well-being, following the Convention on the Rights of the Child (1989). Several equally important dimensions of child well-being were then identified, including survival, identity, freedom of expression, access to information, and protection from all forms of violence including child labour and sexual exploitation. Others were health care and special care needed in case of disability, adequate standard of living, right to education, leisure, and play so that the development of the child's personality, abilities, and talents is encouraged. Unfortunately, due to data limitations, some choices in terms of indicators and proxies were made. While the Survey of Living Conditions presents several options in some

dimensions (for example, housing conditions), the same cannot be said for other pertinent dimensions such as education, health and child protection.

Although the process of operationalising child well-being resulted in a measure that was methodically more rounded, the most important features can still be found in the way the index was formulated. For example, the recognition that MODA approach makes to the evolving nature of child capabilities can be found in the index when both the intrinsic and instrumental value of several of the indicators are considered. The experience of poverty is often multifaceted and deprivations are interrelated in many cases. Overall, the index, if seen in its entirety, tries to capture the specificity and essentiality of a child's needs by operationalising the complex developmental perspective that ought to be used in the case of children. This highlights the need to clearly look at the different concepts of poverty independently and study their overlap (De Neubourg, De Milliano, and Plavgo, 2014).



Figure 2-14: Multidimensional Well-being Index for Virgin Island (UK)



Constructed by authors

Table 2-11 shows four different groups – the total population (individuals), children, households, and households with children. Starting with the housing dimension, we found that the main indicator of concern among children was overcrowding. Children were by far the most disadvantaged group and households with children were worse than those without. The different groups had similar outcomes in terms of dwelling conditions and toilet facilities. Also, children and households with children were slightly better in relation to water source and outer wall materials.

Based on available indicators, there were no discrepancies among the groups per se on health, but it is worth noting that the deprivation in the life/health insurance indicator was high for the whole population, although this was only used as a proxy for deprivation⁸. For the education and development, we found that children were mostly deprived in the Development-Oriented Commodities Index (DOCI), which examined the different communications equipment (having

⁸ This survey was conducted in 2002 prior to the role out of the national health insurance. This indicator is used as a proxy for deprivation so as to give insight into the deprived groups.

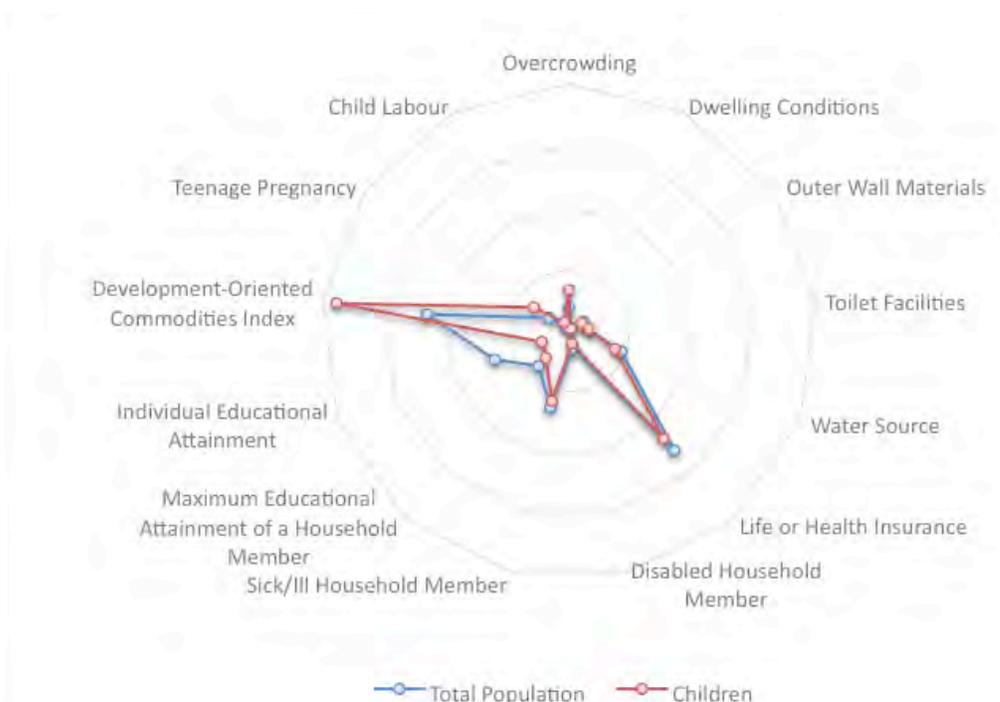
a television, computer, telephone, or radio/stereo) that we felt could assist children in their learning and development (see for example Gulati, 2008). Annex B explains the DOCI. The Multidimensional Well-being

Index also included indicators on teenage pregnancy and child labour, which would become more relevant in further categorisations.

Table 2-11: Categorisation of dimensions by total population and children

Dimension	Deprivation	Total population (1933) (%)	Children (N=603) (%)	Total households (N = 665) (%)	Households with children (N = 313) (%)
HOUSING CONDITIONS	Overcrowding	7.95	13.41	4.1	8.43
	Dwelling conditions	1.06	1.01	1.06	1.38
	Outer wall materials	5.63	4.79	7.66	4.73
	Toilet facilities	6.40	6.39	7.35	6.25
	Water source	18.03	15.91	18.46	16.83
HEALTH	Life or health insurance	51.35	46.24	55.51	46.83
	Disabled household member	5.51	4.05	5.01	5.46
	Sick/ill household member	25.27	23.10	21.51	22.25
EDUCATION & DEVELOPMENT	Household member	14.82	11.30	21.35	11.18
	Individual educational attainment	25.57	9.40	39.67	36.61
	Development-oriented commodities index	46.15	75.71	39.67	36.61
CHILD PROTECTION	Teenage pregnancy	7.80	13.78	4.58	9.79
	Child labour	2.09	3.28	1.36	2.9

Figure 2-15: Comparison of children’s deprivation to total population



Constructed by authors

Children were always worse irrespective of the number of dimensions examined (Table 2-11). For example, looking at deprivation in two dimensions (D = 2), which means that the child was deprived in

any two of the five dimensions, we found that children had a higher incidence of multidimensional poverty (63 percent compared to 38 percent for the total population) and higher intensity.

Table 2-12: Aggregated measures with five different cut-off points

		D = 1	D = 2	D = 3	D = 4	D = 5
Total population (N = 1933)	Headcount ratio (%)	66.3	38.1	12	3.4	0.1
	Average intensity of deprivation (%)	21.4	27.1	35.6	43.3	50
	Adjusted headcount ratio (%)	14.2	10.3	4.3	1.5	0.00
Children (N = 603)	Headcount ratio (%)	96.6	63.1	25.8	3.6	0.4
	Average intensity of deprivation (%)	39.2	49.5	63.1	82.3	100
	Adjusted headcount ratio (%)	37.9	31.2	16.3	3	0.04

D = Number of Dimensions

Source: Based on SLC2002 - authors’ calculations

Table 2-12 presents the contribution of each dimension of well-being to the deprivation score of the children population. We found that the first dimension, regardless of how many dimensions we are considering, was the education and development, followed by the health.

among children in each of the dimensions. The values are different for different cut-off points (in this case being deprived in just one indicator or a combination of four, except deprivation in four dimensions ($K = 4$)⁹ and it seems that the development oriented commodities index, life/health insurance and teenage pregnancy were among the drivers.

Table 2-13 presents a closer examination, which gives an indication of the main contributor to deprivation

Table 2-13: The contribution of each indicator to the deprivation in the children population

	k = 1 (%)	k = 2 (%)	k = 3 (%)	k = 4 (%)
Housing conditions	8.3	10.4	10.8	14.5
Water & sanitation	14.8	13.8	19.3	14.5
Health	28.7	30	26.1	17.5
Education & development	36.8	34.3	29.4	32.1
Child protection	11.4	11.5	14.4	21.8

Source: Based on SLC2002 - authors' calculations

Table 2-14: Contribution of each indicator to deprivation in the children population

	k = 0.1 (%)	k = 0.2 (%)	k = 0.3 (%)	k = 0.4 (%)
HOUSING CONDITIONS				
Overcrowding	5.7	7.1	7.8	14.5
Dwelling conditions	0.4	0.6	1.4	0
Outer wall materials	2.1	2.6	1.7	0
WATER & SANITATION				
Toilet facilities	4.3	3.6	7.7	11.9
Water source	10.6	10.1	11.6	2.2
HEALTH				
Life or health insurance	18.4	18.9	15.7	16
Disabled household member	1.8	2.1	2	0
Sick/ill household member	8.5	9	8.4	1.5
EDUCATION & DEVELOPMENT				
Maximum educational attainment of a household member	5	5.3	5.4	8.1
Individual educational attainment	4.2	4.6	4.9	8.1
Development-Oriented Commodities Index	27.6	24.3	19.1	1.5
CHILD PROTECTION				
Teenage pregnancy	9.2	9.5	9.7	21.8
Child labour	2.2	2.1	4.7	0

K= number of dimensions

Source: Based on SLC2002 - authors' calculations

⁹ We only included deprivations up to 4 dimensions, as the result were not significant when we added the 5th dimension.

2.3.3 Limitations of the index

Data limitations

The dataset used for this analysis was not recent, which is a clear limitation of its accuracy and relevance especially if its ultimate purpose was to inform future policy decisions on child well-being. This, however, was not the case here, the aim was only to contextualise the report.

Appropriateness of the variables used as indicators: Overall, the dataset was appropriate for the type of analysis performed but several important indicators/dimensions of child well-being could not be analysed. The first problem was the lack of any specific information regarding individual consumption and nutrition. Second, even if health were included in the index the type of variables in the dataset were not suitable. Having a life/health insurance (of which no specific details in terms of coverage were recorded) and not being disabled or sick was not sufficient for assessing a child's health well-being. Information on frequency and access to healthcare, access and use of medicines (including contraceptive health) could have added more depth to the analysis. Other interesting aspects of well-being like birth registration and protection from violence in and outside the household (in the forms of corporal punishment, forced sex, bullying, and verbal abuse) could have provided more insight on child protection. Third, to deepen the discourse on education and development, some information on leisure, cultural activity and personal growth could have been very useful.

Methodology limitations

Operationalising the concept of well-being is complex. At best, MODA could serve as a substitute for actual well-being because it is based on the notion of minimal levels. The most visible disadvantage of the index is the lack of age-specific indicators and dimensions. The Development-oriented Commodity Index only measured the existence of certain indicators and not their use by children.

From a human-rights perspective, no child can be considered well-off if he or she is deprived of even one dimension, therefore, the issue of setting thresholds is particularly sensitive. This analysis has used two methodologies but theoretically the first one (unit approach at least within the dimensions) is preferred. The problems with indicators, dimensions and thresholds however make its effectiveness in capturing child well-being and child deprivation doubtful. A second more flexible approach was therefore presented.

2.3.4 Determinants of multidimensional well-being

Several regression models were conducted to provide a more in-depth understanding of the poverty situation in households. Annex B provides a technical description and explanation of these models and their specifications. Based on the results, several aspects had significance and magnitude on deprivation outcomes.

A significant household characteristic that determined well-being was the household size and the number of children in the household. An increase in the number of children seemed to have negative effect on household well-being. Increase in the number of household members was associated with a lower score for monetary poverty and a higher score for multidimensional poverty. A possible reason for this discrepancy is that an additional household member offers a possible additional income source and an additional expense. The effect in terms of household income/expenditure was positive but it did not necessarily translate into a positive effect on economic status, therefore, there was no need for further investigation.

The results showed that single headed households were more likely to be poor and deprived, and the effect could be seen on both male and female headed households. The age of the household head had an

increasing effect on well-being until they reached age 47–55 when the household well-being began to decline. This pattern was also observed in monetary poverty.

Geographically, living on Jost Van Dyke or Anegada increased the likelihood of deprivation compared to living on Tortola, with Anegada appearing to have higher negative impact among all the households. It was difficult to draw conclusions about households in Virgin Gorda due to the lack of statistical significance in the results, however, if the magnitude were considered there was a higher probability that the poverty status score was lower than households in Tortola.

Households headed by a Caribbean national were poorer than those headed by a Virgin Island (UK) national. Households headed by non-Caribbean nationals were expected to be richer in terms of income/expenditure and poorer in terms of multidimensional well-being. Although the results were not always statistically significant they are consistent. The effect of a higher educational level for the household head was always positive and significant.

Having a disabled household member increased the likelihood of being poor and having a close relative living outside the island had a negative influence on the household poverty status. This could be explained by a possible reversed causality, that poor households could be more likely to have a member emigrate in search of a better job or higher wages.

2.4 Conclusion

This chapter set the subsequent ones. It discussed the public financial management reform process of Virgin Islands (UK) and the strategic priorities that have been outlined in the SEED.

Some of the strategic economic sector priorities of the government are to: grow the tourism sector to

maximise economic output, build a thriving and sustainable financial services sector and remain a world leading corporate domicile, expand value added services, promote a prosperous and diversified small business sector and review agricultural legislation and policy frameworks (SEED, 2015).

It discussed the macroeconomic and fiscal environment of the island, which showed that while the GDP per capita is relatively high, inequalities and inequities persist in the territory. Moreover, the economy faces challenges such as limited resources, remoteness, susceptibility to natural disasters, vulnerability to external shocks, excessive dependence on international economies, and fragile environments. The gender and age distribution of the population for the last two censuses show that a large proportion of the population is of working age. Children make up a significant proportion as well and only a small proportion of the population is aged 65+.

Government officials said economic growth has been volatile in the past five years and the pattern of GDP growth tends to coincide with global developments. A positive aspect is the low inflation rate and the development in the GDP deflator. The economy is mainly based on tourism and financial services. Agriculture and fishing make up the smallest share and this seems to be declining. Manufacturing and utilities, public services and private social services contribute moderately. Commercial services contribute the largest share (around 70 percent) to the GDP in all years and if indirect contributions were considered tourism would account for more than 75 percent of the GDP.

Participation in the labour force is high, particularly among the prime age groups (25–55 years). Employment to population ratios are high and unemployment rate is 2.8 percent, which is low from an international perspective. Gender disaggregation was not possible due to data constraints, therefore,

it is not clear whether there is a significant difference between male and female rates. Unemployment is concentrated among the youth, especially those under 25¹⁰.

Total government debt, including parastatals, has increased since 2010 but remains low from an international perspective, and is expected to decrease. Tax revenues account for approximately 95 percent of government revenue and current expenditure is volatile. On recurrent expenditure, public sector wages and salaries have remained stable, expenditure on goods and services decreased slightly while subsidies increased. Interest have been modest and decreased in real terms.

Available data shows that children are the ones mostly affected by poverty as a group and in terms of households with children. This is more serious in households headed by females. The age of the household head has a positive effect on poverty until it age 47–55 when the pattern is reversed. For multidimensional deprivation, health is a driver of low deprivation scores in the whole population and the life/health insurance indicator¹¹ is high for the whole population. Particularly for children, the main indicators of concern are overcrowding and the constructed Development-Oriented Commodities Index.

The chapter also discussed poverty and well-being. The most significant determinants of household well-being are household size and number of children, both increasing the probability of poverty. Households living in Jost Van Dyke or Anegada are worse than other regional and living in Anegada appears to have the highest negative impact of all the household characteristics used to explain poverty. Households headed by a Caribbean national are poorer than those headed by Virgin Island (UK) nationals. Households headed by non-Caribbean nationals are expected to be richer in terms of income/expenditure and poorer in terms of multidimensional well-being. In all cases for Islanders and non-islanders the situation of households with children is worse than those without. Having a disabled household member increases the likelihood of being poor and having a close relative living outside the island has a negative influence on the household poverty status.

Subsequent chapters will discuss programme budgeting in Virgin Islands (UK) in more detail as it applies to education, health and social development, and child protection.

10 Should be available with the 2015 LFS, additionally a new round will be conducted in a couple of year.

11 This is a proxy to capture deprivation among groups, and this particular indicator should be followed up with the more recent surveys, as it has been specifically targeted by the roll out of the NHI in 2016.



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3 Education

Support the educational, health, social and economic development of young people and promote participation in sport and physical activity among children, youth and adults.

(Government of Virgin Islands, SEED – Strategic priorities, 2015)

The Ministry of Education and Culture is the entity responsible for the education budget, and for carrying out the strategic objectives of the Government of Virgin Islands when on education. In 2015, the government identified the following strategic priorities to strengthen the education (and cultural) sector (SEED, 2015):

- Improve the quality and accountability of leadership and management in the delivery of education services.
- Improve learning by ensuring that teachers have appropriate qualifications for the grades and subjects they teach.
- Increase secondary graduation rate and Caribbean Examinations Council, Caribbean Secondary Education Certificate (CXC CSEC) results.
- Improve curriculum and strategies for assessment.
- Increase (and expand) access to quality early childhood development services.
- Provide opportunities for all learners in technical and vocational education and training.
- Increase provisions for tertiary and continuing education.

- Support the educational health, social and economic development of young people and promote participation in sport and physical activity among children, youth and adults.
- Provide access to a range of high quality educational and cultural information for research, learning and recreation, and collect and preserve cultural documents.

This chapter focuses on education, starting with a brief overview of the education system in Virgin Islands (UK) and followed by a description of the institutional framework, including policies and legislation. It presents a brief overview of education programmes for various age groups and suggests KPIs to measure performance. Some of these KPIs coincide with those the government presents in its budget, but most are new. Subsequently, the chapter discusses in-depth the education budget, considering allocation and operational efficiency and assessing the share of expenditure that actually accrues to children. This analysis is complemented by a mapping of child well-being related to education in the well-being of households with children. The chapter concludes with a discussion and insight for the future.

3.1 Short overview of the education system in Virgin Islands (UK)

Compulsory education in Virgin Islands (UK) starts at age five but children aged 1–4 years can enrol in non-compulsory early childhood education (ECE). Secondary school starts at age 12 and the formal age range for public secondary education is 12–16 years. There are seven grades in primary school and six grades (forms) in secondary school (OECS, 2013, UNICEF, 2016, GoVI, 2016). After completing secondary education, students can enrol in post-secondary or tertiary school.

The island has 32 ECE centres, 27 primary and seven secondary schools, one (private) post-secondary/tertiary Institution, and one institute for vocational

training. The government owns and administers two of the ECEs while the other 30 belong to private owners. Sixteen of the primary and four of the secondary schools are government-owned and managed and this reflects in the ministry's budget.

3.2 Policies and planning

3.2.1 Laws and other basic regulations concerning education

The Virgin Islands (UK) Education Act as amended in 2004 governs education, which is compulsory and free for children aged 5–17 (UNICEF, 2016).

3.2.2 Administration and management of the education system

The private sector is a large provider of education services in the islands and the Ministry of Education and Culture coordinates and administers the Education Act and thus controls the education system.

3.3 Overview of programmes

3.3.1 Early childhood education services

ECE centres provide services to children aged 1–4 years and they provide daycare and preschool supervision services. Daycare centres provide childcare services to children aged 1–2 years while nursery or preschool centres admit children 3–4 years old. They all use a structured curriculum prescribed by the Early Childhood Unit of MEC. There were 32 ECE centres in the academic year 2013/2014, of which 30 were privately-owned, one operated by MEC and the other was a government assisted preschool (UNICEF, 2016).

UNICEF (2016) identified several challenges for ECE in the island, which insufficiently trained staff working with young children and shortage of resources (materials, supplies). Low-income families face the barriers of costs because the centres charge a fee for their services, and this places the burden of taking

care little sisters/brothers at home on older children (UNICEF, 2016).

Another challenge lies in monitoring the quality of ECE services. A quality assessment conducted by MEC in 2014 indicates that one-third to half of the centres operate below standard (UNICEF, 2016).

