Methodological Report on the Consumption Aggregate and Poverty Lines

based on the

Surinam Survey of Living Conditions 2016/2017

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1. INTRODUCTION

This report corresponds to the third Report/Deliverable assigned to the consultant Carlos Eduardo Sobrado (vendor ID: 0020018085) from IDB contractual 00123458, contract number 0002: "Methodological report outlining the details of the methodology used for the calculations".

There are three sections in this document: first, a description of the consumption aggregate, its components, variables, and transformation; second, the construction of poverty lines; and third, basic poverty results. The main source of information for the work is the 2016/2017 Suriname Survey of Living Conditions (SSLC-2016/17). Secondary sources are the caloric requirements for people, the food caloric content tables, and the Consumer Price Index (CPI).

2. MEASURING CONSUMPTION WITH THE SSLC-2106/17

JUSTIFICATION

The main welfare indicator in this work is per capita consumption. Consumption is preferred over income, because consumption tends to fluctuate less between months and over the years. For example, people smooth their consumption over time by saving money (e.g., bank account), resources (e.g., cattle, crops), or investing (e.g., housing, land), and by using those saving when needed. Also, respondents tend to provide more accurate information on consumption than income. And while consumption is an objective measure of welfare, indicators based on multiple variables combined use subjective definitions, including which variables are to be included and the respective weights assigned to their components.

WHAT IS INCLUDED IN THE CONSUMPTION AGGREGATE?

Consumption includes all goods and services that increase a household welfare. Consumption and expenditure are similar but not the same; important differences exist in cases when (i) a household consumes a good or service without having any expenditure: food received as a gift, social program, or school lunch; (ii) the expenditure and consumption take place at a different time: the purchase of a bag of rice a month ago consumed during last week; (iii) the consumption is the product of a family business: crops or cattle with many expenditures over long periods of time allocated to several activities; (iv) the durable goods improve the wellbeing of the household during many years: a stove purchased a few years ago does not require new expenditures but keeps improving the household welfare today; also, the benefits derived from a new stove this year are less than the original purchase price.

The SSLC-2016/17 has the information to construct the consumption aggregate. The consumption aggregate includes food and drinks (purchased or non-purchased), use value of

housing, housing utilities, education, health, transport, communications, personal and household expenditures, small and medium durables purchases, entertainment and other consumption (see Box 1).

The SSLC-2016/17 does not have enough information to estimate the use value of durable goods. Using the purchase value for big ticket items does not solve the problem and increases the bias for households reporting new items. Excluding the durable goods would underestimate the consumption aggregate value but reduces the bias for individual households and is expected to have very limited impact on poverty estimates (see individual components for a detailed list of excluded items).

Module four, "Government social safety net programs" was reviewed to evaluate the need and feasibility to include in-kind benefits as part of the consumption aggregate. There were only 51 in-kind benefits reported in the survey, representing 5.3% of the 1,196 benefits reported. The rest of the benefits are cash and checks used by household to purchase goods and services and are expected to be reported in other sections of the questionnaire and included in the consumption aggregate. For the 51 cases, no value was provided and there is no information to make a reliable estimate. The value of In-kind social benefits would not be included in the consumption aggregate

VARIABLE CLEANING AND UNITS

Variable cleaning

All the variables used in the consumption aggregate were reviewed to identify values out of range, outliers, and missing values. An action was taken for every case, with the purpose of reducing the bias introduced by the problem and provide a reasonable estimate.

Answers with values not included in the questionnaire list were values out of range. The "out of range" values were changed to those that were valid depending on other answers given by the household or, if no other option was available, the most common answer was used.

Outliers are observations with values too different from the rest to be true. The three characteristics used to determine outliers were: (i) standard deviations from the mean; (ii) a clear jump in values between the outliers and the next observation (based on inspection of plotted values in a graph); and (iii) total number of outliers being a small percentage of the observations.

The value of some variables is expected to increase with the number of household members, as in the case of food purchases where the bigger the household, ceteris paribus, the more food

consumed. Other variables do not change much regardless of household size[1]; for example, the purchase value of an electric iron tends to be the same regardless of the household size. To help determine the sensibility of non-food expenses to the household size, a regression between the average value paid (dependent variable) and the household size (independent variable) was estimated[2]. For all variables with values sensible to the household size, the reported amounts were divided by the number of members before estimating the number of standard deviations from the mean[3].

Each individual outlier was more than 4, 5, 6 or 7 standard deviations away from the mean and the total number of outliers for each variable was less than half a percentage point of the reported values (< 0.5%)[4].

Missing values are observations where a household member reported having purchased or consumed a good or service but did not provide its value. Outliers and missing values were estimated together. The average value for the specific item was used to replace the outlier or the missing value[5]. For variables sensible to household size, the per capita value was used for the estimation and then transformed back to the total household expenditure. A record of every estimation was kept having an exact value of the consumption aggregate estimated share.

Variable units

Before adding the individual components, all variables were transformed to the same units: monthly and per capita (per person). Each question has a recollection period (e.g., during the last X number of days or months have you spent any…). The recollection periods used in the

[1] Household size is the number of household members.

[2] The regression was run for all goods and services reported in Module 14, parts B, C and D (Household non-food consumption and expenses).

[3] The per capita value was used in all the goods and services except for: 1201 Electricity, 1203 Bottled Gas, 1204 Water Supply, 1302 Liquid Bleach, 1304 Soap Powder (Detergent), 1306 Toilet Cleaners, 1601 Antiperspirant, 1611 Sanitary Napkins of Paper, 1612 Toilet Paper, 1613 Toilet Soap (cakes), 1614 Tooth Brushes, 1615 Toothpaste, 1801 Internet, phone, cable TV fees, 1804 Other (specify), 2004 Barber, 2109 Panties, 2110 Pajamas, 2111 Boots, 2116 Other (Specify), 2201 Blouses, 2209 Slacks, 2210 Stockings and Panty Hose, 2212 Brassieres, 2215 Boots, 2303 Shorts, 2311 Boots, 2312 Sandals, 2313 Leather Shoes, 2315 Pata/sport shoes, 2401 Blouses, 2404 Trousers (not jeans), 2409 Slacks, 2420 Other (Specify), 2510 Belts, 2511 Other (Specify), 2602 Building Stones, 2706 Labor charges - Other laborer's, 2804 Digital Music Player, 2905 Chest of Drawers, 3002 Washing Machines, 3011 Air Conditioner, 3302 Car Parts - other, 3303 New Tires for Motor Cars, 3403 Vehicle Insurance - Purchase, 3502 Drivers Licenses Fee (Renew), 3702 PC (personal computer), 3704 Tablet, 3709 Other (Specify), 3802 Tailoring &3809 Other (Specify).

[4] The number of standard deviations used to identify outliers was adjusted according to the type of expenditure and data characteristics.

[5] Outlier selection and estimates were calculated separately for each domain: Great Paramaribo, Rest of the Coastal Region and Interior

consumption questions included 7 days, 30 days, 3 months, and 12 months. All values reported were transformed to monthly units by multiplying for the appropriate factor: the values for 7-day questions were multiplied by 52 and divided by 12, for 30-day questions were not changed, for 3-month questions were divided by 3, and for 12-month questions were divided by 12.

To consider the change in the Surinam Dollar (SRD) purchasing power, the aggregate values were deflated using the official CPI. Using the General Bureau of Statistics of Suriname (ABS) November 2007 report, a CPI index was created by dividing each monthly CPI value by the June 2017 CPI value (Annex 1).

For each household, the last day of the interview was selected as the reference month and the corresponding CPI index was used. Each consumption aggregate component was then multiplied by the index.

