

## Colophon

Human Development Atlas Suriname

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Map on the cover: Distribution of Clean Drinking Water by District 2010

### HUMAN DEVELOPMENT ATLAS S U R I N A M E



### Foreword

As the saying goes, a picture is worth a thousand numbers and therefore I commend and congratulate the General Bureau of Statistics of Suriname and the United Nations Development Programme for sterling collaborations which resulted in the first Human Development Atlas (with many pictures) of Suriname.

The Human Development Atlas comprises maps (hence pictures) of all ten districts of the Republic of Suriname, showcasing information regarding: Population, Human Development (with Health, Education and Income dimensions), Millennium Development Goals, and Crime and Violence.

Adequate Statistics are necessary for formulating policies, as well as for monitoring purposes and as such the Human Development Atlas certainly is a great asset to all involved in these activities, but also to all that want to find pertinent information about Suriname in one place.

The prevailing Development Plan 2012-2016 of the Bouterse-Ameraali Government has the following Major Policy Areas.

- Governance and Justice;
- Economics;
- Education, Science and Culture;
- Welfare;
- Security and international policy;
- Spatial Planning and the Environment

This First Human Development Atlas addresses one way or the other: Governance and Justice, Economics, Education, Welfare, Security and Spatial Planning.

The present Human Development Atlas also provides an accurate overview of the situations in Suriname as at 2004-2005 and as at 2009-2010, as well as an overview of the developments that took place between these two points.

Indeed this is an impressive and interesting starting point, but it leaves the user wanting much more. We were given the assurances by the Statistical Officials that the next Human Development Atlas, benefitting from the results of the 2012 Census, will indeed provide more.

Since the Major Policy Areas of the Development Plan 2012-2016 are subdivided into fifteen Focal / Priority themes comprising,

- Infrastructure
- Energy
- Drinking water
- Housing
- Mining
- The Agricultural Sector
- Tourism
- Estate and Land Right issues
- Nation Orientation
- National Council for Science and Technology
- National Institute for History and Culture
- Child and Youth Policy
- Information and Communication Technology
- Gender

we express the sincere hope that maybe the second, but certainly the third issue of a Suriname Human Development Atlas can address, most if not all the priority themes directly while retaining the information regarding the Major Policy Areas.

Finally, we congratulate Suriname with this Human Development Atlas and wish for an extensive and productive use of this product and remain.

Adelien H. Wijnerman Minister of Finance

# Preface by UNDP

#### Human Development Atlas Suriname

The United Nations Development Programme (UNDP), together with other UN system agencies in Suriname, is committed to assisting the Government of Suriname in strengthening its statistical and information management systems, especially through the strengthening of data collection and information management systems and capacities.

The collection, analysis, and dissemination of up-to-date and reliable data are essential for building knowledge and providing robust data and analyses on progress and continuing deficits in Suriname's development process; and to enhance inter-sectoral cooperation, coordination, and action.

Appropriate data and information systems allow for evidence-based policy decisions, identifying legislative and policy gaps, promoting best practises, and ensuring the monitoring and evaluation of development projects and programmes. An improved research capacity contributes to the inclusion of groups or individuals who are left out of the development process.

In partnership with the General Bureau of Statistics, various initiatives have been implemented or supported by UNDP and our UN sister agencies in raising awareness of the importance and use of data and statistics. In this regard we would like to mention the National Conference on Poverty Measurement, the Baseline Assessment Report on Social Statistics in Suriname, the Seminar Series on Social Statistics for Decision-makers, and the training seminar on DevInfo, all implemented between 2010 and 2013.

This Human Development Atlas is the first report on human development indicators aggregated at national and district level published for Suriname. It is the result of an agreement reached between UNDP and the General Bureau of Statistics in early 2012 to prepare an Atlas mapping progress on various human development indicators as a contribution to reporting progress in Suriname on achieving the MDGs.

This first edition of the Atlas is meant to establish the baseline and to initiate a continuous process of publishing regular updates to keep the information current and relevant. The next edition will aim to capture the results of the recently-completed 8th Population and Housing Census and the National Household Budget Survey that will be undertaken later this year.

It is UNDP's hope that this Atlas will generate interest from policy-makers and the general public on issues related to human development and hopefully lead to more concerted efforts to address continuing social and development deficits in Suriname.

Richard Blewitt Resident Representative

Thomas Gittens, Country Director August, 2013

### Preface by THE GENERAL BUREAU OF STATISTICS

As early as 2011, Dr. Marcia de Castro, former UN Resident Coordinator and UNDP Resident Representative for Suriname inquired whether the GBS would be interested in producing a Human Development Atlas for Suriname.

The GBS showed interest, but was preoccupied with inter alia Population and Housing Census preparations, so the initiative was put on the back burner. In 2012 Dr. de Castro allowed us a sneak preview of the Draft of the Human Development Atlas of Trinidad and Tobago and indeed our appetite arose. The GBS commenced an exchange with consultant Akbar Abdurakhmanov and joint computations were made as early as September/October 2012. Again, since we were in the middle of field work activities of the 8th General Population and Housing Census, most notably the Post Enumeration Survey in 2012, a Suriname HD Atlas was relegated to the lesser priorities.

Receiving a complimentary copy of the Trinidad & Tobago Human Development Atlas 2012 early in 2013 and the UNDP unremittingly approaching the GBS to pursue this endeavour resulted in a renewed interest and a more vigorous attempt to produce a Suriname Human Development Atlas.

In producing the Human Development Atlas Suriname did not enter virgin territory, as a good example has been set by the Central Statistical Office of Trinidad and Tobago. Nevertheless, being the second in the CARICOM Region to produce a Human Development Atlas fills us with great pride and joy. We have also decided that producing a Human Development Atlas, as time consuming as it may be will not be a one off activity, but will be repeated at regular intervals. The next issue of a Suriname HD Atlas will certainly benefit from the final results of the 8th Population and Housing Census and of the forthcoming Household Budget Survey 2013/2014.

The arduous task of producing Human Development and MDG estimates for all Districts, made it clear to all involved that instruments for all possible sources: Censuses, Surveys and Administrative Data, must be designed in such a way, as to produce reliable data, disaggregated by Sex and District. So far only Population Censuses and Multiple Indicator Cluster Surveys (MICS) have allowed for these types of disaggregation. Regular availability of this kind of data is necessary for proper monitoring of Suriname's Development Plan 2012-2016, and it is imperative that all data producers within Government produce timely and accurate data, disaggregated by Sex and District.

Most of the data included herein comes from the 2004 Population and Housing Census, the MICS 3 and MICS 4 surveys, but also from administrative sources. In certain situations there was only national level data available and the GBS produced District level estimates, based on the national level estimate and certain assumptions and more or less established models. The information in the present Human Development Atlas is considered the best available data and estimates as at 30 July 2013, given the current state of knowledge, science and technology in Suriname.

While the results are presented in a user-friendly format, not all the concepts included are easily comprehensible, but these have as much as possible been relegated to Annexes. The GBS wishes to encourage: Policymakers, the business community, academia, students and the layperson alike to make good use of this publication and to provide feedback, which may be used to improve future issues.