Table 3-1 presents the combined monitoring indicators for ECE, which are currently not in the government's budget. It shows that estimates of the gross enrolment rate for ECE was 58.3 percent in 2013/2014 and total enrolment was 1,508. Nearly half of the teachers/caregivers were qualified and the child/caregiver ratio was 8.4.

Table 3-1: Monitoring Indicators Early Childhood Education - MEC 2010/11-2014/15

Early childhood education monitoring indicators	Year				
	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Access					
Gross enrolment rate (%)	71.6	–	–	58.3	–
Total enrolment	853	–	–	1,508	–
Female pupils (%)	48	–	–	–	46.9
Total number of ECE	–	–	–	32	–
Number of (semi-) public ECE	–	–	–	2	–
Average size of ECEs	–	–	–	47.1	–
Transition					
Proportion of children achieving pre-primary readiness skills	–	–	–	–	–
Resources					
Qualified/trained practitioners (%)	–	–	–	48.3	–
Child-caregiver ratio	–	–	–	8.4	–

Source: OECS (2014), UNICEF (2016), Government of Virgin Islands Budget 2016, authors' calculations.

3.3.2 Primary school services

Primary school is for children aged 5–11 and in 2013/2014 some 3,277 pupils were enrolled, corresponding to a gross enrolment rate of 91 percent (UNICEF, 2016, GoVI, 2016).

There were 27 primary schools in 2015, government operated 16 of them, including one special needs school, and the private sector owned 11. The schools were located according to population distribution in the territory: 19 in Tortola (12 of which were public and seven private); six in Virgin Gorda (two public and four private), one public each in Anegada and Jost Van Dyke (UNICEF, 2016).

Student support services

Table 3-2 presents an overview of the student support provided. There was limited textbook support programme for English and Mathematics and lunch, uniform, and other materials were provided based on a needs assessment. MEC operated an extremely limited (in scope) school lunch programme which catered for 22 pupils, 0.67 percent of total enrolment (UNICEF, 2016).

Student counselling was available to all pupils for free and students with moderate disabilities were given some cash support to encourage them to enrol in mainstream education (tailored to individual needs).

Table 3-2: Student support services for primary education, Virgin Islands (UK)

Student support provided	Description	Provider	Criteria/conditions
Textbooks	Limited support, only for English and Mathematics	Government	Based on need
Breakfast	Provided to needy students	School sponsored	Based on need
Lunch	Provided in one public school	Government	Based on need
Uniforms	Provided to needy students	School/government sponsored	Based on need
Transportation	No support	n.a.	n.a.
Cash support	Provided to needy students	Government	Based on need
Student counselling	Available to all	Government	Upon need
Special needs support	Available through the pupil support unit	Government	Upon identification of need
After school programme	Clubs, extracurricular activities, youth programmes	Community volunteers, government supported	Based on interest and availability

Source: Knight and Robinson, 2016

Key Performance Indicators Primary Education

Table 3-3 presents the key performance indicators for

primary education in Virgin Islands (UK). It shows that gross enrolment has decreased in the past years.

Table 3-3: Key performance indicators for primary education, Ministry of Education, 2010/2011–2014/2015

Primary education KPIs	Year				
	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Enrolment					
Gross enrolment rate (%)	97	87	84	84	98
Net enrolment rate (%)	--	--	--	78	80
Enrolment total	3,138	--	--	3,277	--
Enrolment in public schools	--	--	--	2,250	2,301
Female students (% of total)	48	--	--	--	46.2
Non-Belonger/(UK)VIlander rate (%)	--	--	--	--	--
Total number of primary schools	--	--	--	27	--
Number of public primary schools	--	--	--	16	--
Average class size (no. of students)	--	--	--	14	--
Leavers, transition and repetition					
Dropout Rate (% of total)	--	--	--	0.8	--
Transition rate – primary to secondary (%)	--	--	94.7	97.5	--
CPEA (as against the 2014 regional mean: 317.1)	--	--	--	--	--
Total repetition rates (%)	--	--	--	--	--
Female repeaters (%)	--	--	--	--	--
Teachers					
Qualified teachers (% of total)	--	--	--	82.6	--
Pupil-Teacher ratio (Caribbean region average: 18.4)	--	--	--	11	--
Facilities and programmes					
Participation in school lunch programme (% of total)	--	--	--	--	--
Beneficiaries from Cash Assistance (% of total)	--	--	--	--	--
Pupils at special needs school (Eslyn Henry Richiez)	--	--	--	20	--

Source: Source: OECS (2014), UNICEF (2016), Knight and Robinson (2016), Gov't of Virgin Islands Budget 2016, Authors' calculations.

Note: -- Data not available. The blue marked KPIs are identical to the ones in the budget.

The teacher: student ratio was 1:11 in 2013/2014 and in the same year 28 children (11 male and 17 female) dropped out of school, corresponding to a dropout rate of 0.8 percent. Graduation rates in 2012/2013 were high at 96 percent (UNICEF, 2016). The 2016 budget indicated the establishment of a territorial examination board that would implement uniform assessments at grades 4 and 6 and ensure standardisation of textbooks. Some 82.6 percent of teachers in 2013/2014 were trained, which is positive. There was limited (at least no comparative data in regional perspective) information about student performance but the percentage of students passing primary 5 examination tests decreased from 93.6 percent in 2009 to 84.5 percent in 2014 (UNICEF, 2016).

The main challenge which UNICEF (2016) identified for primary education in the island was decreasing enrolment, probably due to cost barriers for low-income families. Education is free but pupils pay for school uniforms, textbooks, transportation, etc.

3.3.3 Secondary school services

There were six (three public and three private) secondary schools in 2014/2015 and 79.3 percent of the students was enrolled in government schools. Net enrolment rate was 81 percent and only 38 percent of the students were in a grade corresponding to their age (UNICEF, 2016, GoVI, 2016).

Student support services

Table 3-4: Student support services for secondary education, Virgin Islands (UK)

Support provided	Description	Provider	Criteria/conditions
Textbooks	Limited through a textbook loan programme	Subsidised by government	Based on financial needs assessment
Breakfast	Provided to needy students	School sponsored	Upon identified need
Lunch	Provided in one school	Subsidised by government	No conditions
Uniforms	Provided to needy students	School/government sponsored	Upon demonstrated need
Cash support	Medical needs	Government	Upon identified need
Examination fees	No examination fees levied	Subsidised by government	No conditions
Transportation	Available to all students who need to access it	Subsidised by government (60%)	Upon identified need, or enrolled in alternative education or apprenticeship programme
Personal computers	Available at subsidised cost	Government supported	Upon need and availability
Student counselling	Available to all	Subsidised by government	Based on referrals and student requests
Special needs support	Available	Government	Upon identified need
Learning support	Limited available	Government	Upon need
Second chance education	Available through ASEP and an apprenticeship programme	Government	Upon need
After school programme	Clubs, extra-curricular activities, youth programmes	School and Department of Youth and Sports	Based on interest and availability

Source: Knight and Robinson, 2016

Most services were provided to selected pupils based on identified needs but there are no guidelines or procedures for assessing these needs. Government provides support in counselling, special needs, examination fees, learning and the provision of second chance education. The latter were free to the Islanders/belongers while others paid US\$100 per semester (Knight and Robinson, 2016). Other support services such as breakfast, lunch and transport were provided in some schools according to need. Laptops were available (remedial teaching) in class and provided to students taking information technology classes and less-abled students. In one school (Virgin Islands School of Technical Studies) all the students received a personal iPad.

Students with moderate disabilities were given some cash support to encourage to enrol in mainstream education (tailored to individual needs).

Key performance indicators for secondary education

The enrolment rate was a bit volatile and with a downward trend (Table 3-5). The last dropout figure recorded (2013/2014) was 68 out of which were 49 girls. One of the possible reasons for the gradual increase in dropout rate when progressing in the

forms, particularly for male pupils, could be the attractiveness of short-term jobs (like car washing, etc.), that is, the incentive to 'make quick money'. A second reason lies in the cultural values that places girls at a disadvantage. Third was the general unattractiveness of the curriculum offered for boys and the absence of male role models among school staff (UNICEF, 2016). For the ethnic minorities, there was also the issue of language and a lack of support to compensate for this additional barrier (UNICEF, 2016). Lastly, there was the issue of costs for low-income families; again, although education was free there were additional costs for uniforms, textbooks, transportation, etc. (UNICEF, 2016).

The teacher-student ratio was 1:8 in 2013/2014, which was extremely low compared to international standards. The number of qualified teachers was low. Improved teacher training, teacher evaluation and supervision, and a strengthened inspection regime to guarantee quality standards were among top priorities in the 2016 budget.

Results of the Caribbean Examinations Council tests have been slipping gradually from 2012/2013 to 2013/2014. However, all students completed the test in 2015.

Table 3-5: Key performance indicators for secondary education, Ministry of Education, 2010/2011–2014/2015

Secondary education KPIs	Year				
	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Enrolment and dropouts					
Gross enrolment rate (%)	97.0	99.2	98.5	95.5	102.8
Net enrolment rate (%)	–	–	–	83.4	86.8
Enrolment total	–	–	–	1,987	2,064
Enrolment in public schools	–	–	–	1,640	1,700
Female students (% total)	–	–	–	52.1	51.4
Non-Belonger/UK Vislander rate (% total)	–	–	–	–	–
Repetition rate	–	–	–	12.2	8.3
Transition rate – secondary to tertiary (%)	–	68	71	70	70
Share of students achieving honours (%)	–	–	–	–	32.8
Education quality					
Students achieving grades I to III in English/Maths	–	–	81.1/ 71.3	77.8/ 68.1	--
Students passing 5 CSEC subjects, including English and Maths (general & technical) (%)					75
Dropout rate (% of total)	–	–	–	3.2	–
Teachers	–	–	–		
Qualified teachers (% of total)	–	–	–	70	–
Pupil/teacher ratio	–	–	–	8	–
Female teachers (% of total)	–	–	–	–	–
Average class size (no. of students)	–	–	–	17	–
Facilities and programmes	–	–	–		
Beneficiaries from school transportation (% of total)	–	–	–	–	–
Beneficiaries from bursaries	–	–	–	92	80
Female beneficiaries from bursaries (% of total)	–	–	64.1	68.8	67.5

Source: OECS (2014), UNICEF (2016), HLSCC (2016), Knight and Robinson (2016), Gov't of Virgin Islands Budget 2016, authors' calculations. Note: -- Data not available. *The blue marked KPIs are identical to the ones in the budget.*

3.3.4 Tertiary school services

Apart from the University of the West Indies, which operates a campus in Virgin Islands, offering some specific courses, the H.L. Stout Community College (HLSCC) is Virgin Islands' main tertiary education institute. It is located in the eastern part of Tortola and operates a smaller branch in Virgin Gorda. In the 2016 spring semester, 812 students were enrolled, 62 percent (500) female and 38 percent (312) male. Out of all students 83 percent (678) were (UK) VIslanders/

belongers. There were 98 staff members out of which 54 were on full-time appointment.

Some of the enrolled students were up to 60 years and older, but around 50 percent of first time enrollees were less than 20 years.

Government provided scholarships to 80 students enrolled in HLSCC, which included tuition-free enrolment/attendance for all UKVIslanders/belongers. They also provided scholarships to students studying overseas.

Table 3-6: Key performance indicators for HLSCC, 2011/2012–2015/2016

Tertiary Education KPIs	Year				
	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Enrolment and dropouts					
Enrolment in HLSCC total	942	905	833	777	812
'Non-Belongers'	163	156	146	124	133
Education quality					
Students achieving their certificate	162	210	186	166	–
Graduation rate (% of total enrolled 3 years before)	–	46	42	39	–
Average class size (no. of students)	–	–	–	–	12
Teachers					
Teachers	102	108	96	93	–
Doctoral/master's degree teachers (% of total)	–	–	–	–	73
Female teachers (% of total)	–	–	–	55	53
Facilities and programmes					
Beneficiaries from HLSCC tuition assistance (TAP)	–	–	92	77	80
Beneficiaries from bursaries (overseas scholarships)	–	–	290	289	290
Students enrolled in vocational training programme	–	–	56	26	30

Source: HLSCC (Factbook Spring 2016) and Government of Virgin Islands (2016). Note: -- Data not available. The blue marked KPIs are identical to the ones in the budget.

3.4 The education budget

3.4.1 Education financing

The sum of US\$53.2 million was allocated to the Ministry of Education and Culture for both recurrent and capital expenditure in 2016, representing 15.9 percent of the national budget for the year. Public education expenditure (pre-primary, primary and secondary) was US\$20.9 million, which was 2.1 percent of the GDP and 6.3 percent of government recurrent expenditure.

This section analyses the education programme budget of the Ministry of Education and Culture, including the allocation and operational effectiveness and efficiency of direct and indirect public allocations for children, the allocation of resources for their stated objectives, with particular reference to children. It explores the economics of spending considering the choice of inputs related to programmes for children.

3.4.2 Methodology and data

The Government of Virgin Islands (UK)'s budget outturns for 2014 and the estimated expenditure for 2015 and budget 2016 were used for this analysis. The original estimates are classified into administrative and economic. In the first chapter, it was mentioned that programme-based budgets can be far less detailed in the listing of economic line items because these are not relevant for senior budget decision-makers. A different categorisation is needed for programme-based budget analysis, one that rearranges the budget into meaningful combinations of activities that meet certain objectives (programmes). This report also breaks down programme expenditure into the administrative and (genuine) programme components. Substantial, administration costs are often 'hidden' in programme expenditure in traditional budgets. Our objective here is to filter these out to assess whether there were operational inefficiencies in programme implementation.

Table 3-7 presents the conversion for both administrative and economic classifications. For the administrative classification, no changes have been applied because the existing programmes were retained. However, economic categories in the budget were reduced by combining various expenditure items. For example, the newly introduced category salaries is an addition of personal emoluments, social contributions, travel, social assistance benefits and employer social benefits; and grants such as contains grants, assistance grants and subsidies.

To arrive at an adequate distinction between administrative (non-programme) and programme expenditure, some assumptions were made. Goods and services and 'other' were perceived to be 100 percent administrative expenditure and grants were assumed to be 100 percent programme expenditure, even when it included purchases of supplies, transportation, etc. which may directly benefit pupils. We did not have sufficient information to separate these expenditures. For the categories salaries and training information on the composition of staff from the 2016 budget was used to produce an estimate of the proportion of programme expenditure in salaries and training. For example, for pre-primary and primary education 206 technical and service delivery staff out of 255 staff were categorised as programme and the remaining 49 as administrative staff. Hence, most of the salaries in this department (81 percent) were taken as programme expenditure rather than administrative costs, because the services provided were directly linked to the beneficiaries *as Rights holders*. The same approach was applied for the other departments.

Subsequently, child tagging was applied to the proportion of expenditure classified as programme spending, which was the identification of the proportion of the budget of a certain programme that was actually allocated to the (direct) benefit of children.

Child tagging is a means to discover whether there are mismatches in the allocation of resources and there are various approaches to do this. The first is most straightforward. If a programme is designed exclusively for children, once programme expenditure and administration costs have been derived (from the first step above), the entire programme expenditure can be perceived as allocated to the benefit of children. Hence, the child tag can be applied to the entire programme expenditure. On the other hand, if a programme is designed to serve not only children but also adults, the specific budget component for children should be determined. The approach to achieve this is to consider utilisation profiles. Once the age and gender profiles of users of the programme are known, they can guide the application of a child tag in terms of the proportion of spending that is allocated to children.

Some sub-programmes were assumed to target children 100 percent and this, for example, applied to pre-primary and education programmes, but it was also assumed to be the case for tertiary, adult and continuing education after looking at the strategic objectives and performance indicators in the budget. In the absence of accurate utilisation data for most of the remaining programmes the proportion of children (or children in the relevant age group, for example, 6–17) in the total population was to determine the appropriate child tag.

Since 2014 was the first year for which budget data in their current form were available, it was not possible to analyse spending.



Table 3-7: Conversion table, Ministry of Education and Culture

Administrative (programme) classification	Economic classification
Policy planning and administration	Salaries
Policy planning and administration	Personal emoluments (511)
Facilities, maintenance and infrastructural development	Social contributions (512)
Education, planning and policy research	Travel (525)
ICT support	Social assistance benefits (561)
Student support services	Employer social benefits (562)
Education quality assurance and standards	Training
Teacher training and evaluation	Training (526)
Curriculum development, stage assessments, examination	Contributions to professional bodies (527)
School inspections and accreditation	Goods and services
Pre-primary and primary education	Rent (512)
ECD	Social assistance benefits (561)
Interschool activities and supplies	Utilities (522)
(+ 16 schools are listed as separate sub-programmes)	Supplies (523)
Secondary education	Repairs (524)
Alternative secondary education	Services (528)
Interschool activities and supplies	Entertainment (529)
(+ 5 schools are listed as separate sub-programmes)	Interest
Tertiary adult and continuing education	Interest (530)
HLSCC and tuition assistance programme	Grants
Overseas scholarships	Grants (551)
Department of culture	Assistance grants (572)
Cultural activities	Subsidies (541)
Cultural skills development and job creation	Other
Library services	Property expenses (571)
Library services	Other (573)
Library outreach	
Youth affairs and sports	
Youth affairs and sports administration	
Youth development	
Sports services	
HM Prison	
Prison Services	

Source: authors. Notes: The categories in bold are the applied categories. Any categories below the bold items are combined into these applied categories. The 3-digit codes in the economic classification correspond to items in the Gov't of Virgin Islands' Chart of Accounts.

3.4.3 Budget analysis

A summarised version of the newly categorised budget is presented in Table 3-8. The first five columns give the expenditure per programme in US\$1,000 and the final column presents the total budget of the ministry allocated to that programme in FY2016. For example, 32.6 percent of the total budget was allocated to central administration. The largest programmes were central administration, pre-primary, primary and

secondary education, with 32.6, 19.6 and 23.0 percent of the total budget, respectively. A major component, 8.5 percent, was allocated to tertiary, adult and continuing education.

The largest proportion of all resources allocated to tertiary education (for example, 71.4 percent in 2016) was for HLSCC.

Table 3-8: Summarised budget MEC, administrative classification, 2014–2016 (US\$1,000, current prices)

Administrative classification	Actual	Estimated	Budget	% of MEC total (2016)
	2014	2015	2016	
Policy planning and administration	16,401	15,923	16,002	32.6
Education quality assurance and standards	2,505	1,200	444	0.9
Pre-primary and primary education	–	10,029	9,608	19.6
Of which salaries	–	–	9,480	19.3
Secondary education	9,128	12,969	11,286	23.0
Of which salaries	7,920	11,092	10,592	21.6
Tertiary, adult and continuing education	6,062	5,309	4,180	8.5
Department of Culture	2,401	1,597	1,665	3.4
Library Services	1,239	1,267	1,235	2.5
Youth Affairs and Sports	1,651	1,258	1,472	3.0
HM Prison	3,417	3,696	3,126	6.4
Total (recurrent)	42,804	53,248	49,019	100.0
Development expenditure/Capital	3,300	1,600	3,000	

Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations. Note, budget heads prior to 2014 cannot be translated on a one-to-one basis to current programmes.

Dividing the budget by economic classification, as in Table 3-9, it appears that a little more than half (56.9 percent) of the total budget was allocated to employee compensation. The education sub-programmes accounted for the largest proportion of the salary costs and grants, 32.8 percent, represented the other major proportion. This relates to the substantial effort the government is making by giving overseas

scholarships to students to study in universities abroad.

These two items (salaries and grants) appear to have dwarfed (recurrent) expenditures on other important inputs such as supplies and materials, operating and maintenance services, and teacher training.

