MINISTRY OF LABOR
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Methods and techniques to determine and combat poverty in Suriname

MULTIDISCIPLINARY WORKING GROUP ON POVERTY LINE DETERMINATION 2020-2023

Editors: Rosita Sobhie & Anjali Kisoensingh

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PREFACE
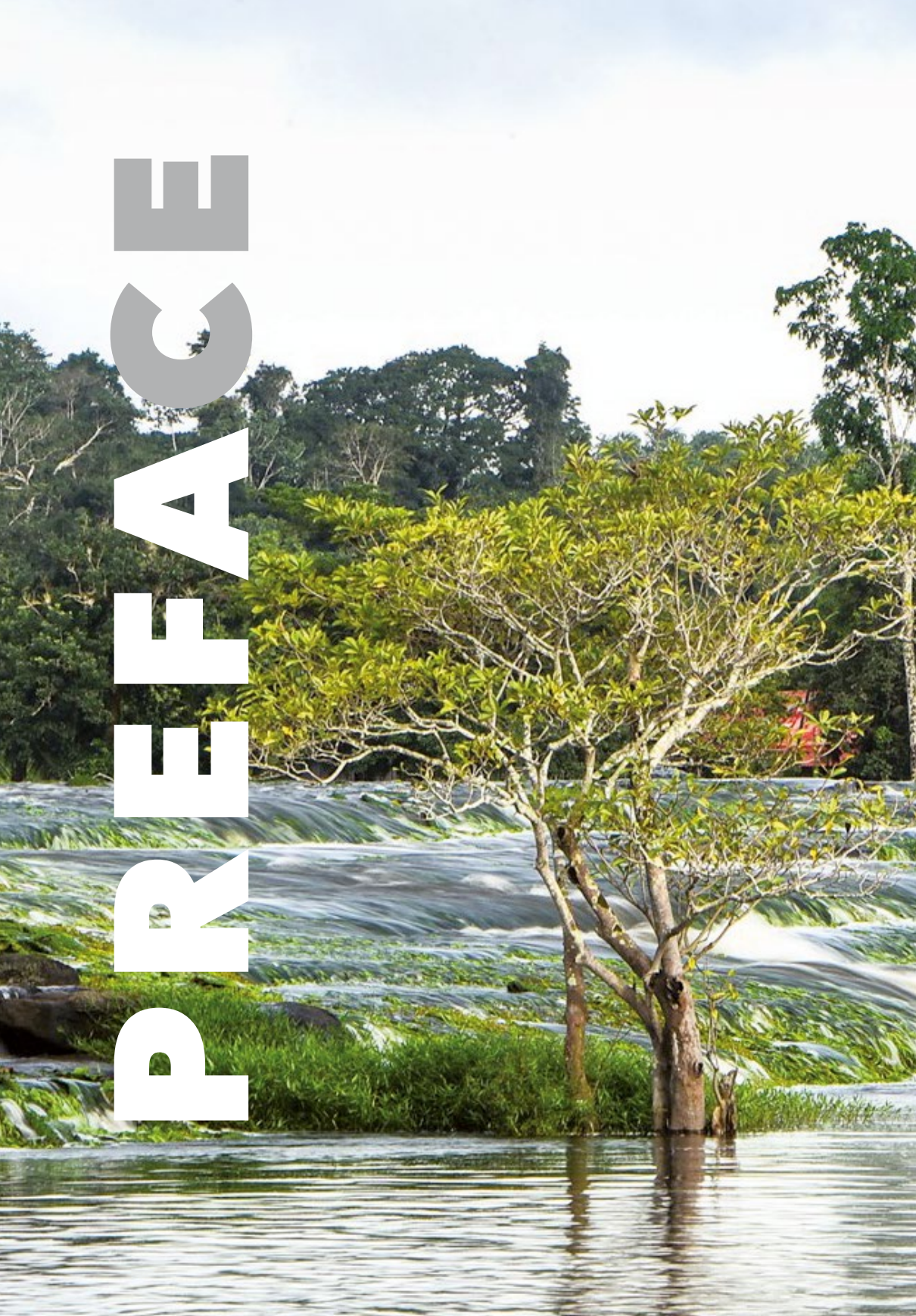
PREFACE

Suriname has faced frequent economic crises in recent decades that have created and, in principle, continue to create challenges at the socio-economic level. The Santhoki-Brunswijk government that took office in 2020 has placed poverty reduction high on its agenda. In its many reform and crisis management measures, it seeks to keep support accessible for the poor, those who are less affluent and socioeconomically vulnerable families. In the emergency phase of its policy, the Government implemented a Crisis and Recovery Plan 2020-2022, under in which poverty reduction was identified as one of the core themes. In doing so, it sought to achieve its social objectives and reduce further impoverishment of the population. In this context, the need for the establishment of a Multidisciplinary Working Group on Poverty Line Determination (further referred to as Poverty Commission), which was established by the Ministry of Labor, Employment and Youth Affairs (AWJ) on July 8, 2021, became apparent. The purpose of this working group was (i) to study poverty issues in Suriname and (ii) to determine approaches and techniques appropriate to Surinamese conditions for poverty measurement as well as related poverty lines and indicators. Establishing Surinamese-oriented measurement techniques will not only provide insight into the extent and severity of poverty in Suriname, but will also make it possible to study poor households more closely in terms of their characteristics, patterns, and factors driving them in this unfavorable situation. The findings of the Poverty Commission will be used to develop empirical policy measures, in order to continue to assist society in general, and the underprivileged and vulnerable in particular, in a socially responsible manner. This will enable the Ministries of AWJ and Social Affairs and Housing (SOZAVO) to implement their social-economic policy programs in a more efficient and effective manner.

A special word of gratitude is due to dr. Rosita Sobhie and Anjali Kisoensingh MSc. who performed the technical calculations and made their scientific studies on poverty and extreme poverty fully available to support the work of the Poverty Commission.

Drs. Steven Mac Andrew
Minister of Labor, Employment and Youth Affairs

WORKING METHOD OF THE
POVERTY COMMISSION

This report of the Poverty Commission describes the findings of the updated research on developing a national framework for approaching and measuring poverty in Suriname. This involves the study and testing of existing international poverty approaches, calculation techniques and procedures for determining the extent and severity of poverty, based on Surinamese contexts. The report includes the determination of both monetary and non-monetary poverty lines, and the identification of indicators as proxies of poverty.

The Poverty Commission was installed on July 8, 2021 and in general the tasks of the Commission are[1]:

a) to define and operationalize the necessary concepts of poverty and the poverty line;

b) to critically study and use relevant parts of the draft report 'Poverty Line in Suriname 2017', which was prepared by the 'National Commission for the Preparation of Poverty Lines in Suriname' (NCVA);

c) to produce measurement techniques to determine the poverty level of the population, based on internationally accepted and used approaches, using available research data on the living conditions of Surinamese people;

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1. In accordance with the decision of the Ministry of AWJ dated June 7 2021, Office No. 284/No.854/2021 regarding 'Installation of the Multidisciplinary Working Group on Poverty Line Determination" for the duration of 1.5 years from 1 March, 2021 until August 2022.

d) to prepare proposals to the Government regarding the approach to be taken to national poverty, the poverty line to be used and the method to be followed for implementing poverty reduction programs;
e) to issue a report containing the research findings.

As indicated above in the tasks, the Poverty Commission used parts of the work of the previously installed "National Commission for the Preparation of Poverty Lines in Suriname" (NCVA, 2016-2020), insofar as it was related to research data, of which there are no recent versions available. The NCVA was installed on June 1st of 2016 by the Ministry of Social Affairs and Housing (SOZAVO) to formulate a national poverty line. Members of the NCVA consisted of representatives from the General Bureau of Statistics (GBS), the Institute for Graduate Studies and Research of the Anton de Kom University of Suriname (IGSR), the Ministry of Social Affairs and Housing (SOZAVO), and the Suriname Planning Office Foundation (SPS). In January 2017, the NCVA presented its final report to then SOZAVO Minister Joan Dogojo. The report was presented again to AWJ Minister Rishma Kuldipsingh on September 27, 2021 for the further continuation of the poverty line calculations. It should be noted that the representation in the current Poverty Commission is an expansion of the institutions and Ministries that were represented in the aforementioned NCVA. Thus, in addition to the aforementioned core institutions (GBS, IGSR and SPS) and the Ministry of SOZAVO, the Poverty Commission has been expanded to include a representative from the Ministries of Labor, Employment and Youth Affairs (AWJ); Defense; Economic Affairs, Entrepreneurship and Technological Innovation (EZOTI) and Regional Development and Sports (ROS), as well as the Association of Economists in Suriname (VES).

The purpose of the multidisciplinary composition is to arrive at responsible and widely supported poverty approaches and calculations. Based on the current situation and available data, the Poverty Commission has studied the findings of NCVA.

In the course of its work, it has modified and/or adopted certain sections of the NCVA report where necessary and added new sections in its report. This study seeks to produce a report that provides stakeholders and Ministries charged with implementing poverty reduction programs with the necessary information on the extent and severity of poverty, as well as the characteristics of poor and vulnerable individuals and households. It further aims to ensure that the poverty lines and poverty profiles established by it, will allow (easily) implementable methods to be used in social policies, poverty reduction programs and measures. This report should also be supportive to the Social Partners (including the Tripartite Body and the Social and Economic Council - SER), for them to be able to advise the Government, in consensual and responsible manner, on the final determination of a national poverty line for Suriname, which on the one hand is based on the needs of the households and on the other hand on the economic capacity of the Government, the business community and the national economy.

Because of the multifaceted nature of the poverty issue in Suriname, the Poverty Commission uses a combined approach, considering both the Basic Needs approach founded on the Food-Energy-Intake methodology (FEI), as well as the multidimensional approach (with both monetary and non-monetary dimensions).

At the request of the Government to expedite the calculations of the poverty lines, these have been updated according to the FEI methodology already described and produced in June 2022, taking into account the price development of goods and services, in the year 2023. Chapter 3 will elaborate on the methodology used.

Outlining the general and specific contribution of the current and former Poverty Commissions with technical expertise as the core starting point, a good foundation has been laid for the systematic development of a nationally accepted poverty line, but more so a turning point in poverty reduction!!

The Poverty Commission executing its interim reportings to the (former) Ministers of AWJ

On behalf of the members of the Multidisciplinary Working Group on Poverty Line Determination;

1. Ms. Shoblina Somai-Chotkan (chair, Ministry of AWJ)
2. Ms. Xuxarra Hardajal (secretary, Ministry of AWJ)
3. Ms. Saskia Donk (Ministry of SOZAVO)
4. Ms. Camille Bosk (Ministry of EZOTI)
5. Ms. Chanique Bipat (Ministry of ROS)
6. Ms. Ashna Mahepal[2](Ministry of Defense)
7. Ms. Yvonne Kesarsing (Ministry of Defense)
8. Ms. Rosita Woodly-Sobhie (IGSR/ADEKUS)
9. Ms. Anjali De Abreu-Kisoensingh (ABS)
10. Ms. Saskia Resosemito-Wallerlei (SPS)
11. Mr. John Goedschalk (VES)

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2. Until September2022

LIST OF
ABBREVIATIONS

ABS/GBS	=	General Bureau of Statistics
AOV	=	General Old Age Provision
AWJ	=	Ministry of Labor, Employment and Youth Affairs
BAZO	=	Basic Healthcare Insurance
BBP	=	Gross Domestic Product
BMI	=	Body Mass Index
BTW	=	Value Added Tax
BVP	=	Basic Food Basket
CBvS	=	Central Bank of Suriname
CDB	=	Caribbean Development Bank
CFNI	=	Caribbean Food and Nutrition Institute
CHP	=	Crisis and Recovery Plan
COICOP	=	Classification of Individual Consumption by Purpose
COL(I)	=	Cost of Living(Index)
CPA	=	Country Poverty Assessment
CPI	=	Consumer Price Index
ECOSOC	=	Economic and Social Council of the United Nations
EZOTI	=	Ministry of Economic Affairs, Entrepreneurship and Technological Innovation
FAO	=	Food and Agriculture Organization
FEI	=	Food-Energy-Intake
FBMMeB	=	Financial assistance for people with disabilities
FBZWHH	=	Financial assistance for the vulnerable households
GLO	=	Regular Primary Education
HBO	=	Household Budget Survey
IGSR	=	Institute for Graduate Studies and Research
ILO	=	International Labor Organization

LAC	=	Latin American and Caribbean Countries
LAPOP	=	Latin American Public Opinion Poll
LSMS	=	Living Standards Measurement Survey
MDG	=	Millennium Development Goals
MICS	=	Multiple Indicator Cluster Survey
MOP	=	Multi-Annual Development Plan
MWA	=	Multidisciplinary Working Group on Poverty Line Determination Determination.
NCVA	=	National Commission for the Preparation of Poverty Lines
NGO	=	Non-Governmental Organization
OECD	=	Organization for Economic Co-operation and Development
OP	=	Development Plan
OPHIMPI	=	Oxford Poverty & Human Development Initiative Multidimensional Poverty Index
PAHO	=	Pan American Health Organization
ROS	=	Ministry of Regional Development and Sports
SER	=	Social Economic Council
SDGs	=	Sustainable Development Goals
SHP	=	Stabilization and Recovery Plan
SOZAVO	=	Ministry of Social Affairs and Housing
SPS	=	Suriname Planning Office Foundation
USD	=	United States Dollars
VES	=	Association of Economists in Suriname
VOJ	=	Secondary Education for Juniors
VOS	=	Secondary Education for Seniors
VN	=	United Nations
WHO	=	World Health Organization

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1.

CHAPTER 1:
INTRODUCTION

1.1   Suriname: Population and socioeconomic development

Suriname, a small country with an area of 163,820 km^2, has a population of 541,638 people distributed among 140,367 households (ABS, 2014). The population is multi-ethnic and the main groups (with their corresponding percentages) are Hindustani (28%), Maroons (22%), Creoles (17%), Javanese (15%) and the Indigenous (4%). Certain districts such as Nickerie, Brokopondo, Sipaliwini and Coronie have an absolute majority of one ethnic group, meaning that more than 50 percent of the district population is represented by a particular ethnic group. In the Interior, more than 80 percent is populated by Maroons, in the districts of Saramacca and Nickerie, more than 50 percent is populated by Hindustani, and in the district of Coronie, 73 percent is populated by Creoles.

Over the past decade, and that is between 2009-2013, Suriname experienced stable growth and was classified by the World Bank as a high-income country. The Gross Domestic Product (GDP, expressed in USD, Xe 3.35) was 5,299 billion for 2013. The average annual growth from 2009 to 2013 was between 3 and 5 percent[3]. Per capita national income rose from USD 2,778.5 (2003) to USD 9,550.15 in 2013 (CBvS, 2014), while the annual consumer price index has fluctuated between 1 and 18 percent since 2005.

Starting from 2014, a sharp decline in the per capita GDP growth rate is noticeable, from 1.8 percent in 2014 to negative 7 percent for 2016, and negative 16 percent by 2021.

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3.   http://data.worldbank.org/country/suriname; oktober 2016

The decline in international prices, particularly of oil, a major export product of Suriname, and increased Government spending on consumer goods in recent years contributed to the sharp decline in 2015/16. The COVID-19 pandemic mainly contributed to the further decline in 2020/21.

In terms of living conditions, figures from the 2012 Census and 2018 MICS indicate that health services have improved to a coverage of 90 percent nationally, 77 percent of people have medical insurance and the highest level of education nationally is Secondary Education Level at Junior Level (VOJ), at 34.6 percent. Nearly 80 percent of households have access to sanitation, 83 percent have piped water in their homes and 87 percent have access to electricity. Table 1.1 shows a summary of access or availability of these and other basic household goods at the national and district levels, based on the Census 2012 and MICS 2018 data.

Table 1.1: **Access or availability of basic goods and facilities in a household, Census 2012/MICS20188**

Region	National	Urban		Rural					Interior		
Indicators/ districts	SU 2012/2018	PB	WA	NI	CO	SA	COM	PA	MA	BR	SI
Tap water in the home	83/71	89/89	85/74	90/82	81/67	70/46	67/28	57/77	58/58	15/34	18/6
Electricity	83/94	95/99	92/99	95/98	90/97	89/99	94/97	59/85	66/81	41/85	4/31
Medical insurance	77/79	74/81	79/81	86/80	72/83	78/83	82/82	77/77	69/58	76/72	87/60
Cell phone	89/96	91/97	93/97	87/94	83/97	91/95	92/96	86/97	83/92	85/92	80/88
Stove	89/94	93/98	92/95	91/93	85/99	92/87	95/95	86/93	87/97	78/89	61/67
Television	87/88	92/92	93/92	91/91	82/88	90/89	94/93	79/78	77/76	66/65	41/42
Radio	79	84	84	80	78	82	86	74	65	48	43
Refrigerator	79/84	89/93	87/89	85/91	77/90	82/86	86/87	65/68	53/58	41/52	13/16
Washing machine	79/85	87/91	86/90	84/84	77/87	84/87	88/87	71/72	64/67	52/59	21/27
Percentage that has access is				*More than 75%*			*Between 75 and 50%*		*Less than 50%*		

Source: ABS,2014-Population data from the 2012 Census, conducted by the General Bureau of Statistics Ministry of SocialAffairs and Housing,2018-Monitoring the situation of children and women, Multiple Indicator Cluster
Survey (MICS)2018, conducted by the General Bureau of Statistics in cooperation with the Ministry of SOZAVO & UNICEF.

Note: changes between 2012 and 2018 of more than 10 percentage points are marked in yellow. ●
SU=Suriname, PB=Paramaribo, WA=Wanica, NI=Nickerie, CO=Coronie, SA=Saramacca, COM=Commewijne, PA=Para, MA=Marowijne, BR=Brokopondo, SI=Sipaliwini

Inequality between regions

Geographically, the country is divided into an urban area (Paramaribo and Wanica), a rural area (Nickerie, Coronie, Saramacca, Commewijne and Para) and the Interior (Marowijne, Brokopondo and Sipaliwini). The figures at the national level illustrate that, in general, many households have access to most basic services. But this situation changes when focusing on specific districts and areas. Table 1.1 illustrates that there are large inequalities between districts. The figures are presented in the red cells for the durable goods and utilities to which less than half of the district's population has access or holds as property.

When comparing districts, large differences are evident in access to or availability of necessary basic services. For example, a comparison of the urban region (Paramaribo and Wanica) with the Interior (Marowijne, Brokopondo and Sipaliwini) shows differences in the order of 70% in access to electricity and piped water in the home. Because of the very low access to tap water and electricity, households in Sipaliwini and Brokopondo often do not have a television, refrigerator or a washing machine. In Paramaribo, 95 percent of households have access to electricity, while in Sipaliwini it was only 4 percent at the eighth Census (2012). Table 1.1 presents statistics from the eighth Census in 2012 together with MICS figures from 2018. Comparisons show that the situation has not improved much in about 6 years, and in some areas even a deterioration (marked in yellow) is noticeable. Of course, when comparing, it should be taken into account that the MICS is a survey where a part of the population was surveyed, while the Census involves the entire population in the country.

The Interior (Marowijne, Sipaliwini and Brokopondo) is not densely populated. Only 13 percent of the population lives in this region, of which 82% are Maroons and 15% Indigenous. Few statistics are available on production and income at the district level. In the following section, using the available statistics, some comparisons are presented with the intention of highlighting the disparity between areas.

The Gross National Income (GNI) for Sipaliwini was USD 5,558 (2009). The National Income per capita in 2009 was USD 7,500 for Brokopondo (HDAS, 2012), which was almost as high as Paramaribo (USD 8,133). This was due to an increase in small-scale gold mining by local people. Despite this high national income per capita, the education level in 2010 was equal to 5.4 average years of schooling, which is very low compared to Paramaribo with a level of 9.7 average years of schooling. Sipaliwini has an average of 2.9 years of schooling (2010), only 4 percent of households have access to electricity and 18 percent have access to piped water in their homes. The LAPOP 2012[4] survey shows that 6 percent have no income and 61 percent have an income of SRD 1,000 (equivalent to USD 299, SRD/USD = 3.35) or less. Nearly 8 percent of household respondents are unemployed and 46 percent has a job.

Poverty characteristics:results from previous studies

Sobhie et al. (2015) described poverty risks based on a variety of relative and absolute poverty lines. Table 1.2 shows that absolute poverty lines ranging between USD 2 and USD 11 (PPP[5]) per day result in poverty rates between 11 and 60 percent. Total household income, adjusted with modified OECD scale for household equivalents (Sobhie et al., 2015), is used as a measure of poverty. With background characteristics such as education, gender, household type and area of residence, a poverty profile is presented.

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4. The 2012 Latin American Public Opinion research project' (LAPOP, 2014) was conducted by the van der Bilt University. The Political Culture of Democracy in Suriname and in the Americas, 2012: Towards equality of opportunity; http://www.vanderbilt.edu/lapop/suriname/Suriname_Country_Report_2012_W.pdf
http://datasets.americasbarometer.org/database-login/index.html;retrievedinJuly2015.
5. 'PPP' is the 2011 Purchasing Power Parity conversion rate for Suriname equals 1 USD=2.0 SRD in 2012. http://data.worldbank.org/indicator/PA.NUS.PPP, October 2015).

Table 1.2:	Relative and absolute poverty rates, adjusted to the OECD scale	
Poverty line (per day, USD)	**Poverty line (per month, SRD)**	**Poverty Risk (%)**
USD 2-line	SRD 120,00	10.9
General old age provision (USD 9-line)	SRD 525,00	47.0
Minimumloon (USD 11-grens)	SRD 686,40	58.8
50%-median income threshold	SRD 275,00	24.0

Source: Sobhie et al., 2015

The over- and under-representation of these different population groups was assessed on different background characteristics. The main findings from this study are that the majority of the poor live in the urban area, but when this is compared to the sample distribution, it becomes clear that the poor are under-represented in the urban area but relatively over-represented in the Interior (Sobhie et al., 2015). Further, of the poor, 66 percent lives in the urban area, while the urban area covers 70 percent of the total sample. Thirteen (13) percent of the poor live in the Interior of the country, while the Interior covers only 10 percent of the sample size.

Similarly, among households at high risk of poverty, unmarried and single-parent households are overrepresented in their respective subgroups. Most of these households have only one breadwinner or are not active in the labor market. When disaggregated by ethnicity, Indigenous people and Maroons have a higher risk of poverty. The heads of these ethnic groups, compared to other ethnic groups in society, have relatively lower levels of education and are often also single parents.

1.2 Macroeconomic situation 2010-2022

The economic situation in a country affects the level of prosperity and well-being of its population. Previous studies of Rowntree (1901), Ravallion (1904) and Nussbaum (2000) have already shown that there is a correlation between economic growth and poverty. Developing countries experience a relatively

higher risk of poverty increase due to deteriorating economic conditions globally or within their own region or country. Suriname being a small emerging economy is no exception and experiences a high degree of risk for poverty increase with changing global market prices and trends as well as internal factors.

Suriname's economic growth is highly dependent on developments in the mineral industry, particularly the gold and petroleum sectors. Suriname's revenues are highly dependent on the development of world market prices of these commodities, with Suriname occupying the position of 'price taker' because of its relatively small share on the international market. Positive price trends result in positive revenue and economic growth, but if world market prices deteriorate, the country declines into economic recession.

Tables 1.3a and 1.3b show economic growth over the period 2010-2022; Table 1.4 shows the development of GDP and other major macroeconomic variables at the national level and per capita. Table 1.5 shows the national debt over the period 2010- June 2021. These tables show that in the recent period there has been an economic recession which has affected the Surinamese population. The earning capacity per capita has deteriorated and the Government has implemented its policy programs with the help of large external loans.

A closer analysis of macroeconomic statistics shows that in the past decades, Suriname has already been "hit" twice by a financial-economic crisis (2015/16 and 2020/21). The 2015/16 crisis was mainly due to declining world market prices for gold and petroleum, the closure of the aluminum industry in 2015 and a spending pattern of the Government financed with borrowed capital. This led to an unsustainable debt burden resulting in less revenue for the state of Suriname and a deterioration in the exchange rate and inflation rates (see Tables 1.3a and 1.3b).