Consumption values were first estimated using the file's organization, which reflects the design of the questionnaire. Some questions were asked to each individual family member, other questions were for the entire household. Regardless of the organization, the individual consumption variables were added up for all household members. After creating the 11 groups listed in Box 1, the per capita values were estimated by dividing the household consumption by the number of household members. The consumption aggregate components are in "Monthly, Per Capita, June 2017 SDR".

INDIVIDUAL COMPONENTS IN THE CONSUMPTION AGGREGATE

Having several components in the consumption aggregate helps organize the work and interpret the results. The only division that is necessary to estimate the poverty lines, is between the "food" and the "non-food" components[6]. Other groups reflect the questionnaire design and the preferences of the analyst. Welfare level and poverty status for each household use the total consumption aggregate and do not change with the grouping. The individual components of the consumption aggregate are included in the STATA data file "h Consumption2.dta" (or the SPSS data file "h Consumption2.sav") and the variable names are listed after each component and sub-component.

[6] Food includes food and all types of drinks.

Box 1: Consumption Aggregate components and sub-components	
1-Food and drinks	Food at school (M3 Q3_19j) Food bought and consumed outside the house (M11 Q11_3901b to Q11_3909b) Food consumed at home (M14.A Q14_03c)
2-Use value of housing	Rent paid (M14.B Q141_02 for code 1101)[7] Use value of house estimated with regression
3-Utilities	Fuel, electricity and water (M14B Q141_02 for codes 1201 to 1210)
4-Education	Education expenses (M3 Q3_9a to Q3_9k, excluding Q3_19j)
5-Health	Total health expenditures (M5 Q5_21, Q5_23, Q5_25, & Q5_28) Medical insurance and others (M14B Q141_02 for codes 1701 to 1703)
6-Transport	Petrol, oil, parking, etc. (M11 Q_11_4101b to Q11_4105b) Bus and Taxi (M11 Q_11_4201b to Q11_4204b) Maintenance, fees (M14.D Q141_02 for codes 3301 to 3307, 3403, 3405 & 3501 to 3504)
7-Communication	Cell Phone cards and Internet cafes (M11 Q11_4401b & Q11_4402b) Communications (phone, internet) (M14B Q141_02 for codes 1801 to 1804)
8-Personal & household	Cleaning supplies and Personal care (M14.B Q141_02 for codes 1301 to 1621) Clothes, footwear, linens, & tailors (M14.C Q141_02 for codes 2101 to 2514 and M14.D Q141_02 for codes 3101 to 3104, & 3801 to 3802)
9-Small & med. durables	Durables (M14.C Q141_02 for codes 2802, 2803, 2805 to 2809, 2901 to 2907, 2910 to 2917, 3001, 3005, 3006, 3008 to 3010, 3012, 3201 to 3203, 3404, 3705 to 3706 & 3803)
10-Entertainment	Recreation (M11 Q_11_4301b to Q11_4308b) Recreation, services, celebrations (M14.B Q141_02 for codes 2001, 2002 to 2008, and M14.D for codes 3601 to 3602, 3701, 3707 to 3709 & 3806 to 3808)
11-Other	Tobacco (M11 Q11_4001b to Q11_4004b) Other non-food (M14.B Q141_02 for codes 1103 to 1108, 1901 to 1904 and M14.D Q141_02 for codes 3804 to 3805 & 3809 to 3811)
Key: "M" is for Module; "Q" is for Question.	

Food and drinks

The food variable, **food2**, includes food or snacks at school (variable **Food_1_2** from module 3-Education, question Q3_19j), food bought and consumed away from home (variable **Food_2_2** from module 11-Personal expenses, questions Q11_3901b to Q11_3909b), and food consumed

[7] Variable used was "Q141_02_". Variable "Q141_02_" includes a correction performed in the cleaning stages of variable "Q141_02". Most of the corrections are cases where the interviewer or data entry person misplaced a decimal place in the expenditure value. The corrected variable was used in this and every other case where question Q14_02 is mentioned.

at home (variable **Food_3_2** from module 14.A-Consumption of food and beverages in the past 7 days[8], question Q14_03c, for all food items from code 0101 to 1011).

Use value of house

Use value of house variable, **house2**, includes the monthly rent paid (variable **Rent_1_2** from module 14b-Non-food expenses in the past 30 days, question Q141_02, item 1101). For non-renters, the use value of the house was estimated using the prediction from a multivariable regression (variable **House_1_2**).

Using the households reporting rent, a regression between the natural logarithm of the rent paid (dependent variable) and several house characteristics (independent variables) was estimated. Almost all variables from the housing section of the questionnaire were used (module 13-Housing). Discrete variables were transformed into Dummy variables by grouping classifications related to higher rent values. The final model included seven variables and the constant, encompassing geographical location, number of bedrooms, wall materials, security features (camera, bars, smoke detectors) and having cable or satellite television. Selected variables were significant at $p \leq 5\%$ and with positive beta values.

The model was significant with a $p \leq 0.1\%$ and the adjusted R squared was 0.291. **Error! Reference source not found.** has the detailed description of the variables as well as the estimated beta, t value, and significance level. Annex 1 has the complete regression results.

Table 1 Rent Paid Regression Results, Suriname SSLC-2016/17

	Beta	t	Sig.
Constant	7.729	43.307	.000
Lives in Paramaribo	0.449	4.016	.000
# of rooms in dwelling used as bedrooms (Q13_19)	0.111	2.583	.010
Outer walls NOT of wood or wood and stones/bricks (Q13_08>2)	0.345	3.608	.000
Dwelling has security camera (Q13_12a=1)	0.388	3.673	.000
Dwelling has bars in some windows (Q13_12e=1)	0.326	2.563	.011
Dwelling has smoke detectors (Q13_12g=1)	0.495	2.305	.022
Household has cable/Satellite TV (q13_23e=1)	0.268	2.130	.034

Dependent variable is the natural log of actual monthly rent paid
Adjusted R-squared =0.291

[8] This includes food prepared at home. It excludes prepared food bought, and normally eaten, outside the home.

Using the beta values from **Error! Reference source not found.**, the "rent natural logarithm" was estimated. The actual estimated "rent" is the exponential value of the prediction ($e^{predicted}$) [9]. The estimated rent was used as the house use value for the households without rent, and the actual rent was used for households paying rent.

Housing services

The Housing services variable, **electric2**, includes services related directly to the house. It has the variables from Module 14.B.12: electricity; petroleum; bottle gas; water supply and other fuel and light expenditures (items 1201 to 1210).

Education expenditures

The Education expenditures variable, **educat2**, includes variables in Module 3-Education, Questions Q3_19 to Q3_19i, except for question Q3_19Q9j (Food or snacks at school). The other ten variables are: registration fees, examination fees, tuition fees, text books, exercise books and stationary, uniform dress and footwear, private tutoring, accommodation expenses, transport cost, and other expenditures.

Health expenditures

The Health expenditures variable, **health2**, has two components: individual medical expenditures (**Health_1_2**), and family expenses (**Health_2_2**). Individual personal expenditures are estimated with Module 5-Health, questions Q5_21 (private medical services), Q5_23 (other medical care services), Q5_25 (other medical products), and Q5_28 (medicines from public or private source). Family expenditures are estimated with the information from module 14b-Non-food expenses reported in items 1701 (medical insurance), and items 1702 and 1703 (other medical expenses).

Transport

The Transport variable, **transpor2**, has three components -- first, variable **Transport_1_2**: moving expenses (Module 11-Personal expenses, questions Q_11_4101b to Q11_4105b: Diesel oil, Gasoline, lubricating oils, parking fees and others), second variable **Transport_2_2**: bus and taxi fares (Module 11-Personal expenses, questions Q_11_4201b to Q11_4204b: bus fares, taxi fares and boat fares) and third variable **Transport_3_2**: maintenance and fees (Module 14.D-Non-food expenses in the last 12 months, question Q141_02 for codes 3301 to 3307, 3403, 3405 & 3501 to

[5] The number ***e*** is a mathematical constant that is the base of the the unique number whose natural logarithm is equal to one. It is approximately equal to **2.71828**, and is the of $(1 + 1/n)^n$ as n approaches .