The GBS wishes to thank the UNDP for an exemplary conduct in pursuing us for this rewarding endeavour and in collaborating with us for the production of the HD Atlas. In particular thanks are due to Dr. Marcia de Castro, Dr. Thomas Gittens (Country Director) and Mr. Ruben Martoredjo (Senior Associate). Thanks are also due to the UNDP for making available the excellent consultant Mr. Akbar Abdurakhmanov (AA) who had an extensive training session with GBS staff in March 2013, produced a manual upon request and was always available for videoconferencing. AA has always been quite open for the views of others and to adopt alternative but sound methods. The exchange with AA can certainly be considered capacity building at the GBS.

The GBS also wishes to thank the following members of its own staff for contributing to the production of the first Suriname HD Atlas inter alia by participating in the training session of AA: John Sontosoemarto, Eartha Groenfelt, Jo-Ann Keenswijk-Fung A Loi, Edith Ritfeld, Anjali De Abreu-Kisoensingh, Denise Sjahkit, Naomi Caupain, Safora Nijon and Fallon Lambert. Of these, Anjali Kisoensingh and Edith Ritfeld deserve a special mention, the first for liaising with AA during the hectic 2012 period and for also contributing towards lay-outing and proofreading and the second for insightful contributions in the areas of: population, life table production, adolescent fertility, and maternal mortality.

Special thanks are also due to selected staff of the Ministries of Education and Health for their collaborative and cooperative attitude and for actual contributions made to Suriname's Statistical System in general, but in particular to the input data used for computations.

General Bureau of Statistics

Iwan A. Sno Director

### Acknowledgements

The preparation of the Human Development Atlas of Suriname has been a collaborative effort. This publication, a joint effort between the General Bureau of Statistics (ABS) and the United Nations Development Programme (UNDP) Country Office in Suriname could not have been developed without the leadership of Drs. Iwan Sno Msc., Director of General Bureau of Statistics and Dr. Thomas Gittens, Country Director of UNDP and their respective teams.

We wish to extend our appreciation to Dr. Marcia de Castro, former UN Resident Coordinator and UNDP Resident Representative for Trinidad and Tobago, Suriname and the Dutch Antilles who inspired and created the interest from UNDP and ABS, to partner to produce the Atlas capturing the current situation of human development in Suriname.

Special thanks go to Mr. Akbar Abdurakhmanov, Statistician with the Uzbekistan Academy of Sciences who provided the technical expertise on statistics, data analysis and mapping and worked with the UNDP and ABS team to select, prepare and organize the data sets to calculate the different human development indicators for Suriname. With input from ABS and other actors, Mr. Abdurakhmanov also prepared most of the maps and the statistical tables on key aspects of human development and on the crime and citizen security survey data included in the publication.

The statistics used to produce the maps come from Multiple Indicator Cluster Survey (MICS) of 2006 and 2010 for which we wish to thank our UNICEF colleagues and the Ministry of Social Affairs and Public Housing, Census 2004 and other sources provided by the ABS. The citizen security data come from national data on crime and violence produced by the Suriname Police Corps; and the Victimization Survey conducted by UNDP for the production of the Regional Human Development Report on Citizen Security.

Special thanks go out to the General Bureau of Statistics, the Ministry of Social Affairs and Public Housing, the United Nations Children Fund (UNICEF) Office in Suriname, and the PAHO/WHO Office in Suriname for their contributions, participation and/or making available the data used in producing the many different maps and charts included herein.

We would like to thank the very dedicated team at the General Bureau of Statistics led by Drs. Iwan Sno MSc., Director , and comprising of Mr. Johnny Sontosoemarto, Mrs. Anjali De Abreu - Kisoensingh, BSc., Drs. Eartha Groenfelt, Drs. Jo-Ann Keenswijk-Fung Loi, Mrs. Edith Ritfeld, Ms. Denise Sjahkit, Ms. Naomi Caupain, Ms. SaforaNijon, Ms. Fallon Lambert and Mrs. Gladys Huisden for their excellent work.

A number of UNDP staff contributed in the development of the Atlas and provided different levels of support and technical input to help complete the publication.

Mr. Ruben Martoredjo of UNDP Suriname worked closely with the lead Statistician and with the ABS, and provided overall leadership and coordination of to the project.

We would also like to acknowledge the leadership and guidance of Dr. Thomas Gittens, Country Director.

The dedication and commitment of each member of these diverse groups helped to move the project forward efficiently and effectively.

The UNDP and ABS teams would like to thank everyone who took part, directly and indirectly, in the production of the Atlas and accept full responsibility for any errors and omissions.

## Overview

The Suriname Human Development Atlas is produced jointly by the General Bureau of Statistics of Suriname and the United Nations Development Program in Suriname in collaboration with the other UN agencies in Suriname.

The Suriname Human Development Atlas presents the collection of maps and tables on the Human Development Indices and Indicators, Millennium Development Goals and Crime and Violence indicators. The Suriname Human Development Atlas presents the spatially disaggregated statistical information in a user friendly way, in the form of district level maps and tables.

Building on the Human Development Approach (see box 1.0), this first Human Development Atlas for Suriname is intended to map the patterns and trends of development for Suriname and its districts and identify where the growing disparities in development level and inequalities exist. The present Atlas includes the calculation of Human Development Indices including Human Development Index, Inequality adjusted Human Development Index, Gender Inequality Index and Multidimensional Poverty Index for Suriname and its districts.

The Suriname Human Development Atlas uses data for time periods 2004-2006 and 2009-2010 and compares the development trends during these time periods. The Suriname Human Development Atlas uses district level data produced by the General Bureau of Statistics of Suriname and generated from available surveys such us Multiple Indicator Surveys for Suriname.

#### Box 1.0

Human development is the expansion of people's freedoms to live long, healthy and creative lives; to advance other goals they have reason to value; and to engage actively in shaping development equitably and sustainably on a shared planet. People are both the beneficiaries and the drivers of human development, as individuals and in groups.

The concept of human development puts people at the centre of development, regards economic growth as a means and not an end, and addresses intragenerational and intergenerational equity, enabling present and future generations to make the best use of their capabilities and to realize their potential.

#### The Atlas is organized into three broad categories:

#### Human Development Maps

This section is devoted to the key aspects of Human Development and contains the district level maps providing overview of Human Development level of districts and trends over the periods 2004-2006 and 2009-2010.

Human Development Maps were produced on new internationally developed Human Development Indices such as Human Development Index, Inequality adjusted Human Development Index, Gender Inequality Index, Multidimensional Poverty Index and their dimension indicators. Population Maps and Maps on Uni-dimensional Poverty are included to this section as well.

Maps in this section were produced by using data managed by the General Bureau of Statistics of Suriname and available surveys such as Multiple Indicator Cluster Survey for Suriname.

#### Millennium Development Goals – MDG maps

The section on Millennium Development Goals maps presents the district level maps on MDG indicators. The maps of this section show the regional disparities in MDG indicators and illustrate the attainment of all Millennium Development Goals by districts including poverty, gender, education, health, nutrition, HIV and sanitation.

Maps for the section of Millennium Development Goals were produced by using data managed by the General Bureau of Statistics of Suriname and available surveys such as Multiple Indicator Cluster Survey for Suriname.

#### **Crime and Violence Maps**

The section on Crime and Violence Maps presents the district level maps on crime and violence indicators and indicators calculated from Citizen Security Survey conducted in 2010 in Suriname.

Crime and Violence Maps were produced using the crime statistics data provided by the General Bureau of Statistics of Suriname and Citizen Security Survey commissioned by UNDP as part of the UNDP Caribbean Human Development Report 2012.