Table 3-9: Summarised budget for the Ministry of Education and Culture, economic classification, 2014–2016 (US\$1,000, current prices)

Classification item	Actual	Estimated	Budget	% of total 2016
	2014	2015	2016	
Employee compensation	16,024	28,909	27,909	56.9
Training	104	175	38	0.1
Goods and services	6,120	6,062	4,815	9.8
Interest				0.0
Grants	20,170	17,716	16,079	32.8
Other	381	381	176	0.4
Total	42,804	53,248	49,019	100.0

Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations

Table 3-10 shows that salaries increased after 2014; the average expenditure per staff was around US\$38,283. In primary education, average earning was US\$37,176,

whereas average earning in secondary education was US\$40,894 (not only teaching staff, includes all staff working in these departments).

Table 3-10: Salary expenditures by the Ministry of Education and Culture, 2012–2016 (US\$1,000, current prices)

Salaries	Actual			Estimated	Budget
	2012	2013	2014	2015	2016
Total salary expenditure			16,024	28,909	27,909
Total no. of staff					729
Of which primary education (front-line)					206
Of which secondary education (front-line)					217
Total expenditure / total no. of staff (US\$)					38,283

Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations

Table 3-11 presents the expenditure per pupil in public primary and secondary schools and the public expenditure per student for HLSCC. The latter lies

below per capita expenditure in public secondary education.

Table 3-11: Expenditure per pupil, 2014–2016 (US\$1,000, current prices)

	Expenditure per pupil		
	2014	2015	2016
Expenditure (pre-) primary education		10,029	9,608
Pupils (pre-) primary education (public)	2,250	2,301	
Expenditure per pupil (pre-) primary, US\$		4,359	
Expenditure secondary education	9,128	12,969	11,286
Pupils secondary education (public schools)	1,640	1,700	
Expenditure per pupil (secondary), US\$	5,566	7,629	
Expenditure tertiary education	6,062	5,309	4,180
Pupils tertiary education	833	777	812
Expenditure per pupil (tertiary), US\$	7,277	6,833	

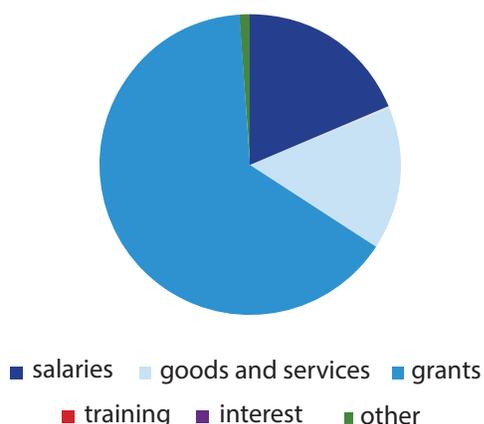
Source: Government of Virgin Islands (UK) (various Budgets) and MEC Education Digest, authors' calculations.

Note: Unfortunately, only for 2013/14 figures on numbers of students are available.

3.4.4 Allocation per programme

This sub-section presents the economic allocation for the largest programmes of the ministry – planning and administration, pre-primary and primary education, secondary education, and tertiary, adult and continuing education. Figure 3-1 present the allocation for the central administration in the 2016 budget. The three highest costs were salaries, goods and services, and grants – the latter being around two-thirds of the budget.

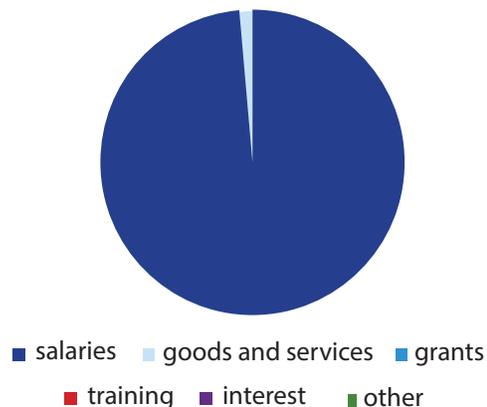
Figure 3-1: Economic allocation of expenditure for planning and administration, 2016 (32.6 percent of total MEC expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations

For (pre-) primary education, the breakdown is simple: almost 99 percent was allocated to salaries and all other categories were marginal (Figure 3-2). A limited allocation was made for goods and services while the resources allocated to training of teachers were negligible, even when the KPIs (Table 3-3) indicated that 18 percent of teachers in primary schools were not qualified.

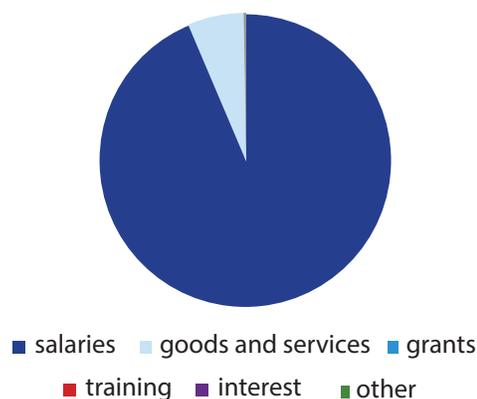
Figure 3-2: Economic allocation of expenditure to pre-primary and primary education, 2016 (19.6 percent of total MEC expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations

Figure 3-3 shows that secondary education also had a large proportion for salaries, but it was less than for primary education; 94 percent for salaries and 6 percent for goods and services. No resources were allocated for training of teachers, which does not reflect the finding (Table 3-3) that a significant proportion of the teachers were not qualified. There was however a special sub-programme tagged education quality assurance and standards, which had less than 0.1 percent of the training component.

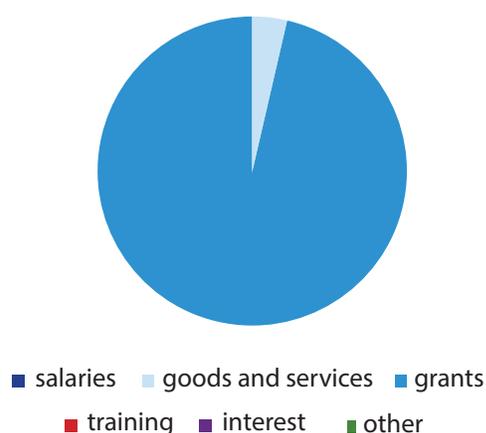
Figure 3-3: Economic allocation of expenditure to secondary education, 2016 (23.3 percent of the total MEC)



Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations

Tertiary, adult and continuing education had an entirely different pattern (Figure 3-4). In the 2016 budget, 99.6 percent of the resources was allocated to grants but no information about what the grants were used for. However, government officials said the grants were allocated to HLSCC, and local and overseas scholarships. Expenditure on salaries was off-loaded, it seems, from this budget. The budget mentioned that staff were transferred to the Planning and Administration Department.

Figure 3-4: Economic allocation of expenditure to tertiary, adult and continuing education, 2016 (8.5 percent of the total MEC expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

3.4.5 Spending for children (child tagging)

Table 3-12 presents the proportion of the programme expenditure within the total recurrent budget in 2014–2016. Programme expenditure in this report means expenditure with direct link to beneficiaries, as already explained (Section 3.4.2). For example, teachers' salaries are programme expenditure whereas salaries of principals, school administrators and cleaners are not. The table also presents the amount of resources, within programme expenditure, that was specifically spent on children.

It is not surprising if most of programme expenditure in a Ministry of Education and Youth Affairs was

child-specific, and this was the case in Virgin Islands (UK). Child-specific expenditure as a proportion of programme expenditure had increased to nearly 80 percent.

Table 3-12: Proportion of programme spending and child-specific spending in the MEC budget, 2014–2016

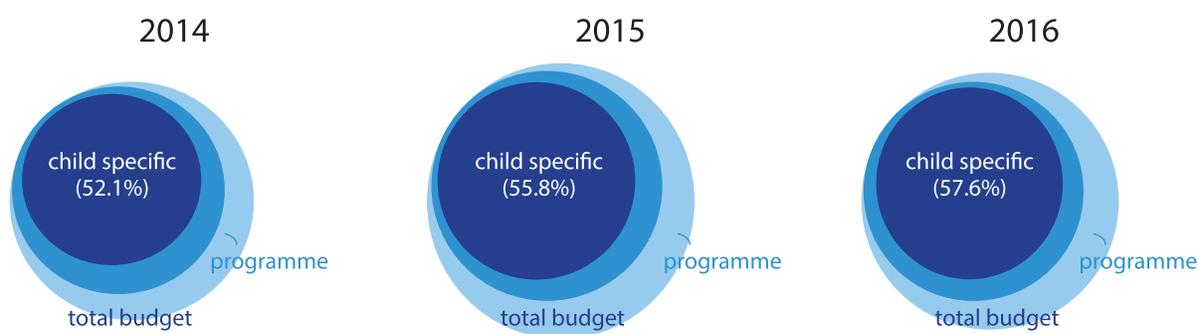
Administrative classification	Actual	Estimated	Budget
	2014	2015	2016
Total budget (US\$1,000)	42,804	53,248	49,019
of which programme expenditure:	32,177	38,811	35,959
of which child-specific programme expenditure	22,298	29,708	28,232
Percentage of child specific expenditure in programme expenditure	69.3	76.5	78.5
Percentage of child-specific expenditure in the total budget (child tagging)	52.1	55.8	57.6

Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations.

Less than 60 percent of the ministry's budget was allocated to children. Figure 3-5 illustrates this in another way. It shows the proportion of programme and child-specific programme spending in the total budget for the last three FYs.

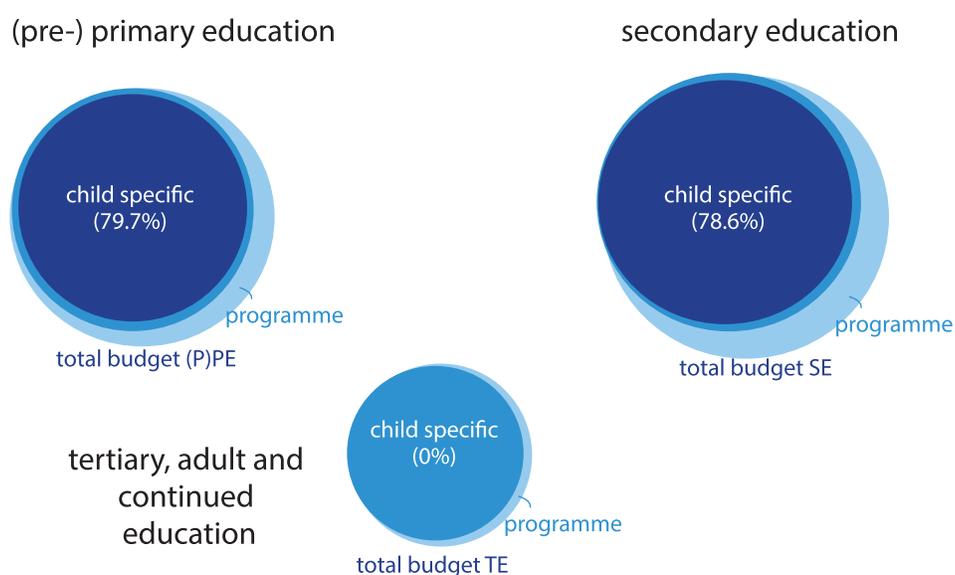
Figure 3-6 presents the proportion of child-specific expenditure for the three units of the ministry that are responsible for education. A large portion of the budget allocated to primary and secondary education programmes actually benefited the children.

Figure 3-5: Child specific budget allocation (Child Tags), MEC, 2014, 2015 and 2016



Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

Figure 3-6: Child-specific budget allocation (child tags), MEC-education, 2015/2016



Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations. Note: tertiary, adult and continued education under a strict definition (children are all in the ages 0 through 17) is not child specific spending.

3.5 Discussion

Investment in education, including early childhood development, translates to building national capacity towards a country's objectives to achieve its socio-economic development goals. Evidence shows that investment in the first five years of a child's life will translate to high returns in human capital development for a country. Under a normative

framework, quality and equitable access to education is a right based on the Convention on the Rights of the Child. With 7.5 per cent of education expenditure out of the total government expenditure, Virgin Islands (UK) demonstrates a clear commitment to the importance of education. However, based on the child tagging approach, less than 60 percent of the ministry's budget was allocated to children and the

proportion of MEC’s budget that could be linked to individual children was below 60 percent. Around 70 percent of the total expenditure could be classified as programme (in the definition of this report), meaning that a large proportion of the total expenditure did not directly benefit the targeted population.

Based on these findings, rolling out programme-based budgeting and refining and formulating KPIs can help determine how best to efficiently and effectively allocate resources for children’s benefits. The following points on the methodological perspective, linked to programme-based budgeting in the education sector, highlight specifically how this can be achieved.

Strategic and operational objectives can be aligned better to the SEED and National Plan of Action for Children. To formulate effective KPIs, national priorities and strategic objectives for education can be translated into operationalising action plans for children. For example, the objectives (mentioned at the beginning of the chapter) set in SEED could be reflected at an operational level under the proposed National Plan of Action for Children. Strategic objectives that will be operationalised for children should not only reflect KPIs on quality and teaching but also important KPIs on access to education for all children residing on the island. This should be guided by the mapping of well-being (i.e. those who are BVI, Caribbean and non-BVI). The current strategic priorities could be organized into categories, which can be translated into operational targets for the short- and medium-term and the KPIs can measure progress in achieving these targets.

Make the budget’s (short-term) operational programme strategies (for the current FY) highly concrete. For example, under education quality and standards several initiatives to improve and strengthen the quality of teaching should be listed, and under pre-primary and primary education plans for the introduction of key stage testing, an

early intervention programme and a strengthened inspection regime for schools should be announced. In secondary education, priorities are curriculum development and the achievement of a 100 percent CXC CSEC examination completion.

KPIs should align more with programme objectives and should be operationalised in a SMART manner. A further step could be to organize these KPIs in form of a balanced scorecard, which would support coordinated implementation of programme strategies (Table 3-13).

Table 3-13: Balanced scorecard for education in Virgin Islands (UK)

<p>Inputs</p> <ul style="list-style-type: none"> • Overall enrolment rate • Enrolment rate for girls • Enrolment rate for non-belonger/(UK) VIs. pupils • Public schools/total schools 	<p>Support for vulnerable children (Support Services)</p> <ul style="list-style-type: none"> • Student support services (selection of vital services: textbooks, lunches, transportation) • User fees as a percentage of total costs • Coverage rate of bursaries
<p>Finance</p> <ul style="list-style-type: none"> • GDP share of education expenditure • Expenditure/pupil • Teacher salaries (average) relative to national average wage • Programme expenditure/total expenditure • Child related (child tagged) expenditure/total expenditure 	<p>Quality and Outcomes</p> <ul style="list-style-type: none"> • Pupil/teacher ratio • Share of trained teachers • Repetition rate and/or dropout rate • Exam pass rate • Transition rate to higher level education • Share of adolescents entering the labour market with a certificate

For each of these KPIs norms can be defined (absolute/trend/relative) and the actual performance can be benchmarked against the norm. Often, traffic lights (red/yellow/green) are used to demonstrate the extent to which actual performance meets the prescribed norm. This can be a powerful management tool for senior level decision-makers, and in some cases are used within strategic plans to indicate the status of strategies and actions.

Address gaps that exist between resource allocation and the KPIs presented in the budget.

For example, the budget presents detail expenditure for individual schools whereas KPIs are not school-specific. Therefore, it is not possible to assess whether allocation to the various schools is appropriate. In this case, there were 30 private ECE centres, 11 private primary schools and three private secondary schools, but there was no information about these private schools in the budget. It should be possible to assess the performance of the private schools.

Commitment to accessible and quality education requires raising the priority on investment in ECD.

Budget allocation on ECD is not separately visible within the sub-programme pre-primary and primary education. Spending on ECD should be transparent to be able to comprehensively assess impact against children's lifelong learning.

Filter the administration costs "hidden" in programme expenditure out to assess whether there are operational inefficiencies in programme implementation. This report breaks down programme expenditure into an administrative and (genuine) programme components, with more accurate utilisation and unit cost data, the method could be further refined to understand if in fact the money spent reached those identified in the programme objectives. The same applies for the proportion of programme spending that actually benefits children (child tagging). Child tagging is a crucial prerequisite

to meet the requirements included in the General Comment (19/2016) that investment in children should be transparent.

Ensure that the equity of services for all children to access ECE, primary and secondary education in Virgin Islands (UK) is prioritized towards improving access and quality education for all.

The need to develop budgets that reflect the needs of the different vulnerable groups of children is crucial and the starting point is to define SMART KPIs that will allow measurement of impact among the vulnerable groups.

Increase investment in teachers training (training represents less than 0.1 percent of the total MEC budget) towards achieving quality academic achievement.

For both primary and secondary education, resources should be allocated to the training of teachers, given that currently the proportion of trained teachers lies below 100 percent. Looking at operational efficiency, the main issue here is the high expenditure on management and administration, which is the largest item in the education budget. Further in-depth analysis into operational efficiency and effectiveness (and what it entails) could point to potential avenues for cost savings in administration and re-allocations within the overall MEC budget to make programmes benefit children more directly.

Review and obtain clarity on investment towards the economic categories, which currently consist of only salaries and grants.

The economic breakdown of the programmes is one-dimensional. For example, in primary education almost 99 percent was allocated to salaries and 94 percent in secondary. On the other hand, for tertiary, adult and continuing education, 99.6 percent of resources was allocated to grants and it is not clear what the grants were used for.

As much as the available data permits conclusions, the following challenges stand out:



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- **Early childhood education:** The enrolment rate was 58.3 percent in 2013/2014, with nearly half of the teachers/caregivers having sufficient qualifications. Access, especially for low-income families and quality of ECE services are two issues that should receive attention from policymakers. Challenges exist when access is limited for low-income families. These two concerns should be addressed in more depth.
- **Primary education:** Enrolment is low¹², especially among low-income families. Although education is free, other costs such as school uniform, textbooks and transportation hinder children from attending primary education.
- **Secondary education:** Enrolment is relatively high but it is slipping in the higher grades, which seems to be most apparent among children from different cultural/ethnic backgrounds.

¹² This is based on Census data and may be underestimated



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4 Health and Social Development in Virgin Islands (UK)

Improve the quality and accessibility of healthcare and social services. Promote gender equity, social justice and the progressive realisation of human rights. (Government of Virgin Islands, SEED strategic priorities, 2015)

The Convention on the Rights of the Child calls upon governments to ensure that children survive and develop themselves in good health (Article 6) and to set the conditions for this through the establishment and maintenance of a system of good quality health care (Article 24).

This chapter presents the health and social services for children, starting with a brief overview of the

conditions and trends in health and social deprivation, regulations and governance, and current programmes in Virgin Islands (UK). It discusses in-depth the health and social services budget, which is complemented with an assessment of health and social services benefits. It then concludes with the main findings of this analysis and recommendations.

The current budgetary allocation to social development includes some components of social and child protection programmes. To ensure that social development is well presented, social protection and child protection are separated in this chapter. The island is still working towards building systematic and integrated services to address social deprivations faced by its vulnerable populations. The analysis will contribute to efforts in finding sustainable solutions

and mobilising national resources to establish and maintain integrated comprehensive services for the two sectors.

There are however limitations in the data used for this analysis. Age-specific health care utilisation and social services statistics have not been available for the island to date and this severely affected the depth of analysis presented in the chapter.

4.1 Overview of health conditions and social deprivation

The birth rate is 9.12, which is among the lowest in the region. The regional average is 15.4 births/1,000 population).

The latest fertility rate estimate is 0.98 births per woman and infant mortality is estimated at 11.27 deaths per 1,000 livebirths (Government of Virgin Islands, 2016).

Of the 287 children born in 2014, some 5.2 percent was from teenage mothers, a decrease from 2011 figures. Around 11.7 percent of the children had low birthweight, an increase from around 5 percent in 2011. No maternal deaths have been registered since 2006 (PAHO, 2012).