3504: batteries, car parts, new tires, service, mechanic, other maintenance, vehicle insurance, other insurance and transport equipment and vehicle registration fee).

Communications

The communications variable, **communic2**, has two components -- variable **Communication_1_2** from Module 11-Personal expenses (questions q11_4401b and q11_4402b: Cellphone prepaid card top up and Internet connection in cyber cafes), and variable **Communication_2_2** from Module 14.B-Non-food expense in the past 30 days (question Q141_02 for codes 1801 to 1804: Internet, phone, cable TV fees, Mobile phone fees, Internet TV and other).

Personal and household expenditures

The Personal and household expenditures variable, **personal2**, has two main components from Module 14-Non-food expenses, question Q141_02. The first component, variable **Personal_1_2,** includes expenses in the last 30 days from codes 1301 to 1621 (sections 13-Washing soaps and detergents, 14-Other cleaning and scouring materia, 15-Other household supplies, and 16-personal care). The second component, variable **Personal_2_2,** includes expenses in the past three months from codes 2101 to 2514 (sections 21-clothes and footwear for men, 22-clothes and footwear for women, 23-clothes and footwear for boys, 24-clothes and footwear for girls, and 25-Other clothing and accessories), and expenses in the past twelve months from codes 3101 to 3104 (section 31-Household linens), and codes 3801 (Dress-making) and 3802 (Tailoring).

Small and medium durables

This variable, **durables2**, has only one component, **Durables_1_2**, estimated with Module 14.C-Non-food expenses in the past twelve months, question Q141_02, codes 2802 (color TV), 2803 (DVD player), 2805 to 2809 (portable radios, digital video camera, mobile phone, and other) 2901 to 2907 and 2910 to 2917 (section 29-Furniture and soft furnishing excluding 2908-Kitchen cabinet and 2909-Living room set), 3001 (Blenders), 3005(Electric irons), 3006(Electric stoves), 3008 (Microwaves and toasters), 3809 (Room fans), 3010(Vacuum cleaners), 3012(other appliances), 3201 to 3203 (section 32-Glassware, cutlery, and crockery), 3404 (Bicycles), 3705 (Video game console), 3706 (Computer peripherals), and 3803 (Appliances and equipment repair).

The fourteen big (expensive) durable goods excluded from the consumption aggregate can be found in Module 14-Non-food expenses: 2801-Flat-screen TV, 2804-Digital music player, 2908-Kitchen cabinet, 2909-Living room set, 3002-Washing machines, 3003-Deep freezers, 3004-Refrigerators, 3007-Gas stoves, 3011-Air conditioner, 3401-Motor car, 3102-Motorcycle, 3702-Personal computer, 3703-Laptop, and 3704-Tablet.

Entertainment

The entertainment variable, **entertai2**, includes individual recreation expenditures (**Entertaiment_1_2**: Module 11-Personal expense, questions Q_11_4301b to Q11_4308b) and household level expenditures from Module 14-Non-food expenses, question Q141_02 from part B-Expenses in the past 30 days (Section 20-Other Services, n.e.c.), and from part D-Expenses in the past 12 months (**Entertaiment_2_2**: codes 3601-Travel, return airfare, 3602-Other, other travel, 3701-Toys, 3707-Musical instruments, 3708-Holidays or tours, 3709-Other recreation, 3806-Weddings, 3807-Funerals, and 3808-Birthday parties)

Other

The last variable, **other2**, includes values from module 11-Personal expenses, section 40-Tobacco (**Others_1_2**: items 4001 to 4004) and from module 14b-Non-food expenses, question Q141_02 (**Others_2_2**: from Part B- expenses in the last 30 days, codes 1103-House insurance, 1104 to 1108-Other rent insurance and mortgages, and section 19-Stationary and drawing materials, and from part D-Expenses in the last twelve months, codes 3804-Legal fees, 3805 (Property/land taxes), 3809 to 3811-Other, other services, n.e.c.)

TOTAL CONSUMPTION AGGREGATE AND ELIMINATED HOUSEHOLDS

The total consumption aggregate is the sum of the eleven individual components described in the previous section. Estimated values for each component were aggregated and compared to the total consumption[10]. The objective was to identify households with too many estimations in their consumption. A cutoff value was designated and households with estimates at or above 25% were considered unreliable.

Twenty-five households (out of 2,033) had 25% or more of their consumption estimated and were eliminated from the sample. To account for the reduction in the number of households, the sample weights were modified. To keep the total value of all the weights, if a household was eliminated, its weight was distributed equally among other households within the same Primary Sampling Unit.

[10] Estimated values are computed for outliers and missing observations. Use value of housing was estimated with a regression and it is not included here because it is part of the methodology and not a data quality issue. In addition, food consumed without any direct expenditure (crops produced for example) are also excluded from the estimates because the quantities were actual values reported by the household, and only reference prices were used.

Average per capita consumption in June 2017 was SRD. 1,326/month. The richest ten percent of the population has an average per capita consumption of SRD. 3,864/month while the poorest ten percent has an average per capita consumption of SRD. 334/month (Table 2).

Table 2 Average Consumption by Decile, Suriname, 2016/17

	1	2	3	4	5	6	7	8	9	10	Avg.
June 2017 SRD /month/person	334	525	658	803	948	1,096	1,312	1,611	2,117	3,864	1,326

3. POVERTY LINES

Two poverty lines were constructed for the Suriname SSLC-2016/17: the extreme poverty line (also known as the indigence line) and the overall poverty line. To compute the extreme poverty line estimation, it is necessary to use the consumption aggregate, the individual household food consumption for each food item, the caloric content of each food item and the average caloric requirement for the country. For the overall poverty line estimation, the food and non-food components of the consumption aggregate for each household are required.

The extreme poverty line

Average caloric requirement for Suriname

The minimum caloric needs for the average person in Suriname are computed using the World Health Organization's (WHO) caloric requirements for a moderate physical active person. The requirements are provided for each group according to their gender and age in years (<1, 1-3, 4-6, 7-9, 10-13, 14-17, 18-30, 31-60, and 61 and older). The requirement average is weighted by the population share according to the 2010 Surinam population census.

Population numbers from the census were presented also by age groups. Unfortunately, the census age groups were not the same WHO used. The WHO age group population numbers were estimated by assigning the total number of persons in each census age group to each year, using the proportions observed in the SSLC2016/17.

For example, the census reported 25,968 males 0-4 years old. The SSLC2016-17 reports 41,033 children 0-4 years old and 9,108 children less than 1 year old[11]. Children less than 1 year old, represent 22.197% of children 0 to 4 years old. The estimate for male less than one year old is:

[11] These are the numbers of the survey, expanded with the sample weight.

25,968 * 0.22197 = 5,764. The same procedure was applied to each year. Then, the yearly estimates were added according to the WHO's age groups.

The weighted average was estimated at **2,084** kilocalories per day. Individual values and estimates are presented in Annex 3, Table A3.1.

An additional caloric requirement for lactating and pregnant women was taken into consideration. The number of lactating women was estimated as the number of children less than one year old. The number of pregnant women was estimated as eight twelves (8/12) the number of lactating women. Total extra calories were the product of the number of lactating/pregnant women by the extra caloric requirement. Finally, the total additional kilocalories were divided by the total population (538,243) to obtain the average additional requirement of **14** Kilocalories. Individual values and estimates are presented in Annex 3, Table A3.2.