#### How to use the maps and tables

The information presented in the Atlas makes it possible to examine broad development trends in the country and it districts. The maps, tables and illustrations included in the Atlas will help to develop the possible strategies to ensure further progress towards human development.

The production of the Atlas creates the opportunity to publish the statistical information in a user-friendly way using graphic illustrations in the form of maps. The publication of rich data on the different aspects of Human Development, Millennium Development Goals and Crime and Violence will serve for encouraging the greater use of the data.

Government officials, regional and local authorities, policy makers can use the information presented in the Atlas for development strategies, setting national priorities, planning, design and implementation of public programs, decision making and allocation funds.

The Human Development Atlas provides the researchers in academia and students the access to disaggregated socio-economic data and encourages the use the information in their own research and expanding their research.

The information contained in the Atlas can be of great value to the media, civil society organizations and community based groups.



## Table of Contents

Foreword by Minister of Finance	
Preface by UNDP	
Preface by GBS	
Acknowledgements	
Overview	
Table of Contents	
List of Maps Included in the Atlas	15
List of Maps Included in the Atlas List of Abbreviations	

Part 1: Human Development	23
1.1 Population	
1.2 Human Development Index	
1.3 Inequality Adjusted Human Development Index	
1.4 Gender Inequality Index	61
1.5 Uni-dimensional Poverty	
1.6 Multidimensional Poverty Index	

Part 2: Millennium Development Goals	
2.1 Goal 1: Eradicate Extreme Poverty and Hunger	
2.2 Goal 2: Achieve universal primary education	
2.3 Goal 3: Promote Gender Equality and Empower Women	
2.4 Goal 4: Reduce child mortality	114
2.5 Goal 5: Improve Maternal Health	118
2.6 Goal 6: Combat HIV/AIDS, Malaria and other diseases	130
2.7 Goal 7: Ensure environmental sustainability	

Part 3: Crime and Violence	147
3.1 Crime and Violence	
3.2 Citizen Security Survey	
Annexes	
Annex 1: Data Tables used for Preparation of the Maps included in the Atlas	
1.1. Human Development Index and its Dimension Indicators	
1.2 Inequality Adjusted Human Development Index and its Dimension Indicators	
1.3 Gender Inequality Index and its Dimension Indicators	
1.4 Uni-dimensional Poverty	
1.5 Multidimensional Poverty Index and its Dimensions	
1.6 Millennium Development Goals (MDG) Indicators	
1.7 Crime and Violence Data	
1.8 UNDP Citizen Security Survey	
1.9 Population in Suriname	
Annow 2. Taska isol Nata on the Colordation of the Ulymon Development Index for Curing and	222
Annex 2: Technical Note on the Calculation of the Human Development Index for Suriname	
Annov 2. Technical Note on the Calculation of the Inequality Adjusted Human Development Index for Surjagme	224
Annex 3: Technical Note on the Calculation of the Inequality Adjusted Human Development Index for Suriname	
Annex 4: Technical Note on the Calculation of the Gender Inequality Index for Suriname	237
Annex 4. rechnical Note on the Calculation of the Gender mequality index for Sumane	
Annex 5: Technical Note on the Calculation of the Multidimensional Poverty Index for Suriname	239
Annex 5. rechnical Note on the Calculation of the Mutidamensional roverty index for Sunname	
Definitions	244
	<b>_</b> [1]
Bibliography	

# List of the Maps included in the Atlas

#### Population

- 1. Population (2009) by Districts
- 2. Population (2004) by Districts

#### Human Development Index

- 3. Human Development Index (2009/2010) by Districts
- 4. Human Development Index its Dimension Indices (2009/2010) by Districts
- 5. Human Development Index (2004/2006) by Districts
- 6. Human Development Index (2009/2010) and (2004/2006) by Districts
- 7. Life Expectancy at Birth (2009) by Districts
- 8. Life Expectancy at Birth (2004) by Districts
- 9. Life Expectancy at Birth (2009) and (2004) by Districts
- 10. Mean Years of Schooling (2010) by Districts
- 11. Mean Years of Schooling (2006) by Districts
- 12. Mean Years of Schooling (2010) and (2006) by Districts
- 13. Expected Years of Schooling (2009/2010) by Districts
- 14. Expected Years of Schooling (2005/2006)
- 15. Expected Years of Schooling (2009/2010) and (2005/2006) by Districts
- 16. Gross National Income per Capita (2009) by Districts
- 17. Gross National Income per Capita (2004) by Districts
- 18. Gross National Income per Capita (2009) and (2004) by Districts

#### Inequality adjusted Human Development Index

- 19. Inequality-adjusted Human Development Index (2009/2010) by Districts
- 20. Inequality-adjusted Human Development Index (2004/2006) by Districts
- 21. Inequality-adjusted Human Development Index (2009/2010) and (2004/2006) by Districts

- 22. Loss in Human Development Level due to inequalities (2009/2010) by Districts
- 23. Loss in Human Development Level due to inequalities (2004/2006) by Districts
- 24. Loss in Human Development Level due to inequalities (2009/2010) and (2004/2006) by Districts
- 25. Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2009) by Districts
- 26. Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2004) by Districts
- 27. Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2010) by Districts
- 28. Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2006) by District
- 29. Loss in Human Development level due to Inequalities in Expected Years of Schooling Indicator (2009/2010) by Districts
- 30. Loss in Human Development level due to Inequalities in Expected Years of Schooling Indicator (2005/2006) by Districts

#### Gender Inequality Index

- 31. Gender Inequality Index (2009/2010) by Districts
- 32. Gender Inequality Index (2004/2005) by Districts
- 33. Gender Inequality Index (2009/2010) and (2004/2005) by Districts
- 34. Maternal Mortality Ratio (2010) by Districts
- 35. Maternal Mortality Ratio (2004) by Districts
- 36. Maternal Mortality Ratio (2010) and (2004) by Districts
- 37. Adolescent Fertility Rate (2009) by Districts
- 38. Adolescent Fertility Rate (2004) by Districts
- 39. Adolescent Fertility Rate (2009) and (2004) by Districts
- 40. Male and Female Labour Force Participation Rates (2010) and (2004) by Districts
- 41. Male and Female Members in the National Assembly of Suriname (election year 2005 and 2010) by Districts
- 42. Male and Female Population with at least Secondary Education (2010) and (2004) by Districts

#### **Uni-dimensional Poverty**

- 43. Uni-dimensional Poverty (2009) by Districts
- 44. Uni-dimensional Poverty (2004) by Districts
- 45. Uni-dimensional Poverty (2009) and 2009 by Districts

#### **Multidimensional Poverty Index**

- 46. Multidimensional Poverty Index (2009/2010) by Districts
- 47. Multidimensional Poor Population (2009/2010) by Districts
- 48. Intensity of Multidimensional Poverty (2009/2010) by Districts
- 49. Multidimensional Poverty Index (2005/2006) by Districts
- 50. Multidimensional Poor Population (2005/2006) by Districts
- 51. Intensity of Multidimensional Poverty (2005/2006) by Districts

#### **Millennium Development Goals**

#### Goal 1: Eradicate extreme poverty and hunger

- 52. Underweight Prevalence (2009/2010) by Districts
- 52A. Underweight Prevalence (2005\_2006) by Districts
- 53. Population (2009/2010) by Quintiles of Wealth Index and by Districts
- 54. Uni-dimensional Poverty (2009) by Districts
- 55. Uni-dimensional Poverty (2004) by Districts