Life expectancy was estimated at 76.5 years in 2015, – 72.9 years for males and 80.8 years for females (Government of Virgin Islands, 2016). Figure 4-1 indicates a drop in 2012 but the cause of this is not known.

Eleven infant deaths were reported in 2011–2014, peaking in 2013 with six deaths. Infant mortality rate was 11.27 per 1,000 livebirths.

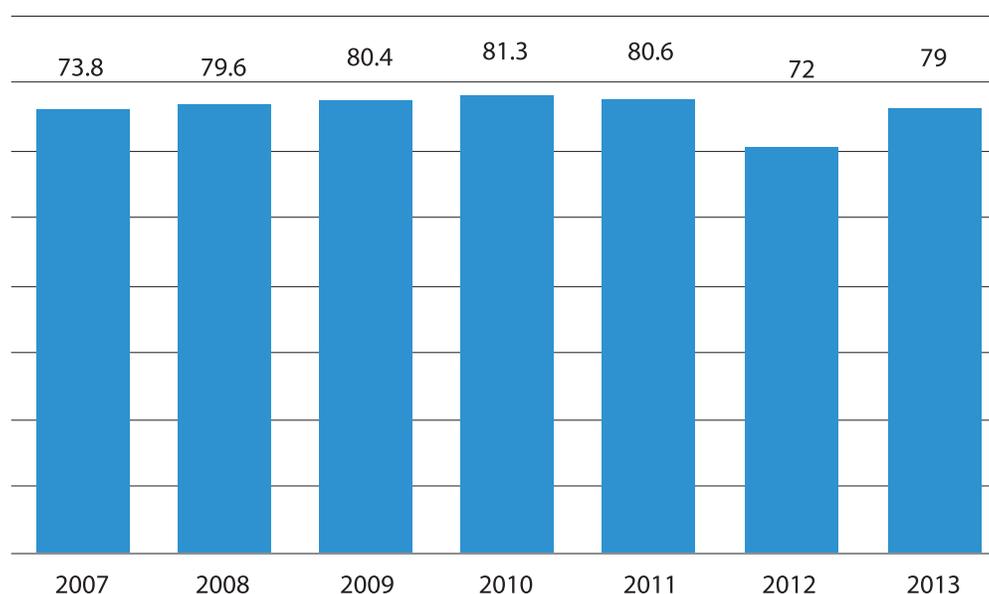
Available statistics on medical services outcomes were generally adequate. Immunization coverage was between 88 and 100 percent in 2015. One of the major health risks was overweight. Thirty-six percent of adolescents aged 10–19 (35.8 percent of boys and 37.8 percent of girls) were overweight and 17.5 percent of boys and 17.9 percent of girls were obese (UNICEF, 2016). The main reason for this from UNICEF's SitAn report was poor eating habits partially due to nutritional shortcuts adopted at home (UNICEF, 2016).

The island had no data on HIV and children but 97 people were diagnosed HIV seropositive in 2010. Comprehensive knowledge of HIV was low among adolescents (UNICEF, 2016).



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Figure 4-1: Life expectancy at birth, Virgin Islands



Government Virgin Islands (UK)

4.2 Governance, policies and planning¹³

In 2011, the island launched a national health policy recognising the right of individuals to the highest attainable level of health and focusing on achieving universal access to quality healthcare.

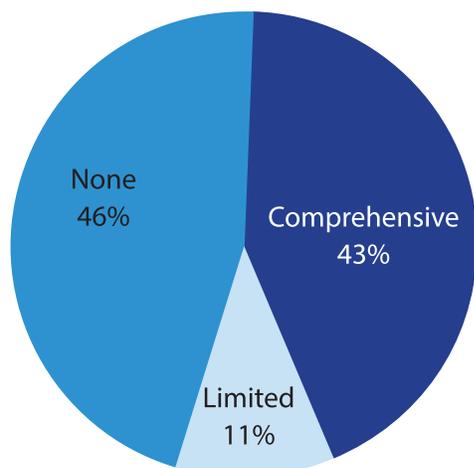
The Hospital Regulation 2014 stipulates that access to health should be free to pregnant women and children under the age of 16 regardless of their migration status. However, there is a difference in co-pay fees and charges for belongers/residents and non-residents/visitors (Virgin Islands Health Services Authority, 2014). The Regulation was not clear about non-belongers, that is, those who resided legally in the territory but were not nationals. The Hospital Amendment Regulation 2015 (Virgin Islands Health Services Authority, 2015) clarifies that a 'resident' is a person who is legally residing in the territory by being a belonger, or in accordance with the immigration and passport ordinance. That change nullified hospital

fees and co-pay among non-belongers, belongers and residents.

The island began implementing a National Health Insurance scheme in 2016. NHI is expected to provide be comprehensive, affordable and universal coverage to all those who reside in the island legally through a combination of government budgetary allocations, employer and beneficiary contributions, as well as co-payments, surcharges and interests earned on the NHI reserve funds (Government of Virgin Islands, 2015b).

¹³ This subsection is taken – full quote – from the UNICEF SitAn report (UNICEF, 2016).

Figure 4-2: Health insurance coverage in Virgin Islands (UK), 2009



Individual contributions were 7 percent of insurable earnings up to a maximum of US\$ 6,717 per month for a full-time job, which was a little over 10 times the statutory minimum wage of US\$640 per month. Employers and employees co-shared half of the premium (3.75 per cent each).

The insurance package covered all essential health services (clinics, specialists, hospital care, intensive care, dental services, mental health, drugs) and overseas care if the specialty was not provided in the island.

Various co-charges applied for patients, from 0 percent (clinics inside the network of contractors) to 40 percent for overseas facilities (when not contracted). Generally, co-payments were less for public facilities than private and non-contracted health services providers.

4.3 Overview of health programmes

4.3.1 Health services

The public health system was financed primarily through government allocations, fees for services and the social security system. Primary healthcare was the

strategy for service delivery; care was provided at 10 health centres and two health posts that offered a wide range of services. The island had a single hospital located in Tortola and there was a growing private sector that provided outpatient and inpatient services (UNICEF, 2016 and PAHO 2012).

Table 4-1 presents available information on patient visits to the clinics and utilisation of PHC services in 2015.

More advanced secondary health care and very limited tertiary care (in the form of visiting specialists) is delivered at the single hospital (Peebles Hospital) on the island. There are challenges related to the geographic location of the hospital. People living outside the main islands (Tortola and Virgin Gorda) have problems accessing specialised health services; they have to travel long distance for their treatment. It is not cost-efficient to provide specialised services to them on location, therefore, there is the continuous trade-off between investing in establishing and maintaining facilities on the islands and transporting patients overseas for treatments. This is a problem for Virgin Islands (UK) and the entire region (UNICEF, 2016).

Table 4-1: Clinic attendance at primary mental health care services, 2015

Clinic attendance	No. of visits		
	Male	Female	Total
Ages 0–4 years	764	715	1,479
Ages 5–9 years	507	380	887
Ages 10–15 years	521	567	1,088

Source: Ministry of Health (2016).

4.3.2 Professionals

Table 4-2 presents the number of available public sector health personnel. Turnover is high and health worker retention is a continuing challenge (UNICEF, 2015).

Table 4-2: Health workers, by number, density and population covered per worker, 2016/17

Category of health worker	Numbers
Medical doctors	102
Nurses and midwives	311
Allied nursing professionals	
Geriatric staff	
Dentists and allied professionals	13
Pharmacists and allied professionals	
Physiotherapists	
Technologists	
Nutritionists and allied professionals	
Environmental health officers and allied professionals	
Psychiatrists and psychologists	
Public Hospital Beds (per 1,000 inhabitants)	48
Private Hospital Beds (per 1,000 inhabitants)	6
Total	

Source: MHSD, Government of Virgin Islands, 2016.

UNICEF (2016) identified several challenges in the health care sector. On the demand side (families), there seems to be a preference for treating some children diseases using over-the-counter medicines or local herbs (teas) probably because of the cost of treatment. Some families with children would seek medical treatment in the hospital as a last resort.

Another problem regarding accessibility is that there are no specific provisions for access to health by children and adolescents (Morlachetti, April 2015). Legislation and regulations do not clearly state at which age children have access to confidential medical counselling and advice without parental consent. Children and adolescents may need such access, for example, when they experience violence or abuse at home or need reproductive health education or services, or in case of conflicts between parents and the child over access to health services. It appears, from the Age of Majority Act, that children who are 16 can give consent to medical treatment but in practice children below 18 are required to provide parental consent to access medical services (Morlachetti, April 2015).

4.3.3 Social development – social protection

Establish a sustainable, comprehensive and integrated social protection system.
(Government of Virgin Islands, SEED Strategic priorities, 2015)

There is no social protection system in the territory; instead, there is a fragmentation of welfare-driven responses to the needs of some vulnerable groups. The six divisions¹⁴ of the Social Development Department (SDD) are responsible for providing the following services: public assistance, day care assistance, skills building, child protection and permanency planning including adoption and foster care, counselling, case management, probation and restitution, disability and rehabilitation, community development and other community-based programmes such as the elderly/senior recreational programmes, non-medical homecare programme, mentorship, and early intervention for children (birth to five years). (Social Development Department, 2012, UNICEF, 2016).

¹⁴ Community Development, Elderly & Disability, Probation, Family & Children Services, Administration & Management and the Virgin Gorda Branch Office.

The Public Assistance Act 2013 (Government of the Virgin Islands, 2013) regulates aid provision for those considered to be in need. The Act stipulates that, public assistance may be provided for any of the following purposes: (a) food and household supplies,

(b) utilities or rent, (c) childcare, (d) medical care, (e) repairs to dwelling house, (f) transportation, (g) funeral and burial expenses, and (h) clothing. Table 4-3 lists other programmes implemented by SDD .

Table 4-3: Programmes implemented by the Social Development Department, Virgin Islands

Programme	Main objective (s)	Rules to qualify
Day care assistance	To provide temporary assistance to qualified single parents who are unable to enrol their children in childcare centres.	To qualify, a parent must be either unemployed, working a minimum of 25 hours monthly or enrolled in a full-time educational programme.
Big brother/big sister programme	To encourage positive social interaction and companionship between children and their mentors, ensuring adequate personal development and life skills socialisation for children at risk. To offer a support system for parents who may be unable to provide all psychological and/or emotional support and attention that their children require. To provide opportunities for adults through service to their community while giving them a sense of fulfilment.	Rules are not clear. Application form is available on the programme's website.
Child abuse prevention	To increase advocacy on child abuse, reducing the number of cases and increasing reporting of abused committed in society.	The programme is a campaign to mobilise the society. No direct services being provided to people and, therefore, no conditions for participating.

Source: (Social Development Department, 2012), UNICEF (2016).

In theory, SDD should work with the most vulnerable groups in the territory, but the number of beneficiaries that receive the grant will depend on the availability of funds. For instance, out of 3,000 students enrolled in primary education in 2013/2014, only 22 students (0.67 percent) received lunch benefits (Ministry of Education and Culture Virgin Islands, 2014).

Moreover, assistance is not available to all residents of the island. Among the eligible are belongers, residents,

spouse of a belonger who resides in the island or who is responsible for a dependent belonger. Non-belongers do not qualify for public assistance unless the Minister of Health and Social Development grants a special permit, which, by the territory's law, only happens in exceptional circumstances (Government of the Virgin Islands, 2013) and such grants are reviewed every three, six and 12 months.

Table 4-4: Public assistance outcomes, Virgin Islands, 2015

Category of assistance	Gender		Status		Approved	Denied	Deferred	Pending	Withdrawn Voluntarily or involuntarily	Referrals	Total
	Male	Female	New	Established							
Burial grants	19	11	24	6	18	11	0	0	1	0	30
Emergency food grants	0	2	1	1	2	0	0	0	0	0	2
Fire	0	0	0	0	0	0	0	0	0	0	0
Financial assistance	7	9	7	9	9	0	4	1	2	0	16
Medical assistance	19	22	26	15	29	3	1	1	7	0	41
Monthly grant (disability & financial)	4	7	5	6	5	4	0	2	0	0	11
Monthly food and household supply grants	6	11*	6	10	13	1	0	0	2	0	16
Rent	1	8	6	3	2	3	0	2	1	1	9
Child care assistance	3*	2	4	0	3	0	1	0	0	0	4
Utilities (electricity or water)	3	1	1	3	3	1	0	0	0	0	4
Pharmaceutical	3	2	3	2	5	0	0	0	0	0	5
Ongoing food grants	1	6	0	7	7	0	0	0	0	0	7
TOTAL	66	81	83	62	96	23	6	6	13	1	145

Source: Public Assistance Committee, Annual Report 2015. Note: *Represents more than one individual on an application

The Public Assistance Committee responsible for administering the programme reported a significant decrease (52.9 percent) in food grant applications in 2015. There were 34 applications in 2014 and 16 in 2015. The committee's report attributes this to the more stringent conditions for assistance in the new legislation. The need to have a belonger status to qualify likely prevented some individuals from applying. Medical and funeral had the highest number of applications in 2015.

The island's legislation does not allow universal access to social services for belongers and non-belongers,

therefore, families and children are deprived of optimal living standards as indicated in the Convention on the Rights of the Child (UNICEF, 2016). Most, if not all, immigrants in the island are in the territory legally, meaning that they pay taxes and contribute to the social security scheme. They, however, do not have the right to receive any form of government support. The government departments often refer non-belongers and their families who are in need of assistance to the non-profit and religious organizations for help. Qualitative evidence also shows that they find help in support groups created by other immigrants from the same country/territory with them.

The reason given for not accepting non-belongers in the public assistance scheme was financial constraints and a perception that allowing non-belongers to access social assistance would attract more families (fortune seekers). This they said it would put additional pressure on an already burdened social protection, education and health system (UNICEF, 2016).

Follow-up discussions revealed that grants as part of social protection spending was also captured outside of the Ministry of Health and Social Development. For example, officials of the Ministry of Finance said the House of Assembly budgeted US\$1,725,000 in 2016 for assistance grants and approximately US\$2,048,937 was spent in 2015 and US\$2,042,067 in 2016. In institutionalising the recommendations of this report, it is important to consider this spending and how it is linked to social protection priorities for the most vulnerable and poor population.

4.3.4 Social development – child protection

As already discussed in the earlier chapters, child protection is under the Health and Social

Development Policy Planning and Administration Programme, which aims to support the provision of the highest standards of health and social services, and promote social justice through high quality policy formulation, planning and monitoring to achieve the best outcomes for individuals, communities and the society. The following section explains the different areas of child protection to provide better insight to programmes and resources for addressing care and safety for children.

4.3.4.1 Sexual and physical abuse

A recent publication by UNICEF, Situation Analysis of Children in the Virgin Islands (UK) (2016), presents the current situation of children in VI (UK). Sexual abuse was the most reported case of violence against children to the Department of Social Development in 2010–2012. Reported cases decreased between 2009 and 2014 (Table 4-5) and stakeholders perceived that it is a reality (UNICEF, 2016).

Table 4-5: Reported cases of child abuse, 2010–2015

Case type	Year					
	2010	2011	2012	2013	2014	2015
Sexual abuse	14	14	13	10	9	
Total number of reported cases of violence against children	11	13	24	28	29	37
(of those) under age 12	0	2	4	3	3	8
(of those) aged 13–15	8	2	9	21	12	12
(of those) aged 16–17	2	2	7	2	8	5
Total number of reported cases of violence against GIRLS	6	2	6	9	8	9
(of those) under aged 12	0	0	0	0	1	2
(of those) aged 13–15	5	0	1	7	4	1
(of those) aged 16–17	1	1	4	1	3	2

Source: Social Development Department and Royal Virgin Islands Police Force

The Protocol for the Prevention, Reporting, Investigation and Management of Child Abuse and Neglect, which complements and improves the Children and Young Persons Act, specifies that the Social Development Department is responsible for all child protection services, including rehabilitation and investigations that are of a child protection nature. The Royal Virgin Islands Police Force is responsible for all investigations of child abuse that are of a criminal nature in which case a criminal investigation is conducted to establish criminal liability on the part of the alleged abuser and to know if the victim requires care and protection. Information from the Governor's Group shows that salaries of police officers made up around 78 percent of the police operations and administration expenditures. There was no clear and specific breakdown of other expenditures and no indication of specific allocations to children or youth. It is therefore important to have a more explicit budget breakdown for the police which will highlight all police work related specifically to children and youth. Such breakdown could be very useful in tracking allocation of resources to children.

4.3.4.2 Corporal punishment

In the Virgin Islands (UK) there is progress on the prohibition of corporal punishment in schools. Section 55 of the Education Act, which used to allow corporal punishment, has been repealed and replaced by an amendment adopted in 2014 that now reads as follows: *"In the enforcement of discipline in public schools, assisted private schools and private schools degrading or injurious punishment shall not be administered"*. This new provision has not explicitly prohibited all kinds of corporal punishment, which is still being practiced in the island (UNICEF 2016).

Corporal punishment is lawful however at home. Article 192 of the Criminal Code 1997 makes it an offence to wilfully assault or ill-treat a child or young person in a manner likely to cause unnecessary suffering or injury to health, but it also states: "Nothing in this section shall be construed as affecting the right of any parent, teacher or other person having the lawful control or charge of a child or young person to administer punishment to him." (GI, 2016).

Unfortunately, there is no data on reported cases of corporal punishments among children but the situation analysis report already cited mentioned that the main determinants of corporal punishment are a combination of social norms and sociocultural practices. Thus, in terms of high incidence of violence among non-belongers, as reported by some interviewees, some immigrants come from cultural backgrounds that use corporal punishment to educate their children and maintain control of their home environment. Some types of abuse are considered culturally acceptable in some of these families (UNICEF Regional Office for Latin America and the Caribbean, 2006) (UNICEF, 2012).

4.3.4.3 Child labour

The latest report on the worst forms of child labour indicates that Virgin Islands (UK) made no advancement in preventing the worst forms of child labour. Although information suggests that this is not a problem, which could be somewhat confirmed from the household survey data (Table 4-6 and 4-7), the government appears to lack a complete preventive legal framework to protect all children. They have not determined the types of hazardous work prohibited for children (USDOL, 2014).

Table 4-6: Households where a child below 18 years old works

	Number	Percentage
Households where a child works	9	1.36
Households where no child works	303	45.63
Households without children	352	53.01
TOTAL	664	100
Households where a child works	9	2.88
Households where no child works	303	97.12
TOTAL	312	100

Source: SLC 2002, based on authors' calculations

Table 4-7: Children (under 18) who are engaged in some form of labour

	Number	Percentage
Children engaged in some form of labour	12	1.99
Children not engaged in any form of labour	591	98.01
TOTAL	603	100

Source: SLC 2002, based on authors' calculations

Table 4-8: Reported cases of children in conflict with the law, 2010–2015

	Year					
	2010	2011	2012	2013	2014	2015
Total number of criminal offenses – child (under 17) was the offender	44	47	39	42	31	49
(of those) offender was under age 10	0	0	0	0	0	0
(of those) offender was 10–17 (juvenile)	44	47	39	42	31	49
Total number of criminal offenses – “girl” (under 17) was the offender	11	9	6	10	4	4
(of those) offender was under age 10	0	0	0	0	0	0
(of those) offender was 10–17 (juvenile)	11	9	6	10	4	4

Source: Royal Virgin Islands Police Force Areas of Child Protection

4.3.4.4 Management of children in conflict with the law

Under the Virgin Islands (UK) domestic laws a child is a person under the age of 16 and a young person is a person who has attained the age of 16 and is under the age of 18 years. The Children and Young Persons Act, 2005 repealed the Juvenile Act, Cap 37 of the Laws of the Virgin Islands, Revised Edition, 1991. It contains provisions that complement the Criminal Justice Act 2005 by considering modern day realities of children and young persons within the criminal justice system. The Act aims to provide substantive and procedural measures and protection for children and young persons who are either perpetrators or victims of crime.