The final average daily requirement for Suriname: **2,084** (population) + **14** (lactating and pregnant) = **2,098** Kilocalories per day**.**

Selected food observations for extreme poverty line

Module "14.A-Consumption of food and beverages in the past 7 days" provides the quantities (in grams or milliliters) and amount (in SRD) for each food item consumed at home by the households. The caloric content and edible portion for each food type, was obtained from tables prepared by the Nutrition Institute of Central America and Panama (INCAP 2010). The selected energy contents and edible portion are presented in Annex 3, including the equivalence between milliliters and grams for liquids.

To estimate the extreme poverty line only useful observations were selected, thus eliminating: (*i*) observations without caloric content; (*ii*) cases with estimated values; (*iii*) observations with values higher than 3 or more standard deviations from the mean (for each product and domain); and (*iv*) food products with less than 15 observations in the entire country[12].

Estimating the extreme poverty line

The extreme poverty line is the cost of buying the minimum caloric requirement of 2,098 kilocalories per day.

[12] These changes do not have any impact on the household's consumption aggregate. The selected cases are used to estimate the cost of a food basket and do not change individual household welfare.

For the extreme poverty line to be relevant for the poor, only poor households are selected to determine the cost of 2,098 kilocalories per day. Also, because the extreme poverty line should reflect the preferences of the poor, the poorest of the poor are excluded to make sure the selected households have real choices on what to eat.

Since it is not known beforehand who is poor and who is not, the first estimates are done with an educated guess of how many poor are in the country and, according to the results, the reference group is modified, and a second estimate is done. This process continues until the selected reference group and the estimated poor are similar. Since the process is convergent, a solution is normally found within three to five runs.

For the first run, the first step was to arrange the households from lowest to highest per capita consumption; the second was to select a reference group including the 6-30% lowest consumption households[13]; and the third step was to estimate the poverty lines.

The second run was the same as the first one, but this time selecting the 6-27% lowest consumption households[14]. At the third run, the reference population (6-26%) and the poverty headcount rate were close to each other. The following description includes the final run for the extreme poverty line:

1. Arrange the households from lowest to highest per capita consumption.
2. Select the 6-26% lowest consumption households.
3. Estimate the cost for those households to buy 2,098 kilocalories per day.
4. Estimate the headcount rates.

To estimate the cost to buy 2,098 kilocalories per day for the reference group, the file prepared earlier with the "selected food observations for the poverty line" was used. From this file, first we eliminate the households below the 6th consumption percentile and above the 26th consumption percentile. For the remaining observations, the weighted average quantity, value and caloric content was estimated for each food product for each domain. The resulting file has the observed food basket for each domain (Great Paramaribo, Rest of the Coastal Region and Interior) with quantities, value and Kilocalories for 135 food products.

The observed food baskets were adjusted to ensure a total of 2,098 kilocalories per day. Each quantity, value and caloric content was multiplied by a constant for each domain. The constant for each domain was:

[13] The poorest 5% of households were not used to exclude the poorest of the poor. The 30% was an educated guess based on an internet search.
[14] Because the first run poverty headcount was 26.8%.

$$Constan_{i=1}^{3} = \frac{2{,}098}{\sum_{j=1}^{135} calories}$$ where i = domain and j = food item

The result of the adjustment is the 2,098 kilocalories food basket for each domain. The total calories provided by each food basket is 2,098, and the sum of the values for all the food products is the extreme poverty line (see Annex 5 for the complete food basket data for each domain).

The extreme poverty line values are SRD 265.29 for Great Paramaribo, SRD 250.48 for the rest of the coastal region, and SRD 258.65 for households living in the interior (**Table 3**). Households with consumption values below these lines are classified as "extreme poor".

Table 3 Extreme Poverty Line by Domain, Surinam 2017

	Domain			
(PC/Month/June 2017 SRD)	Great Paramaribo	Rest of Costal R.	Interior	Average
Extreme Poverty line	265.29	250.48	206.69	258.65

THE TOTAL POVERTY LINE

The overall poverty line is the extreme poverty line plus an amount to account for basic non-food consumption. To estimate the non-food part of the total poverty line, a second reference group is selected. The second reference group includes households with total consumption close to the extreme poverty line[15]. These are households that would need to use all their resources to buy enough food to barely satisfy their caloric needs and, hence, would have no resources for non-food goods and services. However, since these households decide not to use all their resources to buy food, they do not meet their minimum caloric requirement, and the non-food goods and services they consume are as important as the food they purchase. This characteristic, forgoing basic food intake to consume non-food goods and services, as the reason their non-food consumption is also considered essential.

The food share in the consumption aggregate is also known as the Engels coefficient; the non-food share is known as the Orshansky coefficient. To estimate the total poverty line, the extreme poverty line is divided by the food share of the households in the second reference group.

The Engels coefficients for the second reference groups were 0.36188 for Great Paramaribo, 0.42437 for the rest of the coastal region, and 0.38759 for households living in the interior. The

[15] Households with total per capita consumption within 20% of the poverty line value:
(0.8 * extreme poverty line) < consumption < (1.2 * extreme poverty line). Originally a range of 10% below and above was used but only 10 households from the "Interior" domain were within this range. The 20% range includes 28 households from the Interior, 86 from the Rest of the Coastal Region and 201 from Great Paramaribo.

total poverty line values were SRD 733.1 for Great Paramaribo, SRD 590.23 for the rest of the coastal region, and SRD 533.27 for households living in the interior (Table 4). Households with consumption values below these lines are classified as overall poor or total poor.

Table 4 Poverty Lines by Domain, Surinam 2017

	Domain			
(PC/Month/June 2017 SRD)	**Great Paramaribo**	**Rest of Costal R.**	**Interior**	**Average**
Extreme poverty line	**265.29**	**250.48**	**206.69**	**258.65**
Non-food part	467.81	339.75	326.58	432.65
Total poverty line	**733.10**	**590.23**	**533.27**	**691.31**
Engels coefficient	.361878	.424372	.387589	.374152

4. POVERTY RESULTS

The headcount rate for the extreme poor was estimated at 1.7% of the population and the overall poverty headcount rate at 26.2%. Poverty is close to one quarter of the population in the coastal regions and is much higher in the Interior with almost one in every two households being poor (47.9%) (Table 5).

Table 5 Poverty Headcount, Gap and Gap Squared (FGT), Persons, Suriname, 2016-2017

	Great Paramaribo	Rest of Costal R.	Interior	Total
Overall Poverty (PERSONS)				
Headcount rate (P0)	23.7%	28.3%	47.9%	26.2%
Poverty gap index (P1)	0.064	0.080	0.212	0.076
Poverty gap squared (P2)	0.024	0.031	0.118	0.031
Extreme Poverty (PERSONS)				
Headcount rate (P0)	0.5%	1.8%	15.7%	1.7%
Poverty gap index (P1)	0.0011	0.0014	0.0356	0.0033
Poverty gap squared (P2)	0.0003	0.0001	0.0134	0.0010

At the household level, extreme poverty is also very low, representing only 1% of households. Almost one in every 5 households (18.3) is classified as poor, with Great Paramaribo having the lowest rate (16.1%), increasing for the Rest of the Coastal region (30.3%) and reaching more than one third of households in the Interior (33.6%) (Table 6).

Table 6 Poverty Headcount, Gap and Gap Squared (FGT), Households, Suriname, 2016-2017

	Great Paramaribo	Rest of Costal R.	Interior	Total
Overall Poverty (HOUSEHOLDS)				
Headcount rate (P0)	16.1%	20.3%	33.6%	18.3%
Poverty gap index (P1)	0.039	0.053	0.132	0.049
Poverty gap squared (P2)	0.014	0.020	0.067	0.019
Extreme Poverty (HOUSEHOLDS)				
Headcount rate (P0)	0.2%	1.1%	7.6%	1.0%
Poverty gap index (P1)	0.0004	0.0008	0.0156	0.0017
Poverty gap squared (P2)	0.0001	0.0001	0.0055	0.0005

As expected, the household size decreases as the consumption level increases. The poorest quintile average size is 6.1 persons and decreases to less than half (3.0 persons) for the richest quintile. Extreme/All Poor households average 7.5/5.9 persons and the non-poor only 4.1 (Table 7).