#### Goal 2: Achieve universal primary education

- 56. Primary School Attendance (2010) by Districts
- 56A. Primary School Attendance (2006) by Districts
- 57. Children Reaching Last Grade of Primary School (2010) by Districts
- 57A. Children Reaching Last Grade of Primary School (2006) by Districts
- 58. Literacy among Young Women (2010) by Districts
- 58A. Literacy among Young Women (2006) by Districts

#### Goal 3: Promote gender equality and empower women

- 59. Gender Parity Index for Primary School (2010) by Districts
- 59A. Gender Parity Index for Primary School (2006) by Districts
- 60. Gender Parity Index for Secondary School (2010) by Districts
- 60A. Gender Parity Index for Secondary School (2006 by Districts
- 61. Proportion of Seats held by Women in the National Assembly of Suriname by Districts in the election year 2010
- 62. Male and Female Members in the National Assembly of Suriname (election year 2005 and 2010) by Districts

#### **Goal 4: Reduce child mortality**

- 63. Children Vaccinated against Measles (2010) by Districts
- 63A. Children Vaccinated against Measles (2006) by Districts

#### Goal 5: Improve maternal health

- 64. Maternal Mortality Ratio (2010) by Districts
- 65. Maternal Mortality Ratio (2004) by Districts
- 66. Maternal Mortality Ratio (2010) and (2004) by Districts
- 67. Proportion of Births attended by Skilled Health Personnel (2010) by Districts
- 67A. Proportion of Births attended by Skilled Health Personnel (2006) by Districts
- 68. Contraceptive Prevalence Rate (2010) by Districts
- 68A. Contraceptive Prevalence Rate (2006) by Districts
- 69. Antenatal Care Coverage (2010) by Districts
- 70. Unmet need for Contraception (2010) by Districts
- 70A. Unmet need for Contraception (2006) by Districts

#### Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

- 71. Condom Use at Last High-risk Sex (2010) by Districts
- 71A. Condom Use at Last High-risk Sex (2006) by Districts

- 72. Comprehensive Knowledge about HIV Transmission (2010) by Districts
- 72A. Comprehensive Knowledge about HIV Transmission (2006) by Districts

#### **Goal 7: Ensure environmental sustainability**

- 73. Population Using an Improved Drinking Water Source (2010) by Districts
- 73A. Population Using an Improved Drinking Water Source (2006) by Districts
- 74. Population Using an Improved Drinking Water Source (2010) by Districts and by type of Water Source
- 74A. Population Using an Improved Drinking Water Source (2006) by Districts and by type of Water Source
- 75. Proportion of Population Using an Improved Sanitation Facility (2010) by Districts
- 75A. Proportion of Population Using an Improved Sanitation Facility (2006) by Districts
- 76. Population Using an Improved Sanitation Facility (2010) by Districts and by Type of Sanitation Facility
- 76A. Population Using an Improved Sanitation Facility (2006) by Districts and by Type of Sanitation Facility

#### **Crime and Violence**

- 77. Number of Registered Crimes (Inclusive of Attempts to Crime) (2009) by Districts.
- 78. Number of Registered Crimes (Inclusive of Attempts to Crime) (2009) by Type of Crime and by Districts.
- 79. Criminal Offences against Public Order (2009) by Districts
- 80. Drug Offences (2009) by Districts.
- 81. Economic Offences (2009) by Districts
- 82. Homicides and Aggravated Assaults (2009) by Districts
- 83. Property Offences (2009) by Districts
- 84. Sexual Offences (2009) by Districts
- 85. Vandalism and Menace (2009) by Districts
- 86. Number of Female Persons taken into Custody (2009) by Districts
- 87. Number of Female Persons taken into Custody by Districts and by Years
- 88. Number of Male Persons taken into Custody (2009) by Districts
- 89. Number of Male Persons taken into Custody by Districts and by Years
- 90. Number of Registered and Solved Crimes, Inclusive of Attempts to Crime (2009) by Districts

#### **Citizen Security Survey**

- 91. The Most Serious Problems in the Country by Districts
- 92. Actual Victimization in 2009 by Districts
- 93. Comparative Map showing Actual Victimization in 2009 by Type of Crime and by Districts
- 94. Actual Victims of Sexual Assault in 2009 by Districts
- 95. Comparative Map showing Actual Victimization in 2009 and Share of Incidents Reported to Police by Districts
- 96. Frequency of Domestic Violence in Households by Districts
- 97. Frequency of Verbal Threats in Households by Districts
- 98. Frequency of Physical Injury from Partner by Districts
- 99. Frequency of Verbal Abuse from Partner by Districts
- 100. Frequency of Physical Abuse from Partner by Districts
- 101. Perceptions of Crime at the Local Community Level by Districts
- 102. Perceptions of Violent Crime at the Local Community Level by Districts
- 103. Perceptions of Property Crime at the Local Community Level by Districts
- 104. Frequency of Violent Crimes in the Community by Districts
- 105. Gang Violence at Community Level by Districts
- 106. The Extent of Gang Violence at Community Level by Districts
- 107. Fear of Crime in Past Year by Districts
- 108. Feelings of Security by Districts
- 109. Perception of Country's Capabilities by Districts
- 110. Trust in Police Forces by Districts
- 111. Personal Experience of Police Respect towards Citizens by Districts
- 112. Perception of Change in Police Effectiveness at Country and Community Level by Districts
- 113. Perceived Police Competence by Districts
- 114. Perceived Confidence in Police Response to Emergency Calls by Districts
- 115. Perceived Confidence in the Police to Control Crime by Districts
- 116. Trust in Justice System by Districts
- 117. Social Cohesion Scale by Districts

## List of Abbreviations

AIDS	Acquired Immunodeficiency Syndrome
GBS	The General Bureau of Statistics
GDP	Gross Domestic Product
GII	Gender Inequality Index
GNI	Gross National Income
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IHDI	Inequality adjusted Human Development Index
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MPI	Multidimensional Poverty Index
SRD	Surinamese Dollars
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children Fund
WHO	World Health Organization



### PART 1 HUMAN DEVELOPMENT

R

Human development is the expansion of people's freedoms to live long, healthy and creative lives; to advance other goals they have reason to value; and to engage actively in shaping development equitably and sustainably on a shared planet. People are both the beneficiaries and the drivers of human development, as individuals and in groups.

The maps presented in this section provide an overview on key aspects of human development and compare the trends over the periods 2004-2006 and 2009-2010. The maps include Human Development Indices such as Human Development Index, Inequality adjusted Human Development Index, Gender Inequality Index, Multidimensional Poverty Index and their dimension indicators. The maps depict different dimensions of human development including, a long and healthy life, knowledge and a decent standard of living. This section starts with presentation of population maps. Maps on Unidimensional Poverty are included in this section as well.