From 2017, there was a slight growth in the economy with 1.6% in 2017 and 4.9% in 2018 (see table1.3b), which, however, reversed again in 2020 to a contraction of the economy.

The increase in the prices of imported goods, the high foreign national debt, the highly fluctuating and high exchange rates have (again) been the underlying causes of high inflation and the depreciation of the Surinamese dollar, which resulted in a continued decrease in the purchasing power of the Surinamese population and again negative GDP growth (-2.7%) in 2021. In the past 3 years, the economic situation in Suriname has worsened due to, among other things, the COVID-19 pandemic that Suriname was confronted with in 2020 and of which the peak was reached in 2021 with all the negative consequences for economic activity in the country. This resulted in partial or total closure of businesses and consequently partial or total layoffs of personnel, partial or total loss of household income, and finally manifestations of social deprivation.

Table 1.3a: Macroeconomic developments by mineral and non-mineral sector, 2010-2015

Description	Basic year = 2007					
	2010	2011	2012	2013	2014	2015
Mineral sector	15.7	0.1	-11.7	-1.4	-7.7	-9.4
- Gold	7.5	-2.7	-14.3	-0.8	-18.4	3.2
- Oil	-1.6	-3.7	13.4	-4.8	-3.4	-1.5
Non-Mineral sector	1.7	7.2	4.9	5.6	-0.5	-0.02
- Production sector	-2.0	11.9	0.9	4.0	0.0	8.1
- Service sector	3.2	5.3	6.5	6.3	-0.7	-3.2
Government, Education & Health	2.2	2.6	14.5	-5.1	19.3	-9.0
Taxes minus subsidies on products	5.1	17.9	14.3	3.6	2.2	-7.0
Inflation						
Real growth	5.2	5.8	2.7	2.9	0.3	-3.4

Source: General Bureau of Statistics and the Suriname Planning Office Foundation

Description	Basic Year = 2015						
	2016	2017	2018	2019*	2020*	2021*	2022**
Mineral sector	15.0	24.0	0.8	-8.4	-13.4	2.9	-0.3
- Gold	15.5	24.7	2.2	-11.2	-19.4	-13.0	-1.0
- Oil	26.0	22.9	-1.4	-4.1	-4.7	9.6	0.4
Non-Mineral sector	-7.2	-5.2	7.5	0.6	-13.9	-3.5	3.0
- Production sector	-22.6	1.8	0.2	-7.8	-18.6	-10.8	1.8
- Service sector	0.2	-0.8	1.1	0.4	-1.2	0.2	0.3
Government, Education & Healthcare	-14.4	8.9	-1.6	21.6	-29.2	1.9	0.7
Taxes minus subsidies on products	-4.9	1.6	4.9	12	-16.0	-2.7	2.1
Inflation							
Real growth	-4.9	1.6	4.9	1.2	-16.0	-2.7	2.1[6]

Table 1.3b: Macroeconomic trends by mineral and non-mineral sector, 2016-2022

Source: General Bureau of Statistics and the Suriname Planning Office Foundation
*=Preliminary   **=Estimate   ***=Projection

Table 1.4: GDP and other core macroeconomic variables, 2015-2022

Description	2015	2016	2017	2018*	2019*	2020*	2021**
Disposable Income (x1,000 SRD)	17.693.683	20.254.074	24.671.313	27.678.558	29.308.647	35.512.784	54.086.743
Disposable Income per capita in USD	9.173	5.602	5.603	6.229	6.509	6.271	4.499
National income per capita in SRD (x1.000 SRD)	30.793	34.059	41.013 #	45.595	47.883	56.406	83.202
National income per capita in USD	9.057	5.423	5.432	6.055	6.359	6.065	4.267
BBPmp per capita in USD	9.081	5.715	6.108	6.711	7.047	6.838	4.891
GDP at market prices (x1.000 SRD)	17.514.647	16.654.387	16.915.201	17.752.211	17.959.484	15.090.422	14.678.510
Average USD rate per jaar	3.43	6.29	7.55[7]	7.52	7.52	9.39	18.39

Source: General Bureau of Statistics and the Suriname Planning Office Foundation

6.   BBP tables: Update September 2022, Suriname Planning Office Foundation
7.   Suriname: Selected macro economic indicators 2017-2021, average selling rate SRD/USD, preliminary figures Central Bank of Suriname

Table 1.5: National debt period 2010- June 2021

Description	2010	2011	2012	2013	2014	2015
National Debt:						
Domestic debt in USD millions	538,8	457,3	528,3	820,6	642,9	1.132,8
Foreign debt in USD millions	648,2	700,9	810,8	984,2	1.088,2	1.214,4
National debt in USD million	1.187	1.158,2	1.339,1	1.804,8	1.731,1	2.347,2
Exchange rate	2.78	3.35	3.35	3.35	3.35	3.35
National debt in SRD millions	3.299,9	3.880	4.486	6.046,1	5.799,2	7.863,1
Debt ratios:						
Total debt	27.5	26.9	27.3	35.7	33.7	52.3
Domestic debt	12.5	10.6	10.8	16.2	12.5	22.9
Foreign debt	15	16.3	16.5	19.5	21.2	29.4

Description	2016	2017	2018	2019	2020	June 2021
National Debt:						
Domestic debt in USD millions	935,4	721	772,7	984	1972	1.988,1
Foreign debt in USD millions	1.425,4	1.682,7	1.715,4	1.987,2	2.113,5	2.042,4
National debt in USD million	2.360,9	2.403,7	2.488,1	2.971,2	4.085,5	4.030,5
Exchange rate	4.04	7.485	7.52	7.52	7.52	7.52
National debt in SRD millions	9.538	17.991,7	18.710,5	22.343,7	30.723	30.309,4
Debt ratios:						
Total debt	57.7	86.9	81.4	86.6	111.4	109.9
Domestic debt	22.9	25.7	25.3	28.7	53.8	54.2
Foreign debt	34.8	61.2	56.2	57.9	57.6	55.7

Source: Office of National Debt /Ministry of Finance and Planning, Financial Note, 2022

1.2 Social policy for poverty reduction in Suriname

In the policies of successive Governments, social development, but especially poverty alleviation, has been central. In particular, this objective is derived directly from the provision in the Constitution that states that:

> *"Ensuring prosperity and well-being for every citizen is the aspiration of every government ... the social objectives of the State are aimed, among other things, at a just distribution of the National Income, aimed at a just distribution of welfare and prosperity among all levels of the population".*

In the Government's social policy, poverty reduction is a priority area. As a result of the economic situation in Suriname, which has become particularly dire since 2015, the implementation of the Crisis and Recovery Plan 2020-2022 (CHP) with its additional focus on poverty reduction has been high on the social agenda. The aim is to combat poverty through a comprehensive approach in which multiple Ministries have a role to play. The Ministry of Labor, Employment and Youth Affairs has a primary role within the national policy framework with regard to the issue of poverty to address issues in the field of labor, especially unemployment, low wages and work protection. These variables are deemed as important underlying factors of poverty.

The Ministry of AWJ ensures, through training of early school dropouts and the unemployed in a trade (through the Labor Mobilization and Development Foundation- SAO) or in entrepreneurship (through the Productive Work Units Foundation- SPWE), enforcing labor laws (including minimum wage), labor mediation (helping the unemployed find suitable jobs in cooperation with the business community) and labor protection (ensuring that employers comply with various labor laws), that the workers are guaranteed full employment and are not exposed to risks of (further) poverty or long-term poverty as well as being guaranteed a sustainable income and livelihood.

Through its policy programs, the Ministry of Social Affairs and Housing (SOZAVO) strives to implement a social safety net to address the needs of vulnerable groups and individuals in society. Broadly speaking, these are vulnerable groups and individuals who are unable to optimally perform work or generate income or are in acute need such as the unemployed, people with disabilities, households with insufficient income and the elderly.

Poverty and poverty lines

For the implementation of its policy programs, the Government needs concrete information on the extent, severity and concentration of poverty among the population and specific vulnerable groups, as well as on the methodologies and selection criteria for identifying poor individuals and households. In an "*evidence-based social policy,*" measuring poverty is a prerequisite for developing intervention programs and measures, guiding implementation, and an indispensable element in monitoring and evaluation.

However, because of its multidimensional nature, measuring poverty is not a simple matter. Poverty is a concept that is defined in different ways and has as many approaches. Poverty can be both absolute and relative depending on the standard of living of the society in question or according to the intended objective (Sobhie, 2018; Alkire et al.,2010; Kisoensingh, 2021).

Through the definition of a so-called poverty line, which is a technical instrument, it becomes possible, on the basis of explicit assumptions and precisely worked out methods, to determine quantitatively which persons are poor and also how many persons or households of the population are poor. Here a poverty line does not necessarily mean a dividing line expressed in monetary value.

The establishment of a poverty line also makes it possible to estimate how many investments are needed to raise the incomes of the poor to the poverty line, a level at which they are no longer poor. In addition, with this technical approach, the characteristics of the poor and the causes of poverty are also analyzed, making it possible to develop effective and efficient poverty reduction programs.

Setting a poverty line must also be placed in a broader development perspective. The poverty line is generally an anchor for socio-economic policy, a starting point that can be used to quantify (long-term) economic or social objectives and to distinguish measures in different areas for relevant target groups. Thus, the success of policies can be fundamentally tested on whether the population has benefited. The latter involves both groups below and above the poverty line, where this line can be a reference point for policies of both public and private sector institutions and programs.

1.3   Justification

Suriname has no official poverty line and, as a result, there are not yet widely accepted estimates of the extent and intensity of poverty in Suriname. On a national level, there is no consensus on the metrics to be used to establish a poverty line. This shortcoming is a major obstacle for developing evidence-based policies for poverty reduction and social protection. It is therefore important to employ technical expertise to formulate a national definition of poverty in Suriname, as well as to establish and validate an acceptable poverty approach and measurement methodology at the national level.

To substantiate global social development and poverty reduction programs and the monitoring and evaluation thereof, international poverty standards have been developed. However, partly because of the relative nature of the concept of poverty, these "norms" are mostly a reference for internationally comparable statistics rather than an absolute guide for national or regional policies.

Validating a national poverty line therefore remains a necessary condition for developing evidence-based social policies that are relevant in the local context.

Validating and updating a poverty line for Suriname is important for the following:

1. **Quantifying poverty.** Measuring the extent and the intensity of poverty is central to any poverty reduction program: how many people are poor and how poor are they? The prevailing economic crisis, the implementation of the CHP 2020-2022 and the establishment of a social safety net[8] make the establishment of a national policy line an urgent policy measure.

2. **Analysis of the characteristics of the poor.** This includes the causes of poverty. This analysis is critical for developing, implementing and monitoring poverty reduction and social programs. Specifically, this analysis should provide tools to:

   a. Distinguish relevant groups and subgroups for categorization ("targeting")

   b. Develop measures and guidelines to increase the effect, efficiency and impact of programs, including the use of proxy indicators (selection indicators).

   c. Develop better standards for specific programs and in policy areas such as: fiscal policy, employment and wage policy, education, health and social policy.

3. **Establishing a benchmark.** MUsing a nationally recognized poverty line, agencies and institutions in the private and public sectors should be able to establish the following for their programs and measures:

   a. A baseline or (quantitative) starting point by which progress can be measured against other measuring points in the plan period. For the Government this is very relevant at this time, at least for the implementation of policies and plans as contained in the CHP2020-2022 and the MOP 2022-2026.

   b. Impact: determining the (quantitative) effect of interventions on the situation with regard to social and poverty. For the Government, it is particularly important to monitor the situation of poverty as an indication of the success of:

      i. Macroeconomic and development policies, i.e. the use of "poverty targeting".

      ii. Poverty reduction policies and implemented programs.

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8. A "Safety Nets for Vulnerable Populations in Suriname" program is currently being implemented by the Ministry of Social Affairs and Housing, aimed at supporting individuals who are poor and vulnerable.

1.4 Approach

The Poverty Commission bases its work and reporting on conceptual approaches to poverty and its measurement relevant to Suriname. In doing so, it has used, among other things, existing empirical data to calculate poverty lines and presents analysis and estimates of poverty in Suriname[9].This should lead to an easy elaboration of the application of the Suriname poverty line in policies and measures into operational poverty reduction programs and other social programs.

The methodology was as a first step in the initial phase to validate and update the poverty line established in 2017. Through technical methods and using available data from the:
- Census 2012
- Household Budget Survey (HBO) 2013/14.
- Suriname Multiple Indicator Cluster Survey (MICS) 2018 and
- Consumption Price Index (CPI 2017-2022), the poverty lines identified should reflect a technical estimate of minimum household need.

Subsequently, the multidimensional poverty study was redone based on available and current data. The first attempt at a multidimensional approach was based on the 2010 Suriname MICS data file. The Poverty Commission believes that with the available Suriname MICS 2018 data file, better and obviously current insights on household living standards and living conditions are gained. Furthermore, data from the last Census held in 2012 was also used. The Census provides more information about the situation on the labor market and economic position of the households, which can also be used to determine the prosperity of the households. The Census has the advantage of collecting information on the entire population, and also on a multitude of themes/dimensions which particularly provide a good basis for both monetary

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9. It draws on the studies already conducted by Sobhie (2018) and Kisoensingh (2021), having obtained permission from these authors
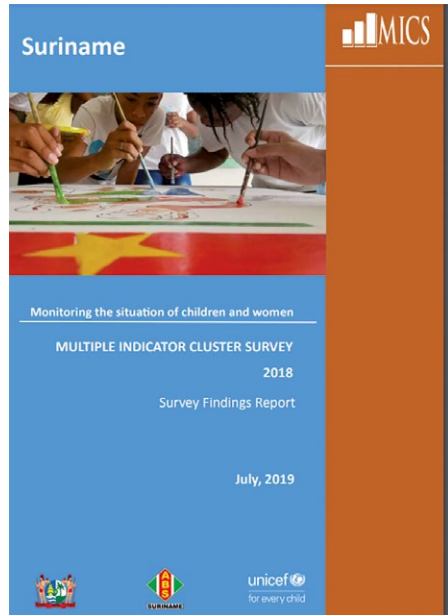
Census 2012 and MICS 2018 pubications.

and multidimensional poverty approaches. Suriname has scheduled its next Census for the year 2024, and the measurement techniques elaborated in this report based on the Census 2012 data will be updated in a relatively simple manner.

At this stage, it is important that a new household budget survey or Country Poverty Assessment Survey (CPA) is conducted as soon as possible under the technical supervision of the ABS and the Poverty Commission. This will allow for a comprehensive, in-depth and above all up-to-date analysis, better reflecting the changing socio-economic conditions from 2015 onwards.

2.

CHAPTER 2
MAIN TRENDS IN THINKING ABOUT POVERTY

2.1 Poverty approaches

Poverty is a multifaceted phenomenon and often cannot be addressed or eliminated in a one-size-fits-all manner. Because of its versatility, there are different views on how to approach the issue of poverty, ranging from differences in defining the concept of poverty to identifying priority areas in poverty reduction programs. Despite this versatility, there is generally consensus on the intuitive meaning of poverty: be it a lack of food, material possessions, social participation, (lack of) power or poor health care.

> The multifaceted nature of poverty is also reflected in the United Nations' definition in its "Copenhagen Declaration" (1995) where poverty is defined as follows: *"Poverty has various manifestations, including lack of income and productive resources to ensure sustainable livelihoods; hunger and malnutrition, ill-health, limited or lack of access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing, unsafe environments and social discrimination and exclusion."*

Following this, in 2001, the United Nations Economic and Social Council (ECOSOC) defined poverty as "*a human condition characterized by the sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil ,cultural, economic, political and social rights*".

Molly Orshansky[10] (1969) who developed the breadline for the United States of America defines poverty as a 'value judgement' , namely: "*Poverty, like beauty, lies in the eye of the beholder. Poverty is a value judgement; it is not something one can verify or demonstrate, except by inference and suggestion, even with a measure of error. To say who is poor is to use all sorts of value judgements. This concept has to be limited by the purpose, which is to be served by the definition….*". According to Orshansky, poverty cannot be measured completely objectively and one cannot avoid using value judgements and subjective measures to best define and determine poverty.

Peter Townsend (1979), who introduced the relative approach, when studying poverty, emphasizes the standard of living of an individual/ household as a (sub)part of the society in which they live and describes poverty as follows: "*Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities.*"

Therefore, when studying poverty and developing poverty reduction programs, the reality is that many phenomena/factors collectively, or in some combination, cause poverty. This multicausality is the underlying rationale in this report for incorporating multiple factors or dimensions in poverty research, but also critical in developing policy programs.

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10. Orshansky, M., 'How Poverty is Measured', Monthly Labor Review, February 1969 p. 37.

2.2 From a one-dimensional to a multi-dimensional approach

Poverty can be approached in a one-dimensional or in a multidimensional way, depending on the research or policy goal. In the first case, the main focus is on the material standard of living of people: *the amount of material goods and services people need to survive.* Although the focus used to be based more on the amount of resources needed to provide oneself with necessary food (Rowntree, 1901), the ever-increasing prosperity of the world has broadened this standard by incorporating non-food elements such as having shelter, clothing, footwear and health care. In many studies, material standard of living is measured by the income or consumption level of a person and/or household.

Under the **income approach**, the question is whether the measured income is sufficient to buy a predetermined basic set of goods and services. This assumes that income is spent rationally on the necessary basic set of goods and services. The consumption approach considers whether the measured consumption expenditure on goods and services of all household members reaches a predetermined minimum (the poverty line).

As the measurement of material living standards occurred through income and/or consumer spending, discussions arose and this one-sided approach was criticized. The Basic Needs Approach then emerged in response to the shortcomings noted. In particular, there was criticism of the dominant role attributed to the factors of nutrition and income. Other social and societal conditions that cause poverty and keep people in poverty, such as education, political participation, and property were included to a lesser extent (Nussbaum, 2000). An improvement in living conditions is therefore not only related to income levels and their growth, but also depends on the extent to which an individual has access to clothing, shelter, education, health and public goods, among other things (Ravallion, 1994).

In the **Basic Needs Approach**, an individual who does not have access to a certain predetermined basic package is characterized as poor. The food-energy-intake method (FEI) was developed for this purpose, in which foods are converted into numbers of calories. It is then determined how many calories an individual needs daily. The market value of these resources is then calculated. This results in the cost of the food component, finally adding an estimate of the cost of the non-food items to obtain the total value of the basic package.

The basic problem with the **Basic Needs Approach** is that there are different views on which and how many goods and services should be included in the basic package, as well as on assigning weighting factors to the components of the package. To mitigate the latter problem, the food-energy-intake (FEI) method was developed. This involves converting foods into calorie counts, determining how many calories an individual needs daily, and then calculating the market value of these resources. Finally, an estimate of the cost of the non-food items is added to obtain the total value of the basic package (NCVA, 2017; Sobhie, 2012; 2018).

If one proceeds to measure people's situation by also paying attention to their education, health or social and political participation, then we speak of a multidimensional approach. Multidimensional approaches thus consider multiple dimensions of human living conditions and try to measure how they are related to or (co-) determine poverty. Increasingly, multidimensional methods are believed to realistically reflect the extent and nature of poverty (Sobhie, 2012; Sobhie, 2018). The effort to include as many as possible of the

underlying dimensions of poverty in measurement methods is desirable, but remains a challenge despite the shift in emphasis toward multidimensional approaches that has been taking place for some time now.

The development economist and Nobel laureate, Amartya Sen (1985, 1993, 1999), has played a leading role in formulating the philosophy of multidimensional approaches. His thinking in this regard is that an individual's initial situation and the possibilities of extricating oneself from poverty depend primarily on the extent to which the individual is able to utilize and enhance his human capabilities. Sen does not consider the mere possession of income to be of primary importance. He therefore rejects the income approach as the ultimate measure of well-being. Instead, Sen focuses on multiple dimensions that capture the extent to which individuals are able to build valuable lives.

3.

CHAPTER 3
THE APPRPOACHES AND DEFINITION OF POVERTY INSURINAME

3.1　National definition of poverty in Suriname

The national definition of poverty is based on the characteristics of the monetary/basic needs approach as well as the multidimensional approach and is as follows:

> **Household poverty in Suriname is characterized by a lack of income and/or property to acquire a basic package of food and other necessary goods and services required to lead a dignified existence. It should be noted that necessary goods and services include adequate housing, clothing, footwear, as well as access to public facilities and services such as education, health care, utilities, transportation and participation in society. The study of poverty characteristics will take into account the variation of intensity among the different districts/ strata.**

3.2　Methodology and data used for Suriname

Voor Suriname is de basic needs benadering, waarbij een basispakket wordt For Suriname, the basic needs approach, which establishes a basic package based on the energy intake method, was developed. The data used for this part of the study is from the latest household budget survey (HBO) conducted by the ABS in 2013/14. The following subsection explains this data set in more detail. The poverty line presented in this report is derived based on the data obtained from the HBO.

In addition to the basic needs approach with the establishment of a monetary poverty line, a multidimensional approach has also been developed.

Suriname recognizes the importance of this approach and wants to incorporate it within its poverty reduction policy. The challenge is to develop an effective operational definition and measurement method for multidimensional poverty that is relevant to the local situation.

To calculate multidimensional poverty in Suriname, the Suriname Multiple Indicator Cluster Survey (MICS) conducted in 2018, and the Census conducted in 2012 were used. This report also used the survey results already obtained from Sobhie (2015; 2018) and Kisoensingh (2021). The Suriname MICS 2018 was a nationwide survey with a sample of 9,400 households, designed to monitor the living conditions of women, men and children in households (UNICEF, 2019), while during the eighth census, Census 2012, information was collected on the entire population.

Both methods, the Basic Needs and the Multidimensional measurement method as well as the calculations of both methods when applied to Suriname's existing data, are presented in this report.

3.2.1   Household Budget Survey2013/14

This study used the most recent household budget survey from the General Bureau of Statistics (ABS), which was conducted from November 2013 through August 2014. In this process, household expenditures were collected for a 2-week period and the collected data were then edited to information on a monthly basis.

The primary purpose of conducting a household budget survey (HBO) is to provide a representative consumer basket of goods and services and their corresponding weights (relative importance measured by expenditure share). These are then used to derive and update consumer price indices (ABS, 2015). Household expenditure or spending is collected to assess household living

standards and is also a tool to measure household and nation welfare (ABS, 2015; Sobhie, 2018). Household expenditures consist of consumption expenditures (such as spending on food, beverages, clothing, and communication services) and non-consumption expenditures (tax payments, investments, savings, etc.). Graph 3.1 shows the distribution of these expenditures from the 2013/14 HBO.

Graph 3.1: Distribution of household consumption and total spending

Note: SRD/USD: 3.35 (year:2014)
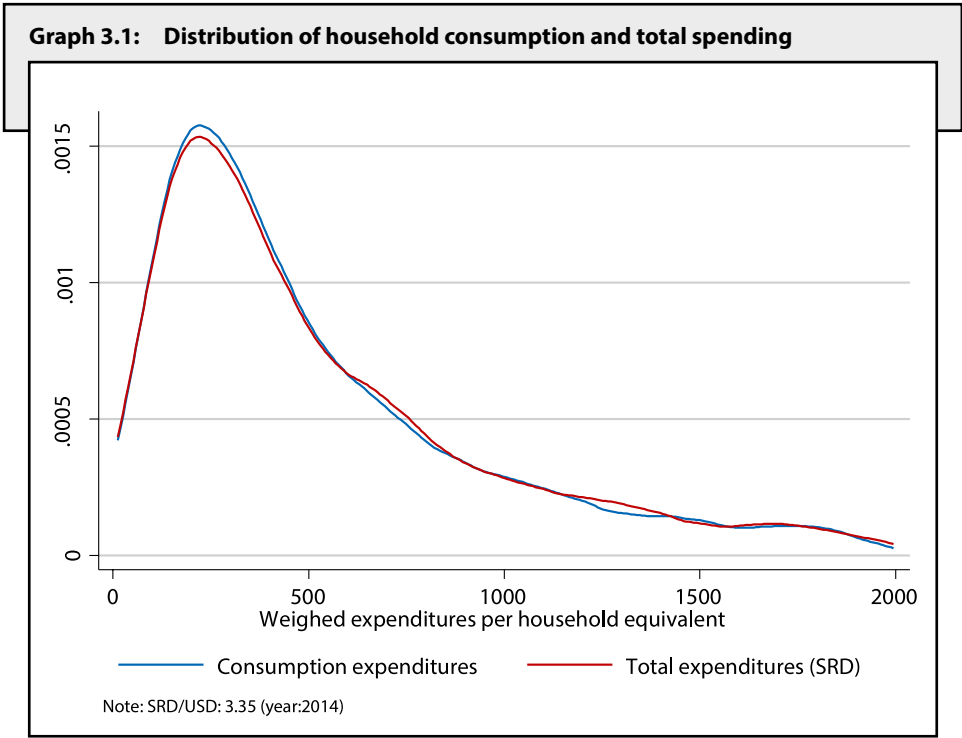
Bron: HBO 2013/14

The HBO is typically conducted every 5 years and that of 2013/14 was the fifth round with an overall national coverage of 87 percent (ABS, 2015; 2016). It should be noted that to date, mainly due to financial constraints, the HBO has not yet been conducted nationwide but has been limited to a few selected districts. The 2013/14 HBO did not include the interior of Suriname due to the high costs associated with collecting data in remote areas.