Table 7 Household Size by Quintile and Poverty, Suriname 2016

	# members
Q1	6.1
Q2	5.1
Q3	4.6
Q4	3.9
Q5	3.0
Extreme Poor	7.5
All poor	5.9
Non-Poor	4.1
Average	4.6

Inequality measured by the GINI coefficient was 0.381 for the entire country. Inequality in the interior region was 0.473 and values in the coastal regions were lower and almost the same: 0.366 and 0.360. (Table 8).

Table 8 Per capita consumption GINI by domain, Surinam 2016-2017

	Domain			Total
	Great Paramaribo	Rest of Costal R.	Interior	
Gini	0.366	0.360	0.473	0.381

5. ANNEXES

ANNEX 1 Rent Paid Regression Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.560[a]	.314	.291	.64825

a. Predictors: (Constant), q13_23e_1, q13_19_number, q13_12e_1, paramaribo, q13_08_3_plus, q13_12g_1, q13_12d_1

b. Dependent Variable: ln_rent_paid Natural logarithm of rent paid

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.225	7	5.746	13.675	.000[b]
	Residual	87.827	209	.420		
	Total	128.052	216			

a. Dependent Variable: ln_rent_paid Natural logarithm of rent paid

b. Predictors: (Constant), q13_23e_1, q13_19_number, q13_12e_1, paramaribo, q13_08_3_plus, q13_12g_1, q13_12d_1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.729	.178		43.307	.000
	paramaribo	.449	.112	.235	4.016	.000
	q13_19_number	.111	.043	.150	2.583	.010
	q13_08_3_plus	.345	.095	.221	3.608	.000
	q13_12d_1	.388	.105	.247	3.673	.000
	q13_12e_1	.326	.127	.161	2.563	.011
	q13_12g_1	.495	.215	.135	2.305	.022
	q13_23e_1	.268	.126	.124	2.130	.034

a. Dependent Variable: ln_rent_paid Natural logarithm of rent paid

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	7.9518	10.0567	8.9252	.43154	217
Residual	-2.09268	1.39577	.00000	.63766	217
Std. Predicted V.	-2.256	2.622	.000	1.000	217
Std. Residual	-3.228	2.153	.000	.984	217

a. Dependent Variable: ln_rent_paid Natural logarithm of rent paid

.

ANNEX 2 Consumer Price Index and Index in Suriname

Table A2.1 Consumer Price Index (CPI) and Inflation by Year and Month, in Suriname, August 2016 To November 2017

Year	Month	CPI	Inflation (% change from June 2017 CPI)	index (use as a multiplier) = 1- inflation
2016	8	110.1	-12.3%	1.12
2016	9	115.8	-7.7%	1.08
2016	10	117.5	-6.4%	1.06
2016	11	119.2	-5.0%	1.05
2016	12	119.4	-4.9%	1.05
2017	1	120.3	-4.1%	1.04
2017	2	121	-3.6%	1.04
2017	3	122.2	-2.6%	1.03
2017	4	123.4	-1.7%	1.02
2017	5	124	-1.2%	1.01
2017	6	125.5	0.0%	1.00
2017	7	127.2	1.4%	0.99
2017	8	127.9	1.9%	0.98
2017	9	129.3	3.0%	0.97
2017	10	130.2	3.7%	0.96
2017	11	130.2	3.7%	0.96

* ABS Consumenten Prijs Index Cifers en Inflatie Over november 2017, Suriname 22 december 2017. ABS= Algemeen Bureau voor de Statistiek (General Bureau os Statistics)

ANNEX 3 Average Calorie Requirement in Suriname 2016

The reported numbers are based on the counted population. The census bureau estimated an undercount of 49,115 = 17.8%.

Table A3.1 Average Caloric Requirement in Suriname, Without Accounting for Pregnant Or Lactating Women

	Population (from 2010 census) (1)			Population structure			Caloric requirements from WHO (2)		Average requirements (Kcal/day): caloric requirement X Population structure		
Age groups	Total	Male	Female	Total	Male	Female	Male	Female	Total	Male	Female
Total	**538,243**	**268,343**	**269,900**	**100.0%**	**49.9%**	**50.1%**			**2,084**	**1,136**	**948**
<1	11,220	5,764	5,456	**2.1%**	**1.1%**	**1.0%**	621	573	12	7	6
1-3	29,059	14,928	14,130	**5.4%**	**2.8%**	**2.6%**	1,249	1,154	65	35	30
4-6	30,095	15,472	14,624	**5.6%**	**2.9%**	**2.7%**	1,401	1,242	74	40	34
7-9	27,909	14,353	13,556	**5.2%**	**2.7%**	**2.5%**	1,747	1,627	88	47	41
10-13	39,367	20,404	18,963	**7.3%**	**3.8%**	**3.5%**	2,396	2,193	168	91	77
14-17	36,601	18,627	17,974	**6.8%**	**3.5%**	**3.3%**	3,122	2,283	184	108	76
18-30	114,368	56,811	57,557	**21.2%**	**10.6%**	**10.7%**	2,527	2,053	486	267	220
31-60	199,084	99,141	99,943	**37.0%**	**18.4%**	**18.6%**	2,472	2,005	828	455	372
61 y +	50,540	22,843	27,697	**9.4%**	**4.2%**	**5.1%**	2,044	1,788	179	87	92

(1) The census estimates (for example 0-4 years old) were allocated to each year according to the SSLC2016/17 percentages (for example, of total # of children 0-4 in the survey, what % had 0 years, 1 year, 2 years, 3 years and 4 years). Finally, the single year estimates were added using the age groups in tale A3.1.

(2) World Health Organization's caloric requirements for a moderate physical activity person

Table A3.2 Additional Requirement by Pregnant and Lactating Women

	Population	Kilocalories (Kcal) (1)	Kcal for population	Average Kcal
TOTAL			**7,797,885.2**	**14**
Pregnant women (2)	7,480	285	2,131,796.0	3.96
Lactating women (3)	11,220	505	5,666,089.2	10.53

(1) World Health Organization's caloric requirements for a moderate physical activity person

(2) Equal to # of lactating women * (8/12); (3) Equal to # of children < 1 year

Final average requirement for Suriname: **2,084**(population) + **14** (pregnant and lactating) = **2,098**/day/person