Table 4-8 shows the reported cases of children in conflict with the law between 2010 and 2015. While it is beyond the scope of this report, it is important to examine the reasons behind delinquency. Without this understanding, it would not be impossible to develop strategies to address and mediate the issue.

4.3.4.5 Government programs

The Ministry for Health and Social Development is the main custodian and government body responsible for child protection issues, and within the ministry, the Social Development Department is the leading and coordinating agency handling child protection and responding to different vulnerable groups. SDD receives referrals from different organizations and it is mandated to decide the best course of action, including recommendations to other organizations and agencies.

The child and family support programme has three sub-programmes:

1. Children and family support services
2. Children's residential services
3. Foster care/adoption

It made a number of achievements in 2015, including the establishment of the Child Abuse Investigative Team, reestablishment of the mentorship programme, conducting parenting sessions, foster care and adoptive training, building capacity among social workers, training lead agencies on reporting practices and procedures outlined in the Child Protective Protocol and making recommendations for child protection legislation.

By the end of 2016, the programme had set some objectives. It:

1. submitted a first draft of the Family Children and Protective Services Policy & Procedural Manual;
2. strengthened the foster care programme by building capacity through recruitment drives;
3. used popular multimedia outlets to educate the public on child protection;
4. developed a draft programme for independent living;
5. collaborated with Gender Affairs and RVIPIF on Sexual Offender Registry and its development; and
6. provided development and training for staff and

foster carers and conducted information sessions on child rights and child abuse.

4.4 The health and social development budget

4.4.1 Overview of health and social development financing

For the financial year 2016, US\$58.1 million was allocated to the ministry for recurrent expenditure on health and social development programmes, which represented 19.4 percent of government's recurrent budget for 2016, mostly on health services. In 2016, public health care expenditure (public health, primary health care, secondary health care and medicines) as a percentage of GDP was 2.26 percent while expenditure on social protection programmes was 0.65 percent of total government expenditure, or 0.21 percent of GDP. Child protection expenditure captured under the current children and family services was 1.5 percent of the total budget of the Ministry of Health and Social Development.

This section analyses the existing allocation and operational effectiveness and efficiency of direct and indirect public allocations to children by the Ministry of Health and Social Development. The would allow an assessment of the allocation of budget resources towards their stated objectives with respect to children and an exploration of the economics of spending for inputs related to children.

4.4.2 Methodology and data

The budget outturns for 2012 and 2014, the estimated expenditure for 2015 and budget 2016 have been used for this analysis. The original estimates were broken down into details under the administrative and economic classifications. A different categorisation is needed for programme-based budget analysis. In traditional budgets, some substantial administration costs are often still 'hidden' in programme expenditure. Our objective is to filter these and assess the operational (in)efficiencies in programme implementation.

Table 4-9 presents the conversion for the administrative and the economic classifications. For the administrative classification, no changes have been applied because existing programmes were retained. However, the economic categories were reduced by combining different expenditure items. This, and the approach to construct an adequate distinction between administrative (non-programme)

and programme expenditure, is the same as applied for the education budget and has been explained in Section 3.4.2.

It should be noted that waste management was not included in the analysis because it is not considered a child investment.

Table 4-9: Conversion table, MHSD Virgin Islands (UK)

Administrative (programme) classification	Economic classification
Policy planning and administration	Salaries
Health and social policy planning and administration	Personal emoluments (511)
Gender affairs	Social contributions (512)
Children and family services	Travel (525)
Children and family support services	Social assistance benefits (561)
Children's residential services	Employer social benefits (562)
Foster care/adoption	Training
Social protection	Training (526)
Social protection policy planning and administration	Contributions to professional bodies (527)
Legal aid	Goods and services
Social housing	Rent (512)
Other social assistance	Social assistance benefits (561)
Social insurance	Utilities (522)
Disability services	Supplies (523)
Early intervention	Repairs (524)
Autism services	Services (528)
Vocational support services	Entertainment (529)
Aged care services	Interest
Home care services	Interest (530)
Seniors' residential services	Grants
Seniors' engagement programme	Grants (572)
Community services	Assistance grants (572)
Community development	
Offender management services	Subsidies (541)
Public health	Other
Health protection	Property expenses (571)
Health promotion	Other (573)
Information, surveillance and research	
Waste management	
Waste collection and disposal	
Beautification	

Source: authors. Notes: The categories in bold are the applied categories. Any categories below the bold items are combined into these applied categories. The 3-digit codes in the economic classification correspond to items in the Gov't of Virgin Islands' Chart of Accounts.

Like the education budget, child tagging was applied to the proportion of expenditure classified as programme spending. Child tagging is a means to discover whether there are mismatches in the allocation of resources. It identifies the proportion of a programme budget that is actually allocated to directly benefit children. If a programme is designed to serve children and adults the specific budget component for children should be determined. To achieve this, you must consider utilisation profiles. The age and gender profile of users of the programme can guide the application of a child tag in terms of the proportion of spending that is allocated to children. In the absence of accurate utilisation data, the proportion of children (or children in the relevant age group, for example, 6–17) in the total population for most of the programmes was used to construct the appropriate child tag. For some programmes, for example, aged care services, child-specific expenditure was zero. Sometimes a more refined indicator was used to

estimate child-specific spending such as the subhead ‘offender management services’, where the ratio between juvenile and adult inmates in HMS Prison was used as proxy.

4.4.3 Budget analysis

Table 4-10 presents a summarised version of the newly categorised budget of MHSD. The first three columns show the expenditure per program in US\$1,000 and the final column shows the total of the ministries’ budget that has been allocated to that programme in FY2016. Apart from waste management, the largest proportion of programmes of the total expenditure are central administration (5.2 percent), social protection (74.8 percent) and aged care services (5.2 percent). Limited resources were allocated to children and family (1.5 percent), disability (0.8 percent), community (1.0 percent) and environmental health (3.0 percent) services.

Table 4-10: Summarised budget of MHSD, administrative classification, 2014–2016 (US\$1,000, current prices)

Administrative classification	Actual	Estimated	Budget	% of MHSD total (2016)
	2014	2015	2016	
Policy planning and administration	26,562	42,836	3,025	5.2
Children and family services	192	127	851	1.5
Social protection*	3,689	3,093	43,469	74.8
*Disability services	95	221	487	0.8
Aged care services	1,628	2,012	3,030	5.2
Community services	135	149	603	1.0
Public health	224	1,261	1,772	3.0
(Waste management)	4,708	4,524	4,868	8.4
Total (recurrent)	37,234	54,222	58,106	100.0
Total (excluding waste management)	32,525	49,698	53,237	
Development expenditure/capital	4,375	5,450	5,100	

Source: Government of Virgin Islands (UK) (various Budgets), Authors’ calculations

*Figures presented here is the first overview of the official budget presented, which include NHI. Details of NHI expenditures are provided in the subsequent sections.

Table 4-11: Condensed Budget MHSD Economic Classification, 2014-2016 (US\$1,000, current prices)

Classification item	actual	estimated	budget	% of total 2016
	2014	2015	2016	
Employee compensation	8,417	8,649	9,305	17.5%
Training	14	7	26	0.0%
Goods and services	1,655	1,664	2,189	4.1%
Interest				
Grants	22,428	39,372	41,707	78.3%
Other	4		9	0.0%
Total	32,525	49,698	53,237	100.0%

Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations.

Note: the total is exclusive of Waste Management.

Dividing the budget into an economic classification, as in Table 4-11, it appears that 17.5 percent of the total budget was allocated to employee compensation, 4.1 percent to goods and services and 78.3 percent to grants, which was the major item in the budget.

Table 4-12 presents the total and calculated salaries per staff; average expenditure per staff was a little below US\$27,000.

Table 4-12: Salary expenditures MHSD, 2012-2016 (US\$1,000, current prices)

Salaries	Actual			Estimated	Budget
	2012	2013	2014	2015	2016
Total salary expenditure			8,417		9,305
Total no. of staff					345
Total expenditure / total no. of staff (US\$)					26,971

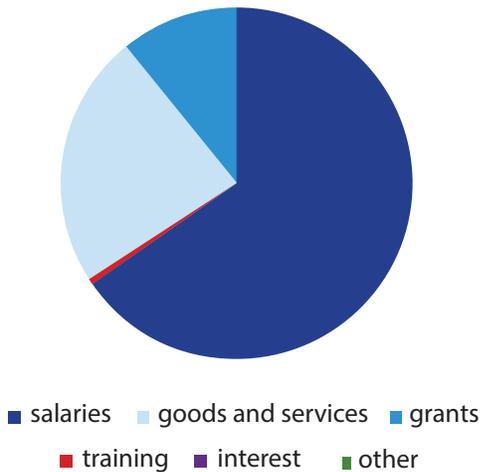
Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

4.4.4 Allocation per programme

The largest proportion of programmes under the ministry was social protection, planning and administration, children and family services, and social protection and aged care services. Figure 4-3

presents the economic allocation per programme and for planning and administration for 2016. Salaries represented more than 65 per cent of the budget and the other two significant costs are goods and services (23 percent) and grants (11 percent).

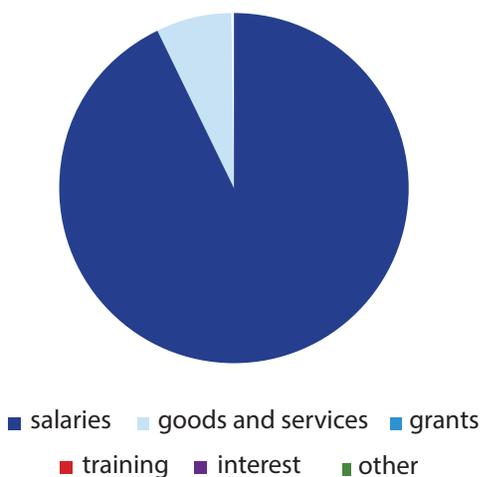
Figure 4-3: Economic allocation of expenditure to planning and administration, 2016 (5.2 percent of total MHSD expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

The breakdown is less complicated for children and family services; 92.8 percent for salaries and 7.1 percent for goods and services. All other categories were marginal (Figure 4-4).

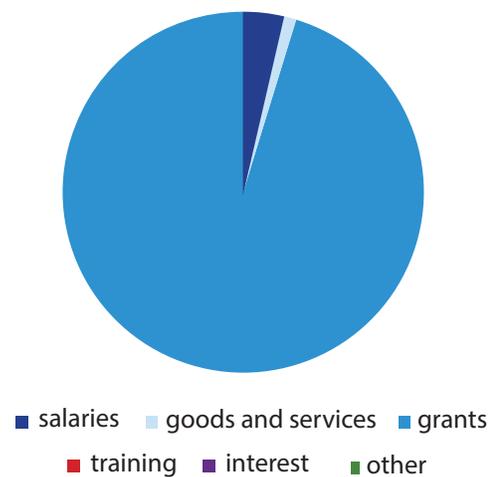
Figure 4-4: Economic allocation of expenditure to child and family services, 2016 (1.5 percent of total MHSD expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

The breakdown of economic expenditure for social protection (Figure 4-5) shows that 95 percent was allocated to grants and less than 4 percent was for salaries and 1 percent for goods and services. Although more than US\$37 million was allocated to grants (77.7 percent of the entire MHSD budget), the published version of the budget provides no information about what these grants were. The major component was an annual subvention, which was to the Health Services Authority before 2016 and later administered as a subvention to the National Health Insurance Scheme (see Section 4.5).

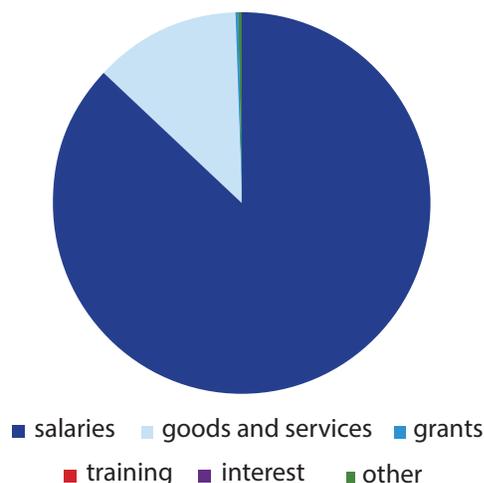
Figure 4-5: Economic allocation of expenditure to social protection, 2016 (74.8 percent of total MHSD expenditure)



Source: Gov't of Virgin Islands (UK) (various Budgets), Authors' calculations

The economic breakdown for aged care services shows a similar pattern to the children and family services in Figure 4-6; 87.6 per cent was for salaries and 12.4 percent for goods and services, and other categories were negligible.

Figure 4-6: Economic allocation of expenditure to aged care services, 2016 (5.2 percent of total MHSD expenditure)



Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

4.4.5 Spending for children (child tagging)

Table 4-13 presents the proportion of programme expenditure within the total budget over the period 2014–2016. Programme expenditure in this report means expenditure with direct link to beneficiaries, as already explained. For example, the salaries of social workers, nurses, etc. are programme expenditure while salaries of the manager, cleaner or office generalist are not. The table also shows the amount of resources, within programme expenditure, that was specifically spent on children.

Table 4-12: Share of programme and child-specific spending in the MHSD budget, 2014–2016

Administrative classification	actual	estimated	budget
	2014	2015	2016
Total budget (in 1,000 US\$)	32,525	49,698	53,237
of which programme expenditure	24,045	42,171	46,709
of which child-specific programme expenditure	8,134	12,867	14,049
Share of child-specific expenditure in programme expenditure	33.8%	30.5%	30.1%
Share of child specific expenditure in the total budget (Child Tagging)	25.0%	25.9%	26.4%

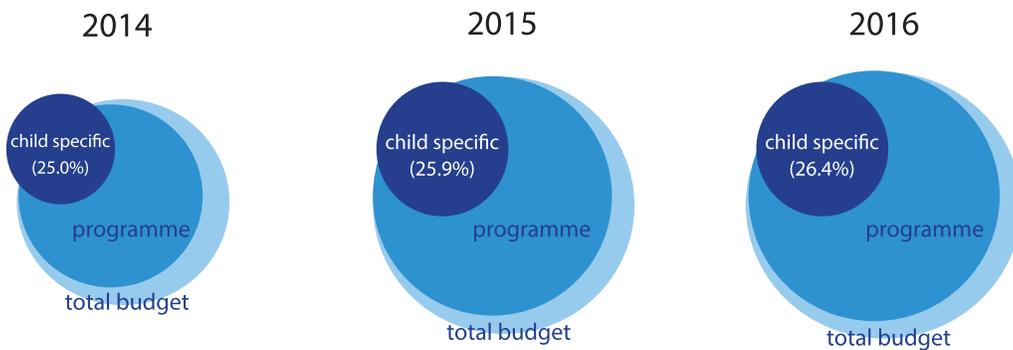
Source: Government of Virgin Islands (UK) (various Budgets), authors' calculations.

Note: Waste management was excluded from the calculations.

Around 25 percent of the resources was allocated to children and the trend seems to have been stable (or even slightly increasing). Figure 4-7 illustrates this in another way, it shows the proportion of programme and child-specific programme spending of the total budget for the last three FYs.

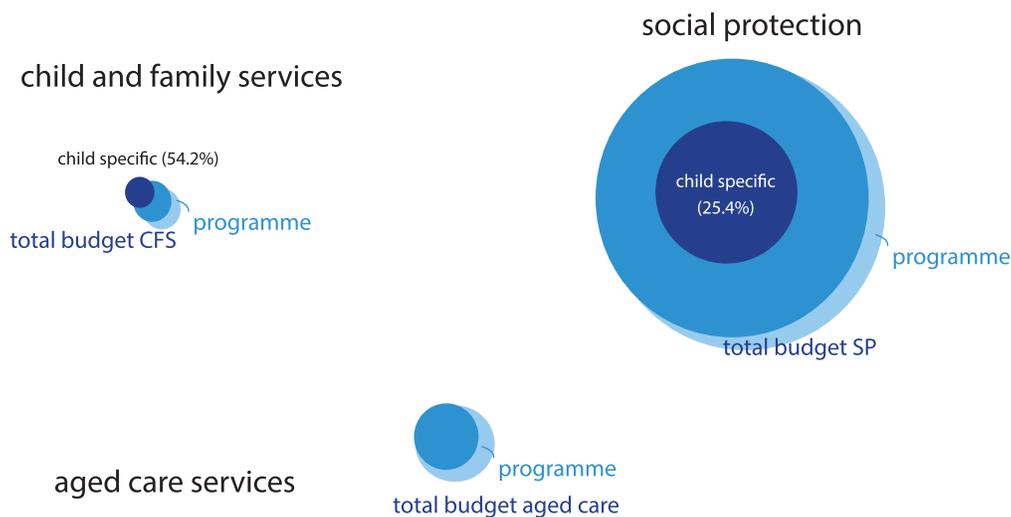
Figure 4-8 presents the proportion of child-specific expenditure for the three main social services units of the ministry. It shows that for some of these specific programmes children benefitted more than others. The children and family services programme allocated most of its resources to children but this was only a small programme compared to some of the others.

Figure 4-7: Child-specific budget allocation (child tags), MHSD, 2014–2016



Source: Gov't of Virgin Islands (UK) (various Budgets), Authors' calculations. Note: Social Services are included in the calculations.

Figure 4-8: Child-specific budget allocation (child tags), MHSD, selected social development, 2016



Source: Gov't of Virgin Islands (UK) (various Budgets), Authors' calculations

4.4.6 KPIs for health and social services

Tables 4-14 and 4-15 provide a selection of KPIs for health and social development. Most of the social development (Table 4-15) was based on the existing KPIs and the table presents a selection of KPIs that were in the budget. KPIs should be concise to be a tool for management, planning and oversight but more

detailed KPIs can be more useful to lower level than top level management in the ministry and Parliament because it would only open the door for micro-management.

Most of the KPIs for health could not be filled due to data unavailability.

Table 4-13: Ministry of Health and Social Development KPIs, 2012–2016

Health KPIs Virgin Islands	Year				
	2012	2013	2014	2015	2016
Health status (Outcomes)					
Birth rates (per 1,000 pop.)			10.9	–	
Death rate (per 1,000 pop.)			5.0	–	
Infant mortality rate (per 1,000 live births)		3.5	–	–	
Under-5 mortality rate (per 1,000 pop.)			–	–	
Perc. children with low birth weight			11.7	–	
Perc. children with overweight (adolescents)			36.8	–	
Maternal mortality rate (per 100,000 births)			–	–	
Life expectancy, females (in years)			79.9	–	
Life expectancy, males (in years)			77.1	–	
Medical inputs and process					
Doctor/patient ratio (per 10,000 pop.)			–	–	
Number of admissions in Clinics			–	–	
Bed days (Hospital Care)			–	–	
Medical staff in administration (as a per cent of total staff)			–	–	
Equity indicators					
Health Insurance coverage rate			–	–	
Health Insurance coverage rate non-belongers			–	–	
Expenditure and financing					
Government expenditure health care (public health in % government budget)			7.4	8.8	7.6
Government expenditure health care (public health in %GDP)			2.0	2.7	2.3
Out-of-pocket expenditures (as a per cent of THE)			–	–	–
Private expenditure on health (as a per cent of THE)			–	–	–
Allocation to primary health care (perc. MHSD budget)			11.3	9.4	7.4
Allocation to public (environmental) health (perc. MHSD budget)			0.6	2.3	3.0
Allocation to administrative overhead (perc. MHSD budget)			n.a.	n.a.	5.2
Allocation to salaries (perc. MHSD budget)					17.5
Allocation to children (child tagging) (perc. MHSD budget)			25.0	25.9	26.4

Source: Government of Virgin Islands, authors own calculations. Note: -- data not available.