Suriname is administratively divided into 10 districts across 3 regions with a mid-year population of 616,500 with approximately 160,000 households in 2021 (Sobhie, 2018; ABS, 2013; 2014a; 2014b; ABS, 2022). The figure below shows the composition of the population by age.

Graph 3.2:   Population Pyramid, 2021
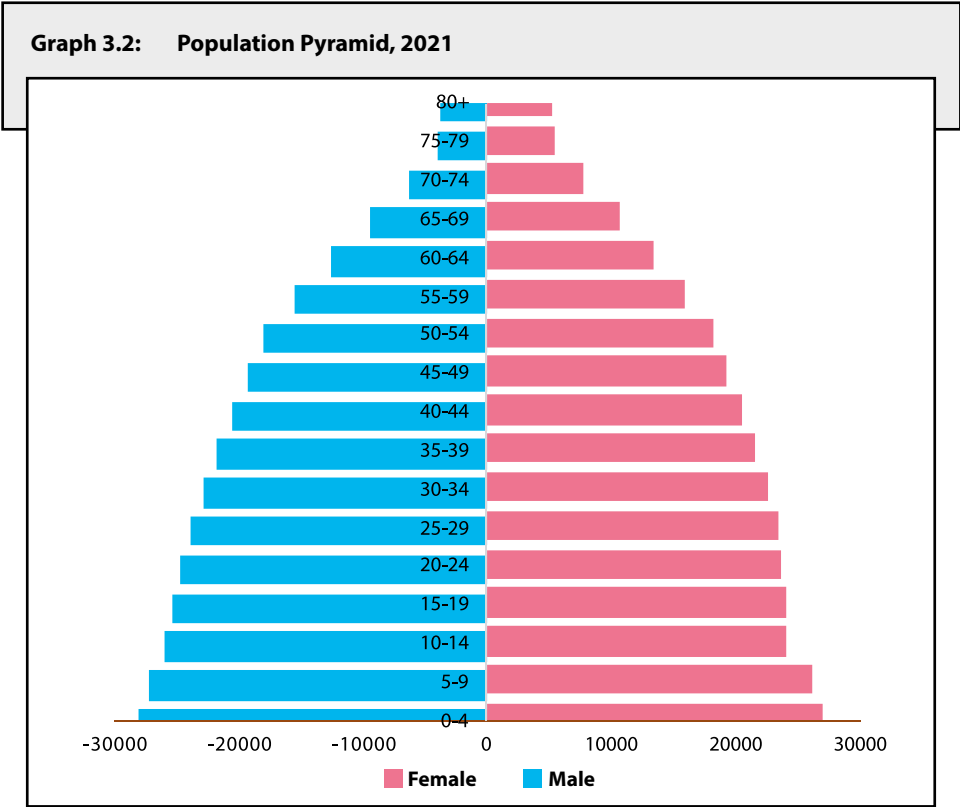
Source: ABS-mid-year population

Table 3.1 shows an overview of the 2013/14 HBO sample distribution by district and strata, and Table 3.2 shows the socioeconomic and demographic variables, using the aforementioned re-weighting.

A total of 3,450 household addresses had been identified based on 138 clusters of 25 addresses each. In this context, a total of 2,928 of the total 4,021 registered households responded. The initial sample proportions (see column 3) were re-weighted, using the Census 2012 proportions as a frame of reference (ABS, 2014). The weighting factors are shown in column 6 to arrive at representative proportions at the "national" level. Column 7 shows the reweighted numbers.

Table 3.1:	Reweighted distribution of households by strata of the 2013/14 HBO sample					
Strata	**Districts**	**HBO 2013/14**		**Census 2012**	**Weighing**	**Wgt.2013/14 HBO**
		N	**%**	**%**	**factor**	**N**
ParWan	Paramaribo Wanica	1.312	45	74	1.66	2.178
Nickerie	Nickerie	360	12	8	0.67	237
CorSar	Coronie Saramacca	352	12	4	0.33	118
Commewijne	Commewijne	419	14	7	0.55	231
Para	Para	485	17	6	0.34	165
Totaal (N)	Strata (5)	2.928		120.951		2.929
Totaal (N)	Nationaal			140.367		

Source: Household Budget Survey 2013/2014andCensus2012

3.2.2   Suriname MICS 2018 research and data

The Suriname MICS 2018 was a nationwide survey with a sample of 9,400 households designed to examine the living conditions of women, men and children in households (UNICEF, 2019). The Suriname multidimensional approach was calculated using a merged MICS data file consisting of the

following five modules which contain information on households, women (15-49 years), men (15-49 years), children under 5 years and children between 5 and 17 years.

The Suriname MICS 2018 was conducted nationwide by the ABS on behalf of the Ministry of Social Affairs and Housing. The MICS is usually conducted every 5 years and that of 2018 was the fourth round for Suriname with an overall coverage of 90 percent for the household questionnaire, 82 percent for the female questionnaire, 70 percent for the male questionnaire, 91 percent for the children under 5 years questionnaire, 92 percent for the children aged 5-17 years questionnaire and 71.3 percent for the water quality questionnaire.

The average measured household size was 4, the percentage of the population under five was 9.4 percent, that of the population under 18 was 33.4 percent and the percentage of women in the age category15-49 years with at least one live birth in the last two years, was 14.7 percent. Furthermore, the percentage of the population living in the urban area was 74.8 percent, in the rural coastal plain area 17.2 percent and in the rural interior area 8 percent (UNICEF, 2019).

The sample size shown in Table 3.2 is based on the sampling frame from the 2012 Census and thus consisted of 9,400 households divided into 10 districts, 3 strata and 470 clusters consisting of 20 households. The stratum classification of the MICS differs from the standard classification generally used by the ABS. In the MICS, the urban area consists of the districts of Paramaribo, Wanica, Nickerie (resort Nieuw Nickerie) and Commewijne (resorts Meerzorg and Tamanredjo). The rural coastal plain area consists of the districts of Nickerie (other resorts), Coronie, Saramacca, Commewijne (other resorts), Marowijne and Para and the rural interior consists of the districts of Brokopondo and Sipaliwini.

District	Stratum	Resorts	Counting blocks	
			District	stratum
Paramaribo	Urban	Totaal Paramaribo	472	741
Wanica		Totaal Wanica	208	
Coronie		Nieuw Nickerie	29	
Commewijne		Meerzorg &Tamanredjo	32	
Nickerie	Rural Coastal Plain	Resterend Nickerie	43	178
Coronie		Coronie	9	
Saramacca		Saramacca	33	
Commewijne		Resterende Commewijne	22	
Marowijne		Marowijne	30	
Para		Para	41	
Brokopondo	Rural interior	Brokopondo	19	47
Sipaliwini		Sipaliwini	28	
Total Suriname			**966**	**966**

Table 3.2: Sample distribution of clusters of households of Suriname MICS 2018 by district and stratum, 2018

Bron: Suriname Multiple Indicator Cluster Survey 2018

3.2.3   Census 2012 and data collected

A 10% sample made available from Suriname's Census 2012 data was used. The 2012 Census was conducted in Suriname by the General Bureau of Statistics and the sample made available consisted of 14,037 households (ABS, 2014). The survey design, response rate, reweighting and validation of the survey are described in the ABS's Census reports (ABS, 2013). The questionnaire provided information on household composition, demographic characteristics, income, occupational status of individuals in the household, their employment sector, health and education status, crime, and migration. Finally, a set of indicators describing the household's standard of living, housing conditions, and ownership of durable goods was included.

The analysis is based on the household level, meaning that we assume that the goods owned by a household member benefit all household members. For the various explanatory variables of multidimensional poverty, the focus is on the characteristics of the household and head of household. This analysis uses a number of measures of deprivation data. Where the questions are directed to individuals, the value of the head is assigned to the household. Questions in the survey included the location where the household lives, the size of the household, and the most commonly spoken language in the household. Individual characteristics such as age, gender, marital status, ethnicity, highest level of education and health status of the household head were recorded.

About one-third of household heads are women and 66 percent are men. Suriname's ethnic diversity is reflected in the data: about 4 percent are Indigenous, 20 percent are Maroon, about 28 percent are Hindustani, 19 percent are Creole, 14 percent are Javanese and 14 percent are of another ethnic group. The highest level of education of the head is distributed as follows: 31 percent Primary Education (GLO), 36 percent Secondary Education at Junior (VOJ) level, 12 percent Secondary Education at Senior (VOS) level and 8 percent have MBO (Secondary Vocational Level) or higher level. Eleven (11) percent had no education. As for the district where the household lives, the largest group of 44 percent can be found in the district Paramaribo, followed by Wanica with 20 percent. Only 1 percent of the total number of households live in Coronie. The districts of Saramacca, Marowijne, Brokopondo and Para have about 3 to 4 percent and Nickerie, Commewijne and Sipaliwini each have nearly 5 to 7 percent of the total households.

3.3   Approaches to poverty in semi-market economies

Non-market or semi-market economies are found primarily in the interior of Suriname among the Indigenous and Maroons. These economies are largely based on self-sufficient production, although a "cash economy" has been established for non-local products and services. Non- or semi-market economies are based on agriculture, forestry, hunting, fishing and transportation and occur primarily in traditional, isolated (tribal) communities.

With increasing interaction with more urbanized areas, there has been a gradual shift from a non-market to a semi-market economy within the traditional communities of Maroons and Indigenous people. Customs and preferences have also changed over time making these communities increasingly rely on non-local products from the city for their consumption patterns, resulting in an increasing need for monetary resources. In our semi-market economies, poverty according to a standardized comprehensive approach is difficult to measure because of the dominance of self-sufficient production, different living situations, expectations and preference differences compared to the urban part of the country.

Therefore the following challenges to measuring poverty using a "standardized method" should be mentioned:

1. The composition of the basic package is especially challenging for these areas because of the differences in consumption patterns between these areas and the urban area in the coastal region which has a much greater "weight". Specifically, the problem in this report is that the established "basic package" was generated from the 2013/14 household budget survey data in the seven districts in the "coastal zone"[11].

2. In a non or semi-market economy, insufficient or no insight can be gained into the consumption levels of households/individuals through the measurement of money transactions alone. The same objection applies to measuring income because many are self-employed in self-sufficient production. Household budget- or wage survey-based methods are structurally capable of measuring only a (small) portion of income or consumption.

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11. Het betreffen in deze de huishoudbudget onderzoekingen van 2007/2008 en 2013/2014. Hiermede is het mogelijk een resultaat te bieden voor 7 van de 10 districten (met circa 87% van de bevolking). HBO 2013/14 is niet uitgevoerd in de districten Marowijne, Brokopondo en Sipaliwini (ook bekend als het binnenland van Suriname).

3. There are price distortions due to the small scale, isolation and shifting consumption patterns in these areas that are not adequately accounted for in measurements, be it due to low response or systematic measurement errors. These distortions can result in the price of the basic package being either too high or too low.

Thus, the poverty calculations discussed in subsequent chapters should be considered with some reserve for these communities. In the second phase of the Poverty Commission's work, this aspect will be included in the Country Poverty Assessment Survey, the household budget survey and the Census (2024) planned after 2023.

4.

CHAPTER 4
THE BASIC NEEDS APPROACH

4.1   The Food-Energy-Intake Method (FEI)

Poverty is usually not defined unambiguously and is a dynamic concept that changes over time and place and for the society being studied. In an attempt to give some objectivity to the measurement of poverty, the conception of "absolute poverty" has been developed. By defining poverty from the concept of the "biological subsistence minimum for a human being," it should be possible to measure it in the same way in different societies (Rowntree, 1901). The biological subsistence minimum is defined as the minimum of resources that a person needs to intake nutrients in order to sustain himself and function in society. The first stream of poverty approach originated from the classic work of Seebohm Rowntree (1901) and can be referred to as the primary or absolute poverty approach that focuses primarily on having the means to meet necessary physical needs.

> In 1901, Seebohm Rowntree defined poverty as not having sufficient financial resources to meet physical needs, that is, the necessary food to stay alive.

Due to the dynamics of society, this approach developed alternatives with an expansion of physical needs by including some basic needs such as health, shelter and clothing. The World Bank introduced the poverty line of USD 1.- per day in 1985 and defined poverty as "all individuals who lack these resources and therefore cannot provide the necessary food, clothing and shelter for themselves.”

The food package, expanded to include other necessary non-food items indispensable for survival, was subsequently referred to as the subsistence minimum package. The challenge was to establish a package of goods and services that included this absolute "subsistence package" and was also socially acceptable. The composition and inclusion of all desirable factors in this package created (computational) problems, and gradually this basic food package was put together based on the minimum daily nutrition required by an individual. Today, it is common to base this package on the energy value of the food package: i.e., how many kilocalories a person needs per day.

This *food-energy-intake (FEI)* method was developed as part of the basic needs approach, where foods are converted into numbers of calories. It is determined how many calories an individual needs daily to then calculate the market value of these foods. Finally, the cost of non-food items (such as footwear, clothing, etc.) is added to this to obtain the total value of the basic package (Nussbaum, 2000). The face value of this minimum is referred to as an "absolute poverty line." The value of this package is then used as a limit to determine if an individual is poor or not and is therefore referred to as the poverty line. The poverty line is thus a dividing line that determines which individuals or households qualify as poor. Poverty lines, according to this approach, are then monetary values that apply to households of different sizes and composition, separating poor households (individuals) from non-poor households (individuals).

This report applies this **food-energy-intake method** to determine the poverty line in Suriname, as well as utilizes the basic needs approach to determine whether or not an individual has access to this minimum subsistence package. However, it should be noted that nationally established poverty lines must take into account the possible variations by location. The poverty line for an individual in Paramaribo and Wanica is not the same as the poverty line for an individual in Coronie or in Sipaliwini. This is due to the fact that in Suriname, for the time being, only price indices are calculated which only allows for comparisons over time and, for the time being, do not incorporate spatial indices.

he methodology used for the basic needs approach according to the FEI method can be indicated schematically as follows.

Table 4.1:   Methodology of poverty lines

Step 1: Determine the value of a 2200-2400 Kcal Basic Food Package (BVP) per day using the Caribbean Food and Nutrition Institute (CFNI) software

Step 2: Using an appropriate Engel coefficient, convert the BVP to a total adult package P (1.0) and convert to monthly basis (365.25/12)

Step 3: Using equivalence factors, convert the poverty line for an adult, i.e., P (1.0) into poverty lines by household size and composition P (n,m)

Step 4: Using the distribution of an appropriate welfare indicator (income or consumption), determine the poverty characteristics (tentatively Pα, for α = 0.1), indicating the headcount index and the poverty gap, respectively.

Source: NCVA report 2017

In the following sections this method for the Surinamese situation is elaborated on through application of the HBO 2013/14 data.

4.2   Derived poverty lines and methodological choices for Suriname

Given the urgency of having official poverty lines available, and taking into account the need for a robust approach, the Poverty Commission has chosen to adopt a modified basic needs approach that is well in line with what is prevalent

in the region, and absolutely still in line with Maslow's famous pyramid of needs. (Top = self-development, recognition, social need, livelihood security, primary biological needs = Basic).

An approach based on a Basic Food Package (BVP) has been adopted. The starting point for establishing the BVP is the available data from household budget surveys. The results of the 2007/2008 and 2013/2014 budget surveys were the main sources for defining the package as well as in providing inflating factors. The initial assumption was 2,400 Kcal per adult per day and - after ample considerations by the Poverty Commission, this was reduced to 2,200 Kcal[12] per adult per day.

The methodological choices are summarized in Table 4.2 and detailed in the following sections.

Table 4.2: **Methodological choices on BVP according to the FEI method**

Option	Choice
Direct methods vs. indirect methods	Indirect (cash poverty) and direct (MPI)
Objective approach vs. subjective approach	Objective
Absolute line vs. Relative line	Absolute
Basic Needs vs. International poverty line	Basic Needs
Fixed basic food basket or variable basic food basket	Fixed food basket
Start date (between May 2010 and May 2016)	December2014
How many Kcal per adult per day (2,000-3,000)	2.200
Engel coefficient (100/E*BVP = total package)	60
Welfare indicator (Income vs. Consumption)	Consumption
Poverty measures	P0(headcount)andP1(gap)

Source: NCVA report 2017

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12. The NCVA had relied on the advice of the dietician, Ms. Mariska Tai A Pin of Mens Sana Dietetics, based on a height of 1.70m for both a female and a male person. A woman with a height of 1.70m needs a diet of 1,800 Kcal and if she plays sports she needs a diet of 2,000 Kcal.
A man with a height of 1.70m needs a diet of 2200 Kcal and if he exercises this is about 2,400-2,600 Kcal. Height is only one indicator when it comes to determining the ADH calories (carbohydrates [slow], proteins and fats [unsaturated]) with or without sports.

4.3 Household spending and its classification by COICOP categories

As indicated earlier, household consumption expenditures as reported in the 2013/14 HBO were used for this part of the study. The household expenditures collected are used to estimate household living standards and are also a tool to measure household and well-being at national level (ABS, 2015; Sobhie, 2018). The HBO 2013/14 data were processed using the Classification of Individual Consumption by Purpose (COICOP) structure (reference for COICOP manual ABS, 2015).

Household expenditures consist of consumption and non-consumption expenditures. In general, the sum of consumption and non-consumption expenditures for non-consumption items should equal the household's disposable income, since total expenditures are a function of available resources. However, non-consumption expenditures have relatively higher underreporting and non-response rates (see Deaton and Zaidi (2002) for further discussion). This is also the pattern observed in the HBO 2013/14 data. Total household consumption expenditure is important because it approximates the household's level of wealth. Total consumption expenditures can be categorized into 12 main groups according to the COICOP classification.

In this report, only the cost of consumption expenditure is used and Graph 4.1 illustrates that the distribution of total expenditure and the distribution of consumption expenditure are almost identical.

Graph 4.1:   Distribution of spending by COICOP main groups (%)
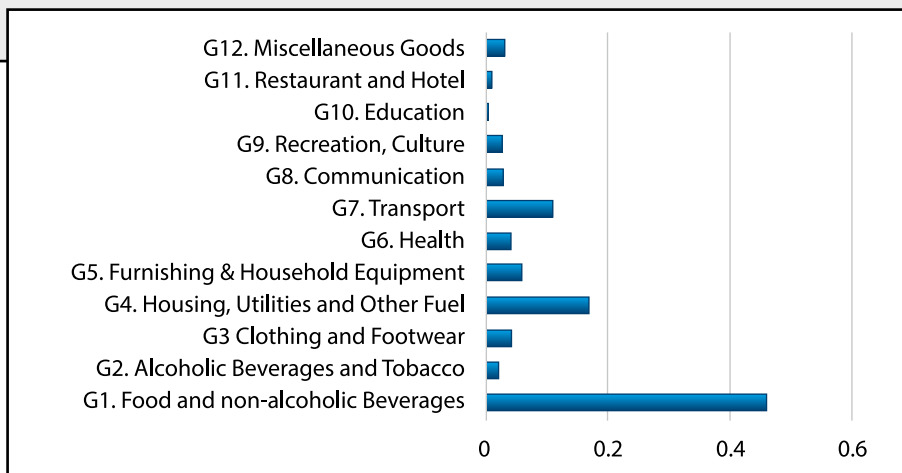
Source HBO 2013/14

Graphs 4.2 and 4.3 present consumption expenditures by main group and distribution by quintiles. As shown in graph 4.2, about 70% is spent on food and beverages, housing, utilities, fuel and transport. Graph 4.3 shows that households in the poorest quintile, spend 60% of total expenditures on food and beverages, while this is about 30% for households in the 5th quintile.

Graph 4.2:   Expenditures of the 3 main groups by quintile
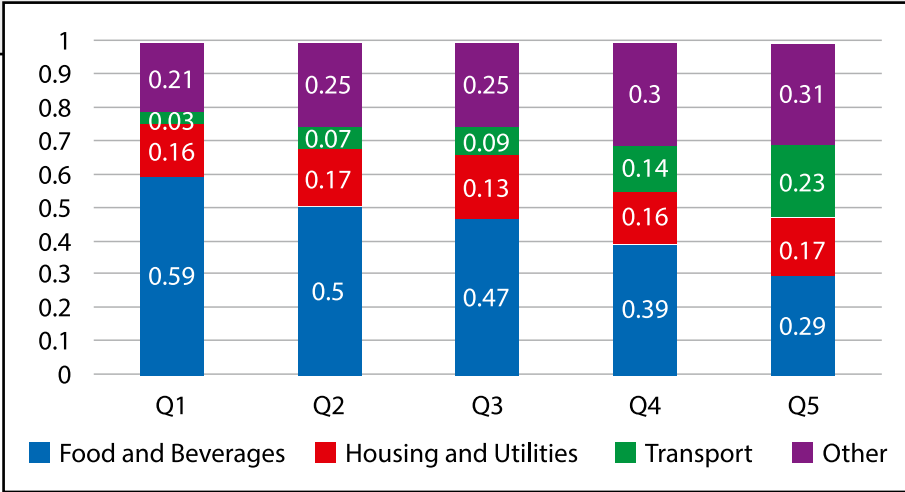
Source: HBO 2013/14

Graph 4.3:   Log consumption expenditure per capita with 2nd and 4th deciles as cut-off points
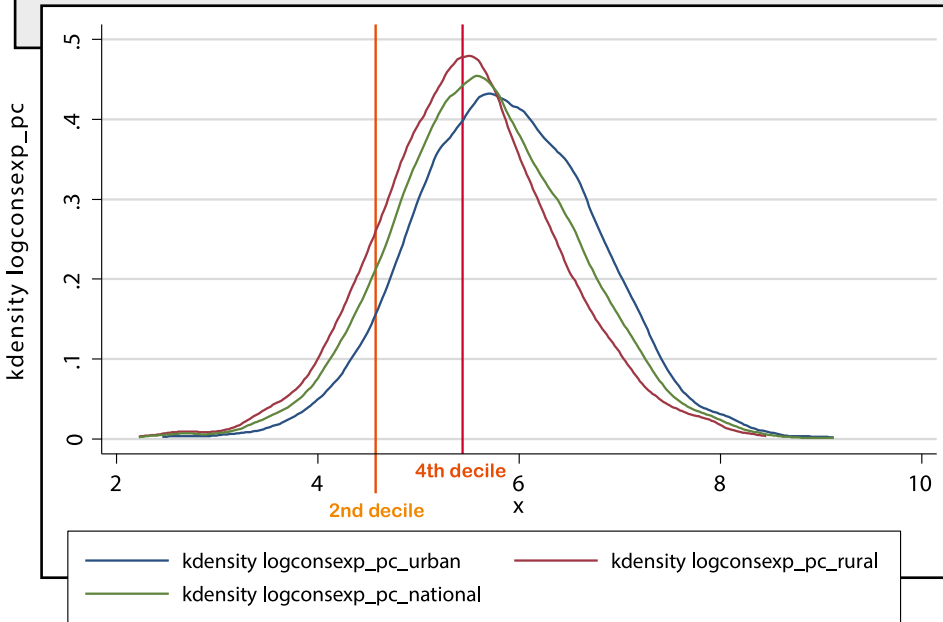
Source: HBO 2013/14

4.4   A fixed basic food package

The NUTCOST software of the former Caribbean Food and Nutrition Institute (CFNI) was used to compile the basic food package, using the default values in terms of percentage distribution of energy while using the default for Suriname (approximately 26) for the number of items[13].