ANNEX 4 Food and Drinks Caloric Content and Edible Portion and Kg. Per Liter

Food item from Module 14.A	Kilocalories in 100 grams	Edible portion	Grams in 1 milliliter
0101 Bread - white, sliced	267	100%	1
0102 Whole wheat bread sliced	246	100%	1
0103 Baguette	317	100%	1
0104 Bread - bran, sliced	246	100%	1
0105 Bread - whole wheat	286	100%	1
0106 Buns	330	100%	1
0107 Rice - packaged	360	100%	1
0108 Biscuits - sweetened	478	100%	1
0109 Biscuits - salted	434	100%	1
0110 Spaghetti	371	100%	1
0111 Chow Mein	371	100%	1
0112 Noodles	371	100%	1
0113 Cornflakes	389	100%	1
0114 Quaker oats	375	100%	1
0115 Cream of wheat	62	100%	1
0116 Meal (corn flour)	363	100%	1
0117 Flour of wheat	367	100%	1
0201 Chicken - whole	215	64%	1
0202 Chicken - backs, necks, etc.	168	100%	1
0203 Chicken wings	211	79%	1
0204 Chicken nuggets	276	100%	1
0205 Pork	216	79%	1
0206 Beef (unsalted)	244	64%	1
0207 Salted beef	317	100%	1
0208 Corn beef	250	100%	1
0209 Sausages - not canned	186	98%	1
0210 Sausages - canned	230	100%	1
0211 Hamburgers	305	100%	1
0212 Bacon	576	100%	1
0213 Ham - sliced	162	100%	1
0214 Luncheon meat - canned	334	100%	1
0215 Mutton Lamb	267	77%	1
0301 Bill Fish	195	51%	1
0302 Kandratiki	103	50%	1
0303 Shrimps	91	40%	1
0304 Trapoen	103	50%	1
0305 Wit witi	103	50%	1
0306 Botervis	103	50%	1
0307 Anjoemara	103	50%	1
0308 Toekoenari	97	51%	1
0309 Hoplosternum littorale	103	50%	1
0310 Bang bang	103	50%	1
0311 Salted fish	290	90%	1
0312 Sardines	208	100%	1
0401 Milk - fresh, pasteurized	65	100%	1.04
0402 Eggs	148	88%	1
0403 Cheese	281	100%	1
0404 Yoghurt	99	100%	1.04
0405 Custard	340	100%	1.14

Food item from Module 14.A	Kilocalories in 100 grams	Edible portion	Grams in 1 milliliter
0406 Powder milk	496	100%	1
0407 Milk - evaporated	134	100%	1
0408 Ice cream	201	100%	1
0409 Milk - sweetened, condensed	321	100%	1
0411 Baby food milk	78	100%	1.04
0412 Milk - flavored	72	100%	1.04
0501 Sunflower oil	884	100%	0.92
0502 Other vegetable oil	884	100%	0.92
0503 Table Butter	465	100%	1
0504 Margarine	719	100%	1
0505 Peanut butter	588	100%	1
0506 Other oils and fats - animal	879	100%	0.92
0601 Mango	59	53%	1
0602 Banana	97	61%	1
0603 Watermelons	22	49%	1
0604 Papaya	32	75%	1
0605 Pineapples	52	59%	1
0606 Oranges, Fresh Dried	42	64%	1
0607 English Apples	59	92%	1
0608 Lime	32	60%	1
0609 Lemons	29	51%	1
0610 Passion fruits	97	52%	1
0611 Soursops	97	30%	1
0612 Grapes, Fresh	63	58%	1
0613 Kiwis	61	86%	1
0614 Pommerak	32	76%	1
0615 Plums	47	75%	1
0701 Tajerblad	23	75%	1
0704 Boulanger	24	81%	1
0705 Sopropo	30	53%	1
0707 Solanum macrocarpon	27	90%	1
0708 Klaroen	23	100%	1
0709 Okra	38	86%	1
0710 Amsoi	14	60%	1
0711 String beans	36	88%	1
0712 Onion	45	91%	1
0713 Garlic	134	94%	1
0714 Tomato	21	98%	1
0715 Cucumbers	15	77%	1
0716 Lettuce	15	79%	1
0717 Canned corn	61	100%	1
0718 Corn - fresh	129	28%	1
0719 Sweet peppers	38	100%	1
0720 Pumpkins	30	53%	1
0721 Potatoes not sweet	79	100%	1
0722 Napi	100	90%	1
0723 Chinese tayer	112	86%	1
0725 Sweet potato	116	78%	1
0802 Brown beans	344	100%	1
0803 Yellow and green peas	343	100%	1
0804 Chick peas	364	100%	1

Food item from Module 14.A	Kilocalories in 100 grams	Edible portion	Grams in 1 milliliter
0805 Salt	0	100%	1
0806 Brown sugar	376	100%	1
0807 White sugar	384	100%	1
0808 Black Pepper	255	100%	1
0809 Curry Powder	325	100%	1
0810 Pepper sauce	0	100%	1
0813 Mayonnaise	390	100%	1
0814 Tomato Ketchup and Tomato Sauce	97	100%	1
0815 Natural honey	304	100%	1.44
0816 Jams / Marmalades	246	100%	1
0817 Trassie	100	100%	1
0818 Picalilly	51	100%	1
0819 Pizza	244	100%	1
0901 Bottled water	0	100%	1
0902 Soft drinks	37	100%	1
0903 Fruit juices	231	100%	1.05
0904 Flavored or colored sugar syrups	382	100%	1.05
0905 Tea	1	100%	1
0906 Coffee - instant	224	100%	1
0907 Coffee - roasted, ground	226	100%	1
0908 Cocoa	229	100%	1
0909 Flavored water	3	100%	1
0910 Soda water	0	100%	1
0911 Dawet	93	100%	1
1001 Beer	43	100%	0.9
1002 Whiskey	250	100%	1.1
1003 Rum	231	100%	1.1
1004 Sparkling wine	84	100%	1.2
1005 Wine	85	100%	1.2
1006 Gin	200	100%	1.1
1007 Stout	63	100%	1.1
* 100000 - 10 advocaat	160	74%	1
* 330000 - 33 awara	92	85%	1
* 430000 - 43 banaan	97	61%	1
* 1280000 - 128 cassava	160	90%	1
* 1550000 - 155 chocopasta	514	100%	1
* 1860000 - 186 creamer	208	100%	1
* 2110000 - 211 djogoe	186	50%	1
* 2150000 - 215 Doks	326	64%	1
* 2740000 - 274 guave	81	82%	1
* 3020000 - 302 kailan	18	100%	1
* 3070000 - 307 kaisoi	27	83%	1
* 3340000 - 334 kers	63	90%	1
* 3510000 - 351 knippa	59	51%	1
* 3590000 - 359 koebi	103	50%	1
* 3700000 - 370 koepila	103	50%	1
* 3930000 - 393 kool	24	80%	1
* 4110000 - 411 krobia	103	50%	1
* 4210000 - 421 kwak	320	100%	1
* 4480000 - 448 macaroni	371	100%	1
* 4590000 - 459 manderijn	53	72%	1

Food item from Module 14.A	Kilocalories in 100 grams	Edible portion	Grams in 1 milliliter
* 5290000 - 529 pataka	103	50%	1
* 5470000 - 547 piering	103	50%	1
* 5720000 - 572 pomme de citre	49	100%	1
* 5810000 - 581 pompelmoes	38	56%	1
* 6010000 - 601 ramboetang	66	51%	1
* 6210000 - 621 salami	399	100%	1
* 6310000 - 631 sapotille	121	63%	1
* 6650000 - 665 spinanzie	23	75%	1
* 7200000 - 720 trie	186	50%	1
* 7360000 - 736 walapa	103	50%	1
* 7430000 - 743 warme vis	117	100%	1

* Items originally codes as "Others".

Kilocalories per gram and edible portion mostly from: “Tabla de composición de alimentos de Centroamérica, Instituto de Nutrición de Centro América y Panamá (INCAP) and Organización Panamericana de la Salud (OPS), Second edition, Third printing, February 2012

Others from actual labels; www.eatthismuch.com; www.recipeofhealth.com; https://www.fatsecret.com. The precise source for each item and translation of some local foods, is documented in Excel file: 04 foods caloric content and edible portion2.xlsx, Sheet: first, columns J and K.