# 1.1 Population



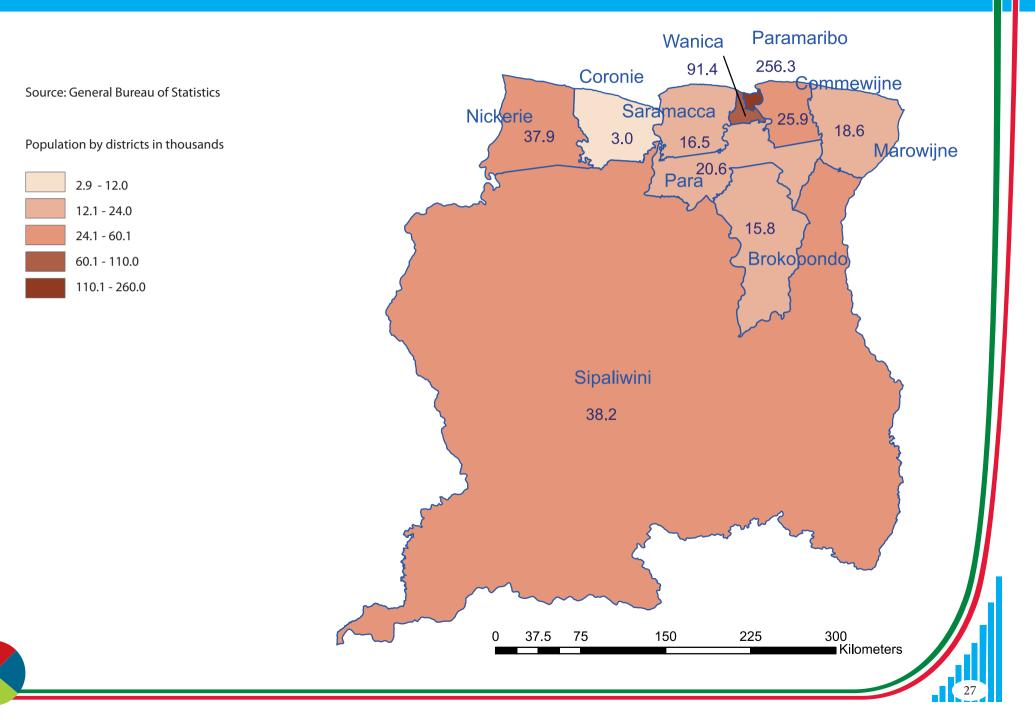
The population maps illustrate the distribution of population by districts for periods 2004 and 2009.

The capital Paramaribo and the district of Wanica, the urban districts, are inhabited by approximately 66.8% of the total population of Suriname in 2004 and 66.3 % in 2009, while they cover only approximately 0.4% of the land area.

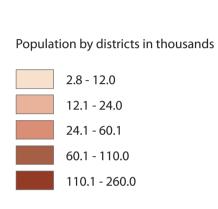
The district of Sipaliwini occupies the largest southern part of the country (79.7 % of land area ), the population is approximately 6.9 % of the total population of Suriname in 2004 and 7.3 % in 2009

The district of Coronie has the smallest population. The population of Coronie is approximately 0.6 % of the total population of Suriname in 2004 and in 2009

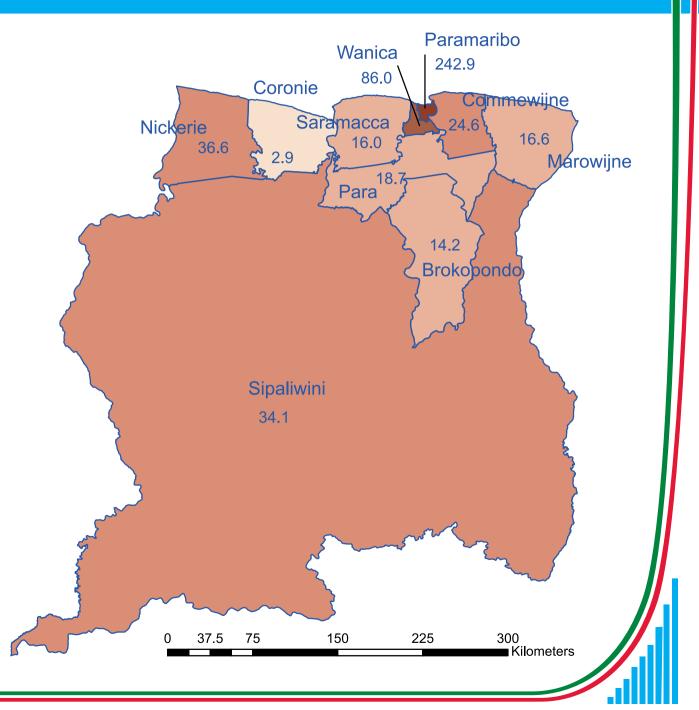
#### 1. Population (2009) by Districts



#### 2. Population (2004) by Districts



Source: General Bureau of Statistics



# 1.2 Human Development Index



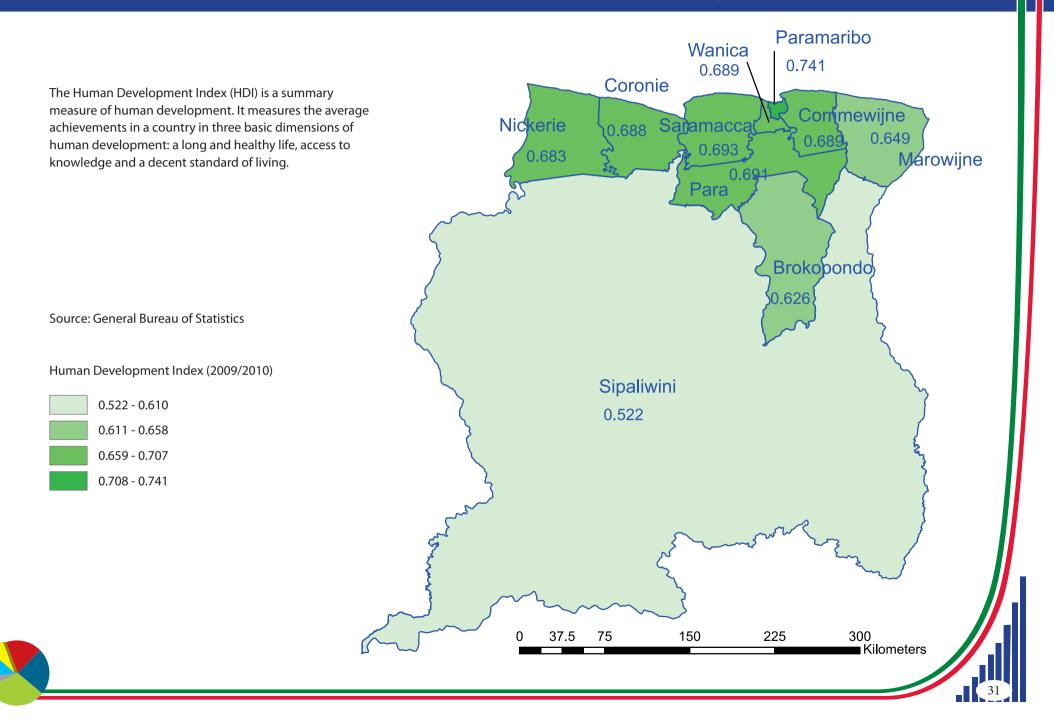
The Human Development Index is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living.

The Human Development Index was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. The Human Development Index was introduced as an alternative to conventional measures of national development, such as level of income and the rate of economic growth.