The groups and energy contribution are shown as follows in table 4.3[14].

Table 4.3: Groups and Energy Contribution	
Food category/group	**Energy contribution**
Grains	30%
Tuber crops	15%
Legumes	10%
Vegetables	4%
Fruit	6%
Animal food	15%
Sugars and Syrups	10%
Fats and oils	10%
Total	100%

Source: NCVA report 2017

The software used is organized to mechanically assemble an optimal combination of food items, which is at the same time the cheapest alternative and also provides the maximum energy required per food category. A package consisting of only cereals would possibly be cheaper, but does not constitute the optimal combination, because only 30% of cereals are allowed in the food package. In addition, within a food category there must be variation.

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13. For a detailed description of this method, see ABS, May 2001
14. In practice, the 8 groups are compressed to 5 groups so that the data can be updated with CPI subgroup indices.

By default, for example, chicken leg, liver and kidney will not be chosen in combination, but the software will choose liver, kidney and salted meat, for example.

The distribution of the number of items is sometimes adjusted to enforce a certain result that better approximates reality. Thus, it is always advisable to analyze the mechanically assembled package and make minimal adjustments if desired. For example, initially, (boned) salted meat was in the package, while garlic, yellow peas and chicken legs were not. The latter items did belong in a standard household food package according to the NCVA and were therefore added.

From the above table and aforementioned considerations, the basic food package results on a daily basis or (x 365.25/12) monthly basis.

Table 4.4: Basic food package on a daily basis	
Basic food package (december 2014)	
Semi super rice	Ketchup
Flower	Eggplant
Noodles	Bananas
Bread	Watermelon
Potato	Orange
Cassava	Fish
Green/Ripe bananas	Liver and kidney
White sugar	Sardines in tomato sauce
Brown beans	Surinamese salted fish
Yellow peas	Sausages
Peanut butter	Drumsticks
Onions	Local milk
Garlic	Soya oil
Chinese spinach	Margarine
Pumpkin	

Source: NCVA report 2017

Note: *After ample consideration, the NCVA decided that "boned salted meat" should be replaced with "drumsticks/chicken legs" and that "yellow peas" and "garlic" should be added to the staple food package (BVP).*

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Table 4.5:	Stability of the basic food basket			
Basic food package december 2014	**December 14**	**Juni 15**	**December 15**	**Maart 16**
Semi super rice	X	X	X	X
Flower	X	X	X	X
Noodles	X	X	X	X
Bread	X	X	X	X
Potato	X	X	X	X
Cassava	X	X	X	X
Green/ripe bananas	X	X	X	X
White sugar	X	X	X	X
Brown beans	X	X	X	X
Peanut butter	X	X	X	X
Onions	X	X	X	X
Chinese spinach	X	X	X	X
Pumpkin	X	X	X	X
Ketchup	X	X	Chinese spinach	Cabbage
Eggplant	X	Chinese spinach	X	X
Bananas	X	X	X	X
Watermeloen	X	X	X	X
Orange	X	X	X	X
Fish	X	X	X	X
Liver and kidneys	X	X	X	X
Sardines in tomato sauce	X	X	X	X
Salted fish	X	X	X	X
Sausages	X	X	X	X
Boned salted meat*	X	X	X	Eggs
Local milk	X	X	X	X
Soya oil	X	X	X	X
Margarine	X	X	X	X

Source: NCVA report 2017

The basic food basket is then expressed in a monetary value (SRD) based on the prices of the goods from the 2013/14 HBO and is as follows:

Table 4.6:	Basic food basket per adult, 2014-2016		
BVP (pvpm)	**December 2014***	**December 2015***	**Mei 2016***
2,400 Kcal	364	391	557
2,200 Kcal	333	359	510

Source: NCVA report 2017
*Note: In SRD per adult, per month

4.5 From a fixed basic food basket to a total basic needs basket

Obviously, having food is essential for determining poverty lines, but it is clearly insufficient. A household needs other basic goods such as footwear and clothing in addition to food. The defined food basket must therefore be augmented with a number of non-food items to compose the total basic needs basket. Although arbitrary decisions must already be made regarding the BVP, this is usually easier to reach consensus. Determining a total basic needs package is often subject to more criticism.

In principle, it is possible to **explicitly** put together a package for non-food items in the same way as the BVP. Since there are no relatively objective standards for non-food items comparable to the minimum standards for nutrition items (e.g., as determined by WHO/ FAO; See WHO 1985), the arbitrary decisions on non-food items become a multiple of the arbitrary decisions on the BVP. Because of the foregoing, it is more common to somehow determine a multiplier by which the value of the BVP is multiplied in order to implicitly determine a total package. There are many ways in which the **multiplier**, usually called the Engel coefficient that relates food expenditure to total expenditure or total income, can be determined.

In this context, the following can be mentioned: expert opinion, percentiles of consumption, frequency distribution of Engel coefficients, regression of the Engel coefficient on consumption and value based on an interval, e.g. [0.9*BVP;1.1*BVP].

After listing various possibilities, the final choice was 60%. This means that 60% of the total basic basket consists of food items and 40% of non-food items. The established basic basket constitutes the poverty line for an adult or 1-person household in December 2014 (based on the 2013/14 HBO). This results in the table below with poverty lines for 1 adult.

Table 4.7:   Poverty lines per adult 2014-2016

TOTP (pvpm)	December 2014*	December 2015*	Mei 2016*
2,400 Kcal	607	652	928
2,200 Kcal	555	598	850

Source: NCVA report 2017
*In SRD per adult, per month

The Poverty Commission recommends to determine the poverty lines twice per year (in June and December of the year), and keep these fixed throughout the year for each time.

4.6   Application of equivalence factors for reweighting by household size and composition

To make households comparable, poverty lines must be established by taking into consideration household size and composition. This is necessary because it is, for example, incorrect to equate the poverty line for a household of 3 adults with the line for 1 adult.

Similarly, it is obviously incorrect to set the limit for 3 adults to be 3 times the limit for 1 adult. Thus, a factor must be determined to multiply the amount needed for let's say 1 adult to determine the equivalent amount (e.g., to maintain the same level of welfare) for 3 adults, and in fact for any other household composition.

The NCVA only considered size and age, distinguishing in terms of age only 2 groups: adults (persons 15 years and older) and children (persons under 15 years of age).

On the other hand, the factors are empirically determined. The "Old" and "New" factors[15] of the ABS are compared in the following table, as well as with the new OECD scale and the scale used in the Netherlands. Depending on household composition and size, the poverty line, which is always calculated for an adult, is converted to a household poverty line[16].

To make household expenditures comparable, the new equivalence structure of the ABS was used, which was also used to calculate poverty lines from 2014 through 2021. The "new Suriname equivalence scale" uses the power function: $F(A,K)=(A+p^*K)^q=(A+0.69^*K)^{0.66}$, where A represents the number of adults (the first adult is given a value of 1) and K represents the number of children (see Table 4.8).

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15. ABS: Old factors May 2001 to April 2010 and new factors as of December 2014.
16. A poverty line (for a 1-person household) of SRD1,000; so for a household with 2 adults and 3 children, this equals SRD 1,000 x 2.53 = SRD 2,530 assuming the 'Suriname New' equivalency factors.

Table 4.8: Equivalence factors for Suriname, new OECD scale and Dutch scale

V\K	Suriname OLD				
	0	**1**	**2**	**3**	**4**
1	1.00	1.56	2.08	2.58	3.06
2	1.80	2.31	2.80	3.28	3.74
3	2.53	3.02	3.49	3.94	4.39
4	3.23	3.69	4.15	4.59	5.03

V\K	The Netherlands from 1995-2000				
	0	**1**	**2**	**3**	**4**
1	1.00	1.33	1.51	1.76	1.95
2	1.37	1.67	1.88	2.06	2.28
3	1.73	1.95	2.14	2.32	2.49
4	2.00	2.19	2.37	2.53	2.68

A\K	Suriname New				
	0	**1**	**2**	**3**	**4**
1	1.00	1.41	1.77	2.10	2.40
2	1.58	1.92	2.23	2.53	2.80
3	2.06	2.37	2.65	2.92	3.18
4	2.50	2.77	3.04	3.29	3.53

A\K	New OECD-scale				
	0	**1**	**2**	**3**	**4**
1	1.00	1.30	1.60	1.90	2.20
2	1.50	1.80	2.10	2.40	2.70
3	2.00	2.30	2.60	2.90	3.20
4	2.50	2.80	3.10	3.40	3.70

$F(A,K)=(A+p*K)^q$
Suriname Old: $F(A,K)=(A+0.69*K)^{0.845}$
Suriname New: $F(A,K)=(A+0.69*K)^{0.66}$
A stands for adults and K for kids.

4.7 Overview of poverty lines 2014-2016

Based on the new equivalence factors and the estimated poverty line at 2200 Kcal of SRD 850 as of December 2016, the poverty lines based on household size are as follows:

Table 4.9: Poverty lines at 2,200 Kcal and new equivalence factors, December 2016

A\K	Suriname New (SRD per month)				
	0	**1**	**2**	**3**	**4**
1	850	1.199	1.505	1.785	2.040
2	1.343	1632	1.896	2.151	2.380
3	1.751	2.015	2.253	2.482	2.703
4	2.125	2.355	2.584	2.797	3.001

Source: NCVA report 2017

The poverty line associated with the 2,200 Kcal basic basket as of December 2016 ranges between SRD 850 for a 1-person household to SRD 3,000 for a household consisting of 4 adults and 4 children. Ex-post facto, it must be acknowledged that the old factors were too generous. This became apparent after those factors (based on HBO 1968/1969 and HBO 1999/2000) were estimated and put into use. The recommendations are that parameter $p \approx 0.70$ (thus a child is 70% of an adult) and that for q: 0.65< q <0.75. The estimated p was fine, but the estimated q was thus too generous.

4.8 Price trends (CPI 2014-2021) and methodology for updating poverty lines

4.8.1 Consumer Price Index (CPI), Inflation and Purchasing Power Consumer Price Index and Inflation

Inflation is an important indicator that gives an indication of the state of the economy. The level of inflation can be derived from fluctuations in the consumer price index (CPI). The consumer price index (CPI) is a measure of the average change in the price of a basket of goods and services defined by quality and quantity that is spent for consumption purposes. The CPI is often also referred to as the "Cost of Living Index" (COL). This name is not entirely accurate since, for example, in a COL, substitutions due to changes in relative prices and tastes, among other things, are included, but not in the CPI (ABS, 2021).

The CPI reflects the change in consumer prices of a fixed basket of goods and services (basic basket), relative to a given period (base period). The basic basket is ideally determined using a household budget survey (HBO), the latest of which was conducted in2013/2014[17] in Suriname. On the basis of this survey,

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17. Ideally, an HBO should be conducted every five (5) years (see resolution on household income and expenditure surveys adopted at the 12th International Conference of Labor Statisticians (ICLS, October 1973). The General Bureau of Statistics (ABS) is trying to meet this time frame but because of, among other reasons, a lack of financial resources, it has not yet succeeded in conducting the necessary HBO. In view of the importance of up-to-date information on household income and expenditure, among other things for targeted social policy, it is important for the Government to give priority to the reservation and provision of resources so that the ABS is able to finance or carry out the necessary HBO within the shortest possible time.

the basic basket - on the basis of which measurements of consumer prices now take place - was created. The CPI package consists of 11 main groups with their own weighting factors. COICOP main groups 9 and 10 were pulled together by the ABS due to low numbers in at least one of those main groups. Of those 11 main groups, in order of importance, food and non-alcoholic beverages, housing and utilities, transportation, and other goods and services, have the highest weight. These COICOP groups are also used for the CPI package published monthly by the ABS.[18] **Only COICOP group 1 "food and non-alcoholic beverages" is used to update the poverty line.**

Table 4.10 is a representation of the 11 main groups of the CPI package from ABS with the corresponding weights.

Table 4.10:	Hoofdgroepen van het CPI-pakket	
	Main groups	**Weighs per (per1000) April-June 2016**
1	Food and non-alcoholic beverages	313
2	Alcoholic beverages and Tobacco	18
3	Clothing and Footwear	39
4	Housing and Utilities	229
5	Furnishings	52
6	Health Care	47
7	Transportation	123
8	Communications	43
9/10	Recreation, Culture and Education	34
11	Dining out	8
12	Other Goods and Services	94
	Total	**1,000**

Source: ABS, 2022

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18. The Consumer Price Index (CPI) and Inflation figures are published monthly by the ABS and are available on the ABS website: https://statistics-suriname.org/nl/consumenten-prijs-indexcijfers-en-inflatie/

Purchasing Power

Inflation affects the purchasing power of the national currency, in the case of Suriname on the Surinamese dollar (SRD), with all the implications this has for the real income of the so-called permanent employees in Government and the private sector, the pensioners and welfare recipients.

Although the aforementioned groups have been compensated for inflation to a greater or lesser extent in the past period, due to the lack of a complete picture as far as wage statistics are concerned, it is difficult to provide a reliable picture of the extent to which inflation has affected income in general, and that of the various groups in particular.

Graphs 4.4 and 4.5 present the CPI over the period 2014-2021 and indicate that from 2016 through 2021, both average and 12-month inflation peaked. These peaks were due in part to the depreciation of the exchange rate, with all its implications for the prices of goods and services. After all, much of the goods are for consumption purposes and are imported. The 12-month inflation rate gives a better indication of inflation because seasonal influences are neutralized. However, this figure remains sensitive to occasional events such as increases in money supply and disposable income, government and consumer spending, cheap monetary policy, private sector expansion, deficit financing and illegal money.

Graph 4.4:   CPI 2014-2021
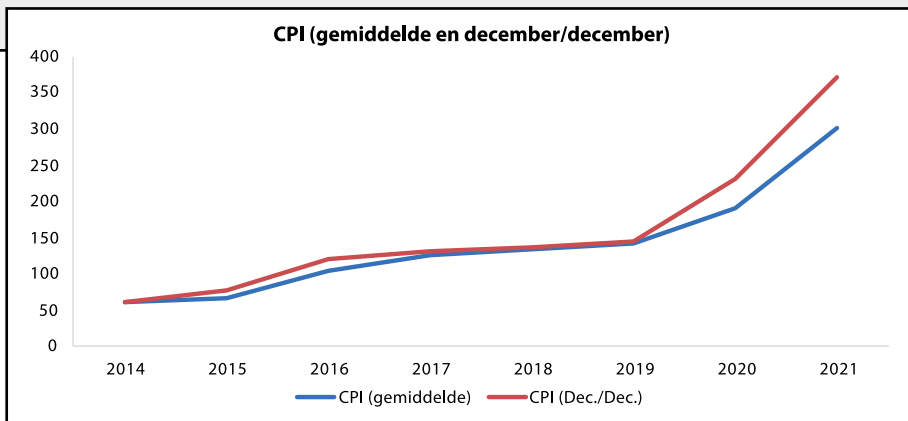
Source: General Bureau of Statistics(ABS)

Graph 4.5:   Inflation 2014-2021

Inflatie (gemiddelde en december/december)
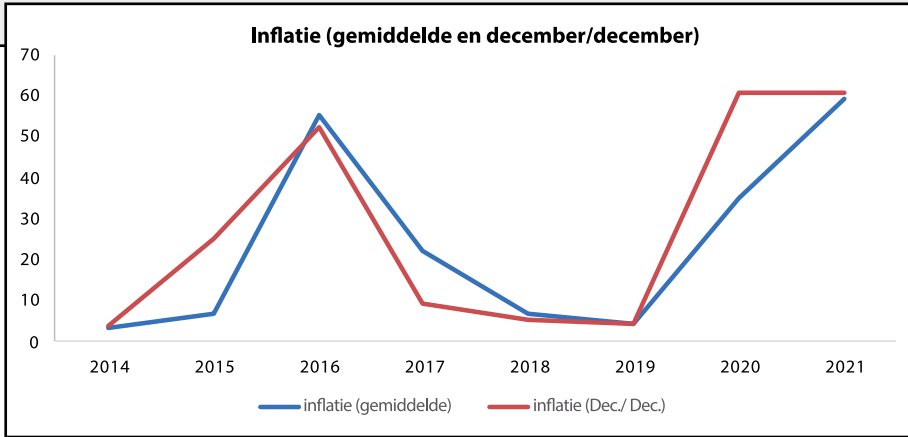
Source: General Bureau of Statistics(ABS)

Table 4.11 shows the trend in the purchasing power of the minimum hourly wage for the period 2015-2021. The figures indicate that from 2016, the real value of the minimum hourly wage declined structurally, with all its consequences for the standard of living of, among others, permanent employees.

Table 4.11: Inflation, Purchasing Power and Minimum Hourly Wage[19] in Suriname, 2015-2022

Jear	CPI[20]	Inflation[21]	Purchasing Power SRD 1.00	Minimum hourly wage in SRD	
				Nominal	Real
2015	66.4	6.9	0.93	4.29	3.99
2016	103.2	55.5	0.61	5.22	3.18
2017	126	22.0	0.49	6.14	3.01
2018	134.9	6.8	0.46	6.14	2.82
2019	140.7	4.4	0.44	8.40	3.70
2020	189.7	34.9	0.34	8.40	2.86
2021	301.1	59.1	0.21	8.40	1.76
2022	447.5	48.3[22]	0.32	15.17	4.70
2022	447.5	48.3[23]	0.32	20.0[24]	6.20

Source: ABS and the Suriname Planning Office (SPS)

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19. https://www.sris.sr/wp-content/uploads/2022/06/Beschikking-Minimum-uurloon-S.B.-2022-no.-58..pdf
20 Average CPI over a 12-month period (one year).
21. Average inflation over a 12-month period (one year).
22. Forecast of SPS
23. Forecast of SPS
24. If January 1, 2020 was the effective date of the minimum wage of SRD 20.

4.9 Update Basic Food Basket and Poverty Lines

Population level of subsistence and poverty reduction

In the policy debate on the effects of the economic crisis and how to bear its burdens, the key question is how much and in what way income earners, pensioners and welfare recipients, should be compensated for the decline in purchasing power. To answer this question, a report was produced by the Government appointed National Commission to Prepare Poverty Lines (NCVA) in 2016, which included a proposed poverty line. However, the Government did not take the decision until the 2nd half of 2021 to validate this and update the poverty line which can be used as a starting point to identify vulnerable groups, develop programs for these groups, and quantify short, medium- and long-term, economic and social goals. Thus, the success of policies can be fundamentally tested on whether groups below and above the poverty line have changed.

In the absence of additional information on household incomes and expenditures, the value of the Basic Food Basket (BVP) used at the time was adjusted by the monthly CPI of main group1 "Food and Non-Alcoholic Beverages." This food package was then used to estimate the value of a total consumption package - consisting of more than just food. Here, the Engel coefficient was used to estimate the non-food component of this normative consumption package. An Engel coefficient of 60 percent was chosen because calculations based on the data of the 2013/14 HBO showed that 60 percent of household consumption expenditures in Suriname, involved food. This implies that the basic food package is "inflated" to a "total consumption package." Thus, the value of the non-food component is40 percent of the total value. This is the most commonly followed method in the composition of this type of package.

Using the equivalence factors discussed earlier, the poverty line for households by size and composition - based on a BVP of 2,200 kcal - was set for Paramaribo and Wanica as of December 2014 (Table 4.12), and then adjusted using CPI figures for 2016-2022 adjusted (see Tables 4.12, 4.13 and 4.14).

Table 4.12:	Basic food basket (2,200 kcal) and poverty lines through CPI adjustment, 2016-2022		
Date	**Basic Food Basket (BVP)**	**Poverty lines**	**CPI-Main group1 "Food and Non-Alcoholic Beverages"**
	In SRD per adult, per month %		
December 2014	SRD 333,-	SRD 556,-	138.7
December 2016	SRD 359,-	SRD 598,-	129.3
July 2018	SRD 692,-	SRD 1.153,-	149.3
July 2019	SRD 730,-	SRD 1.216,-	157.5
July 2020	SRD 1.130,-	SRD 1.883,-	243.9
December 2020	SRD 1.249,-	SRD 2.081,-	269.6
July 2021	SRD 1.858,-	SRD 3.097,-	401.1
December 2021	SRD 2.019,-	SRD 3.365,-	435.8
July 2022	SRD 2.464,-	SRD 4.107,-	532.0

Source: General Bureau of Statistics (ABS)

Table 4.13:   Poverty lines per adult (2,200 kcal) with CPI adjustments, 2014-2022

Poverty line in SRD, December 2014						Poverty line in SRD, December 2016				
		Number of kids					Number of kids			
		0	1	2	3	4	0	1	2	3	4
Number of adults	1	556	785	985	1.165	1.332	850	1.199	1.505	1.785	2.040
	2	878	1.068	1.241	1.403	1.556	1.343	1.632	1.896	2.151	2.380
	3	1.147	1.315	1.473	1.622	1.764	1.751	2.015	2.253	2.482	2.703
	4	1.387	1.541	1.687	1.827	1.961	2.125	2.355	2.584	2.797	3.001

Poverty line in SRD, July 2018						Poverty line in SRD, December 2020				
		Number of kids					Number of kids			
		0	1	2	3	4	0	1	2	3	4
Number of adults	1	1.153	1.631	2.044	2.418	2.764	3.097	4.367	5.482	6.504	7.433
	2	1.822	2.216	2.577	2.913	3.230	4.893	5.946	6.906	7.835	8.672
	3	2.382	2.730	3.057	3.367	3.663	6.380	7.340	8.207	9.043	9.848
	4	2.879	3.198	3.502	3.792	4.071	7.743	8.579	9.415	10.189	10.932

Poverty line in SRD, June 2021						Poverty line in SRD, December 2021				
		Number of kids					Number of kids			
		0	1	2	3	4	0	1	2	3	4
Number of adults	1	2.895	3.239	4.058	4.801	5.488	3.365	4.762	5.966	7.059	8.069
	2	3.618	4.401	5.118	5.784	6.413	5.318	6.469	7.523	8.503	9.427
	3	4.730	5.421	6.070	6.686	7.273	6.953	7.969	8.924	9.828	10.692
	4	5.716	6.350	6.953	7.529	8.084	8.403	9.336	10.221	11.068	11.884

Poverty line in SRD, June 2022						Poverty line in SRD, December 2022				
		Number of kids					Number of kids			
		0	1	2	3	4	0	1	2	3	4
Number of adults	1	4.003	5.666	7.098	8.398	9.600	5.428	7.683	9.625	11.388	13.017
	2	6.327	7.697	8.951	10.117	11.216	8.580	10.437	12.138	13.718	15.209
	3	8.273	9.481	10.617	11.693	12.721	11.218	12.857	14.397	15.857	17.249
	4	9.998	11.107	12.161	13.168	14.139	13.558	15.062	16.490	17.857	19.173

Source: General Bureau of Statistics and Poverty Commission

Table 4.14:	Poverty lines per adult (2,200 kcal) through CPI adjustment, 2019-2022						
CPI GROUP1	161.6	234.6	269.6	375.0	435.8	518.5	703.1
HH (V/K)	DEC 2019	JUNI 2020	DEC 2020	JUNI 2021	DEC 2021	JUNI 2022	DEC 2022
1V/0K	1.248	1.811	2.081	2.895	3.365	4.003	5.428
1V/1K	1.766	2.563	2.946	4.098	4.762	5.666	7.683
1V/2K	2.212	3.211	3.691	5.133	5.966	7.098	9.625
1V/3K	2.617	3.800	4.367	6.074	7.059	8.398	11.388
1V/4K	2.992	4.343	4.991	6.943	8.069	9.600	13.017
2V/0K	1.972	2.863	3.290	4.576	5.318	6.327	8.580
2V/1K	2.399	3.483	4.002	5.567	6.469	7.697	10.437
2V/2K	2.790	4.050	4.654	6.474	7.523	8.951	12.138
2V/3K	3.153	4.577	5.260	7.317	8.503	10.117	13.718
2V/4K	3.496	5.075	5.832	8.112	9.427	11.216	15.209
3V/0K	2.578	3.743	4.302	5.983	6.953	8.273	11.218
3V/1K	2.955	4.290	4.930	6.857	7.969	9.481	12.857
3V/2K	3.309	4.804	5.520	7.679	8.924	10.617	14.397
3V/3K	3.644	5.291	6.080	8.457	9.828	11.693	15.857
3V/4K	3.965	5.756	6.614	9.200	10.692	12.721	17.249
4V/0K	3.116	4.524	5.199	7.231	8.403	9.998	13.558
4V/1K	3.462	5.026	5.775	8.033	9.336	11.107	15.062
4V/2K	3.790	5.502	6.323	8.795	10.221	12.161	16.490
4V/3K	4.104	5.958	6.847	9.524	11.068	13.168	17.857
4V/4K	4.407	6.398	7.352	10.226	11.884	14.139	19.173

Source: General Bureau of Statistics and Poverty Commission

4.10 Further analysis of poverty statistics: headcount, poverty gap and poverty profile selected groups

Once poverty lines have been established (by household size and composition), in other words, once the dividing line between poor and non-poor has been drawn, there are some questions that need to be answered:
1. How many households and/or individuals are below the poverty line?
2. How far below the poverty line are the poor in total and on average?