ANNEX 5 Extreme Poverty Line Composition and Costs

	Great Paramaribo			Rest of coastal region			Interior		
	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day
0101 Bread - white, sliced	0.476	7.00	41.7	0.653	9.90	57.3	0.654	10.69	57.4
0102 Whole wheat bread sliced	0.294	4.39	23.8	0.205	3.33	16.6	0.015	0.23	1.2
0103 Baguette	2.433	32.15	253.6	2.601	36.84	271.0	1.729	23.07	180.2
0104 Bread - bran, sliced	0.106	1.57	8.6	0.039	0.71	3.1	0.000	0.00	0.0
0105 Bread - whole wheat	0.197	2.76	18.5	0.112	1.97	10.5	0.000	0.00	0.0
0106 Buns	0.047	0.91	5.1	0.034	0.87	3.6	0.042	0.75	4.6
0107 Rice - packaged	6.803	25.21	805.2	7.002	24.56	828.7	7.206	27.92	852.9
0108 Biscuits - sweetened	0.009	0.33	1.4	0.030	1.09	4.7	0.013	0.32	2.1
0109 Biscuits - salted	0.026	0.87	3.7	0.034	1.17	4.9	0.027	1.53	3.9
0110 Spaghetti	0.016	0.19	2.0	0.004	0.05	0.5	0.000	0.00	0.0
0111 Chow Mein	0.004	0.08	0.5	0.011	0.16	1.3	0.000	0.00	0.0
0112 Noodles	0.093	1.13	11.4	0.076	1.03	9.3	0.025	0.46	3.1
0113 Cornflakes	0.009	0.49	1.2	0.005	0.19	0.6	0.002	0.12	0.3
0114 Quaker oats	0.047	0.54	5.7	0.029	0.55	3.6	0.021	0.33	2.6
0115 Cream of wheat	0.000	0.01	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0116 Meal (corn flour)	0.031	0.22	3.7	0.016	0.15	1.9	0.000	0.00	0.0
0117 Flour of wheat	0.008	0.05	0.9	0.000	0.00	0.0	0.000	0.00	0.0
0201 Chicken - whole	0.848	13.26	38.4	0.406	6.13	18.4	0.679	10.10	30.7
0202 Chicken - backs, necks, etc.	1.521	18.40	84.0	1.524	17.76	84.2	1.656	18.73	91.4
0203 Chicken wings	0.053	1.16	2.9	0.023	0.94	1.3	0.015	0.24	0.8
0204 Chicken nuggets	0.013	0.44	1.2	0.007	0.22	0.7	0.000	0.00	0.0
0205 Pork	0.029	0.84	1.6	0.014	0.34	0.8	0.011	0.47	0.6
0206 Beef (unsalted)	0.012	0.49	0.6	0.028	1.19	1.4	0.019	0.45	1.0
0207 Salted beef	0.012	0.59	1.3	0.002	0.04	0.2	0.002	0.06	0.2
0208 Corn beef	0.004	0.11	0.4	0.006	0.12	0.5	0.000	0.00	0.0
0209 Sausages - not canned	0.170	3.92	10.2	0.193	3.85	11.6	0.105	3.33	6.3
0210 Sausages - canned	0.020	0.42	1.5	0.012	0.26	0.9	0.020	0.52	1.5
0211 Hamburgers	0.001	0.05	0.1	0.000	0.00	0.0	0.000	0.00	0.0
0213 Ham - sliced	0.000	0.01	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0214 Luncheon meat - canned	0.000	0.02	0.0	0.001	0.04	0.1	0.000	0.00	0.0
0301 Bill Fish (herring)	0.020	0.48	0.7	0.043	0.75	1.4	0.000	0.00	0.0
0302 Kandratiki (green fish (catfish used))	0.104	2.06	1.8	0.066	1.49	1.1	0.046	0.65	0.8
0303 Shrimps	0.007	0.31	0.1	0.037	0.82	0.4	0.008	0.22	0.1
0304 Trapoen (Megalops atlanticus, Atlantic Tarpon (Catfish used))	0.009	0.09	0.1	0.026	0.94	0.4	0.000	0.00	0.0
0305 Wit witi (Jamaica weakfish, Cynoscion jamaicensis (Catfish used))	0.151	2.90	2.6	0.132	2.64	2.2	0.000	0.00	0.0
0306 Botervis (Anjumara and Wolf fish (Catfish used))	0.166	2.54	2.8	0.135	1.34	2.3	0.057	0.60	1.0
0307 Anjoemara (Anjumara and Wolf fish (Catfish used))	0.000	0.00	0.0	0.000	0.00	0.0	0.117	3.54	2.0
0309 Hoplosternum littorale (Catfish)	0.075	0.44	1.3	0.208	1.63	3.5	0.008	0.05	0.1
0310 Bang bang (cod, grouper, haddock (Catfish used))	0.022	0.41	0.4	0.024	0.43	0.4	0.033	0.52	0.6
0311 Salted fish (Codfish used)	0.036	1.20	3.1	0.019	0.55	1.6	0.067	1.63	5.7
0312 Sardines	0.085	2.74	5.8	0.103	2.75	7.1	0.002	0.06	0.1
0401 Milk - fresh, pasteurized	2.111	14.60	46.7	1.702	12.45	37.6	0.420	3.62	9.3
0402 Eggs	0.451	7.38	19.3	0.415	6.98	17.8	0.148	3.32	6.3

	Great Paramaribo			Rest of coastal region			Interior		
	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day
0403 Cheese	0.034	2.55	3.1	0.030	1.46	2.8	0.056	1.99	5.1
0404 Yoghurt	0.274	3.68	9.2	0.190	1.65	6.4	0.032	0.55	1.1
0405 Custard	0.149	1.93	19.0	0.016	0.20	2.1	0.005	0.09	0.7
0406 Powder milk	0.015	0.60	2.4	0.038	1.12	6.2	0.089	3.83	14.6
0407 Milk - evaporated	0.000	0.00	0.0	0.001	0.02	0.1	0.000	0.00	0.0
0408 Ice cream	0.010	0.21	0.7	0.007	0.12	0.5	0.005	0.09	0.4
0409 Milk - sweetened, condensed	0.001	0.05	0.1	0.002	0.04	0.2	0.000	0.00	0.0
0411 Baby food milk	0.072	5.12	1.9	0.040	3.00	1.1	0.019	1.56	0.5
0412 Milk - flavored	0.033	0.33	0.8	0.000	0.00	0.0	0.000	0.00	0.0
0501 Sunflower oil	0.534	5.99	142.7	0.550	6.50	147.1	0.977	13.45	261.2
0502 Other vegetable oil	0.584	6.19	156.3	0.661	7.48	176.8	0.865	4.90	231.4
0503 Table Butter	0.005	0.21	0.7	0.007	0.39	1.1	0.027	0.97	4.1
0504 Margarine	0.094	2.86	22.1	0.069	2.34	16.3	0.065	2.65	15.4
0505 Peanut butter	0.091	3.92	17.5	0.111	4.36	21.5	0.091	4.26	17.6
0506 Other oils and fats - animal	0.004	0.19	1.0	0.000	0.00	0.0	0.000	0.00	0.0
0601 Mango	0.019	0.24	0.2	0.111	0.98	1.1	0.000	0.00	0.0
0602 Banana	0.164	1.31	3.2	0.072	0.53	1.4	0.010	0.08	0.2
0603 Watermelons	0.027	0.28	0.1	0.090	0.73	0.3	0.000	0.00	0.0
0604 Papaya	0.009	0.06	0.1	0.008	0.07	0.1	0.000	0.00	0.0
0605 Pineapples	0.013	0.15	0.1	0.002	0.03	0.0	0.000	0.00	0.0
0606 Oranges, Fresh Dried	0.044	0.31	0.4	0.030	0.57	0.3	0.000	0.00	0.0
0607 English Apples	0.009	0.16	0.2	0.008	0.17	0.1	0.000	0.00	0.0
0608 Lime	0.001	0.02	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0609 Lemons	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0610 Passion fruits	0.007	0.14	0.1	0.001	0.01	0.0	0.000	0.00	0.0
0612 Grapes, Fresh	0.001	0.03	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0613 Kiwis	0.001	0.07	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0615 Plums	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0701 Tajerblad (Tahitian Spinach (Spinach used))	0.155	2.44	0.9	0.109	1.33	0.6	0.020	0.53	0.1
0704 Boulanger (Eggplant)	0.213	2.50	1.4	0.226	2.05	1.4	0.130	0.85	0.8
0705 Sopropo (Bitter melon (squash used))	0.477	4.05	2.5	0.292	2.79	1.5	0.130	0.78	0.7
0707 Solanum macrocarpon (African eggplant)	0.238	2.70	1.9	0.085	1.28	0.7	0.221	2.94	1.8
0708 Klaroen (Common amaranth leaves)	0.035	0.79	0.3	0.004	0.13	0.0	0.001	0.02	0.0
0709 Okra	0.192	1.70	2.1	0.123	1.41	1.3	0.063	0.44	0.7
0710 Amsoi (mustard cabbage (Chinese cabbage used))	0.061	1.29	0.2	0.042	0.79	0.1	0.004	0.14	0.0
0711 String beans	0.042	0.61	0.4	0.008	0.22	0.1	0.000	0.00	0.0
0712 Onion	0.486	2.44	6.5	0.453	2.43	6.1	0.409	2.73	5.5
0713 Garlic	0.170	4.11	7.0	0.249	5.98	10.3	0.179	3.46	7.4
0714 Tomato	0.157	3.03	1.1	0.133	2.27	0.9	0.059	1.51	0.4
0715 Cucumbers	0.212	1.29	0.8	0.133	0.75	0.5	0.016	0.17	0.1
0716 Lettuce	0.001	0.01	0.0	0.000	0.01	0.0	0.000	0.00	0.0
0717 Canned corn	0.003	0.07	0.1	0.002	0.04	0.0	0.000	0.00	0.0
0718 Corn - fresh	0.004	0.11	0.0	0.014	0.13	0.2	0.000	0.00	0.0
0719 Sweet peppers	0.010	0.10	0.1	0.002	0.02	0.0	0.010	0.24	0.1
0720 Pumpkins	0.141	1.20	0.7	0.110	1.32	0.6	0.029	0.16	0.2
0721 Potatoes not sweet	0.792	3.82	20.6	0.823	4.25	21.4	0.216	1.42	5.6
0722 Napi (Yan, Ñame)	0.001	0.01	0.0	0.012	0.05	0.4	0.000	0.00	0.0
0723 Chinese Thayer (Colocasia esculenta (taro plant), ñampi)	0.039	0.46	1.2	0.002	0.02	0.1	0.046	0.34	1.4