Table 4-14: Ministry of Health and Social Development KPIs, 2012–2016

Social development KPIs Virgin Islands	Year				
	2012	2013	2014	2015	2016
Social deprivation status (outcomes)					
Number (rate) poor			–	–	
Number (rate) severe/indigent poor			–	–	
Number (rate) poor female headed households			–	–	
Number (percentage) children in poor households			–	–	
Number (percentage) elderly in poor households			–	–	
Number (percentage) poor non-belonger households			–	–	
Number (percentage) disabled in poor households			–	–	
Services other than children and family (inputs, process, output indicators)					
Number (conditional) Social Assistance beneficiaries			4		
Number of recipients (one-off) Assistance Grants			88		
Number of recipients daycare assistance			6		
Perc. Applications for public assistance denied			27.3		
Avg. length of time receiving publ. assistance (months)			6		
Percentage of recipients receiving assistance >12 months			2		
Average waiting time for receiving public assistance (days)			60		
Number of disabled receiving services			–	–	
Avg. time to secure job placement (for suitable persons)			--	–	–
Avg. length of time in job placement			–	–	
Perc. Participants in (full/part-time) job >12 months			–	–	
Number of elderly receiving home care services			–	–	
Number of elderly in residential care			21	21	
Avg. waiting time for approved placement/service (months)			–	2	
Number on the waiting list placement/service			–	7	
Share of front-line staff (caseworkers) in tot. staff			–	--	–
Children and family services (inputs, process, output indicators)					
Number of families provided case worker assistance			118	220	225
Number of children referred for child protection services			8	12	12
Number of children in residential care			8		
Number of children in foster care			14	16	16
Avg. length of time in care (months)			7.5		
Number of counselling/rehab. sessions attended by children in Foster Care			24	45	50
Number of home assessments conducted			72	75	75

Number of social inquiry reports prepared			21	25	25
Number of domestic violence cases responded to			2	5	5
Avg. length of time in out-of-home care (years)			3.5		
Share of front-line staff (caseworkers) in tot. staff			–	–	
Expenditure and financing					
Social Development expenditure (percent government budget)			2.25	1.85	
Social Development expenditure (percent GDP)			0.60	0.56	
Allocation to Social Protection (perc. MHSD budget)			9.9	5.7	74.8 [#]
Allocation to children and family care (perc. MHSD budget)			0.5	0.2	1.5
Allocation to disability care (perc. MHSD budget)			0.3	0.4	0.8
Allocation to aged care (perc. MHSD budget)			4.4	3.7	5.2
Allocation to administrative overhead (perc. MHSD budget)			n.a.	n.a.	5.2
Allocation to children (child tagging) (perc. MHSD budget)			25.0	25.9	26.4

Source: Government of Virgin Islands, authors own calculations. Note: -- data not available. #: includes allocation to HSA/NHI

4.5 Virgin Islands' Health Services Authority and National Health Insurance

Prior to 2016, health expenditures (for clinics, hospitals, drugs, etc.) were covered through the Ministry of Health's Head 2652 Subhead 551318 – Grants to VI (UK) Health Services Authority (VI (UK) HSA). The Virgin Islands (UK) HSA provides for the administration of Peebles Hospital in Tortola and other community health services and is governed by the VI (UK) Health Services Authority Act (2004).

With the establishment, in 2016, of the National Health Insurance Scheme, annual subventions previously given to VI (UK) Health Services Authority through the Ministry of Health's budgetary appropriations is now captured under Social Insurance, sub-head Grants to

National Health Scheme. The Social Security (National Health Insurance) Regulations 2015 governs the administration of the NHI scheme and the National Health Authority administers health services.

Table 4-15 presents a breakdown of the health services budget by year. On average, in the past four years, 21.6 percent of the expenditure on health services went to the clinics (primary health services) and 67 percent to hospital (secondary health) services. The remaining 11.4 percent of non-administrative health service expenditure was on medicines. In 2016, on the other hand, close to half of the budget (49.4 percent) was allocated to operational expenditure. It was a substantial amount and it was not spent directly on health care services.

Table 4-15: Summarised budget of HSA/NHI health services, administrative classification, 2012–2016 (US\$1,000, current prices)

Administrative classification	Actual			Estimated	Budget	% of NHA total (2016)
	2012	2013	2014	2015	2016	
Operational costs*					20,411.2	49.4
Primary health services		6,178.6	4,199.8	5,083.4	4,305.6	10.4
Secondary health services		20,546.4	10,874.9	14,548.1	15,279.1	37.0
Medicines		1,003.0	3,187.3	4,944.9	1,330.4	3.2
Total					41,326.3	100.0
Total (excluding NHA Administration)		27,728.0	18,262.0	24,576.4	20,915.1	50.6

Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations

*Info on operational costs prior to 2016 was not available. The comparison relates to 2016.

Dividing the budget into an economic classification, as in Table 4-17, it appears that 69.1 percent of the total budget went into salaries in 2013–2016, staff

training consumed 0.4 percent and the remainder 19 percent went to other expenditure.

Table 4-16: Summarised budget of HSA/NHI health services, economic classification, 2012–2016 (in 1,000 US\$, current prices)

Classification item	Actual			Estimated	Budget	% of total 2016
	2012	2013	2014	2015	2016	
Salaries		18,847.1	12,412.1	15,974.6	15,993.2	69.1
Training		85.0	96.5	109.4	79.2	0.4
Other		7,792.8	2,566.1	3,547.4	3,512.3	19.0
Total (excluding operational costs and medicines)						88.6

Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations.

Table 4-18 presents the total and calculated cost of salaries per staff. The average earnings per staff in 2016 was a little below US\$25,600.

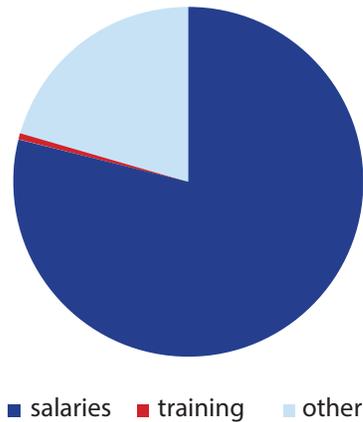
Table 4-17: Salary expenditures by HSA/NHI for health services, 2012–2016 (US\$1,000, current prices)

Salaries	Actual			Estimated	Budget
	2012	2013	2014	2015	2016
Total salary expenditure		18,847	12,412	15,974	15,993
Total no. of staff		508		636	625
Of which primary health care					75
Of which secondary health care					262
Total expenditure / total no. of staff (US\$)		37,101		25,117	25,269

Source: Government of Virgin Islands (UK) (various Budgets), Authors' calculations.

Figure 4-9 shows that, on average, 79.1 percent of resources was allocated to salaries and 0.4 percent to staff training in 2013–2016

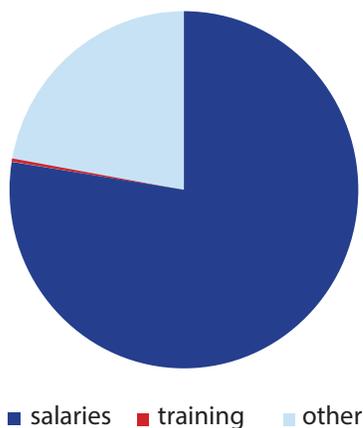
Figure 4-9: Economic allocation of expenditure to primary health services, 2013–2016



Source: Government of Virgin Islands (UK), Authors' calculations

Figure 4-10 shows a similar picture for secondary health services. On average, 77.7 percent of resources was allocated to salaries and 0.5 percent to staff training in 2013–2016.

Figure 4-10: Economic allocation of expenditure to secondary health services, 2013–2016



Source: Government of Virgin Islands (UK), Authors' calculations

Data on utilisation profiles were not available so we could not apply child tagging to the HSA/NHI expenditure.

4.6 Discussion

The strategic priorities (operational objectives) for 2016 for the Government of Virgin Islands (UK) were to:

- Strengthen the leadership, governance and performance of the health and social services systems.
- Improve the quality and accessibility of healthcare and social services.
- Promote gender equity, social justice and the progressive realisation of human rights.
- Establish a sustainable, comprehensive and integrated social protection system.
- Provide the necessary guidance, supervision and direction for the safe and humane custody and rehabilitation of persons committed to prison.

These are linked to the SEED results area: “improved overall social services programmes and healthcare.” Health and social services are essential services that require investment of resources to be sustainable and equitable. Every child has the right to survival, development and protection. Long-term planning in health and social services creates not only healthy members of the society but also productive members. Allocation of resources to children’s programmes is a major factor in attaining the socio-economic development goals and achieving these objectives to deliver equitable and comprehensive essential services. Actual spending on health services is currently 6.8 percent of the total government expenditure and child protection and social protection combined make up 0.7 percent.

The proportion of the Ministry of Health’s budget that can be linked (tagged) to individual children hovers around 30 percent and this is in line with the proportion of children in total population.

The breakdown of budget allocation for the different sectors within the ministry’s budget is a major step in the commitment to improve efficient and effective resources for children.

In addition, public policy reform that includes programme-based budgeting is part of strategic

long-term planning that will contribute to generating lasting impact on children’s lives. The Government of Virgin Islands (UK) is in an advanced stage of rolling out programme-based budgeting. Table 4-18 presents an assessment of the current situation with respect to programme budgeting against the conditions that were presented in Chapter 2.

Table 4-18: Current situation – programme budgeting against conditions presented in Chapter 2

Conditions for successful programme budgeting	Current situation in Virgin Islands (UK)	Remarks
Link operational targets one-to-one to strategic (longer-term) objectives	Operational priorities are defined and linked to SEED	
Identify and translate needs into measures or policies		No needs assessment conducted. No utilisation data available.
Define performance indicators	Budget contains detailed KPIs.	KPI set can be made more concise
Set milestones	Budget contains forward estimates (on outputs, outcomes)	Not clear whether these are hard/soft targets
Identify clear links between inputs (budget resources) and programme outputs and outcomes		Social protection allocations are currently a ‘black box’

There is indeed great commitment towards long-term strategic planning based on MHSD’s mission, which seeks to “provide a caring and integrated system of health and social services that facilitates human development and improves the quality of life in the Virgin Islands.”

Below are key discussion points specific to the methodological perspective and linked to the programme-based budgeting for health and social development.

Development of the programme objective is operationalised through the development of national policies or plans. This will include, for example, gender, ageing and people with disabilities, disaster management procedures guided by legal provisions, studies, statistical monitoring tools and

specific guidelines (i.e. Act and Sex Offices, care and protection of seniors in domestic homecare and institutional settings). In addition, it will include evidence and information from studies such as this report on budget investment on children as means for achieving the aspired results.

Subsequently the respective programme sections in the budget should contain a detailed list of KPIs. Examples are: number of medical licences issued, number of victims of domestic violence receiving assistance, number of inspections, number of beds in residential care and average length of time receiving public assistance. These are often detailed. For high-level planners, a more concise list of KPIs would be better. KPIs for health services should be defined (this report contains suggestions) and data on the KPIs should be collected and presented.

There are no clear linkages between performance and resources allocated to the various programmes most especially in health care services and social protection.

Management of grants allocation should be reviewed to gain clarity and to be formalised to link with the intended results to be achieved. Although more than US\$37 million (77.7 percent of the entire MHSD budget) was allocated to grants the published version of the budget provides no information about what these grants were. The major component was an annual subvention, which before 2016 was to the Health Services Authority but later administered as a subvention to the National Health Insurance Scheme.

The overall utilization rates and for children specifically were incomplete. Collection and publishing of user-specific statistics on health and social development services is a crucial element for programme-based budgeting. Investment in systematic data and information collection on utilisation rate of health and social services should be examined. Data on utilisation profiles are also required to determine the proportion of the budget that is allocated to children (child tagging of the HSA/ NHI expenditure).

Improve the visibility, efficiency and effectiveness of resources through a better understanding of the breakdown of expenditures beyond salaries and grants. In the economic breakdown, salaries and grants were the major items and this seems appropriate for a Ministry of Health and Social Development. The economic breakdown was straightforward within the programmes (like in the MEC), but under “other” a more detailed breakdown of the expenditure would improve visibility, effectiveness and efficiency of resources since a large proportion of resources are spent here.

Visibility on social and child protection budgeting and expenditure can be improved by reviewing sub-programme titles, objectives and indicators that reflect how the Social Development Department manages its programmes and policy implementation related to child protection. More specifically, part of this process requires investing in resources for data collection and compilation. When programme objectives, indicators and intended results are refined and adopt the proposed list of KPIs, there will be a demand for data that is systematic and frequently disseminated. The reform towards programme-based budgeting could provide an umbrella framework and justification to make investment in child sensitive data collection a priority.

Below are some discussion points based on available data and analysis:

- Access to essential services for non-(UK) Virgin Islanders/belongers is a continued concern. There are no formal restrictions in health care, but out-of-pocket payments and the switch to contribution-funded NHI were reportedly potential hindrances. Access to social development services is restricted to people with residential status.
- Looking at the government budget, the largest proportion of programme expenditure was allocated to social protection. The major part went to NHI (see section 4.5) while children and family, disability and aged care services received only a very limited amount.
- Two-thirds of HSA/NHI expenditure went to secondary health services and a more limited proportion to PHC. This is not exceptional from an international perspective but it warrants a good monitoring of the economies of spending, referral practices, etc.



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5 Conclusion and recommendations for the future

Children constitute around 30 percent of the population of Virgin Islands (UK), but the outcome indicators for children show huge deficiencies that can only be addressed with enhanced allocation and expenditure under different child-specific programmes.

The budget document reflects a government's "true" policy priorities because it converts policies and political commitments into decisions on where funds will be spent and how revenue will be collected.

The best interest for child policy or framework will have little effect if unfunded. Budget 'cuts' often have the greatest impact on programmes that benefit vulnerable and marginalised groups, as items such

as debt interest, the public sector wage bill and military expenditure are prioritised (UNICEF, 2016a). In addition to not having specific budget allocations for children, there is no consolidated social policy scheme to effectively help vulnerable families or address the causes and consequences of poverty and vulnerability. Instead, the territory is relying on different forms of social assistance to temporarily help families and individuals in alleviating their problems. This steers further away from a system's approach and is based on fragmented services. Government's social assistance model is reactive in responding to the demands of some rights holders while failing to anticipate the needs of different vulnerable groups (UNICEF 2016b).

The UNICEF 2016 situation analysis report presented the current situation of children in Virgin Islands (UK) and identified barriers in advancing children's rights to health, education and child protection. It highlighted several problem areas and presented findings that are directly linked to the state of child protection in the territory. These include:

1. Poverty and vulnerability are at the core of many of the problems that affect children and adolescents in the Virgin Islands (UK).
2. Early childhood education is dominated by private schools and the two main challenges seem to be guaranteed access and quality of services.
3. Violence against children is widespread and pervasive and continues to compromise social progress and development.
4. The number of reported cases of violence against children is below the actual number of incidents. Among belongers, under-reporting is largely due to fear of being stigmatised, family pride and a perception that cases will not be prosecuted, while non-belongers have additional issues related to losing their work permit, deportation, language barriers and lack of trust in the authorities.
5. There is an increase in the number of children in conflict with the law and, consequently, an increase in the number of children in prison.
6. The criminal system for children is basic and punitive. There is no diversion system and children as young as 10 years can be tried in a magistrate's court for the pettiest offences.

Article 4 of the Convention on the Rights of the Child calls upon governments to plan and execute their budgets in the optimal interest of children. The Convention and the General Comment (19/2016) on public budgeting for the realisation of children's rights (UN, 2016) provide guidelines for governments to ensure that their investments in children are sufficient, effective, efficient, equitable, transparent and sustainable.

5.1 Highlights from the report

Below are discussions points based on the available data and analysis:

Education

- Challenges in ECE are based on access thresholds due to high costs for low-income families and issues with low quality of services.
- Enrolment is low in primary education¹⁵. This may also be related to costs for low-income families, even though the service is free. Challenges arise when many costs such as school uniform, textbooks and transportation impede children from attending primary education.
- Enrolment is high in secondary education but it is slipping in the higher forms (grades) and the challenges are higher among children from different cultural/ethnic backgrounds.
- Resources should be allocated to the training of teachers for both primary and secondary education given that currently the proportion of trained teachers is below 100 percent.
- Enrolment appears to be fair in tertiary education but the main issue is the high fees charged for non-(UK) Islanders/belongers. It is international practice to charge students from overseas higher fees but in the case of Virgin Islands this puts at a disadvantage students with a resident status (who have been residents for their entire life) but who are not (UK) Islanders/belongers.
- The main issue with operational efficiency is the high expenditure on management and administration. It is the largest item in the education budget and the proportion of administration is much higher in MEC than, for example, in MHSD. Further in-depth analysis into issues related to operational efficiency, for example, conducting a public expenditure tracking survey, could point to potential avenues for cost-savings in administration and re-allocations within the

¹⁵ This is based on Census data and may be underestimated

overall MEC budget towards programmes that more directly benefit children.

- Salaries and grants are the major economic categories but within the programmes the economic breakdown is one-dimensional.
- Around 70 percent of the total expenditure can be classified as programme (in the definition of this report), meaning that a large proportion of the total expenditure is not to the direct benefit of the targeted population.
- Finally, the proportion of the MEC budget that can be linked to individual children exceeds 65 percent.

Health and social development

- The main issue is access to services for non-(UK) Virgin Islanders/belongers. There are no formal restrictions in health care but out-of-pocket payments and the switch to contribution-funded NHI are potential hindrances for the deprived individuals and families in this population. Access to social development services is restricted to people with residential status.
- Looking at the government budget, the largest share in programme expenditure is allocated to social protection and the largest proportion goes to NHI. However, children and family, disability and aged care services receive only very limited amount.
- Two-thirds of HSA/NHI expenditure go to secondary health services and a more limited proportion to PHC. This is not exceptional from an international perspective but it warrants a good monitoring of the economies of spending, referral practices, etc. Moreover, children benefit mostly from primary health care, therefore, re-allocating resources to primary health services would benefit them.
- The proportion of programme expenditure in the total expenditure is generally positive.
- Finally, the proportion of the MHSD budget that can be linked (tagged) to children individually

hovers around 30 percent and this is in line with the proportion of children in the total population.

5.2 Recommendations for the future

1. Strengthening programme-based budgeting to ensure sustainable, efficient and effective resources for children.

The following observations and recommendations pertain to programme-based budgeting:

- Strategic objectives are medium- to long-term and longer-term objectives are operationalised through the development of national policies, action plans, measures or programmes. However, the programmes in the budget are not well aligned to the strategic objectives.
- On the other hand, the budget's (short-term) operational objectives, or programme strategies (for the current FY), are concrete but the short-term objectives miss a grounding in the strategic objectives. Strategic and operational objectives should be better aligned.
- The strategic objectives can be translated into operational targets for the short and medium term and the KPIs can measure progress in achieving these targets.
- It is also imperative to link resources (budget allocation) to these objectives (both long-term and short-term) and performance indicators.
- KPIs should be more aligned to programme objectives and operationalised in a SMART manner. The KPIs are not broken down to the level of the various programmes and/or sub-programmes, therefore, it is not possible to assess whether budget allocation to (sub-) programmes is appropriate. In the education and health and social services chapters, several examples of KPIs have been elaborated, some of which will require collection of additional information.
- The budget should be made more transparent especially in social protection. Social protection is currently expenditure a "black box" even when it represents a major part of the MHSDs budget.

- Utilisation profiles should be developed and unit costs highlighted and this will require the collection of appropriate information.
- To be able to report on child-related spending, specific KPIs should be formulated and appropriate information should be collected. This report suggests an approach that can be further refined in line with the statistics that are or will become available.