Answering the first question gives rise to the so-called headcount index (the percentage of poor below the poverty line), but many will also ask whether a situation where large portions of the population are not far below the poverty line is worse or better than a situation where a small portion of the population is far below the poverty line. The fact is that there is agreement that the situation below the poverty line should also be looked at more closely. For the sake of simplicity, we assume that regarding the use of the so-called Pα measures, where P0 is the headcount index and P1 is the Poverty Gap index, the questions posed above are answered and consensus can be reached.

Furthermore, establishing a poverty line is usually half the battle. In order to monitor whether or not the situation has improved, there must be a reliable distribution of income or (consumption) expenditures. The overview below is for Paramaribo and Wanica (situation per research period November 2013 - August 2014), and immediately shows the effect of the equivalence factors on the result. The old equivalence factors and the 2,200 Kcal package result in a headcount of 49.5 percent when applied to data from HBO 2013/14, while the new equivalence factors result in a headcount of 36 percent (see Table 4.15). This indicates that based on the new equivalence factors used here and beyond, at least 40 percent of households are below the relevant poverty line and qualify as poor.

KCAL	Headcount EQUIVALENCY FACTORS		Poverty gap index EQUIVALENCY FACTORS	
	OLD	NEW	OLD	NEW
2.400	53.2%	37.9%	29.1%	19.3%
2.200	49.5%	36.0%	26.3%	17.2%

Table 4.15: Headcount ratios at various basic packages

The poverty gap index for 2200 kcal based on the new equivalence factors results in a gap of 17.2 percent. That gap indicates the difference between household income and the poverty line.

This allows calculating for each poor household how much its income falls short of being able to purchase the established basic package of 2200 kcal. With this it is possible to calculate how many resources are needed to subsidize all households below the poverty line (subject subsidy).

The section below presents some more statistics of the poverty level of different population subgroups and outlines the profile of households living below and near the poverty line. Further calculations show that 46.5 percent (about 66,684 households) lived below a poverty line of SRD 515.- per month, 24.9 percent (about 35,708 households) lived below the extreme poverty line of SRD 309 per month and 64.3 percent (approximately 92,210 households) were vulnerable to poverty with a poverty line of SRD 773 per month[25].

Table 4.16 shows that poverty was higher in the rural area (74.6%) than in the urban area (36.8%), which is also true for extreme poverty, which was higher in the rural area (52%) than the urban area (15.6%). Thus, the results suggest that the probability of extreme poverty is higher in the rural area, than in the urban area.

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25. The average number of households around 2013 and 2014 was 143,406 households (ABS, 2019). The poverty lines were adjusted using inflation because the 2013/14 HBO was conducted during the survey period November 4, 2013 to August 30, 2014 instead of December 2014. However, these calculations used the poverty lines at the time of the survey. They worked with a poverty line of SRD 515 instead of SRD 555, an extreme poverty line of SRD 309 instead of the basic food basket of SRD 333, and a poverty line for vulnerable people equal to 1.5 times the poverty line (1.5x SRD 515= SRD 773). The value of the basic food basket is used here as the limit for extreme poverty.

Table 4.16:	Poverty, extreme poverty and vulnerability to poverty by stratum (%), 2013/2014		
Stratum	**Extreme Poverty (basic food basket) (SRD 309,- per month)**	**Poverty (SRD 515,- per month)**	**Poor and Vulnerable to poverty (SRD 773,- per month)**
Urban	15.6%	36.8%	56.4%
Rural	52.0%	74.6%	87.2%
Nationwide	**24.9%**	**46.5%**	**64.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Table 4.17 shows that the female head of the household experienced slightly less poverty (44.6%) and extreme poverty (23.5%) compared to the male head of the household with respectively 47.4% and 25.6%.

Table 4.17:	Poverty and extreme poverty by gender (%), 2013/2014	
Gender	**Extreme Poverty (SRD 309,- per month)**	**Poverty (SRD 515,- per month)**
Female	23.5%	44.6%
Male	25.6%	47.4%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Table 4.18 indicates that households headed by an Indigenous person (73.2%) and person of Maroon descent (62.4%) experienced relatively more poverty. Extreme poverty was also highest among these groups: among the Indigenous people (49.4%) and the Maroons (37.7%). One reason is that a number of Maroon and Indigenous village communities can be found in the district Para, where extreme poverty is high.

Table 4.18:   Poverty and extreme poverty by ethnicity (%), 2013/2014

Ethnicity	Extreme Poverty (SRD 309,- per month)	Poverty (SRD 515,- per month)
Indigenous	49.4%	73.2%
Maroon	37.7%	62.4%
Creole	20.0%	39.3%
Hindostani	22.1%	47.1%
Javanese	27.3%	52.7%
Mixed	18.0%	30.1%
Other	37.0%	52.7%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Table 4.19 shows the incidence of poverty by the marital status of the household head. Here we find that heads who were unmarried (51.1%), divorced (43.1%) or widowed (43.1%) had a relatively higher incidence. Extreme poverty was most common among the head of households who were unmarried (28.9%) or widowed (25%).

Table 4.19:   Poverty and extreme poverty by marital status (%), 2013/2014

Marital status	Extreme Poverty (SRD 309,- per month)	Poverty (SRD 515,- per month)
Unmarried	28.9%	51.0%
Married	21.0%	42.6%
Divorced	19.7%	43.1%
Widowed	25.0%	43.1%
No answer	36.2%	60.0%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Tabel 4.20 geeft aan dat de armoedeincidentie naar huishoudgrootte. Daarbij is gebleken dat hoe groter het aantal huishoudleden was, hoe groter de kans op armoede. Armoede was relatief hoger bij huishoudens met 8 en meer personen (70.3%) en 5-7 personen (57.9%), terwijl die laag was bij huishoudens met 2-4 personen (41.3%) en bij éénpersoons huishoudens (32%).

Table 4.20:   Poverty and extreme poverty by household size (%), 2013/2014

Household size	Extreme Poverty (SRD 309,- per month)	Poverty (SRD 515,- per month)
1 person	18.5%	32.0%
2-4 persons	21.8%	41.3%
5-7 persons	29.6%	57.9%
8+ persons	44.5%	70.3%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Table 4.21 indicates that education level plays an important role in poverty risk. The higher the education level of the household head, the lower the risk of poverty. Poverty was most frequently experienced by household heads with no education or only a GLO education (64%), followed by VOJ education (43.6%) and a VOS education (28.6%). Poverty (8.8%) and extreme poverty (4.6%) were least common among household heads with a university education or higher vocational education (HBO).

Table 4.21:   Poverty and extreme poverty by level of education (%), 2013/2014

Education level	Extreme Poverty (SRD 309,- per month)	Poverty (SRD 515,- per month)
No education or GLO	37.9%	64.0%
VOJ	21.7%	43.6%
VOS	10.2%	28.6%
University/ Higher vocational education	4.6%	8.8%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

Table 4.22 indicates that poverty is highest among households where the head is unemployed (34.6%) and family caretaker (28.0%), while extreme poverty is low among the employed (23.6%), pensioners (22.8%) and others (24.5%). A possible reason for pensioners and others experiencing less poverty than the employed may be that they occur in a household where multiple household members have income. The activity status of the head of the household plays an important role in the level of poverty.

Table 4.22:   Poverty and extreme poverty by activity status (%),2013/2014

Activity status	Extreme Poverty (SRD 309,- per month)	Poverty (SRD 515,- per month)
Employed	23.6%	44.8%
Unemployed	34.6%	59.3%
Family caretaker	28.0%	52%
Retired	22.8%	43%
Other	24.5%	38.2%
Nationwide	**24.6%**	**46.3%**

Source: Kisoensingh (2021) building on the work of the World Bank (2016) and Sobhie (2018)

4.11 Summary establishing and updating poverty lines

Many options are available for updating established poverty lines, all of which have advantages and disadvantages. Below are some options with their advantages and disadvantages.

Option	Advantages	Disadvantages
Having to repeat calculations	Consistency from the base period to each current period.	Very labor intensive and the package is no longer fixed but variable.
Total package update with an index (e.g. CPI)	Provides the fastest results.	Total CPI overall is not the best index for the poor. With a flexible exchange rate, the line can get very high.
Convert total package to USD and update with dollar exchange rate.	In times of constant exchange rate fluctuations (and inflation), it can produce quick and acceptable results.	With a uniform fixed exchange rate, the poverty line is never adjusted, which is unrealistic. Substitution may also occur, where for local products the exchange rate increase may not always be passed on in prices.
Update Basic Food Package (BVP) with an index (e.g. CPI for main group 1 "food and non-alcoholic beverages") and then use the agreed Engel coefficient.	Provides reasonably quick results. The Engel coefficient always remains recognizable.	Food CPI overall (divided into sub-indices or not) is not the best index for the poor. Keeping the Engel coefficient constant for a very long period is probably not realistic.
Update BVP with an adjusted nutrition CPI and update the difference between total package and BVP from the base period with an adjusted index, namely based on "Housing", "Transportation" and "Health",	Best ensures that the "Basic Needs" concept is retained. Changes in the Engel coefficient illustrate shifts in the spending patterns of the poor between two "major up- dates "[26] in.	Very labor intensive

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26. After a new budget survey, BVP and parameters should be revisited, preferably in conjunction with the previous budget survey. That way there will still be a link in the series.

Caution should be exercised in using estimated poverty lines

Considering the current situation in Suriname, some caution should be exercised in using consumption expenditure as the equivalent of disposable income for years where the actual measurement is not done, but estimates are made from a certain point in time, or corrections/projections are made using inflation rates.

In economies that have experienced virtually little change over the years and do not have high inflation rates, this is not a problem. However, in situations where the economy is/has been frequently affected by hyperinflation, structure reversals and household consumption expenditures/consumption patterns are subject to change, some caution is warranted. In Suriname, for example, the last HBO dates back to 2013/14. In the following years namely 2016, 2020 and in 2021, the economy was hit by a crisis which caused a contraction of the economy as well as a more than proportional increase in inflation. Although the prices of goods and services increased by nearly 600% from 2016 to 2022, the price of labor, i.e. wages and salaries, did not increase correspondingly. Public sector wages and salaries rose by some 200% from 2016 to 2022, while those of the private sector rose by just over 300%. Compared to the price increases of goods and services (600%), there is a lag of 50%.

It is recommended that a proper study be carried out on this, so that the figures can be determined more precisely.

In practical terms, this means that households that had a certain consumption package in 2016 are unable to purchase it to its full potential because of the decline in purchasing power. Consumer spending concentrates around their real wage/earning capacity. It is therefore necessary not to use household budget surveys over too long a period or not to delay new measurements for too long, so that behavioral and consumption changes can be sufficiently observed based on current data. This can avoid risks of overestimating poverty lines/income.

5.

CHAPTER 5
THE NATIONAL MULTIDIMENSIONAL POVERTY INDEX (NMPI)

5.1 Methodology for Multidimensional Poverty Approaches

When studying poverty according to the multidimensional approach, as stated earlier, multiple dimensions beyond material standard of living are considered. In addition to Sen (1985, 1993, 1999), researchers such as Alkire (2008, 2010, 2018), Dekkers (2003), Dewilde (2006) and Kruijk (2010) have made significant contributions to the further development and refinement of the multidimensional approach.

> The multidimensional approach focuses on the following issue: which dimensions and indicators should we include in poverty measurement and in what way can we aggregate them into a poverty index?

The existing literature mainly identifies Education, Health Care and Living Standards as important dimensions, mostly due to the trend since the 1990s to fight global poverty by formulating the MDGs and since 2015, the SDGs[27] (Sobhie, 2015; Alkire, 2014; 2018; Nolan et al., 2008; Kisoensingh, 2021).

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27. In September 2015, seventeen Sustainable Development Goals (SDGs) and 169 sub-goals were officially adopted by 193 United Nations (UN) member states with the goal of achieving between 2016 and 2030, among others, human rights, gender equality and empowerment of all women and girls. According to the UN, the first goal of the SDGs is "*the elimination of poverty (including extreme poverty) in all its forms and dimensions*", one of the greatest global challenges and is therefore an indispensable requirement for sustainable development (United Nations, 2020).

A dimension is reflected in certain quantifiable variables, also called indicators. Here, information from a particular (developmental) area is bundled through indicators to provide the best possible picture of that area. For example, the dimension 'Education' can be measured with indicators that reflect, among other things, the level of development of a household.

In this context, respondents are asked about "the number of years of education", "the highest level of education", "the number of dropouts" or "the number of out-of-school children" in a household. These are all indicators that individually or in combination give an indication of the level of development of the household and thus the risk of poverty.

Determining these dimensions and associated indicators can be done in a variety of ways, and one of the following ways has mostly been used by researchers:

1. Choosing á priori which indicators and weights to use (cf. Alkire,2010; 2018, Townsend, 1993)
2. Selecting indicators using multivariate statistical techniques (cf. Dekkers, 2003; Dewilde, 2006)
3. Choosing indicators based on surveys of household preferences (cf. Kruijk, 2010).

When defining the dimensions and indicators, the relative importance is also determined by assigning weights to each indicator and dimension. After assigning these weights, aggregation to an index takes place. Two possibilities arise:

1. A specific poverty line is chosen for each indicator and then determined for each household whether or not it falls within this line (cf. Townsend, 1993). Depending on the definition the researcher wishes to use, it is decided that a household is poor if it falls short in one indicator or in a number of indicators to be specified.

2. A composite index is calculated by cumulating the weighted indicators. Starting from the equal weights for the identified dimensions, indicators counted as belonging to a particular dimension are assigned a uniform weight. There is a two-pronged cut-off here: for each indicator a threshold is set indicating if the household is or is not deficient in that area, and then the deficits (now expressed in weight values) are cumulated and compared to an overall standard that determines if the household is or is not (overall) poor.

5.2 International practice and evaluation of Surinamese data and circumstances

The studies, as listed in Table 5.1, show that emphasis is placed on the three dimensions of Health, Education and Standard of Living. The higher a country's level of development, additional dimensions such as social participation and leisure activities come into play. Latin American researchers tend to base their studies on dimensions related to the Human Development Index and the United Nations SDGs. Western-oriented researchers, on the other hand, mainly use indicators related to well-being, social integration and involvement of individuals or households in social developments (cf. Townsend (1993) and Dekkers (2003)). The latter is obvious because in developed countries the lack of essential material goods no longer plays a weighty role. Suriname has not yet conducted its own poverty survey, so the poverty analysis will be based on secondary data. A multidimensional poverty analysis for Suriname on secondary data first requires an assessment of the indicators found in existing studies.

The Poverty Commission, following Alkire et al. (2014, 2010, 2018), has chosen the á priori selection methodology, where the Oxford Poverty and Human Development Initiative (OPHI) has developed the Multidimensional Poverty Index (MPI)[28] methodology, also known as the Alkire-Foster (AF) methodology.

This methodology is based on the Human Development Index (HDI)[29] and the SDGs and is otherwise consistent as much as possible with the methodology used in other Latin American countries. In this methodology, researchers select the indicators and weights to be used based on available data, expert knowledge as well as results from previous studies. For example, Alkire (2010; 2018) uses the 3 dimensions of the HDI (Health, Education and Living Standards) and uses the same weights for each dimension. These weights are then evenly distributed across the number of indicators for each dimension. In contrast, Townsend (1993) uses 12 indicators that are equally weighted. With Alkire, the weight to be assigned to one indicator depends on the total number of indicators per dimension, while Townsend assigns the same weight to each indicator (Sobhie, 2012; Kisoensingh, 2021.)

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28. The MPI complements traditional poverty-based poverty measures by capturing the deprivations each person faces simultaneously with respect to education, health, and standard of living (Alkire& Santos, 2010; Alkire& Jahan, 2018).
29. The HDI is a summary measure for assessing long-term progress in three fundamental dimensions of human development: a long and healthy life (life expectancy at birth), access to knowledge (average years of schooling among the adult population aged 25 and older and expected years of schooling for school-age children) and a decent standard of living (gross national income (GNI) per capita. (UNDP, 2020).

Table 5.1:   Overview of dimensions and indicators used by researchers

Researcher/organization	Indicators
UNICEF (2006; 2020)	Malnutrition, child mortality, educational years, school attendance, drinking water, sanitation, electricity, cooking gas, possessions, information provision, overcrowded living areas, poor housing and living conditions
Baros (2006) - Brazilië	Vulnerability, education, employment, income and assets, child development and household characteristics.
Arimen Vigorito (2007)	Education level of parents, educational participation or inadequate conditions in housing.
Amarante et al (2008) - Uruguay	Nutrition, social participation, education level of parents, family characteristics and income.
Conconi (2007) - Argentinië	Employment, household characteristics, education and income
Battiston, et al. (2009) - Brazilië, Chili, Guatemala, Mexico en Uruguay	Income, education level of the head of the family, educational participation, school attendance, sanitation, connection to running water and shelter.
Alkire en Santos (2010; 2018) - 104 LDCs	Child mortality, malnutrition, years of education, school attendance, cooking fuel, electricity, sanitation, drinking water, housing and possessions.
Dekkers (2003) - België	Financial status, housing and living comfort, family composition, health, education and employment.
Townsend (1993)	Social participation, leisure and vacation, housing and living comfort, going out and participating in social life.
Kruijk (2010) - Malediven	Education, health, housing, employment, income, environment, drinking water, electricity, transportation, communication, food and consumer goods.

Table 5.2 provides an overview of some surveys that have been conducted in Suriname such as the Multiple Indicator Cluster Survey (MICS), the Household Budget Survey (HBO) and the Census that contain indicators that can be used to calculate multidimensional poverty. From this we can more or less already deduce that there is no survey that measures poverty in all its facets. However, there is sufficient data available for a first orientation.

Table 5.2:   Indicators used in Surinamese surveys, 1999-2018

Dimension	Indicator	MICS				HBO	Census
		2000	2006	2010	2018	1999/2000 2013/2014	2012
Health	Infant mortality	X	X		X	X	X
	Malnutrition	X	X	X	X	X	
	Monthly expenditure on medical facilities					X	
	Access to medical facilities	X	X	X	X	X	X
	Type of medical facility	X	X	X	X		X
	Number of sick days during the last two weeks	X	X	X	X		
	Number of conditions					X	
Education	Education level of parents	X	X	X	X		X
	Educational accessibility	X	X	X	X		X
	Number of educational years	X	X	X	X		
	School attendance	X	X	X	X		X
Living standard	Availability of clean drinking water	X	X	X	X	X	X
	Access to drinking water	X	X	X	X		X
	Number of persons per household	X	X	X	X	X	X
	Sanitary facilities	X	X	X	X	X	X
	The following belongings: TV, radio, refrigerator, bicycle, car, washing machine, etc.		X	X	X	X	X
	Type of water supply	X	X	X	X	X	X
	Type of energy supply			X	X	X	X
	Residential and living environment (overcrowding, housing, shelter, cooking facilities)	X	X	X	X	X	X
Income stability	Income (fixed, subsidy)					X	X
	Possessions (home by ownership)					X	X
	Employment			X	X	X	X
	Spending per household on consumption expenditure	X				X	
	Spending per household on non-consumptive expenditure	X				X	
Social capital	Information supply		X	X			X
	Social participation						

Note: *The Suriname MICS 2006 and 2010 were conducted in a uniform way. The 2018 MICS had a male questionnaire in addition to the standard questionnaires.*

5.3 Choice of dimensions, indicators, weights and cut-offs in methodology

In this report, as stated earlier for the orientation phase, the á priori selection methodology following the OPHI-MPI methodology was used to calculate the multidimensional poverty, and initially limited to calculating headcount ratios. This provided the basis for comparison with the region and dimensions and a methodology based on achieving the SDG standards were initially chosen. However, it should be noted that for proper interpretation of the dimensions, indicators focused on the national situation were used. This research was conducted by using the Census 2012 and the Suriname MICS 2018 data and the results are presented in the following.

In implementing the multidimensional poverty approach on the Suriname data, the following points are elaborated:
1. the choice of dimensions and indicators that are relevant and valid
2. the corresponding cut-offs (dividing lines) for each dimension/indicator
3. determination of the extent of poverty when applied to the Census 2012 data
4. determining the extent of poverty when applied to the MICS 2018 data
5. the nature of poverty based on the demographic and background variables of households and individuals
6. the profile of a poor individual/household.

The choice of dimensions and the methodology to be followed is based on the OPHI- MPI approach, adapted to the Surinamese reality. An outline of the methodology and dimensions relevant to Suriname has already been developed in 2018 by Sobhie (2018).
The dimensions studied concern health, education, financial and socioeconomic security, basic services and standard of living. In choosing the indicators, available data served as a guide.

5.3.1 Database selection

A closer examination of the available data files shows that:

1. The 2012 Census collected sufficient data for the MPI. However, due to the low response rate of those surveyed, it does not have information on income. The advantage of the Census is that it was conducted nationwide and there is sufficient reliable data available on the material possessions of households, information on their labor market position, as well as the economic and health status of individuals.

2. The MICS does not have income indicators but does have relevant information regarding education, health and living standards. One disadvantage, however, is that not all MICS surveys considered the entire household. The focus in MICS 2018 was mainly on women and children, but MICS 2018 added a module for men as well. The advantage is that this survey was conducted nationwide.

3. The HBO 2013/14 measures household spending and further surveys about material possessions. A disadvantage, however, is that no data specific to Education was collected that could be used to determine the education level of the individuals in the household. The information available is from the head of the household. Another disadvantage is that the household budget survey has not been conducted nationwide so far. Also, the districts of Sipaliwini, Brokopondo and Marowijne have not been included in any household budget survey conducted by the ABS.

The Census 2012 and MICS 2018 data files had the most indicators beforehand and have been used as the database for the multidimensional poverty calculations for 2012 and 2018.

5.4 Methodology for poverty calculations at the household and personal level

For this exercise, factor analysis was used to test whether the identified dimensions also "charge high" with this method (see Hair, 1996 for a further

explanation of the statistical methodology). These data files were used because, compared to the others, they contain the most relevant poverty indicators.

The following four dimensions were identified:
1. Education
2. Health
3. Standard of living and
4. Financial and Social Economic Security.

These dimensions each reflect some form of poverty and are composed of indicators based on the SDGs, WHO and UNICEF guidelines, and the poverty definition for Suriname as formulated earlier in this report. For each of these indicators, a standard has been established that indicates whether a household possesses or lacks the given indicator. This was based on expert knowledge and the standard commonly used in most studies (see also the earlier studies by Sobhie (2018) and Kisoensingh (2021)).