	Great Paramaribo			Rest of coastal region			Interior		
	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day	Kg. or lt.	Cost (SRD)	Cal. /day
0725 Sweet potato	0.023	0.29	0.7	0.010	0.10	0.3	0.000	0.00	0.0
0802 Brown beans	0.174	2.20	19.7	0.163	2.26	18.4	0.060	0.74	6.8
0803 Yellow and green peas	0.125	1.00	14.1	0.134	1.21	15.1	0.051	0.31	5.8
0804 Chick peas	0.001	0.01	0.1	0.001	0.02	0.2	0.000	0.00	0.0
0805 Salt	0.163	0.69	0.0	0.185	0.76	0.0	0.243	1.37	0.0
0806 Brown sugar	0.610	4.20	75.4	0.619	4.47	76.5	0.950	7.37	117.5
0807 White sugar	0.407	2.87	51.3	0.437	3.16	55.2	0.599	4.66	75.6
0808 Black Pepper	0.009	0.53	0.8	0.011	0.72	0.9	0.008	0.58	0.7
0809 Curry Powder	0.029	1.29	3.1	0.045	2.05	4.8	0.002	0.18	0.2
0810 Pepper sauce	0.004	0.11	0.0	0.005	0.19	0.0	0.002	0.08	0.0
0813 Mayonnaise	0.020	0.47	2.5	0.028	0.59	3.6	0.008	0.22	1.1
0814 Tomato Ketchup and Tomato Sauce	0.075	1.23	2.4	0.068	1.14	2.2	0.030	0.73	1.0
0815 Natural honey	0.002	0.15	0.3	0.002	0.14	0.3	0.000	0.00	0.0
0816 Jams / Marmalades	0.012	0.28	1.0	0.014	0.40	1.1	0.000	0.00	0.0
0817 Trassie (shrimp sauce (Koom Chum) label)	0.002	0.12	0.1	0.004	0.13	0.1	0.000	0.00	0.0
0818 Picalilly (Label (Hayward's))	0.002	0.05	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0819 Pizza	0.000	0.02	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0901 Bottled water	0.253	1.11	0.0	1.199	1.99	0.0	0.633	1.78	0.0
0902 Soft drinks	1.631	10.97	19.8	1.770	12.12	21.5	0.833	8.98	10.1
0903 Fruit juices	0.282	2.64	22.5	0.100	0.98	8.0	0.155	1.81	12.4
0904 Flavored or colored sugar syrups	0.226	4.04	29.9	0.249	3.66	32.9	0.131	3.52	17.3
0905 Tea	0.023	2.13	0.0	0.030	2.79	0.0	0.030	3.37	0.0
0906 Coffee - instant	0.008	1.14	0.6	0.016	1.91	1.2	0.006	0.67	0.4
0907 Coffee - roasted, ground	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0
0908 Cocoa	0.027	0.87	2.0	0.019	0.60	1.4	0.021	0.83	1.6
0910 Soda water	0.011	0.07	0.0	0.012	0.10	0.0	0.026	0.26	0.0
0911 Dawet (Lemongrass)	0.000	0.00	0.0	0.001	0.01	0.0	0.000	0.00	0.0
1001 Beer	0.170	2.46	2.2	0.048	0.85	0.6	0.192	3.38	2.4
1002 Whiskey	0.003	0.17	0.2	0.004	0.14	0.4	0.000	0.00	0.0
1003 Rum	0.000	0.00	0.0	0.013	0.46	1.1	0.003	1.46	0.2
1005 Wine	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0
43 Banana	0.000	0.00	0.0	0.002	0.02	0.0	0.000	0.00	0.0
128 Cassava	0.018	0.15	0.8	0.017	0.15	0.8	0.000	0.00	0.0
155 Choco pasta (Chocolate spread)	0.009	0.36	1.6	0.017	0.58	2.9	0.000	0.00	0.0
186 Creamer	0.002	0.06	0.1	0.004	0.05	0.3	0.000	0.00	0.0
307 Kaisoi (Brassica juncea (chinese mustard))	0.004	0.05	0.0	0.015	0.44	0.1	0.000	0.00	0.0
359 Koebi (Black drum or Plagioscion surinamensis (catfish used))	0.002	0.08	0.0	0.005	0.11	0.1	0.070	0.71	1.2
370 Koepila (Arius Proops (catfish used))	0.004	0.10	0.1	0.000	0.00	0.0	0.000	0.00	0.0
393 Kool (Cabbage)	0.014	0.20	0.1	0.006	0.05	0.0	0.000	0.00	0.0
448 Macaroni	0.017	0.25	2.0	0.004	0.04	0.5	0.000	0.00	0.0
581 Pompelmoes (citrus maxima or pomelo)	0.000	0.00	0.0	0.000	0.00	0.0	0.000	0.00	0.0
665 Spinach	0.000	0.03	0.0	0.004	0.09	0.0	0.000	0.00	0.0
720 Trie (small fishes (like sardine))	0.001	0.02	0.0	0.000	0.00	0.0	0.000	0.00	0.0
743 Warme vis (Smoked fish (can be any type of fish))	0.017	0.78	0.6	0.057	0.75	2.2	0.000	0.00	0.0
TOTALS	**26.53**	**265.29**	**2,098**	**26.16**	**250.48**	**2,098**	**20.98**	**206.69**	**2,098**