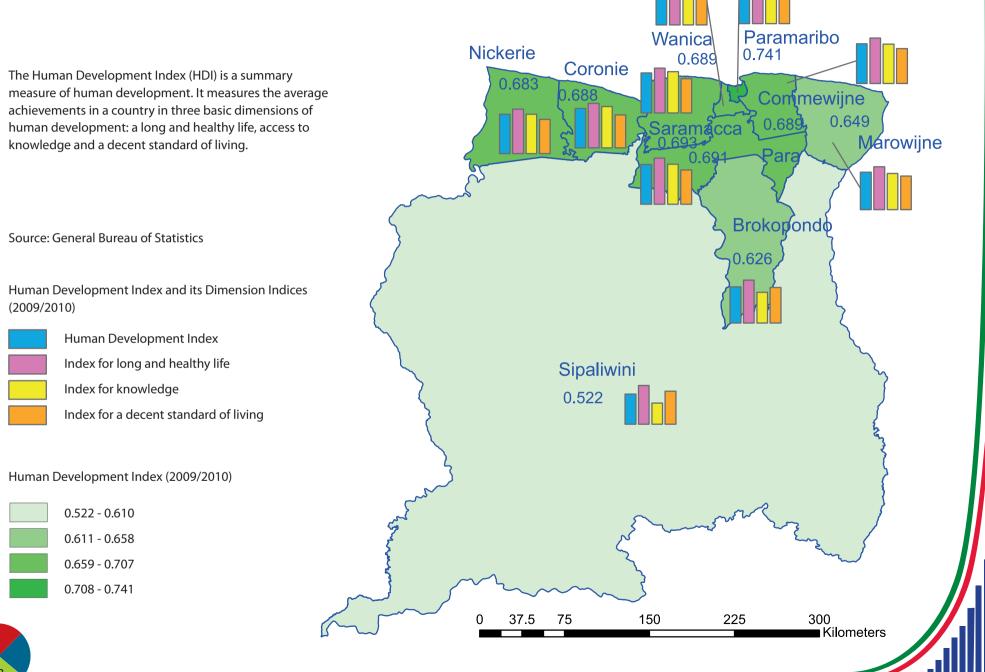
A long and healthy life dimension is measured using Life Expectancy at Birth indicator. Access to knowledge dimension is measured using Mean Years of Schooling and Expected Years of Schooling indicators. A decent standard of living is measured using Gross National Income per capita indicator.

This section contains the maps related to Human Development Index and its dimension indicators. The maps included in this section compare the trends in Human Development level of districts of Suriname over the periods 2004-2006 and 2009-2010.

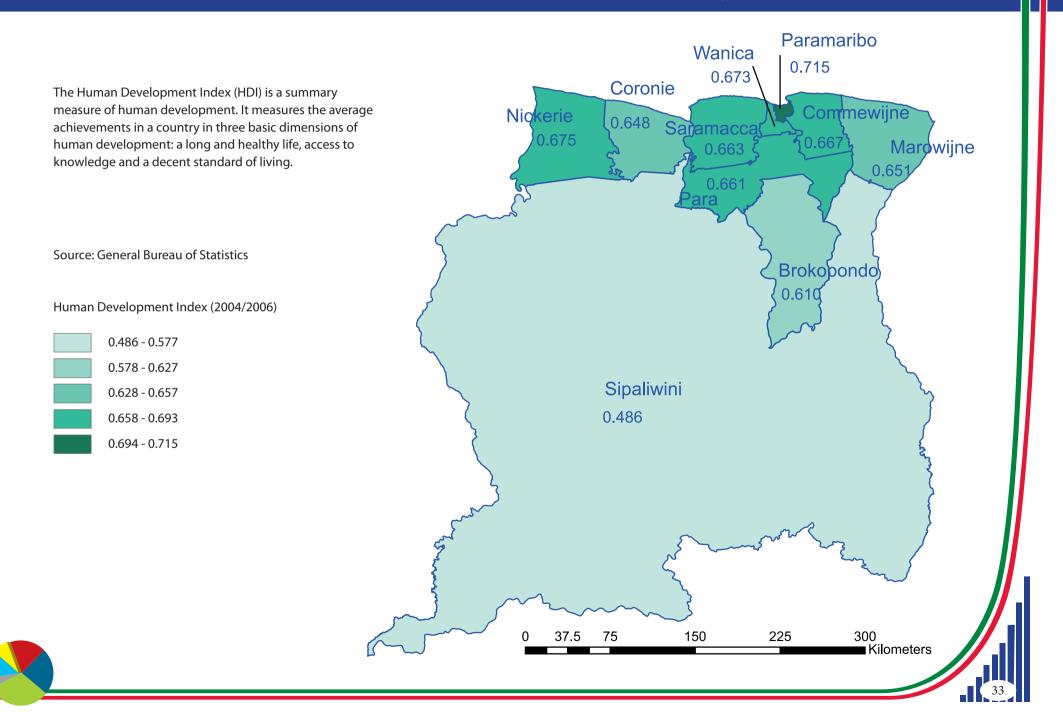
#### 3. Human Development Index (2009/2010) by Districts



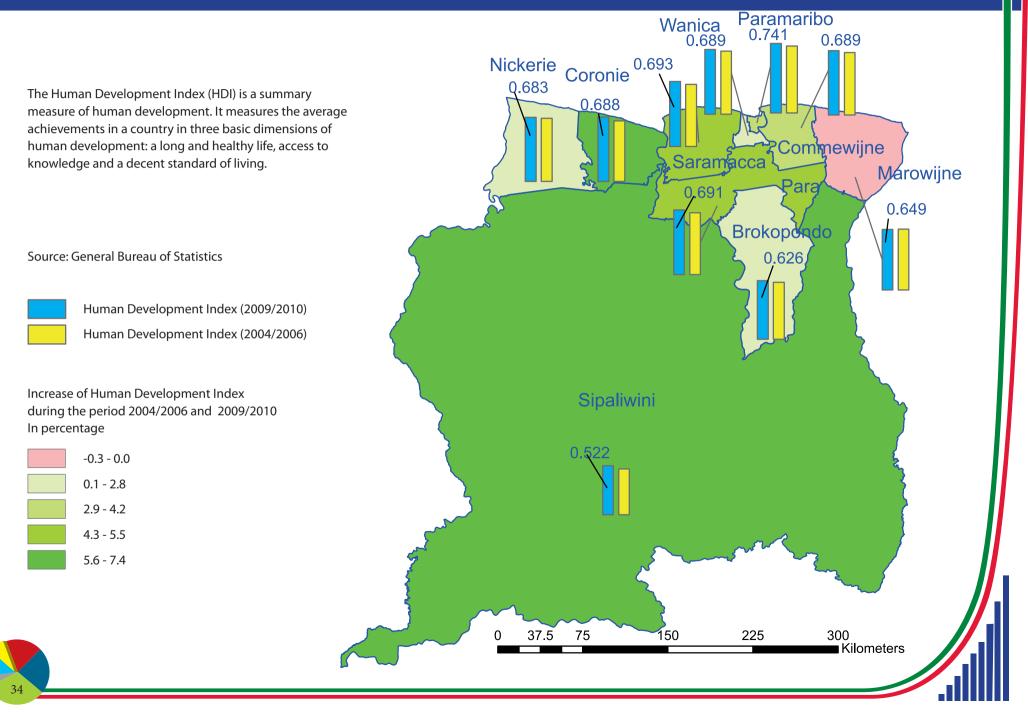
### 4. Human Development Index and its Dimension Indices (2009/2010) by Districts