For the follow-up analysis and calculation of multidimensional poverty, a 2-part division was made. First, the multidimensional poverty among **HOUSEHOLDS** was determined using the 2012 Census. Indicators and variables were used to measure at the household level or aggregated available data from individual household members at the household level. Through the information obtained from the chosen indicators, it was concluded **how many households were living in poverty**, taking into account multiple dimensions besides economic situation. The following section elaborates on this approach.

A second approach was developed by calculating poverty at the **INDIVIDUAL** level. The Suriname MICS 2018 data and was used and determined **how many persons were living in poverty**, taking into account multiple dimensions.

The indicators used here are variables measured at the level of individuals Of course, for each person, some indicators at the level of the household where he/she resides are also important. Here we have chosen to attribute household information to the individual. An example for explanatory purposes: for a household where electricity is available, this availability is attributed to each

individual of that household. For education level, however, this is not the case; for each individual, the level of education he/she has acquired applies separately. In chapter 6, the poverty approach at the individual level is further elaborated on.

6.

CHAPTER 6
THE NATIONAL MPI FOR HOUSEHOLDS AND INDIVIDUALS INSURINAME

6.1 Dimensions and Indicators in the case of poverty among households

As stated in the previous chapter, the Census 2012 data was used to calculate poverty at the household level. Through factor analysis, the number of dimensions was derived and the corresponding indicators were determined. The four (4) dimensions to be distinguished are Health, Education, Standard of Living and Social Economic Security which in turn are divided into (21) indicators. Figure 6.1 below shows an illustration of the dimensions and indicators.

Figure 6.1: Dimensions and Indicators of the National MPI.
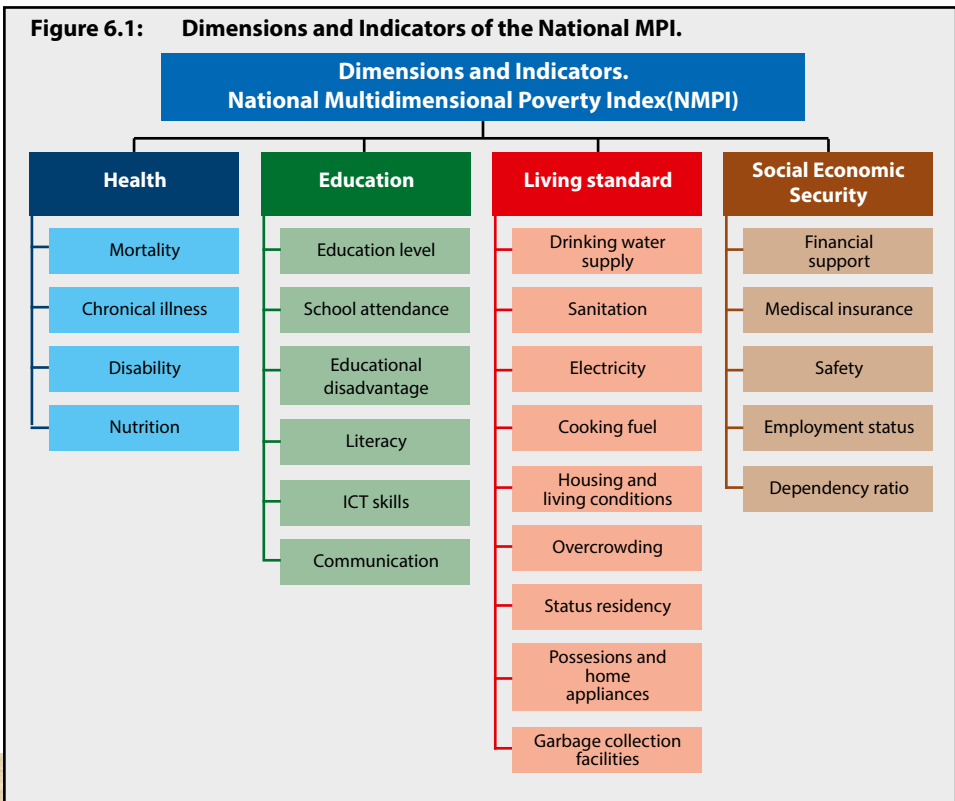
The table below presents a summary of the indicators and breakpoint used to determine whether a household lacks a particular facility or not and whether or not it is deprived.

Table 6.1:   Dimensions, indicators and cut-offs

| Dimension	Indicators	Cut-off point: The household lacks /has no (qualitative/optimal) access or is in a disadvantaged or undesirable situation regarding(indicator), where
1. Health 1/4	Mortality	at least 1 case of mortality before the average age of meanlife expectancy is reported.
	Chronic illness	at least 1 member of the household has a chronic illness.
	Dysfunctionality	at least 1 member of the household has a disability or has been declared unfit for work.
	Nutrition	he/she lives in a household where there is at least one (1) child under 5 years of age who is malnourished or severely overweight.
2. Education 1/4	Education level	the head of household has not completed at least education at secondary junior level.
	ICT skills	there is no member in the household with a minimum level of ICT basic skills.
	School attendance	there is at least 1 member in the household in the age group 6-16 age years who no longer attends the school.
	Communication	the household does not have access to any of the following communication/information sources: newspaper, radio, television, internet, mobile phone.
	Literacy	at least 1 person in the household is illiterate, cannot read and write, or has never attended school.
	Learning disadvantage	at least 1 person aged 6-16 years has a learning disadvantage of 2 or more years relative to the required level.
3. Living standard 1/4	Cooking fuel	there is no access to quality sources of cooking fuel.
	Sanitation	there is no access to quality sanitation facilities and/or who shares these facilities with other households.
	Drinking water provision	there is no access to quality drinking water supplies located is within a range of 200m from the living quarters.
	Electricity	there is no access to quality electricity supplies.
	Housing and living conditions	the material of the living quarters such as the roof, walls and floor is inadequate, or if the household does not have access to its own living quarters.
	Overcrowding	there are than 3 persons per sleeping area.
	Possessions and household appliances	there is access to less than half of the following household appliances and possessions (or similar items): radio, television, telephone, computer, means of transportation, washing machine, microwave oven, air conditioner/fan, water heater, gas stove with or without oven and refrigerator.
	Garbage collection	there is no access to garbage collection service and/or garbage is handled in a non-environmental/friendly or healthy manner.
4. Social economic security 1/4	Financial support	at least 1 member receives financial support (other than general old age pension (AOV)) from the Government as the main income to cover living expenses.
	Medical insurance	at least 1 member has no health insurance or uses the insurance of the basic health insurance/BAZO.
	Employment status	no member of the household has a job.
	Safety	at least 1 member was a victim of a crime in the past year.
	Dependency ratio	the dependency ratio (number of household members/number of workers) is more than 2.

Note: In performing the calculations, certain indicators were dropped due to data quality issues. However, the list in Table 6.1 will be kept for future updates.

In establishing the dimensions, equal weights were assigned to each dimension (1/4) and to each indicator within the dimensions (1/4 divided by the number of indicators per dimension). If the scores for each dimension are known, they are aggregated resulting in a cumulative score for a household. The cumulative score is used to determine whether or not a household is poor. There are four dimensions and logically, for example, a household can be said to be poor if it lacks at least 1 dimension, so a deprivation of up to 25% of the total deprivation score is allowed, in order not to be considered poor. Technically, the different possibilities were considered and it was found that at a cut-off between 20 and 30, the variance was very small (see Graph 6.1). A cut-off of 25% was therefore used. This means that households with a deprivation score greater than 25% of the total deprivation score are poor. This cut-off resulted in a headcount ratio of 16%, in other words a maximum of 16% of households were poor in more than 1 dimension.

Graph 6.1: **Cut-off for aggregated deprivation score**
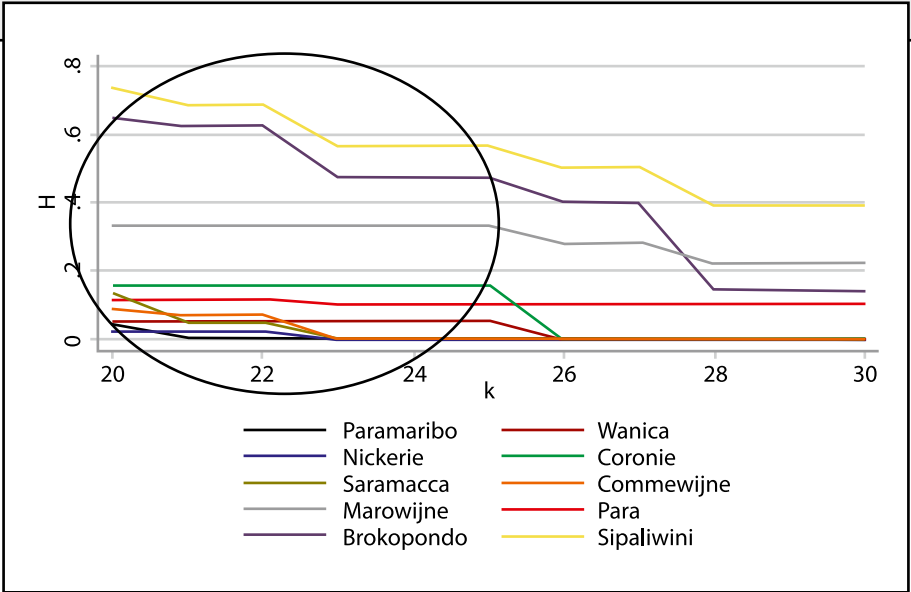
Source: Suriname MICS 2018

6.2 NMPI results and poverty rate among households

Dimensions and Indicators Census 2012
The MPI of the 2012 Census database consists of four (4) dimensions (Health, Education, Standard of Living and Social-Economic Security) divided into twenty (20) indicators. The **Health dimension** with two (2) indicators: chronic illness and dysfunctionality; the **Education dimension** with the indicator: educational level; and the Standard of Living dimension with fourteen (14) indicators including cooking fuel, sanitation, drinking water supply, electricity, housing and living conditions, living quarters status, overcrowded living space, garbage collection, transportation, possessions and household appliances and the **Social Economic Security** dimension with three (3) indicators including employment status, medical supply and dependency ratio. Due to limitations of available data, mortality could not be calculated.

To determine the poverty level through the multidimensional approach, three measures have been developed that calculate the level of proportion (H), intensity (A) and average poverty level through an index (NMPI).
The first measure as defined by Alkire and Santos (2012), the "headcount ratio (H)," gives an indication of the proportion of the population, in this case households, that is multidimensionally poor. In other words, the percentage of households that are poor given the chosen dimensions and indicators. For the Surinamese situation, these are the households that are deprived in at least one-fourth of the weighted indicators. This is therefore the percentage of households that are poor in more than 1 of the 4 dimensions. The H is therefore used to determine the incidence or probability of being categorized as poor.

Another measure is the average share of indicators in which poor people are deprived and is called the "intensity of poverty" (A). This measure shows how much poor households differ from each other and basically indicates the severity of poverty. This ratio ranges between 0 and 1, with higher values reflecting higher inequality among the poor and indicating higher intensity of poverty.

A third measure is the multidimensional poverty index, referred to in the literature as M0. For Suriname, here and beyond, this index is also referred to as the National Multidimensional Poverty Index (NMPI). The NMPI is calculated by multiplying the incidence of poverty (H) by the average intensity of poverty among the poor (A),
thus NMPI = H x A.

he NMPI shows the proportion of deprivation experienced by the poor people of the country relative to the total possible deprivation that would be experienced if every person in society were poor and deprived in each indicator.

Depending on the level of poverty, the intensity for each individual can vary between 0 and 1. An intensity of poverty equal to 1 indicates material deprivation for all dimension indicators, that is, the household/individual is extremely "poor." When the intensity of poverty is equal to 0, the household/individual is not experiencing material deprivation for all dimension indicators, that means, the individual is "not poor." The intensity of poverty can be expressed in percentages and range from 0 to 100 percent. The intensity of poverty for a population (sub)group is defined as the average of the intensities of households/individuals belonging to the (sub)group (Alkire& Santos, 2010; Alkire& Jahan, 2018).

Table 6.2 and Chart 6.1 indicate that 16 percent of households identified as multidimensionally poor. Based on the total number of households at the 2012 Census, being about 143,000, the estimated number of poor households equaled about 22,880. The highest incidence occurred in the interior where nearly two-thirds (66%) of households identified as multidimensionally poor.

This poverty rate was additionally nine times (9x) higher than that of the urban area, which was equal to 7 percent. The rural area had a headcount ratio of 10

percent. The national average was 16 percent, mainly because of the greater proportion of households (67%) in the urban area.

Further analysis of the intensity of poverty among poor households shows that both nationally and by region, this was around 35-50 percent. This indicates that, on average, households were deprived (showed deprivation) in more than one-third to one-half of possible services (expressed in the various indicators).

The poverty index shows that, on average, households experienced about7 percent of all possible deprivations. For the Interior, it was about one-third and for the remaining areas, it was less than 5 percent.

Table 6.2:   Multidimensional household poverty (%), Census 2012

Strata	Proportion poor households (H)	Intensity of poverty (A)	National Multidimensional Poverty Index (NMPI/M_0)
Urban	7%	37%	3%
Rural	10%	38%	4%
Interior	66%	49%	32%
Nationwide	**16%**	**44%**	**7%**

Bron: Census 2012
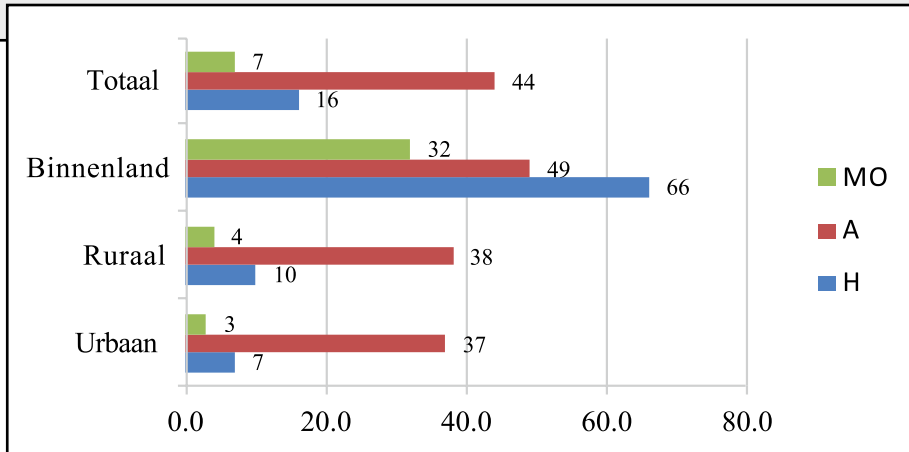
Bron: Census 2012

Table 6.3 and Graph 6.3 present poverty levels by district. The multidimensional poverty level was relatively higher in the districts of the Interior namely: Sipaliwini (84%), Brokopondo (56%) and Marowijne (26%). Also in the rural area, namely in the districts of Para (17%) and Saramacca (10%) households experienced relatively more poverty than in the other districts.

Table 6.3: Multidimensional poverty by district among households (%), Census 2012

District	Proportion poor households (H)	Intensity of poverty (A)	Nationale Multidimensional Poverty Index (NMPI/M_0)
Paramaribo	6%	36%	2%
Wanica	10%	37%	4%
Nickerie	9%	38%	3%
Coronie	8%	47%	4%
Saramacca	10%	37%	4%
Commewijne	7%	37%	3%
Marowijne	26%	40%	10%
Para	17%	39%	7%
Brokopondo	56%	46%	26%
Sipaliwini	84%	51%	43%
Nationwide	16%	44%	7%

Source: 2012 Census

Graph 6.3: Multidimensional poverty for households by district and nationwide (%), Census 2012
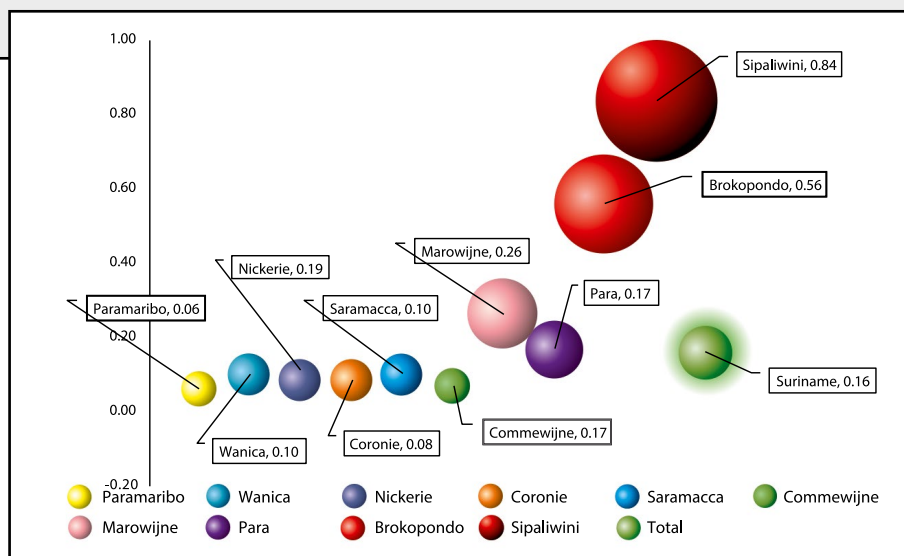
Source: Census 2012

In addition to the aggregate poverty figures at the national level and by area as presented in Tables 6.2 and 6.3 and Graphs 6.1, 6.2 and 6.3, further analysis of deprivation and deprivation by indicator has also been conducted.

Table 6.4 and Graph 6.4 show household deprivation by indicator by area. The indicators that contributed highly to the NMPI were mainly education level, chronic illness, transportation and medical insurance. In the Interior, in addition to education level, chronic illness, transportation, and medical insurance, access to basic services such as drinking water supply, sanitation, electricity, cooking gas, assets, and employment were also found to be high contributors to poverty levels.

Table 6.4:   Deprivation by indicator by household strata (%), Census 2012

Dimension	Indicators	Urban	Rural	Interior	Nationwide
Health	Chronic illness	32%	29%	40%	33%
	Dysfunctionality	7%	7%	22%	9%
Education	Education level	33%	46%	80%	42%
	Cooking gas	10%	14%	35%	14%
	Elektricity	2%	5%	61%	11%
	Drinking water	8%	13%	51%	15%
	Sanitation	1%	1%	41%	7%
	Housing and living condition	0%	1%	14%	2%
	Living status	34%	31%	19%	31%
Living standard	Overcrowding	7%	6%	25%	9%
	Radio	13%	17%	51%	19%
	Television	5%	9%	44%	11%
	Refrigerator	9%	17%	69%	19%
	Washing machine	11%	15%	62%	19%
	Telephone	3%	7%	16%	6%
	Transport	23%	16%	59%	26%
	Garbage collection	4%	33%	52%	16%
Social-Economic Security	Medical insurance	16%	16%	68%	23%
	Employment	8%	8%	30%	11%
	Dependancy ratio	5%	2%	2%	4%

Bron: Census 2012

Table 6.4 shows that in the urban and rural area, 16 percent of households did not have access to adequate medical facilities, while that figure was 68 percent for the Interior Chronic illness, living quarters status and education level were found to be the high deprivation indicators for the urban area, with about one-third of households showing deprivations in these indicators. For a number of items such as housing and living conditions, drinking water supply and electricity, the deprivation level was below 5 percent. For the rural area, the picture was much the same as in the urban, albeit slightly more sharpened with slightly higher deprivation scores. The deprivation scores of the interior, however, showed a completely different picture. These were almost twice as high per indicator compared to the urban area. The high deprivation scores for education, transportation, ownership of household appliances, drinking water supply and electricity are particularly evident. Graph 6.4 shows a graphic illustration of the 3 areas by indicator.

Graph 6.4:   Deprivation by indicator by household strata (%), Census 2012
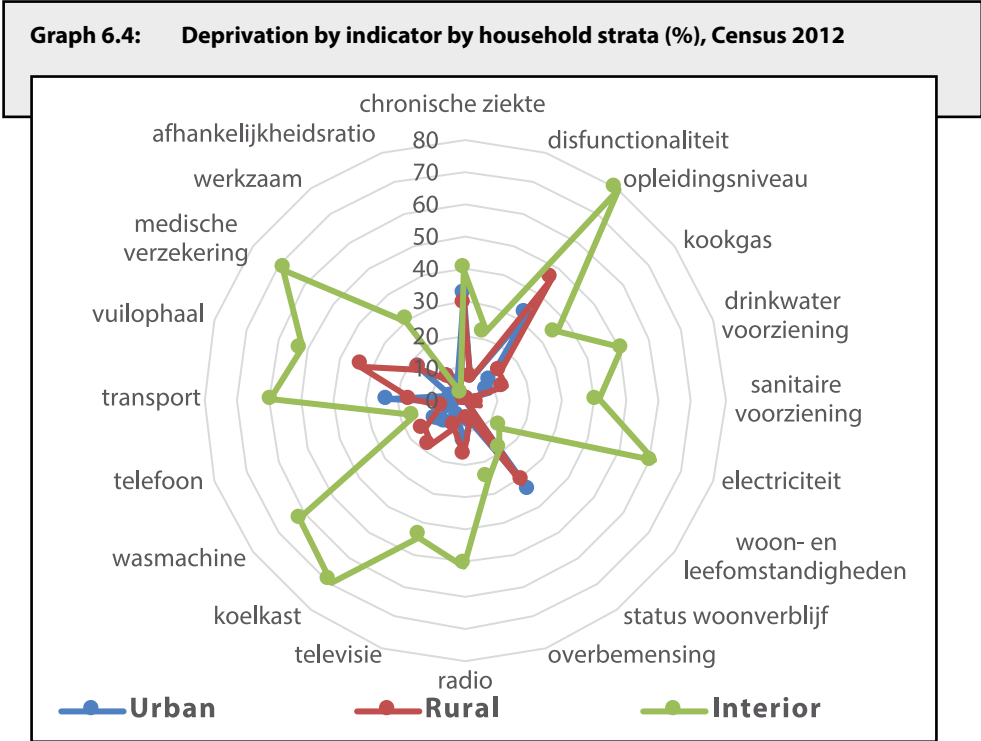
Source: Census 2012

Table 6.5 and Graphs 6.5 and 6.6 represent deprivation by indicator by district. Indicators where there was more than 50 percent deprivation among households, are highlighted in a different color. Again, the same picture of what was presented earlier about the urban and rural area as well as the Interior, with the additional feature that deprivation differences between districts are more pronounced.

This also highlights an advantage of the multidimensional approach to poverty, namely that it lends itself well to monitoring disadvantage and deprivation by indicator and district. For each district, it is possible to infer concretely where deprivation is and how severe the poverty situation is.