2. Optimizing national resources to invest in children and realize the CRC

Leveraging national resources is an investment that will not only ensure a sustainable future for the children but will also enhance human capital to achieve the national socio-economic development objectives.

Education

Investment in education, including early childhood development, translates to building national capacity towards a country's objectives to achieve the socio-economic development goals. The following are some of the key discussion points in the report that are linked to programme-based budgeting in the education sector:

- Strategic and operational objectives could be better aligned to the SEED and National Plan of Action for Children. Current strategic priorities could be organized into categories, and strategic objectives could be translated into operational targets for the short and medium term and the KPIs can measure progress in achieving these targets.
- Refine the programme level objectives to suit the intended results that are set for a particular programme. The current practice is to list the strategic objectives and KPIs per programme and then present an economic classification of the budget for each of the sub-programmes. This should be modified to make room for further improvement.

- KPIs should be more aligned with programme objectives and operationalised in a SMART manner. For each of the KPIs, norms can be defined and the actual performance can be benchmarked against the norm.
- The gaps that exist between resource allocation and KPIs presented in the budget should be further examined.
- Investment in ECD should be considered a priority area that would entail commitment to access and quality education.
- Child tagging is a crucial prerequisite to meet the requirement included in the General Comment (19/2016) that investment in children should be transparent. This would entail filtering the administration costs "hidden" in programme expenditure to assess whether there are operational inefficiencies in the programme execution.

Health and social services

Health and social services are essential services that require investment of resources to make them sustainable and equitable. Operationalising the MHSD's mission requires indicators and objectives to be clearly defined and programmes to be more visibly linked to those indicators and objectives.

Some of the more general recommendations that emerge in this report include:

- Strengthening the leadership, governance and performance of the health and social services systems.
- Improving the quality and accessibility of healthcare and social services.
- Promoting gender equity, social justice and the progressive realisation of human rights.
- Establishing a sustainable, comprehensive and integrated social protection system.
- Providing the necessary guidance, supervision and direction for the safe and humane custody and rehabilitation of persons committed to prison.

Specifically, for high-level planners, the report suggests:

- A more concise list of KPIs should be crafted with clearer objectives and relevant indicators to use resources efficiently and effectively. While the current overarching objective – “support the provision of the highest standards of health and social services, and promote social justice through high quality policy formulation, planning and monitoring to achieve best outcomes for individuals, communities and the society” – is proper, it is symptomatic of the lack of specificity of objectives for the various programmes, where objectives should be tailored to the various programmes.
- A more concise (less detailed) list of KPIs would be more appropriate for high level planners than the respective programme sections in the budget which contain a detailed list.
- Improved linkages between performance and resources allocated to the various programmes.
- Collecting and publishing user-specific statistics on health and social development services is a crucial element for programme-based budgeting. Investment in systematic data and information collection on rate of utilisation in health and social services should be considered.
- Improved visibility, efficiency and effectiveness of resources through understanding the breakdown of expenditures beyond salaries and grants is imperative. Visibility of social protection and child protection budgeting and expenditure can be improved by reviewing sub-programme titles, objectives and indicators to reflect how the Social Development Department manages its programmes and policy implementation related to child protection.
- KPIs for health services should be defined and data on them should be collected and presented.

Specifically relating to child protection

Child protection should become a separate programme in the budget. This does not mean that budgets should be reallocated between ministries, but it does mean that child protection measures are presented in an interrelated manner and that resources allocated to the various measures are linked to KPIs that sometimes are outside the area of the administrative unit responsible for the measure.

1. **Data collection.** Critical data gaps hamper progress in child protection, including information on the situation and environment of the most vulnerable children, particularly those who cannot be captured through household surveys. Continuous monitoring and assessment of child protection programmes should be strengthened to identify interventions that will have maximum impact in preventing child protection violations and responding when they do occur, which will inform government planning and budgeting.
2. **Programme mapping.** A child protection mapping of programmes and stakeholders (public and private) should be conducted through the islands as much as the size of the island allows. Budget information, where available, should be collected as this would give a first idea of what is being spent and how. From available information, it can be argued that the key risk areas for children in Virgin Islands (UK) are foster care, corporal punishment and to an extent sexual abuse. Therefore, it is pertinent that these areas receive priority when considering a future undertaking of primary data collection. While it is also important to identify additional data needs on less visible themes, these key areas can be a starting point. Better data, coupled with government commitment, will pave the way for financial allocation to child protection programmes. There should be a resolute and serious undertaking in planning when thinking about budgets or budget items involving child protection schemes and programmes.

3. **Develop a framework of core indicators for measuring and monitoring national child protection systems in the region generally and Virgin Islands (UK) specifically.** The indicators would be used either jointly or selectively and will support monitoring and assessment of the enabling environment for national child protection systems. These would include the relevant legal and regulatory structure, social welfare system for children and families, justice system as it relates

to child protection, and budget requirements to make these happen. This monitoring will enable governments to assess the impact of policies and programmes on child protection systems over time. The framework would draw from existing indicator systems to fill gaps within a system-wide perspective and the indicators would be designed for measurability and adaptation across different countries.

REFERENCES

1. Allen, R., R. Hemming and B.H. Potter eds. (2013), *The International Handbook of Public Financial Management*, Palgrave Macmillan
2. Cummins (2014), presentation M. Cummins in a UNICEF Seminar on Public Finance for Children (PF4C), Christchurch, Barbados, October 2014
3. De Neubourg, Chris, Marlous De Milliano, and Ilze Plavgo. "Lost (in) Dimensions: Consolidating progress in multidimensional poverty research." UNICEF Office of Research Working Paper, WP 2014 4 (2014).
4. Ghosh, A.R., J.I. Kim, E.G. Mendoza, J.D. Ostry and M.S. Qureshi (2013), Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies, *The Economic Journal*, Volume 123, Issue 566, pp. F4-F30, February 2013
5. Gruber, J. (2011). *Public finance and public policy*. Worth Publishing.
6. Gulati, S. (2008). Technology-enhanced learning in developing nations: A review. *The International Review of Research in Open and Distributed Learning*, 9(1).
7. Heller, P.S. (2005), *Understanding Fiscal Space*, IMF Policy Discussion Paper PDP/05/4
8. Hillman, A. L. (2009). *Public finance and public policy: responsibilities and limitations of government*. Cambridge University Press.
9. ILO (2012), *Social Protection Floors Recommendation (No. 202) Recommendation concerning National Floors of Social Protection Adoption: Geneva, 101st ILC session (14 Jun 2012)*
10. Karr (2010), *Illicit Financial Flows from the Least Developed Countries: 2000-2009*, UNDP Discussion Paper, New York
11. Morlachetti, A., (2015), *Current state of legislation in the British Overseas Territories from a children's and women's rights perspective - UNICEF Office for the Eastern Caribbean 2015*
12. Ortiz, I., J. Chai and M. Cummins (2011), *Identifying Fiscal Space: Options for Social and Economic Development for Children and Poor Households in 182 Countries*, UNICEF Social and Economic Policy Papers, October 2011
13. Ortiz, I., M. Cummins (2013), *The Age of Austerity: a Review of Public Expenditures and Adjustment Measures in 181 Countries*, Initiative for Policy Dialogue and the South Centre Working Papers, March 2013
14. Ostry, J.D., A.R. Ghosh, J.L. Kim and M.S. Qureshi (2010), *Fiscal Space*, IMF Staff Position Note, SPN/10/11
15. Piketty, T., & Goldhammer, A. (2014). *Capital in the twenty-first century*. Belknap Press.
16. Ravallion, M. (2004), *Who is Protected from Budget Cuts?*, *Journal of Policy Reform*, (7)2, pp. 109-122
17. Stiglitz, J. (2012). *The price of inequality*. Penguin UK.
18. UN (2016), *Committee on the Rights of the Child General comment No. 19 (2016) on public budgeting for the realization of children's rights (art. 4)*
19. UNICEF (2015a), *Budget Analysis for Children in Saint Lucia*, UNICEF, 2015
20. UNICEF (2015b), *Fiscal Space for a Social Protection Floor for Saint Lucia*, UNICEF, 2015

21. USDOL (2014), 2014 Findings on the Worst Forms of Child Labor - Office of Child Labor, Forced Labor, and Human Trafficking Bureau of International Labor Affairs US Department of Labour
22. UNICEF (2016), Situation Analysis of Children in the British Virgin Islands - British Virgin Islands, UNICEF Office for the Eastern Caribbean Area.
23. World Bank. (n.d.). World Development Indicators (WDI), April 2016. from The World Bank <http://www.worldbank.org/>
24. World Bank (2015), Having Fiscal Space and Using It, World Bank Flagship Report, January 2015

ANNEXES

Annex A: Equivalizing household poverty lines

1. Calculate total annual household food expenditure (as a sum of food items)
2. Generate the annual Minimum cost of food basket – MCFB which is:
 - a) US\$1,712 for adults
 - b) US\$850 for a child between the age of 13 and 17
 - c) US\$510 for a child between the age of 7 and 12
 - d) US\$340 for a child between the age of 0 and 6
3. Calculate the Household Indigence Live as the sum of the MCFBs of the household members
4. Create Household Quintiles based on the Total Annual Household Income/Expenditure variable created in step (1). Resulting from the mistake explained above, here 198 individuals – 64 Households – are in a wrong quintile.
5. Calculate the Average Non-Food Per Capita Expenditure of the bottom 40% of the Population. This will be the individual Non-Food Item used in the poverty line calculations.
6. Calculate the Household Poverty Line as the total sum of the MCFB plus the Non-Food Item for all the household members.
7. Finally, we can assign poverty statuses as follow:
 - a) Not Poor - above the Household Poverty Line
 - b) Poor - below the Household Poverty Line but above the Household Indigence Line
 - c) Indigent – below the Household Indigence Line

Annex B: The construction of the multidimensional index

DIMENSION	INDICATOR	DESCRIPTION	UNIT	RANGE	CUT OFF VALUE (z)
HOUSING CONDITIONS	Overcrowding	Number of People-per-Room	Households	0.1 – 5 PPR	Two or More PPR (Excluding Kitchen and Bathroom) is considered a sign of overcrowding.
	Dwelling Conditions	Type of Dwelling and Type of Dwelling Tenure	Households	<p>DWELLING TENURE</p> <input type="checkbox"/> Owned <input type="checkbox"/> Squatted <input type="checkbox"/> Rented (Private or Government) <input type="checkbox"/> Leased <input type="checkbox"/> Rent-Free <input type="checkbox"/> Other <p>DWELLING TYPE</p> <input type="checkbox"/> Undivided Private House <input type="checkbox"/> Part of a Private House <input type="checkbox"/> Flat, Apartment, Condominium <input type="checkbox"/> Townhouse <input type="checkbox"/> Double House/Duplex <input type="checkbox"/> Combined Business & Dwelling <input type="checkbox"/> Barracks <input type="checkbox"/> Other	One category for each of the two variables is considered a sign of inadequate dwelling conditions – respectively squatted dwelling and barracks. Therefore, if a household is living either in a squatted dwelling or in barracks it is considered deprived.
	Wall Materials	Type of Material used for Dwelling's Walls	Households	<input type="checkbox"/> Wood <input type="checkbox"/> Wood/Concrete <input type="checkbox"/> Concrete/Concrete Blocks <input type="checkbox"/> Stone	Only walls made entirely from wood are considered inadequate, and thus a sign of deprivation. ¹
WATER AND SANITATION	Sanitation	Type and Location of Toilet Facilities	Households	<p>TYPE OF TOILET FACILITIES</p> <input type="checkbox"/> Flush Toilet – Linked to Sewer <input type="checkbox"/> Flush Toilet – Linked to Septic Tank or Soak-Away <input type="checkbox"/> Pit-Latrine <input type="checkbox"/> Other <input type="checkbox"/> None <p>LOCATION OF TOILET FACILITIES</p> <input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor <input type="checkbox"/> None <input type="checkbox"/> Other	In terms of toilet facilities, every type of facility that is not a flush toilet is considered inadequate. For the location an only an indoor toilet facility is regarded as adequate. Therefore, if a household has a pit-latrine, no toilet, or another type of toilet facility that is not a flush-toilet or if the facility is located outside the household is considered deprived.
	Water Source	Source of Water	Households	<input type="checkbox"/> Private Piped into Dwelling <input type="checkbox"/> Private Catchment not Piped <input type="checkbox"/> Private Catchment Piped <input type="checkbox"/> Street Water Piped into Dwelling <input type="checkbox"/> Street Water Piped into Yard <input type="checkbox"/> Public Well or Tank	Water obtained via a private catchment system (either piped into the dwelling or not) and water obtained from a public well or tank is considered a sign of deprivation.

DIMENSION	INDICATOR	DESCRIPTION	UNIT	RANGE	CUT OFF VALUE (z)
HEALTH	Health Insurance	Household Expenditure on Life or Health Insurance Payments per annum	Households	US\$ 0 – 13,800	Households that spend US\$ 0 yearly on life or health insurance payments are considered deprived.
	Disabled HHM	Disability that prevents the HHM from working or studying – limbs, back, eyes, ears, mental, other	Households	Binary - Yes or No	Having one or more members who is prevented from working or studying because of his/her disability is considered a sign of deprivation.
	Chronically Sick/ Ill HHM	Chronic Diseases: Cancer, Heart Diseases, Diabetes, and Hypertension.	Households	Binary - Yes or No	The chronic diseases highlighted here are the four leading causes of death in the VI (UK). Having a HHM who suffers from one of these conditions is considered a sign of deprivation.
EDUCATION & DEVELOPMENT	Maximum Educational Attainment of a HHM	Maximum Educational Level Attained by a Household Member	Households	<input type="checkbox"/> None <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> College <input type="checkbox"/> University <input type="checkbox"/> Vocational <input type="checkbox"/> Other (ECE, etc.)	The minimum acceptable educational attainment for an adult is having completed Secondary education since it is free and mandatory between the ages of 5 and 17.
	Individual Educational Attainment	Individual Educational Attainment or Age-Appropriate Educational Attainment	Individual	<input type="checkbox"/> None <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> College <input type="checkbox"/> University <input type="checkbox"/> Vocational <input type="checkbox"/> Other (ECE, etc.)	The minimum acceptable educational attainment for an adult is having completed Secondary education since it is free and mandatory between the ages of 5 and 17. For children younger than 18, the age-appropriate educational level is used as a threshold.
	Development-Oriented Commodities Index	An index of development-oriented commodities is calculated assigning one point each for having a TV, a computer, a telephone, or a Radio/Stereo	Households	0-4 points	Scoring less than 2 on the development-oriented commodities index is considered a sign of deprivation.

DIMENSION	INDICATOR	DESCRIPTION	UNIT	RANGE	CUT OFF VALUE (z)
CHILD PROTECTION	Teenage Pregnancy	Teenage Pregnancy in the last 12 months	Households	Binary – Yes or No	Living in a household where one or more teenage members had a pregnancy in the last 12 months is considered a sign of deprivation.
	Child Labor	Child Labour is estimated by comparing the number of adults of the household and the number of working household members.	Households	Binary – Yes or No	Living in a household where one or more underage children are working is a sign of deprivation.

Annex C: Technical Note of Regression Specifications on the determinants of Well-being

After trying several different model specifications, some of them were chosen as the final ones. For these eight specifications, a short interpretation of the results will be provided, together with the tables and the relative formulas (See Annex xx for the model specifications). Most of the conclusions that can be drawn are in fact common across the eight specifications, therefore confirming the validity of the analysis. Nevertheless, it is worth noting also their differences since some more insight can be gained when trying to discover their potential causes.

The first four specifications regress Total Annual Household Income/Expenditure (in US\$) on several household characteristics while the second four use as the dependent variable the household poverty status. Since, the poverty status variable was created by dividing the household population into 2 categories based on their Annual Household Income/Expenditure and the poverty line the results should be at least consistent.

First, the two main household's characteristics of interest are always the household size and the number of children. In all eight specifications, these two variables are highly statistically significant. However, if an increase of the number of children seems to always have a negative effect (decrease in Annual Total Income/Expenditure and increase in Poverty Status score), the same does not apply for the household size. Specifically, when the variable on which household size is regressed is the Annual Total Income/Expenditure, for every additional household member a positive effect is expected - US\$ 6,200 more in terms of annual total income/expenditure, holding everything else constant. On the contrary, when the household size is used to regress the Poverty Status score, having an additional household member seems to have a negative effect, again holding everything else constant. A potential reason for this discrepancy is that an additional household member is at the same time an additional income source and an additional mouth to feed. As such, the effect in terms of household income/expenditure is surely positive, but this does not necessarily translate into a positive effect in terms of economic status. It could be easily demonstrated how an increase in household income could not result into an increase in per capita income (or equivalised income), and the same holds for the poverty status variable here used. Overall, the difference in sign of the effect of having one additional household member – holding everything else constant – gives evidence to how bigger households may earn or spend more while in fact being poorer. This is generally consistent with the picture resulting from the decomposition of monetary poverty where the negative effect of larger households is not as striking as it could be: only households that comprise 6 or more persons are overrepresented among the poor suggesting how the working status of the additional member could in fact be the relevant factor.

Second, it is worth noting how having a female head of the household appears to be negatively correlated with poverty while being always statistically significant. Having a female head of the household is expected to result in an average US\$ 12,830 less per annum in terms of total household income/expenditure or 0.09 point higher in terms of Poverty Status score.

Thirdly, as for the age of the household head, we allowed for a non-linear specification. Together the variables Age and Age2 are jointly significant in every specification. They depict a consistent image across the four specifications where, holding everything else constant, the effect of a one-year older household head is positive until he or she reaches a certain age (between 47 and 55) and then it becomes negative.

As for the geographical location of the household, the picture seems very consistent both in terms of statistical significance and magnitude across all eight specifications in the case of living on Jost Van Dyke or Anegada. In both cases the expected annual total household income/expenditure is lower - and the poverty status score higher - as compared to living on Tortola. It should be noted that living on Anegada appears to have the bigger negative impact out of all the household's characteristics used to explain poverty. As for those who live on Virgin Gorda, the picture is not that clear: their annual total income/expenditure is expected to be lower while also their poverty status score is expected to be lower than that of those living on Tortola. In any case, the magnitude of the positive effect on poverty registered in the last four regressions is very small when compared to that of the other two geographical categories.

As for the nationality of the household head, even though the results are not always statistically significant, they are mostly consistent in terms of sign. Specifically, if compared to a VI (UK) headed household, households headed by another Caribbean national are expected to be poorer – both in terms of annual total income/expenditure and in terms of poverty status score – while households headed by another non-Caribbean national are expected to be richer in terms of income/expenditure and poorer in terms of poverty status score (in 2 out of 3 regressions).

Moreover, it should be noted how the effect of a higher educational level for the household head is always positive and significant cross all 8 specifications. Since the variable used to express the educational level is an ordinal variable that ranges from 1 (No Education) to 6 (University Degree), the results can be read as follow: for each additional degree of educational achieved by the household head, the household total income/expenditure is expected to increase of around US\$ 7,400 per annum and consistently the poverty status score is expected to be lower of 0.055. This is especially relevant considering that close to 40% of the children lives in a household where the head did not even reach secondary education.

Lastly, it is interesting to check for a potential impact of having a disabled household member or a close relative living outside the VI (UK). As showed, in regression 4, the impact of having a disabled household member on annual household income/expenditure is negative and statistically significant. As for having a close relative living outside the VI (UK), it also appears to result in a negative impact on the household poverty status by raising the poverty status score of 0.07. In this case, is it safe to assume that the causality is reversed: poor households could in fact be more likely to have a member emigrate looking for a better or more paid job.¹⁶

¹⁶ Following the considerations illustrated above, the preferred specification is the eight.