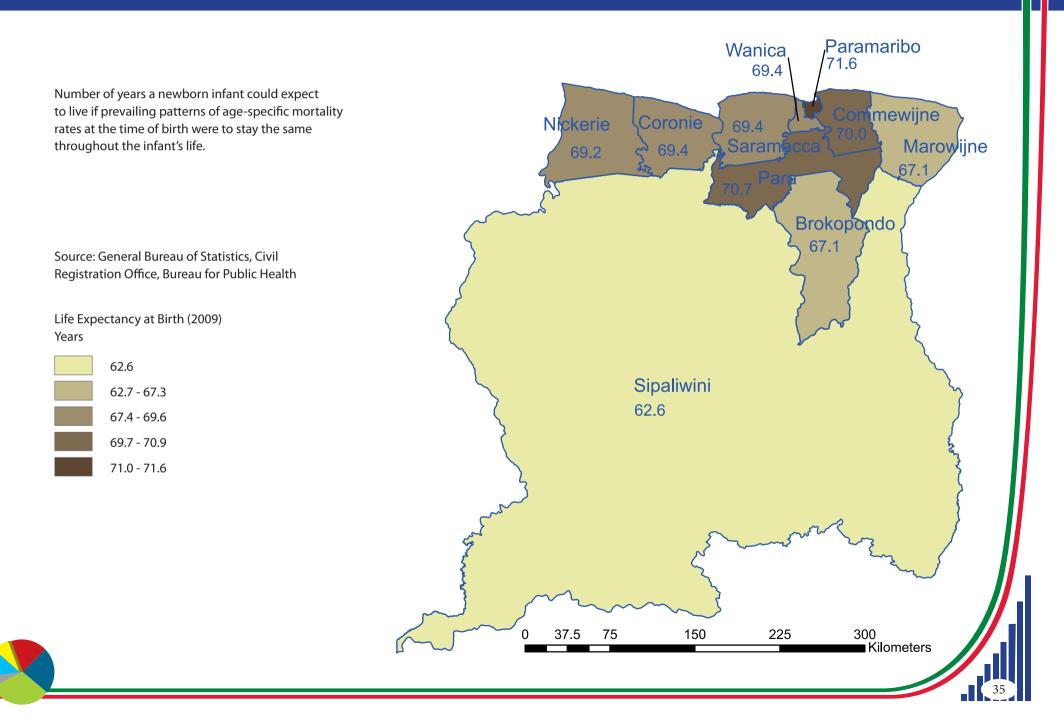
#### 5. Human Development Index (2004/2006) by Districts



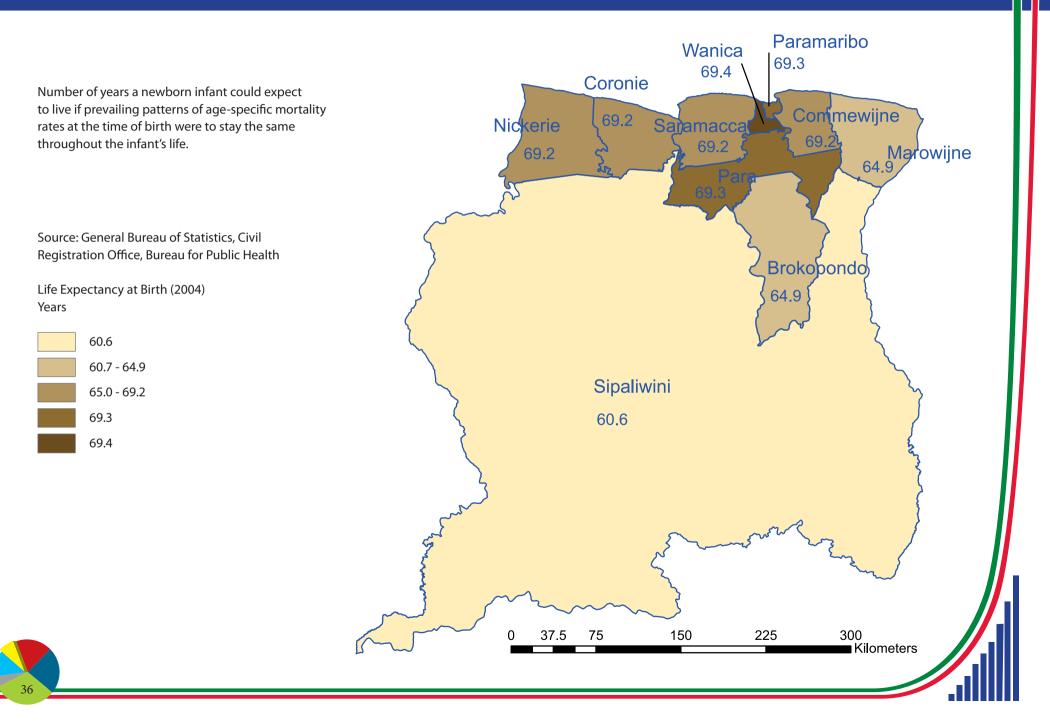
#### 6. Human Development Index (2009/2010) and (2004/2006) by Districts



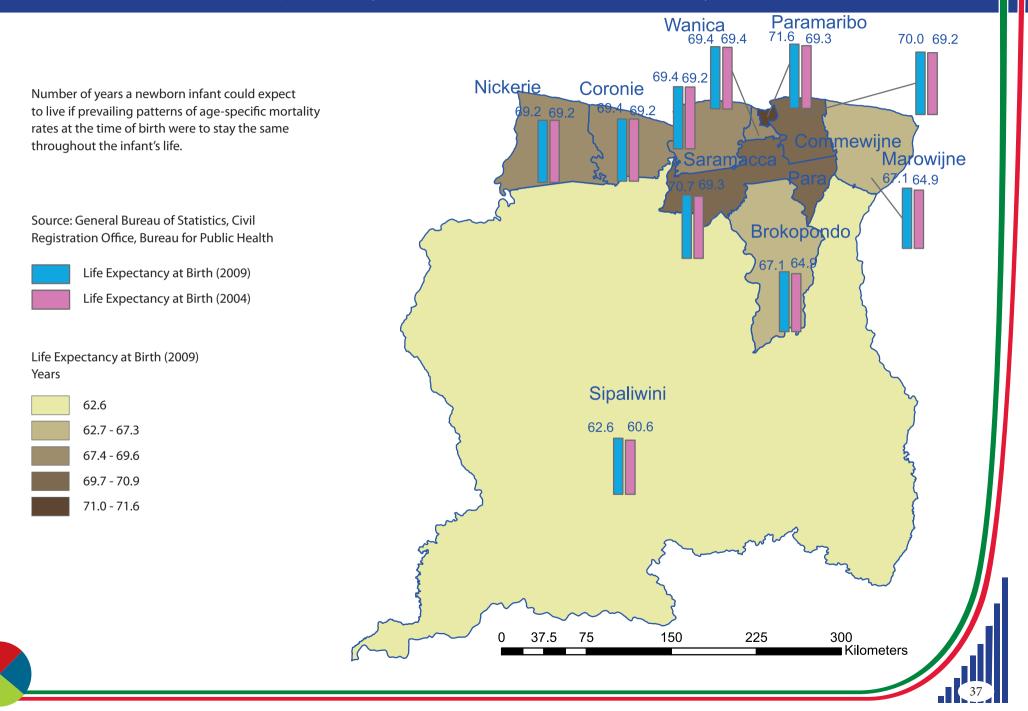
# 7. Life Expectancy at Birth (2009) by Districts