Table 6.5:   Deprivation of households by indicator and district (%), Census 2012

District	Par'bo	Wan.	Nick.	Cor.	Sar.	Com	Mar.	Para	Brok.	Sip.	Totaal
Dysfunctionality	7%	7%	8%	6%	6%	6%	6%	7%	21%	28%	9%
Chronic illness	32%	32%	32%	11%	31%	27%	28%	26%	35%	46%	33%
Education level	29%	42%	50%	40%	51%	43%	60%	40%	69%	93%	42%
Cooking gas	5%	20%	13%	7%	24%	12%	11%	11%	20%	50%	14%
Electricity	2%	3%	3%	6%	3%	2%	25%	14%	42%	83%	11%
Drinking water	5%	14%	3%	3%	17%	23%	29%	16%	40%	64%	15%
Sanitation	1%	2%	1%	0%	1%	1%	10%	4%	32%	55%	7%
Housing and living conditions	0%	0%	1%	1%	1%	0%	1%	2%	11%	19%	2%
Living status	38%	26%	32%	43%	33%	30%	31%	26%	29%	11%	31%
Overcrowding	7%	7%	3%	7%	5%	5%	13%	14%	23%	30%	9%
Radio	13%	14%	17%	17%	17%	13%	37%	23%	48%	57%	19%
Television	5%	6%	6%	17%	8%	6%	19%	18%	32%	57%	11%
Refrigerator	8%	11%	13%	21%	15%	14%	42%	31%	55%	85%	19%
Washing machine	10%	14%	13%	18%	13%	13%	32%	25%	48%	79%	19%
Telephone	3%	4%	5%	17%	5%	6%	12%	12%	14%	19%	6%
Transport	25%	19%	8%	15%	12%	14%	51%	37%	61%	62%	26%
Garbage collection	2%	8%	41%	42%	76%	9%	23%	17%	58%	60%	16%
Medical insurance	17%	15%	21%	8%	13%	12%	19%	18%	62%	87%	23%
Employment	7%	10%	7%	11%	6%	7%	17%	14%	29%	35%	11%
Dependency ratio	6%	5%	2%	0%	3%	3%	2%	2%	5%	1%	4%

Source: Census 2012
Commentary: Par'bo= Paramaribo, Wan.= Wanica, Nick.= Nickerie, Cor.= Coronie, Sar.= Saramacca,
Comm.= Commewijne, Mar.= Marowijne, Brok.= Brokopondo en Sip.= Sipaliwini

Graph 6.5: **Deprivation by indicator to districts Paramaribo, Saramacca and Sipaliwini (%), Census 2012**
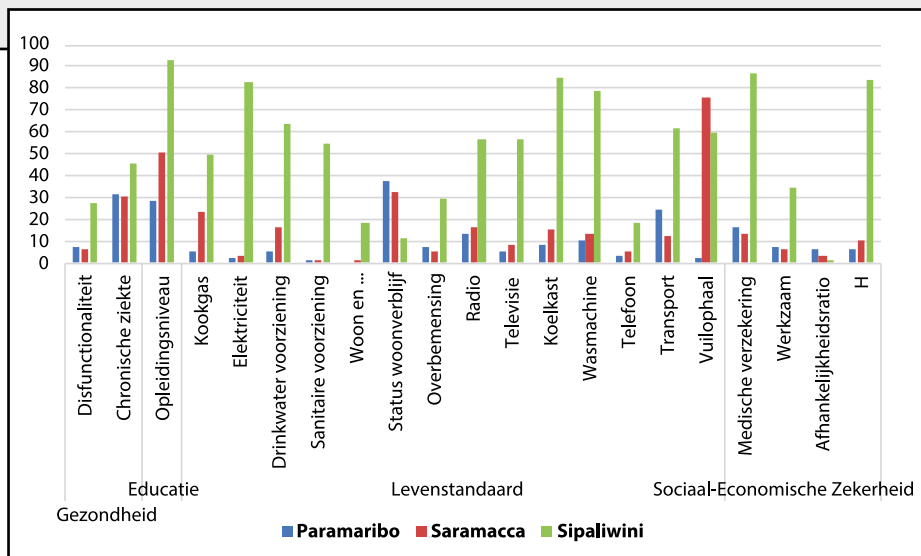
Source: Census 2012

Graph 6.6: **Deprivation by indicator for the districts of Paramaribo and Wanica (%), Census 2012**
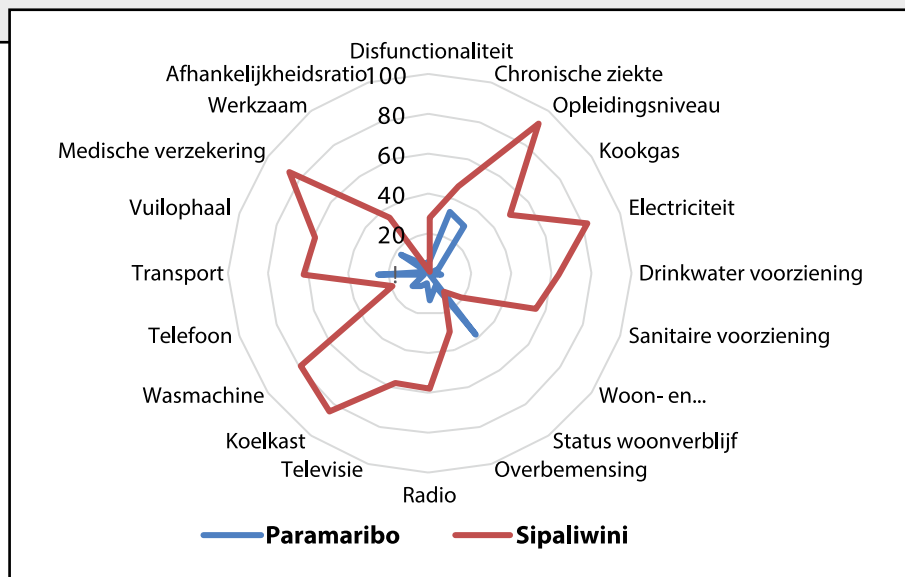
Source: Census 2012

The following provides a further presentation of the poverty level focused on selected features / characteristics of the households.

Table 6.6 is a representation of multidimensional poverty by gender of the household head. The figures indicate that households headed by a woman had a headcount ratio of 26%, which is about twice the poverty level of households headed by a man (11%).

Table 6.6: Multidimensional poverty by gender of household head (%), Census 2012			
Gender of the head of the household	Proportion poor households (H)	Intensity of poverty (A)	National Multidimensional Poverty Index (NMPI/M0)
Male	11%	41%	4%
Female	26%	46%	12%
Nationwide	**16%**	**44%**	**7%**

Source: Census 2012

Table 6.7 and Graph 6.7 represent multidimensional poverty by gender and deprivation by indicator. Again, the picture was that households headed by women experienced relatively higher deprivation by indicator and overall experienced.

Graph 6.7:   Deprivation by indicator by gender (%), Census 2012
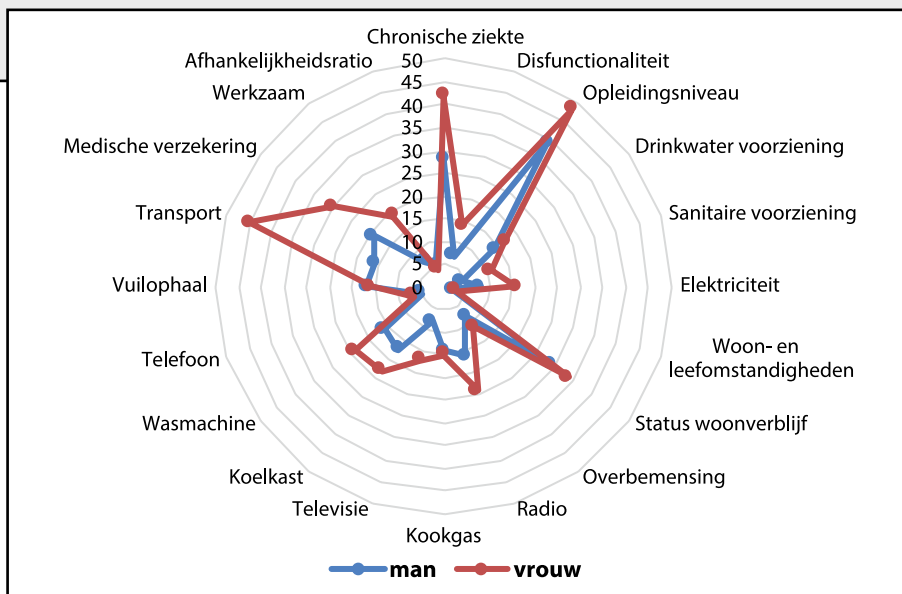
Source: Census 2012

Table 6.7:   Deprivation by indicator by gender of household head (%), Census 2012

Dimension	Indicatoren	Male	Female	Nationwide
Health	Chronic illness	28%	42%	33%
	Dysfunctionality	7%	14%	9%
Education	Education level	39%	48%	42%
Standard of Living	Cooking fuel	14%	15%	14%
	Electricity	8%	16%	11%
	Drinking water supply	14%	17%	15%
	Sanitation	4%	11%	7%
	Housing and living conditions	2%	3%	2%
	Residency status	29%	34%	31%
	Overcrowding	8%	11%	9%
	Radio	16%	24%	19%
	Television	8%	17%	11%
	Refrigerator	17%	23%	19%
	Washing machine	16%	24%	19%
	Telephone	5%	7%	6%
	Transport	16%	45%	26%
	Garbage collection	17%	16%	16%
Sociaal-Economic Security	Medical insurance	19%	30%	23%
	Employment status	7%	19%	11%
	Dependency ratio	5%	4%	4%

Source: Census 2012

6.3 Dimensions and Indicators in personal poverty

Suriname MICS 2018 Dimensions and Indicators

The 2018 MICS data was tested through factor analysis to ascertain if the identified dimensions charge high, paying attention to the variance to be explained. The MPI of the MICS 2018 database consists of four dimensions (Health, Education, Standard of Living and Social Economic Security) divided into eighteen (18) indicators. The **first dimension Health** with the three (3) indicators: nutrition, infant mortality and dysfunctionality; the **second dimension Education** with the three (3) indicators: educational level, school attendance and learning disability; the **third dimension Standard of Living** with the eight (8) indicators: cooking fuel, sanitation, drinking water supply, electricity, housing, housing and living conditions, overcrowded living space, assets and household appliances; and the **fourth dimension Social Economic Security** with four (4) indicators: financial support, medical insurance, security and dependency ratio. For each of these indicators, a standard is set indicating whether a household possesses or lacks the given indicator.

Table 6.8:	Dimensions, indicators, deprivation limits, weights for individuals, MICS 2018			
Dimensies & SDG-indicator		**Indicator**	**An individual is disadvantaged or deprived if…**	**W.**
Health	2.1.1	**Nutrition**	*He/she lives in a household where there is at least one (1) child under the age of 5 who is malnourished or severely overweight.*	1/12
	3.2.1	**Child mortality**	*He/she lives in a household where at least one (1) child under five years of age has died, up to a maximum of 5 years prior to the survey..*	1/12
		Disability	*He/she lives in a household where at least 1 member in the household has a disability that makes it very difficult for him/her to function.*	1/12
Education	4.1.1	**Educational level**	*He/she has not completed Junior Secondary Education*	1/12
	4.1.1	**School attendance**	*He/she lives in a household where at least 1 member of the household between the ages of 6-16, does not (or no longer) attends school (drop-out); 16 years due to attainment of Junior Secondary level as minimum subsistence level.*	1/12
	4.4.1	**Learning disadvantage**	*He/she lives in a household where at least 1 member of the household (age 6-16), has a learning gap of 2 or more educational years.*	1/32
Living standard	7.1.2	**Cooking fuel**	*He/she lives in a household where cooking is not done on gas but with inferior fuel such as dung, wood, charcoal or coal.*	1/32
	6.2.1	**Sanitation**	*He/she lives in a household where the sanitation of the household is not adequate (see SDG guidelines) and/or is shared with other households.*	1/32
	6.1.1	**Drinking water supply**	*He/she lives in a household where the household does not have access to improved drinking water (according to SDG indicators), or safe drinking water is at least a 30-minute walk from home, there and back/ or is outside a range of 200 m from the living quarters.*	1/32
	7.1.1	**Electricity**	*He/she lives in a household where the household does not have access to quality electricity connection/supply.*	1/32
	11.1.1	**Housing and living conditions**	*He/she lives in a household where housing materials for at least a roof, walls and floor are of low quality/inferior; the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials.*	1/32
	11.1.1	**Residence**	*He/she lives in a household where the household does not have its own and/or living quarters free of charge.*	1/32
	11.1.1	**Overcrowding**	*He/she lives in a household where more than three persons in the household share a bedroom.*	1/32
	1.4.2	**Assets and house-hold appliances**	*He/she lives in a household where the household does not have more than half of any of these possessions: radio, TV, telephone, computer bicycle, moped or refrigerator and has no car or truck.*	1/16
Social Economic Security	3.8.2	**Medical insurance**	*He/she lives in a household where at least one member of the household does not have access to health insurance.*	1/16
		Safety	*He/she lives in a household where at least one member of the household has been a victim of criminal attack at least once and/or does not feel safe at home at night.*	1/16
		Financial support	*He/she lives in a household where at least one member of the household receives financial assistance (not AOV) from the government as primary income.*	1/16
		Dependency ratio	*He/she lives in a household that does not have adequate financial coverage considering the composition and size of the household namely dependency ratio: household size/number of people working is greater than 3*	

Note: As with the calculations of multidimensional household poverty, here assuming equal weights for the four dimensions and then equal distribution by number of indicators for each dimension, the weights below were produced. For example, the dimension Standard of Living with a weight of 1/4 that consists of 8 indicators results in a weight of (1/4)/ 8= 1/32 per indicator.

6.4 NMPI results for individuals based on Suriname 2018 MICS

The poverty calculations for individuals were carried out in the same manner as for households, as explained in Sections 6.1 and 6.2. Again, the results will be presented by reporting the number (percentage) of poor people, the intensity of poverty among poor individuals, and the multidimensional poverty index, M0 or NMPI for Suriname. After the general results at country and district level, there is also a breakdown by individual characteristics and characteristics of the respondents.

Today, in addition to the division into poor and not poor, the group that is close to the poverty line and just short of being counted as poor is also considered. A further exposition of that group as of extreme poor are detailed in Kisoensingh (2021).

Table 6.9a and Graph 6.8 present the Suriname Multi-Dimensional Poverty Index (MPI) combined with a set of linked poverty measures for 2018 and are based on 18 indicators. In 2018, the headcount ratio, H, for Suriname was 17.4 percent, the average intensity of poverty was 44.9 percent, and the NMPI had a value of 0.078. This meant that the multidimensional poor in Suriname, assuming the maximum number of deprivations, experienced 7.8 percent of total deprivation.

The percentage of multidimensional poor in the Interior was 50.3 percent, while that of the urban and rural areas was respectively 12.6 and 21.3 percent, respectively. Multidimensional poverty was highest in the district of Sipaliwini (56.0%), followed by Brokopondo (44.3%), Para (33.8%) and Marowijne (30.7%), while it was lower in the districts of Coronie (9.8%), Commewijne (12.1%), Wanica (12.3%) and Paramaribo (12.7%). It was observed that the further in the Interior one lived, the greater the likelihood of multi-dimensional poverty was.

The poverty of residents in the Interior, especially in the district of Sipaliwini was higher in all dimensions compared to those in the urban and rural areas.

One of the reasons for this is the limited infrastructure in the Interior, which makes the Interior residents more likely to lack access to basic services such as clean drinking water, proper sanitation, electricity and good health care. Because of high transportation costs, especially for durable goods, the cost of living in the Interior higher are than those in urban areas.

Table 6.9:   Multidimensional poverty of individuals (%), MICS 2018

Statum	Proportion poor households (%) (H)	Intensity of Poverty (%) (A)	National Multi-dimensional Poverty Index (NMPI/M_0)
Urban	12.6%	44.2%	0.056
Rural	21.3%	44.4%	0.095
Interior	50.3%	46.6%	0.235
Nationwide	**17.4%**	**44.9%**	**0.078**
District			
Paramaribo	12.7%	44.5%	0.056
Wanica	12.3%	43.2%	0.053
Nickerie	13.5%	47.1%	0.063
Coronie	9.8%	45.9%	0.045
Commewijne	12.1%	45.2%	0.055
Saramacca	15.0%	43.4%	0.065
Marowijne	30.7%	44.7%	0.137
Para	33.8%	44.1%	0.149
Brokopondo	44.3%	43.5%	0.193
Sipaliwini	56.0%	48.9%	0.274
Nationwide	**17.4%**	**44.9%**	**0.078**

Source: Suriname MICS 2018

Graph 6.8:   Multidimensional poverty by district (%), MICS 2018
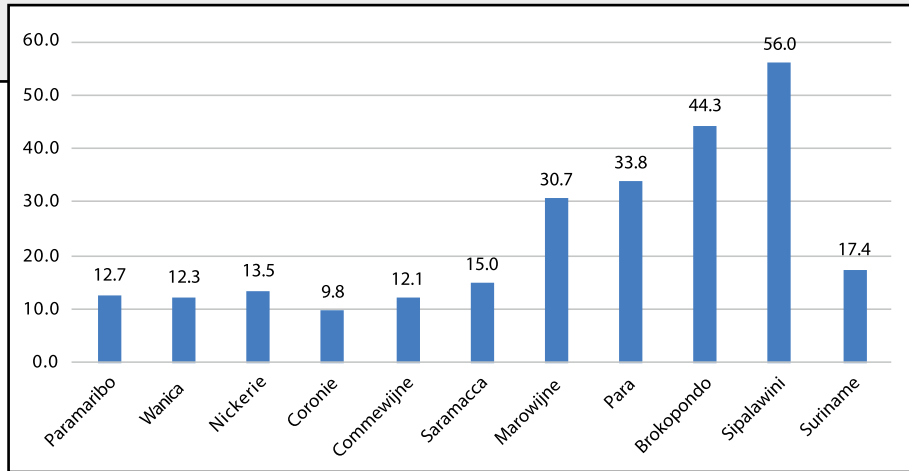
Source: Suriname MICS 2018

The following provides a further presentation of poverty levels focused on selected features/characteristics of the individuals.

Table 6.10 is a presentation of multidimensional poverty by gender. The headcount ratio of men does not differ much from that of women. About16 percent of men and 17 percent of women are categorized as poor. The intensity of poverty among men and women was found to be nearly equal and is about 45 percent, indicating that both men and women categorized as poor experienced deprivation in nearly half of the indicators. A further breakdown by indicator shows that the level of deprivation was nearly the same for both men and women. With the figures focused on gender, it can be noted that poverty is almost equally high among men and women, and on average less than 20% of both groups are poor.

Tabel 6.10: Multidimensional poverty by gender for individuals (%) MICS 2018

Gender	Proportion poor households (%) (H)	Intensity of Poverty (%) (A)	National Multi-dimensional Poverty Index (NMPI/M_0)
Male	16.9%	45.1%	0.076
Female	17.7%	44.6%	0.079
Nationwide	**17.4%**	**44.9%**	**0.078**

Source: Suriname MICS 2018

Table 6.11 is a representation of multidimensional poverty by level of education. The higher the level of education, the lower the poverty rate. Multidimensional poverty is most common among persons with no education (39.6%), followed by those with only primary education (24.1%). Multidimensional poverty is lowest among persons with secondary or higher education.

Tabel 6.11: Multidimensional poverty by level of education (%), MICS 2018

Educational level	Proportion poor households (%) (H)	Intensity of Poverty (%) (A)	National Multi-dimensional Poverty Index (NMPI/M_0)
ECE or no Primary education	39.6%	45.3%	0.179
Primary education	24.1%	46.0%	0.111
Lower secondary education	14.8%	44.0%	0.065
Higher secondary education	6.8%	43.2%	0.029
Higher education	6.1%	41.8%	0.026
Nationwide	**17.4%**	**44.9%**	**0.078**

Source: Suriname MICS 2018

Table 6.12 shows the multidimensional poverty of individuals based on the size of the households to which they belong. The multidimensional poverty among persons who lived in households with11 or more persons (55.7%), followed by households consisting of 6-10 persons (34.7%) experienced higher levels of poverty than persons who lived in households with 2-5 persons (7.4%). The figures show that a person's poverty level was lower if the household they lived in was smaller. The relationship between household size and poverty for Suriname has been demonstrated previously, see Sobhie (2018) and Kisoensingh (2021).

Table 6.12: Multidimensional poverty by household size (%), MICS 2018			
Household size	**Proportion poor households (%) (H)**	**Intensity of Poverty (%) (A)**	**National Multi-dimensional Poverty Index (NMPI/M_0)**
1 person	0.3%	33.8%	0.001
2-5 persons	7.4%	42.9%	0.032
6-10 persons	34.7%	45.1%	0.156
11+ persons	55.7%	47.2%	0.263
Nationwide	**17.4%**	**44.9%**	**0.078**

Source: Estimates made by Sobhie and Kisoensingh based on Suriname MICS 2018

6.5 Summary

The results based on households and individuals show almost the same trend. If it is also taken into account that the results of households are based on data from the year 2012 and those of persons from the year 2018, it can be established that there has been no significant improvement in the living situations of households.

The table below shows the national results of the MICS 2018 and Census 2012.

Table 6.13: Multidimensional poverty at household and individual level (%), Census 2012 and MICS 2018

MICS 2018	Proportion poor households (H)	Intensity of Poverty (A)	National Multi-dimensional Poverty Index (NMPI/M_0)
Urban	12.6%	44.2%	0.056
Rural	21.3%	44.4%	0.095
Interior	50.3%	46.6%	0.235
Nationwide	**17.4%**	**44.9%**	**0.078**
Census 2012	**Proportion poor households (H)**	**Intensity of Poverty (A)**	**National Multi-dimensional Poverty Index (NMPI/M_0)**
Urban	7%	37%	3%
Rural	10%	38%	4%
Interior	66%	49%	32%
Nationwide	**16%**	**44%**	**0.07%**

Source: Census 2012 and Suriname MICS 2018

7.

CHAPTER 7
POVERTY LINES AND SOCIO-ECONOMIC POLICY AND PLANNING

This chapter, based on the findings and insights gained from poverty approaches and measurement techniques appropriate for Suriname, relates them to socio-economic policy and planning and makes recommendations for the follow-up process.

7.1 Poverty line and the Subsistence Minimum as Development Goals

As mentioned in the introduction, the poverty line was mentioned as a social anchor that, in both economic and social policy, should be a long-term reference point for policy development, monitoring and evaluation. However, the short- and medium-term indicator that plays a central role in operational programs as well as in monitoring and evaluation is the social subsistence level.

The social subsistence minimum refers to the standard of living guaranteed by society to each individual/household and obtained by relevant individuals through work (wages, salaries, profit/entrepreneurial income), income from property and transfers from government, family or others.

Once this key indicator, which is a realistic and therefore achievable policy goal for the Government, Private Sector, Trade Unions and Non-Governmental Organizations is established by the Government on the advice of the SER and/or the Tripartite Body, it becomes a benchmark for social and economic policy. For the 2022-2026 MOP it is assumed that at the end of the plan period, the

standard of living of every citizen will be at or above this subsistence minimum. It is the "target" to which macroeconomic policies will be aligned. In addition, fiscal measures and thresholds will also be aligned to or above this indicator, such as the tax-free limit and subsidies. Also in social policy, i.e., the Suriname Social Security System, this indicator will be the anchor or income threshold for determining who is eligible for exemptions, remittances or benefits. Likewise, in determining the minimum wage, the social subsistence minimum will play a decisive role.

It should be noted that calculated poverty lines (see Chapter 4) are not a priori equal to the aforementioned social subsistence minimum; at most, they can form the basis for determining this.

7.2   Poverty line and reform of the Social Security System

A social security system is the coherent set of institutions, (legal) regulations and other public measures designed to provide citizens with protection against economic and social distress, including as a result of the absence or substantial reduction of income from work or as a result of, inter alia, illness, childbirth, occupational accident, unemployment, disability, old age or death of the breadwinner. Social security also includes ensuring health care, other social services and services for poor and marginalized households, especially those with children30.The United Nations (2009) classifies social security into two main categories of support or facilitation activities aimed at the poor and vulnerable:
a. *Services*: access to essential services such as water and sanitation, health care, education and employment. These include affordability and geographic distance.

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30. World Social Security Report 2010-2011: Providing coverage in times of crisisand beyond–ILO, Geneva, 2010, p.13

b. *Transfers:* provide cash and/or in-kind support to the poor and vulnerable in terms of minimum income security and access to essential services, including health care.

In Suriname, the social security system is primarily coordinated by the Ministry of SOZAVO. A major weakness of the current social security system is that the goals and organization of its components are not planned and operationalized by the Government as a coherent whole. Programs are based too much or only on cash or in-kind transfers. Furthermore, there is no integration with complementary programs among the various Ministries, resulting in programs having little or no impact. The result of all this is an inefficient system with a multitude of programs delivered by different providers with little or no coordination to the client who is often not or not fully entitled.

Appendix 1 lists the various programs under implementation from the Ministry of SOZAVO and other government agencies.

A structural problem is also the direct financing of social security from the current state budget. In times of budgetary constraints, this also creates a crisis in the health care system. The problem is exacerbated by inadequate planning for the actuarial sustainability of programs. Policy reforms are very urgent and therefore deserve priority. Among other things, implementing Conditional Cash Transfer (CCT) programs are now recommended.