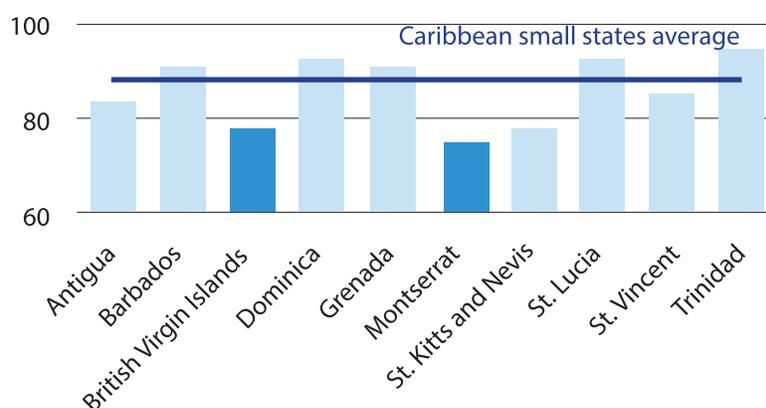
Annex D: Benchmarking Virgin Islands (UK)

Education, Outcomes

Performance of primary school services (from a regional perspective)

Figure 3-1 and Table 3-3 show the latest available net enrolment rates for primary education for several countries in the region. Virgin Islands (UK) appears at the low end of the scale.

Figure 3-1: Net enrolment rates, primary education, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

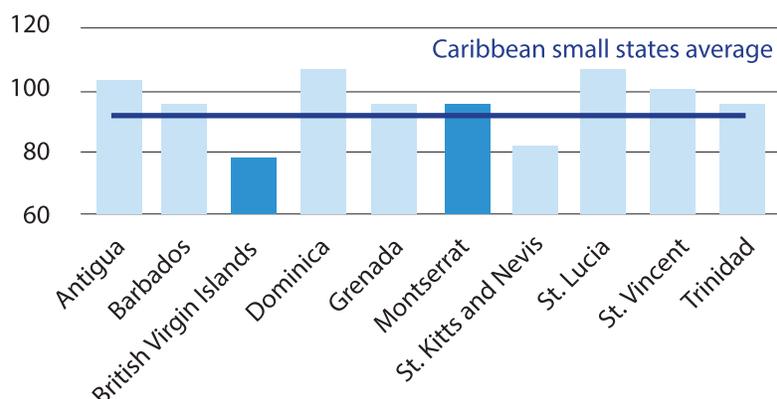
Table 3-3: Net enrolment rates, primary education, Caribbean small states

		last available year
Caribbean small states	88.3	2013
Antigua and Barbuda	84.1	2014
Barbados	91.0	2014
Virgin Islands (UK)	78.0	2013/14
Dominica	93.0	2009
Grenada	90.5	2013
Montserrat	75.0	2012/13
St. Kitts and Nevis	79.0	2014
St. Lucia	93.0	2007
St. Vincent and the Grenadines	85.7	2014
Trinidad and Tobago	95.2	2010

Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

Figure 3-2 and Table 3-4 show completion rates in primary education for selected countries in the region. This is an important performance measure.

Figure 3-2: Completion rates, primary education, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

Table 3-4: Completion rates, primary education, Caribbean small states

		last available year
Caribbean small states	91.2	2013
Antigua and Barbuda	102.3	2014
Barbados	95.5	2014
Virgin Islands (UK)	77.5	2014
Dominica	106.6	2014
Grenada	94.5	2013
Montserrat	96.0	2014
St. Kitts and Nevis	82.1	2014
St. Lucia	107.6	2007
St. Vincent and the Grenadines	100.5	2014
Trinidad and Tobago	94.9	2010

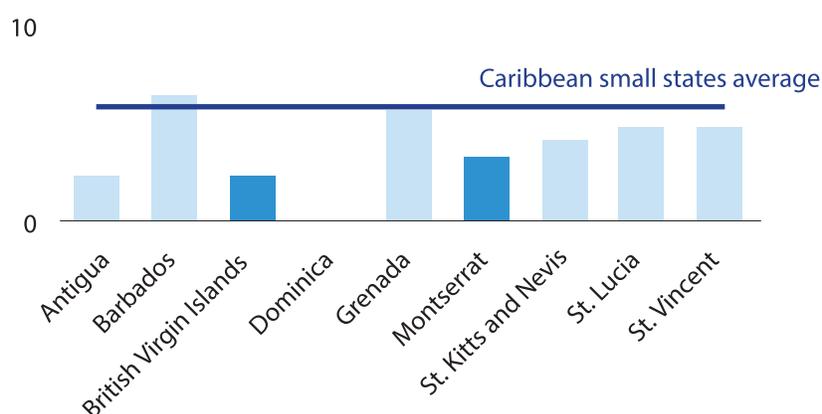
Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

Education, Expenditure

For a regional comparison of the public expenditure on education, we turn to World Bank data. Figure 3-6 shows the percentage of GDP spent on education for some regional countries for which data was available. Virgin Islands (UK) was at 2.4 per cent in 2015, based on calculations from the government budget data and National Accounts statistics. This is far below the average for the Caribbean region (6.0 per cent in 2014).

This section will explore public expenditure on education more in depth.

Figure 3-6: Public expenditure on education, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), for Montserrat and Virgin Islands: Authors' calculations.

Table 3-12: Public expenditure on education, Caribbean small states

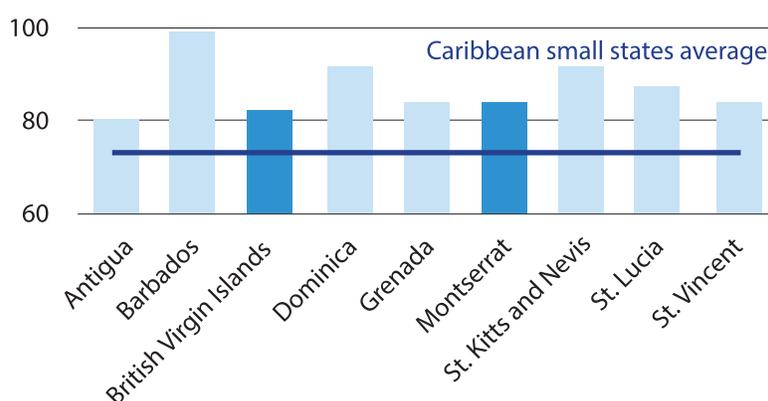
		last available year
Caribbean small states	6.0	2014
Antigua and Barbuda	2.6	2009
Barbados	6.7	2014
Virgin Islands (UK)	2.4	2015
Dominica		before 2007 or n.a.
Jamaica	6.0	2014
Montserrat	3.3	2015
St. Kitts and Nevis	4.2	2007
St. Lucia	4.8	2014
St. Vincent and the Grenadines	5.1	2010

Source: World Development Indicators, World Bank (April 2016), Authors' calculations on data received from Government.

Performance of secondary school services (from a regional perspective)

Figure 3-3 show and table 3-7 show the latest available net enrolment rates for secondary education for several countries in the region.

Figure 3-3: Net enrolment rates, secondary education, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

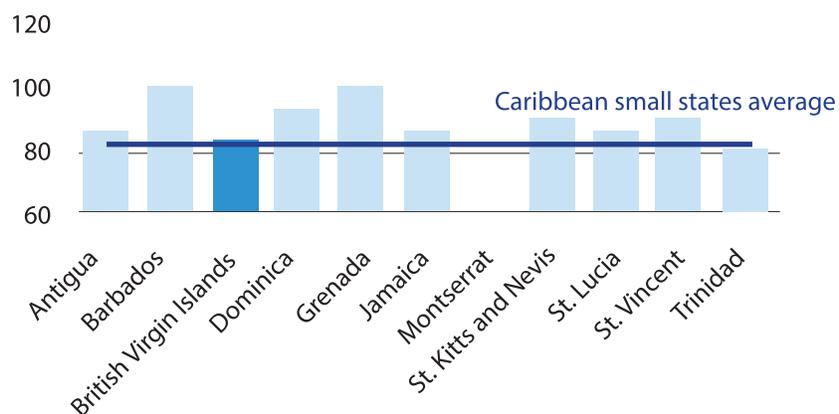
Table 3-7: Net enrolment rates, secondary education, Caribbean small states

		last available year
Caribbean small states	73.4	2012
Antigua and Barbuda	79.7	2014
Barbados	99.4	2014
Virgin Islands (UK)	83.4	2014
Dominica	78.9	2011
Grenada	80.2	2013
Montserrat	82.5	2012/13
St. Kitts and Nevis	82.9	2014
St. Lucia	80.7	2013
St. Vincent and the Grenadines	85.2	2010

Source: World Development Indicators, World Bank (April 2016), UNICEF (2016), Authors' calculations.

The completion rate at lower-secondary level would be good indicator for the quality of secondary school education. However, information for Virgin Islands (UK) is not available to date. Figure 3-4 and Table 3-8, nevertheless, show this indicator for selected benchmark countries in the region.

Figure 3-4: Completion rates, lower-secondary education, Caribbean small states



Source: World Development Indicators, World Bank (April 2016).

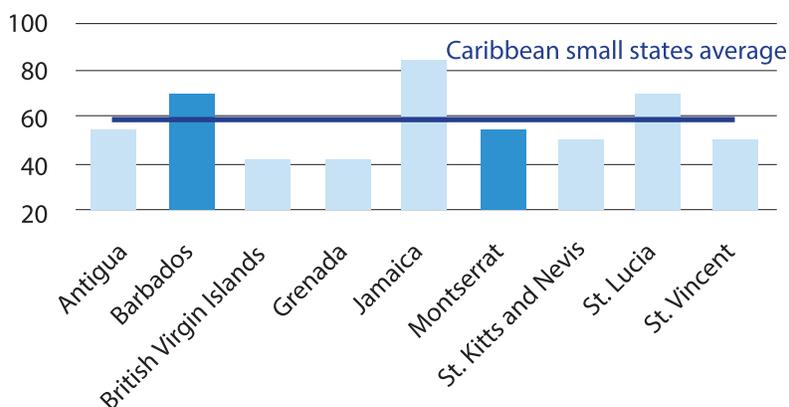
Table 3-8: Completion rates, lower-secondary education, Caribbean small states

		last available year
Caribbean small states	81.8	2013
Antigua and Barbuda	85.3	2014
Barbados	100.7	2009
Virgin Islands (UK)	84.5	2014
Dominica	93.1	2014
Grenada	101.8	2009
Jamaica	86.3	2014
St. Kitts and Nevis	92.1	2014
St. Lucia	86.5	2014
St. Vincent and the Grenadines	90.8	2014
Trinidad and Tobago	80.9	2010

Source: World Development Indicators, World Bank (April 2016).

The number of qualified teachers is a little below regional average as Figure 3-5 below indicates.

Figure 3-5: Qualified teachers (percentages), secondary education, Caribbean small states



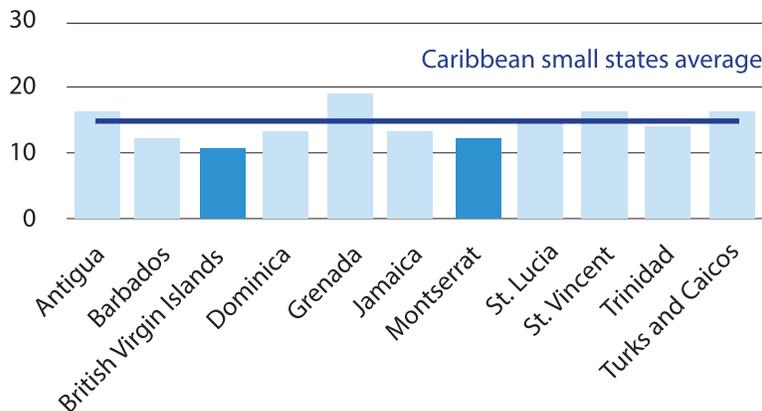
Source: World Development Indicators, World Bank (April 2016).

Table 3-9: Qualified teachers (percentages), secondary education, Caribbean small states

		last available year
Caribbean small states	58.5	2011
Antigua and Barbuda	55.2	2014
Virgin Islands (UK)	69.8	2014
Dominica	41.1	2013
Grenada	40.6	2013
Jamaica	83.8	2014
Montserrat	54.0	2014
St. Kitts and Nevis	50.7	2014
St. Lucia	71.5	2014
St. Vincent and the Grenadines	50.1	2014

Source: World Development Indicators, World Bank (April 2016).

Figure 4-1: Crude birth rates, Caribbean small states

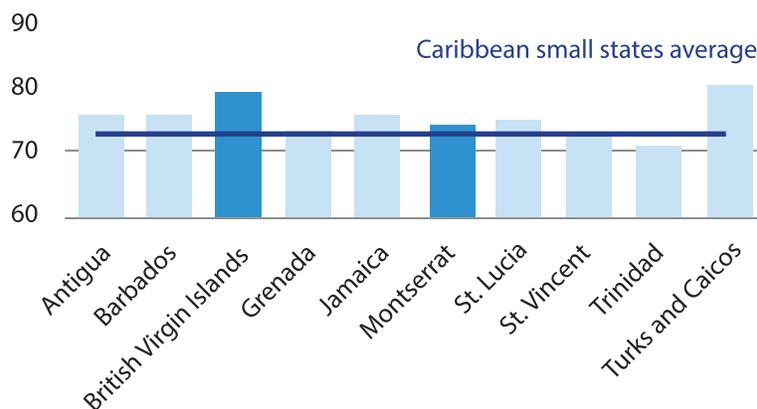


Source: World Development Indicators, World Bank 2016, for VI, Montserrat, Turks and Caicos: CIA World Factbook 2016.

The latest estimate for the fertility rate in Virgin Islands (UK) is 1.26 births per woman, and infant mortality is estimated at 12.98 deaths per 1,000 live births (CIA World Factbook, 2016).

Life expectancy in Virgin Islands (UK) stands well above the average to the region (see Figure 4-2). For 2015, life expectancy was estimated at 78.5 years in Virgin Islands (UK) – with male and female life expectancy recording 77.1 years and 79.9 years, respectively (CIA World Factbook, 2016).

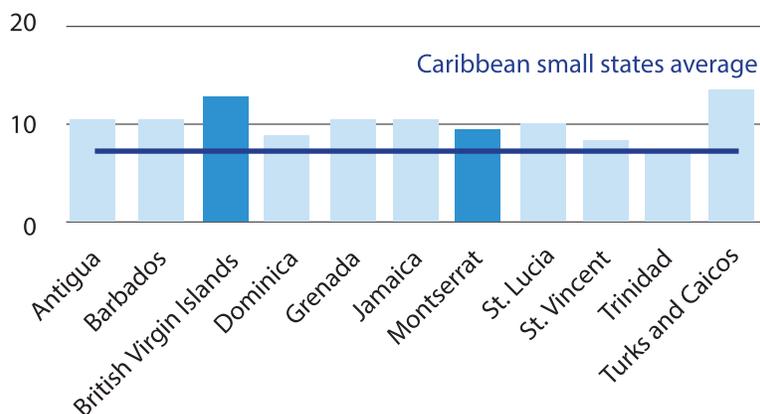
Figure 4-2: Life expectancy at birth, Caribbean small states



Source: World Development Indicators, World Bank 2016, for Montserrat, Turks and Caicos: CIA World Factbook 2016, Gov't Virgin Islands (UK)

Virgin Islands (UK) is below the regional average in terms of death rates (Figure 4-3). The figure for Virgin Islands (UK) is 4.99, whereas the regional average stands at 7.1 deaths per 1,000 inhabitants (World Bank WDI data, 2016).

Figure 4-3: Crude death rates, Caribbean small states

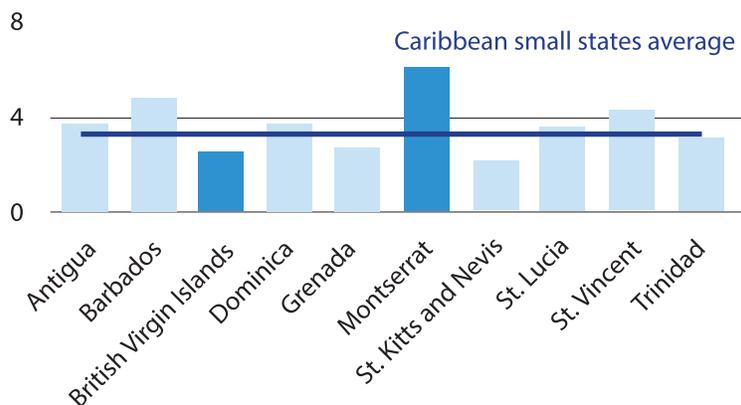


Source: World Development Indicators, World Bank 2016, for VI, Montserrat, Turks and Caicos: CIA World Factbook 2016.

Health, Expenditure

For a regional comparison of the public expenditure on health, we turn to World Bank data. Figure 4-5 shows the percentage of GDP spent on education for some regional countries for which data was available. Virgin Islands (UK) is not included in the World Bank data. However, based on calculations from data received from government, public expenditure on health stood at 2.67 per cent of GDP in 2015. This is below the average for the Caribbean region (3.3 per cent in 2014).

Figure 4-5: Public expenditure on health in % GDP, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), for Montserrat and Virgin Islands: Authors' calculations.

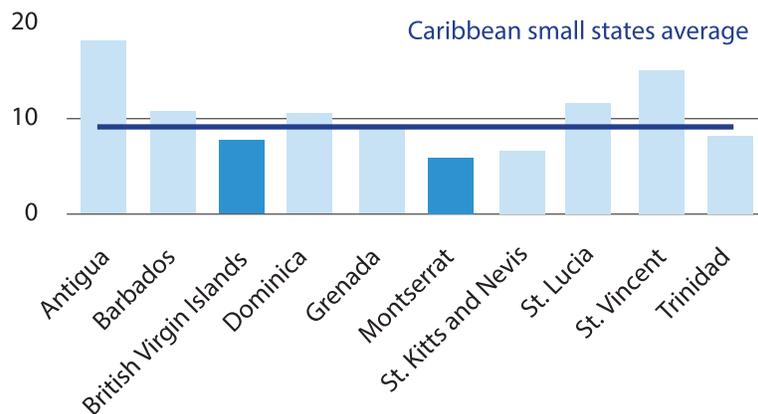
Table 4-7: Public expenditure on health in %GDP, Caribbean small states

		last available year
Caribbean small states	3.3	2014
Antigua and Barbuda	3.8	2014
Barbados	4.7	2014
Virgin Islands (UK)	2.7	2015
Dominica	3.8	2014
Grenada	2.8	2014
Montserrat	6.1	2015
St. Kitts and Nevis	2.1	2014
St. Lucia	3.6	2014
St. Vincent and the Grenadines	4.4	2014
Trinidad and Tobago	3.2	2014

Source: World Development Indicators, World Bank (April 2016), Authors' calculations on data received from Government.

In addition, Figure 4-6 shows public expenditure on health as a share of public finance. Virgin Islands (UK) is at 7.7 per cent, which is almost 1.5 percentage points below the regional average.

Figure 4-6: Public expenditure on health in % Gov't expenditure, Caribbean small states



Source: World Development Indicators, World Bank (April 2016), for Montserrat and Virgin Islands: Authors' calculations.

Table 4-8: Public expenditure on health in % Gov't expenditure, Caribbean small states

		last available year
Caribbean small states	9.1	2014
Antigua and Barbuda	18.1	2014
Barbados	10.9	2014
Virgin Islands (UK)	7.7	2015
Dominica	10.5	2014
Grenada	9.2	2014
Montserrat	5.9	2015
St. Kitts and Nevis	6.9	2014
St. Lucia	11.5	2014
St. Vincent and the Grenadines	14.8	2014
Trinidad and Tobago	8.2	2014

Source: World Development Indicators, World Bank (April 2016), Authors' calculations on data received from Government.

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