Reform planning requires not only an understanding of social security needs, but also information needed to design new multidimensional programs that deliver an integrated product that effectively impacts poverty reduction. Chapters 4-6 developed the basic methodologies to support policy.

The poverty line, but especially the social subsistence minimum derived from it, plays a decisive role here which is/will be in:
1) Determination of the number of potential clients: estimates of the number of stakeholders basically amounts to estimating how many individuals are poor based on the poverty line, and how many are below the subsistence

minimum and therefore entitled to support. After all, for the latter group, through a "mix" of (cash) transfers, subsidies (housing, electricity and water supply), exemptions (tax exemption, basic health insurance (BAZO)), the minimum wage and special programs, subsistence is guaranteed.

2) Design of new:

a) Programs with higher impact on poverty reduction. These are programs that deliver an integrated product to stakeholders. This requires information on the nature and causes of poverty and/or vulnerability of specific target groups who are poor and living below the subsistence level; the selected indicators of the multidimensional approach provide a good basis for this.

b) Election, identification and monitoring mechanisms for beneficiaries of services. In particular, this concerns the design and maintenance of so-called "proxy-means-tests" or proxy carrying capacity tests that enable the social security system to determine, in a quick and inexpensive manner as well as with reasonable reliability, whether a person is eligible for one or more forms of support or services. The necessary information for this is usually obtained from multidimensional poverty research approaches (see Chapters 5 and 6). Especially in Suriname, such systems can only function successfully in combination with other control mechanisms, including parallel administrative files, field monitoring on a sample basis, and legal sanctions for abuse of social support.

3) The determination of the level of benefits, financial assistance ("cash transfers"), other welfare benefits and subsidies as well as the level of the minimum wage. All this in relation to the other components that actually (in fact) make up the household income of a specific client/target group which also includes the following incomes that household members may enjoy:

a) Income from work (wages and entrepreneurial income) or insurance benefits;

b) Income from ownership;

c) Transfers from families or NGOs.

4) The composition of coordinated implementing organizations and mechanisms that require this type of reform program. Required are adequately equipped organizations that correct themselves and can network more efficiently to deliver an integrated product and have constant feedback with the client. These almost always more efficient organizations must:
   a. be more targeted and accurate, able to differentiate and serve standard categories of clients;
   b. have integrated delivery, monitoring and evaluation mechanisms that include strong ICT capabilities;
   c. have adequately trained senior staff who have special skills and motivation to serve target groups;
   d. have appropriate infrastructure (buildings and facilities).

In conclusion, all of this requires an understanding of the target groups identified not only as poor and/or vulnerable, but also how poor they are and which of their characteristics (as a target group) are relevant to social security programs, as well as social development programs. The latter should result in developing a degree of self-sufficiency among the target groups. Of particular importance here are characteristics related to causes of their poverty or vulnerability. Developing these insights is only possible through research, monitoring and disciplined record keeping of administrative records that are purposefully designed. In this process of research as well as maintaining and editing administrative information and analysis, the poverty line and the social subsistence minimum are two key indicators. All of this makes the need for the urgent establishment of a poverty line one of the conditions of the reform of both social programs and the organizations and mechanisms that these programs must deliver to the clients/target group.

7.3   Roadmap for care of the poor in Suriname

Based on the fact that the Government strives to keep care for the poor optimal and accessible to the less well-off, to monitor social objectives and to combat poverty in order to prevent further impoverishment of the population and to gradually remove groups dependent on "poverty care" from this circuit and transform them from "needy to self-sufficient citizens" in Suriname, the Poverty Commission proposes the following roadmap:

- **support:** agreement for the approaches and techniques for poverty measurement and related poverty lines and indicators used in this report to Surinamese conditions should be reached with all relevant national actors in order to maximize support.

- **legal basis:** adoption of a Poverty Line Determination Act aligned with the Minimum Wage Act. In the process of enactment of said Act, the General Bureau of Statistics will have an important role to play in terms of approaching and measuring poverty in Suriname.

- **data collection:** investing in continuous data collection at country and sub-country levels. In this respect, frequencies in the conduct of household budget surveys, poverty assessments and other surveys are considered. Improvement in the maintenance of administrative data by Government and other quasi-government institutions should be further realized.

- **integral policy:** centralizing data files relating to weak households/ individuals to increase the efficiency of allocating support (benefits and other types of provisions). This will also make it possible to determine what the Government overall wishes to invest from its budget for the target groups.

- **standard of living in Suriname:** establish/agree on a social subsistence minimum as a starting point for determining the number of the needy and the social packages/programs per target group.

- **circle breaking/control:** analyses should be conducted to identify the causes of poverty among poor households/individuals and deploy data-driven social and educational policy programs for the path of sustainable poverty reduction (from "needy to semi- and fully self-sufficient").

- **preventive and future-oriented:** develop and implement preventive poverty reduction programs in cooperation with NGOs in order to provide at-risk groups with as much timely support as possible to prevent "inflow into the poverty circle." This should include structural creation of capacity building (vocational training programs) and entrepreneurship stimulating interventions.

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ANNEXES

Annex 1:
Social safety net measures and policies of the Ministry of Social Affairs and Housing, 2021

To promote the general welfare in Suriname, the Ministry of Social Affairs and Housing (SOZAVO) has the responsibility to support the vulnerable groups (children and youth, people with disabilities (handicaps), the homeless, senior citizens, minimum income persons and families and those seeking housing) in our society so that they can also lead a dignified existence (DNA, 2017).

These vulnerable groups may be eligible for the following types of support from the Ministry of SOZAVO;[31]

a. Basic Health Insurance (BAZO), where everyone of Surinamese nationality in the age group of 0-16 years and 60 years and older is exempted from paying the premium. This premium is paid by the government. Individuals in the 17-59 age group may also qualify for basic health insurance. The decision to pay the premium for this group is made on the basis of the result of an asset test, which is performed by the Basic Care Implementing Agency. This examines whether or not the applicant for basic health insurance is able to pay the premium himself. In the case of the employed, the employer is required under the Basic Health Insurance Act 2014 to pay at least 50% of the premium. According to the Annual Financial Plan 2022, as of the end of June 2021, the Government has transferred SRD 49.5 million and SRD 92.3 million to the State Health Fund for BAZO (0-16 years and 60+) insurance and BZV (17-59 years) (Annual Financial Plan 2022, Table 4.6.6, p. 59).

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31. https://www.planningofficesuriname.com/wp-content/uploads/2022/07/outlook-2023-Surya.pdf

b. A Financial Assistance for Persons with a Disability (FMMEB). Financial assistance (FMMEB) has been gradually increased as follows: SRD 325 (2019), 500 (2020), SRD 750 (as of June 2021), SRD 1,750 (as of March 01, 2022) per month and SRD 2,500 (per July 2023). According to statistics from the Ministry of Finance and Planning, in 2021 the Government has made an amount of SRD 85.4 million or USD 4.6 million available for the payment of financial assistance to people with a disability.

c. The General Old Age Pension (AOV), for nationals and residents who meet the requirements of the law and are 60 years of age or older, was gradually increased. That increase was as follows: SRD 525 (2019), SRD 750 (as of November 2020), SRD 1,000 (as of June 2021), SRD 1,250 (as of March 01, 2022) per month and SRD 1,750 (per July 2023). In addition, SRD 50 million has been reserved for senior citizens who depend only on an AOV benefit, as well as retirees whose pensions are low. This target group will receive an adjusted AOV benefit. Based on statistics from the Ministry of Finance and Planning, in 2021 the Government transferred an amount of SRD 737 million or USD 40.1 million to the AOV Fund for disbursement to stakeholders (See Financial Note, 2021: Grants and Contributions.)

d. A financial assistance for socially disadvantaged households (FBZWHH) (these are the poor and extremely poor households) to whom a one monthly amount is paid. The FBZWHH is SRD 500 (2020), SRD 1,000 (as of June 2021), SRD 1,250 (as of March 01, 2022) and SRD 1,500 (per July 2023). One of the conditions for registering as a socially vulnerable household with the Ministry of SOZAVO is that gross income should not exceed SRD 4,000 per month. In 2019, financial assistance for socially vulnerable households was disbursed to over 5,000 families, of which 128 families were from the coastal plain and 5,065 families were from the interior. The number of families in the coastal plain was very low because the amount of SRD 33-40.50 per month was unrealistically low and people did not bother to register for that amount. In 2020, because of COVID-19, over 10,000 families were registered to be eligible for the financial assistance (SOZAVO, 2022). According to statistics from the Ministry of Finance and Planning, the Government provided an amount of SRD 8.5 million or USD 0.5 million in subsidy towards the payment of FBZWHHin 2021.

e. The General Child Benefit (AKB), which is a monthly payment, has also been gradually increased as follows: SRD 50 (2019), SRD 75 (as of November 2020), SRD 125 (as of June 2021) and SRD 200 (per July 2023). In accordance with the statistics of the Ministry of Finance and Planning, the Government has provided an amount of SRD 61.3 million or USD 3.3 million as a subsidy for the disbursement of the AKB to stakeholders in 2021.

f. A basic food package that households can purchase at a reduced price. During 2017 and 2018, 10,000 food packages were funded by the Government and distributed to socially disadvantaged households. The households who had registered for a food package paid SRD 50 for their package which had a total value of SRD 275. The households that were not registered with the Ministry of SOZAVO paid between SRD 90,- and SRD 110,- for a food package.

According to statistics from the Ministry of Finance and Planning, the Government has made a total of SRD 909 million or USD 49.4 million available to the Ministry of SOZAVO in 2021 for the payment of the aforementioned social benefits to beneficiaries (see Table A below).

Other social safety net measures

In addition to the aforementioned social benefits, incidental provisions within the framework of the Crisis and Recovery Plan 2020-2022 have been made as part of the social safety net as support to various target groups, in order to provide some relief from the negative effects of the social economic crisis with which Suriname was confronted. In this context, the following may be mentioned:

a. Purchasing power enhancement for civil servants and national servants;

b. The incorporation of the support allowance for public servants/officials of SRD 1,000 and the purchasing power strengthening allowance of SRD 800.- per month for national public servants/officials in their salaries, and on top of that a salary adjustment of 17 percent as of January 2022 and an 8 percent salary adjustment as of July 2022;

c. A support allowance for retirees of SRD 750.- per month as of June 2021. As of September 2021, retirees received a tax-free exchange rate compensation of SRD 490 per month. The support allowance and the exchange rate compensation were incorporated into the pensions of the former public servants/officials in proportion to the incorporation as applied to the wages and salaries of the public servants/officials and the agreed wages increase of 17 percent (January 2022) and 8 percent (July 2022), respectively, if applicable.

d. Free baby food for poor families through outpatient clinics;

e. Free school transportation for schoolchildren and students of (poor) families;

f. Poverty alleviation funds through religious organizations in neighborhoods and districts: "Direct Poverty Alleviation" included in the 2020-2022 Crisis and Recovery Plan);

g. Subject subsidy of at least SRD 250 for electricity to poor families (after screening);

h. Levy rebate on payroll and income tax of SRD 750 per month in 2021, until VAT was introduced. This levy rebate was also included in the various purchasing power enhancing benefits, the salary of public servants/officials and the salary increases of 17 and 8 percent given thereon;

i. COVID-19 support of SRD 1,500 through the Ministry of AWJ. In 2021, a total of 8,119 registered persons who were unemployed or had lost their jobs because of COVID-19 (2,993), had reduced income (2,218), or self-employed persons and owners of small and medium enterprises that had a total close down in whole or in part (2,907) received the COVID-19 support;

j. Revision of tax brackets that reduced pressure on wage earners;

k. Temporary food program for poor families;

l. Provision of school bags (with content) to poor schoolchildren and students. A total of 20,000 school bags were provided;

m. Increased control of retail prices of basic goods.

Table A: Budget of programs for Poverty Reduction in Suriname

| Ministry			Expenditure 2019	Estimate 2020	Estimate 2021 (x SRD 1000)	Estimate 2022 (x SRD 1000)
Name	Code	Description				
Home Affairs	0902	Contribution to households	39.605	42.000	50.000	77.260
Finance and Planning	0998	Supplemental government pension fund contribution		1.001.118	1.288.400	-
	1501	COVID-19 Emergency Fund	368.978	689.831	633.879	1.099.796
	1703	Subject Subsidy Electricity		650.000	1.300.000	25.000
	4108	Subsidy Fuel				500.000
	4112					120.000
Natural Resources	2102	Drinking water production center		45.000	3.200	45.000
	2106	Commewijne Energy supply			40.000	21.047
	2201	Public street lighting			10.026	20.000
	2202	Renewable energy (Solar, Hydro and Wind energy)		3.000	2.000	69.000
	2205	Decentralized Drinking Water Supply for		11.400	24.865	310.660
	2103	Upper Suriname Proj.2BOSAQ)				71.205
Labor Employment & Youth Affairs (AWJ)	2402	Poverty alleviation/education and popular development/improving social protection	50	270	2.470	9.394
	3704	Strengthening and counseling at-risk youth	300	650	650	750
Social Affairs and Housing (SOZAVO)	0937	Grant to government foundations based on operating deficits	2.481	1.500	1.500	3.500
	0938	Subsidy to private social institutions based on rates per days of stay	3.723	4.500	4.500	7.000
	1002	Social protection program (common Community development program)	7.645	14.800	15.000	2.500
	2403	AOV Fund	365.200	431.000	437.000	893.556
	2404	General Child Allowance	52.287	53.544	57.616	129.400
	2408	Care Transport	748	510	700	717
	2409	Poverty alleviation: contribution to the care costs of parents with triplets or more; Nutrition for families; Feeding for the benefit of shelters (creches, residential and non-residential shelters	1.647	3.000	6.000	212.000
	2414	Contribution in acute emergencies	23	1,000	842	2.000
	2415	Financial contribution to people with disabilities	54.916	49.375	64.572	120.000
	2416	Financial contribution to socially disadvantaged households	1.326	2.274	3.270	78.165
	2502	Contribution to medical devices	291	500	300	300
	2503	Home health care	0	0	150	150
	2504	Premium payments basic health insurance	10.252	148.183	219.000	319.000
	2505	Additional costs of medical care	84.026	12.000	20.000	20.000

Ministerie		Programma		Besteding 2019	Raming 2020	Raming 2021 (x SRD 1000)	Raming 2022 (x SRD 1000)
Naam	Code	Omschrijving					
	2601	Low Income Shelter Program		0	16.567	133.388	217.969
	2602	Housing development program		0	0	1,000	5.750
	1705	COVID social spending					20.368
Education, Science and Culture	0722	School Nutrition			15.000	5.000	1.711
	2904	Study grant to scholarship students in higher education		687	1.500	4.138	8.276
	2605	Housing in boarding schools		91	800	500	5.500
	2418	Schooltransport					80.000
Health	0952	Subsidy Medical Mission Suriname		24.163	6.250	33.000	55.000
	0954	Bed, nursing and medical expenses chronic patients Psychiatric Center Suriname		14.053	14.102	25.000	48.000
	0955	Grant Regional Health Service Foundation		33.000	8.250	40.000	110.000
	0973	Additional state contribution State health insurance fund				20.000	60.000
	0978	Medication supply BGVS for the total community		0	0	31.869	100.000
	3101	ARMULOV(government contribution)				20.000	60.000
	3109	Addressing HIV/AIDS, Tuberculosis and Elimination of Malaria (government contribution/ Global Fund)		797	0	19.326	60.000
	3111	Addressing chronic non-communicable diseases		2.405	1.224	6.600	15.000
	3113	Costs for vaccine purchase, lab supplies, drugs, devices and lab costs for public health care		0	0	8.000	45.000
	4109	Mother and child care baby food					87.000
Public Works	0134	Housing		55.719	55.719	112.784	60.500
Transport Communication and Tourism	0958	Grant National Transportation Company		28.001	11.155	38.500	70.000
	0959	Subsidy Shipping Company Suriname		3.148	5.000	5.500	5.500
	0977	Grant boat and bus permit holders			9.061	2.500	8.800
	0961	Subsidized Flight Services to the interior					20.000

Source: approved budget 2021 and conept budget 2022 (https://www.dna.sr/wetgeving/ontwerpwetten- at-dna/approved/draft-law-state-budget-2021/)

Annex 2:
Poverty calculation methods

Figure 1: Types of poverty approaches

Unidimensional

Monetary

Income based			Income based		
Absolute Poverty lines		**Relative poverty lines**	**Absolute Poverty lines**		**Relative poverty lines**
National thresholds specific for individual countries, in the national currency	Internationally comparable thresholds	Share of the median (or mean)	National thresholds specific for individual countries, in the national currency	Internationally comparable thresholds	Share of the median (or mean)
1. Cost of basic needs	3. Severely poor with income below 1.99 PP$	5. Relative low income (example: below 50% or 60% of the contemporary median equivalized income in each country)	8. Cost of basic needs	10. Severely poor with expenditures below PP$ 1.99 per day	12. Relative low expenditures (example: below 50% or 60% of the current median equivalized expenditures in each country)
2. Subsistance minimum	4. "Just poor" with income below 3.10 PP$	6. Relative low income anchored at a fixed point in time	9. Subsistance minimum	11. Relative poor with expenditures below PP$ 3.10 per day	13. Relative low expenditures anchored at a fixed point in time
		7. Weakly relative poverty line			14. Weakly relative poverty line

Poverty

Multidimensional

Food energy intake (FEI)

15. Nationally specific FEI-based poverty rates (varies by climate conditions, rural/urban distribution, type of occupation, etc.)

Deprivations

16. Indicator dashboard

17. Indices of multiple deprivations, including material deprivation

Multidimensional poverty estimates internationally comaparable (following the methodology developed by OPHI and used for international comparisons and in the Global HDRs published by the UNDP)

18. Multidimensional poverty index (thresholds for the various dimensions)

Official national multidimensional poverty indices following the methodology developed by OPHI

19. Severely poor

20. Moderately poor

Note: Reprinted from "GUIDE ON POVERTY MEASUREMENT," by the UNECE Task Force on Poverty Measurement, 25 september 2017, p.27, United Nations Economics Commission for Europe (UNECE).

Annex 3:
Characteristics of the household head, weighted sample

Table A1: Characteristics of the household head, weighted sample (HBO, 2013/14)			
Characteristics of the head of household			
Gender	N=2928	**Leeftijdsgroep**	N=2910
Female head	32.0	17-29 years	6.4
Male head	68.0	30-59 years	67.8
		60 years and older	25.8
Etniciteit	*N=2928*	**Burgelijke staat**	N=2827
Creole	20.3	Not married	43.3
Indigenous	2.2	Married	43.0
Maroon	10.7	Widowed/divorced	13.7
Hindou	29.9		
		Nationaliteit	
Creole	20.5	Surinamese	95.9
Javanese	18.8	Dutch	1.6
Mixed	13.8	Guyanese	1.6
Other	3.9	Other[13]	0.9
Religion		**Meest gesproken taal**	N= 2851
Christian	47.1	Dutch	47.6
Hindu	23.6	Surinamese	6.6
Muslim	22.0	Traditional language[7]	42.6
Other	4.2	Other[7]	5.1
None	3.0		
Location and household composition			
Household size	N=2925	**District**	N=2928
1 member	9.9	Paramaribo	50.9
2-4 members	57.4	Wanica	24.5
5-7 members	26.8	Nickerie	8.1
8 or more members	5.5	Coronie	1.9
		Saramacca	3.0
		Commewijne	6.9
		Para	4.8
Overcrowding[6]			
Yes			
No			
Number of children	N=2925	**Number of adults**	
0	46.5	1-2	49.5
1-2	41.4	3-4	39.1
3-4	10.4	5 or more	11.4
5 or more	1.8		

Economic environment of the household

Activity status	N=2839	Education level	
Employed	67.9	Primary/No education	39.8
Unemployed	3.1	Secondary(JuniorHigh)	40.2
Family caretaker	17.8	Secondary(SeniorHigh)	14.2
Retired	8.5	Tertiary	5.7
Other (disabled/ discourage/student)	2.7		
Activity type (ISCO)	N= 2925	Number of workers	N=2925
Armed occupation	0.7	0	16.9
Managers	3.5	1	39.3
Professionals	3.3	2 and more	43.8
Technical and associate Professionals	4.8		
Administrative forces	4.6		
Experienced agriculture, forestry and fishery workers	4.3		
Craft and related trade workers	13.9	Type of worker	2925
Plant and machine operators and assembly	9.6 6.0	Employer	1.4
Mineworkers		Small entrepreneur	12.2
Elementary professions	15.0	Employee	50.2
Economically inactive	34.1	Unemployed[1] /Other	36.3
Frequency of payment			N=2925
Monthly	40.6	Job type	49.4
Fortnight	5.4	Full time (> 30 hrs)	5.4
Weekly/daily/unpaid	15.8	Parttime (30 hours or less.)	45.3
Not working/Lacking	38.1	Unemployed [1]	

Housing characteristics, basic services and durable goods

Housing status		Elektricity source	
Ownership	66.1	Improved[2]	96.9
Rent	14.3	Not improved	3.1
Other	13.7		
Drinking water source		Rooms	2693
Tap water in home		1-2	8.9
Mains water in the yard within 200m	72.4	3-6	78.7
Mains water outside the yard > 200m	9.9	7 or more	12.4
Not improved[5]:	1.2		
Cooking fuel		Bedrooms	N=2817
Gas / electricity	97.0	1	10.2

Housing characteristics, basic services and durable goods			
Not improved[3]	3.0	2-3	68.7
		4 and more	21.1
Construction material house	**N=2925**	**Purchased**	
Wood	20.1	Household textiles[8]	8.8
Stone	41.2	Householdappliances[9]	19.4
Wood and stone	35.1	Vehicle[10]	7.3
Other material	0.44	Furniture[11]	9.8
Don't know/not available	2.5	Audio-and video devices	12.3
Condition of the residence	**N=2839**	**Beschikt over een computer**	
Very good/good/reasonable	86.1	Yes	32.5
Bad/very bad	13.9	No	67.6
		Telecommunication service	**N=2925**
		Improved[4]	72.5
		Not improved/no service	27.5

Source: Household Budget Survey 2013/14

1)   this is the category that is economically inactive (see variable employment status)
2)   improved: from EBS power company, NH ministry/ neighbour/ own generator; unimproved: other(lamp/candle)ornoelectricity
3)   improved: gas/electricity; unimproved: wood/charcoal/petroleum/other/don't cook
4)   improved telecommunication: landline/cellular/fixedcellular; unimproved: radio transmitter/no
5)   phone well within200m/well further than 200m/river/creek/rainwaterin tanks/other
6)   overcrowding: Yes, if 3 or more persons per bedroom
7)   Traditional language: Sarnami, Javanese, Arowak, Caraib, Saramacaans, Aucaans, Paramacaans; Other: Chinese, French, English, Portuguese, other language
8)   Household textile. Household textile represents here the semidurable goods. For the HBS2013/14 the GBS defines Semi-durable goods as goods with an expected lifetime of 1-3years. The following sub categories areidentified: Clothing (dresses, pants, skirts, t-shirts underwear, pyjama's, hats, socks, etc,.), shoes, household textile (curtains, bedsheets, tablecloths, bags, doormat, carpet, etc.), small kitchen appliances (coffeemakers, toasters, blender,i rons, etc.), mallhousehold and gardenequipment (saw, screwdriver, flashlight, lamps, hammer, hose, etc.)
     -    parts for vehicles (tires, sparkplugs, battery, etc.)
9-12)   These are components of the durable goods. The category durable goods is defined as goods with an expected lifetime of atleast 3 years. And consists of the following categories: Vehicles (car/ pickup/ truck/Van/bus/motor-cycle/bike/boat/water-scooter/ATV, etc.), communication/audio/ video devices: (television, mobile, video recorder, radio, CD player, DVD player, photo camera, printer, video camera, laptop, etc.), householdappliances (refrigerator, freezer, stove, microwave, washingmachine, dryer, air conditioner, dishwasher, hydrophore, etc.) & Furniture (wardrobe, sofaset, bed, matrass, cabinet)
13)   Nationality; Other: Haiti, Brazil, China, Dominican Republic, French Guyana, etc.

STAATSOLIE

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