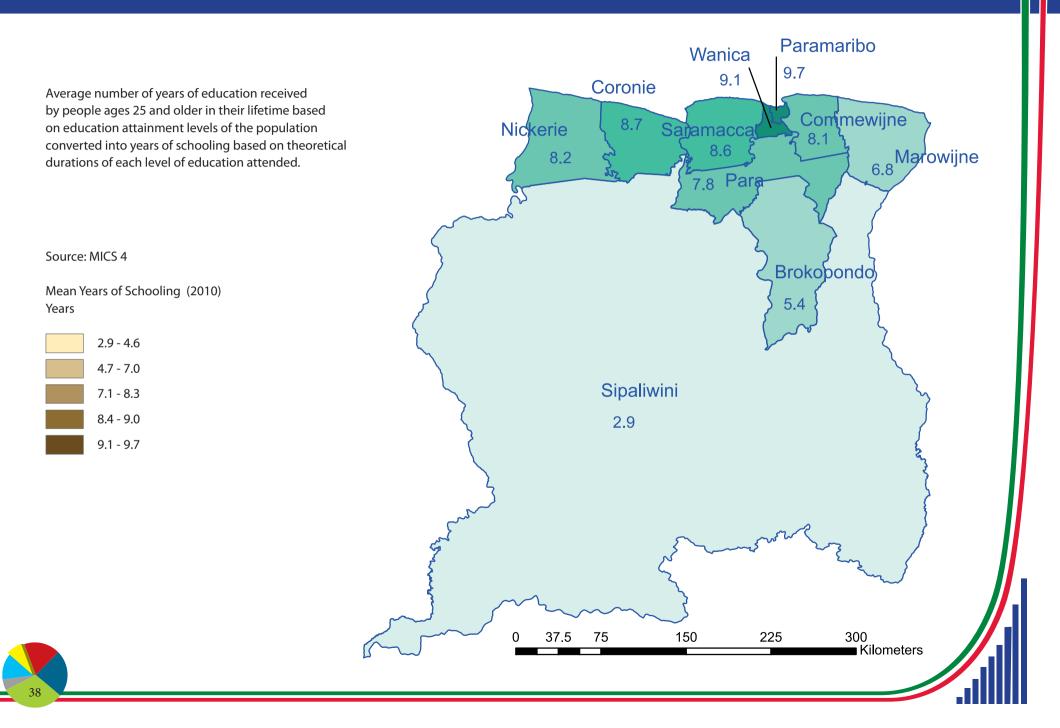
# 8. Life Expectancy at Birth (2004) by Districts



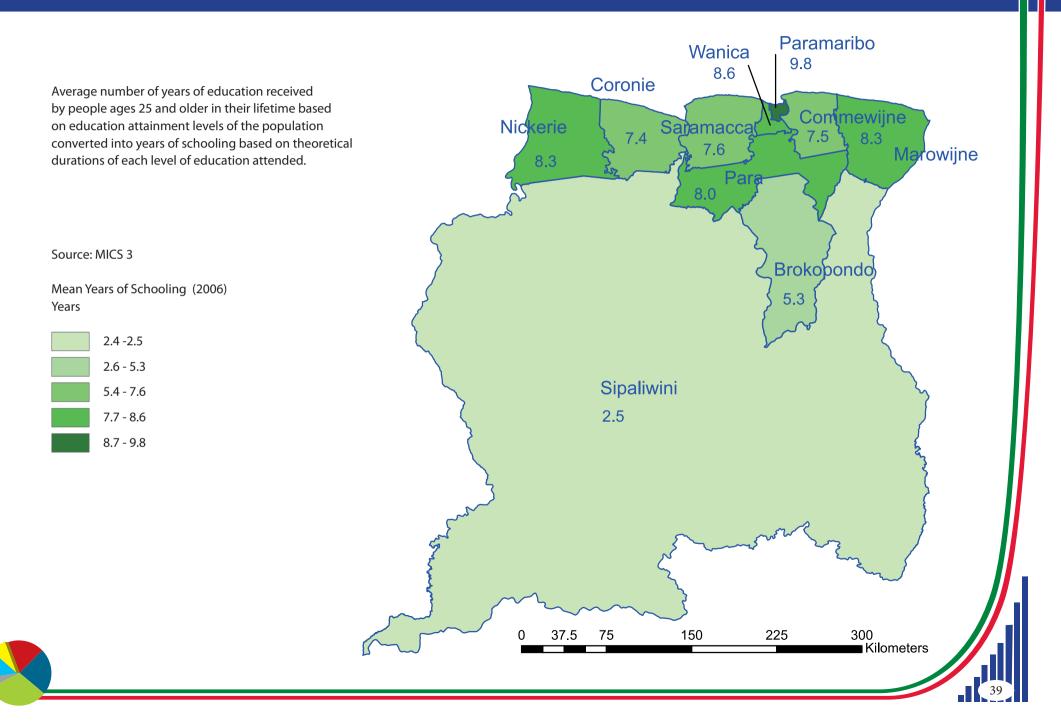
#### 9. Life Expectancy at Birth (2009) and (2004) by Districts



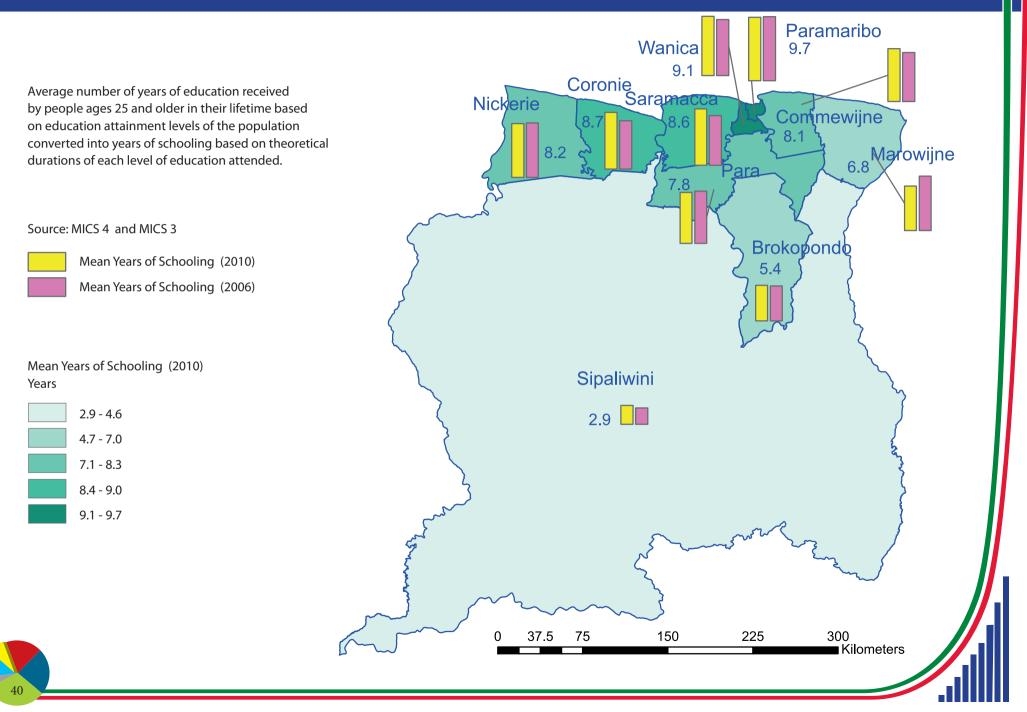
#### 10. Mean Years of Schooling (2010) by Districts



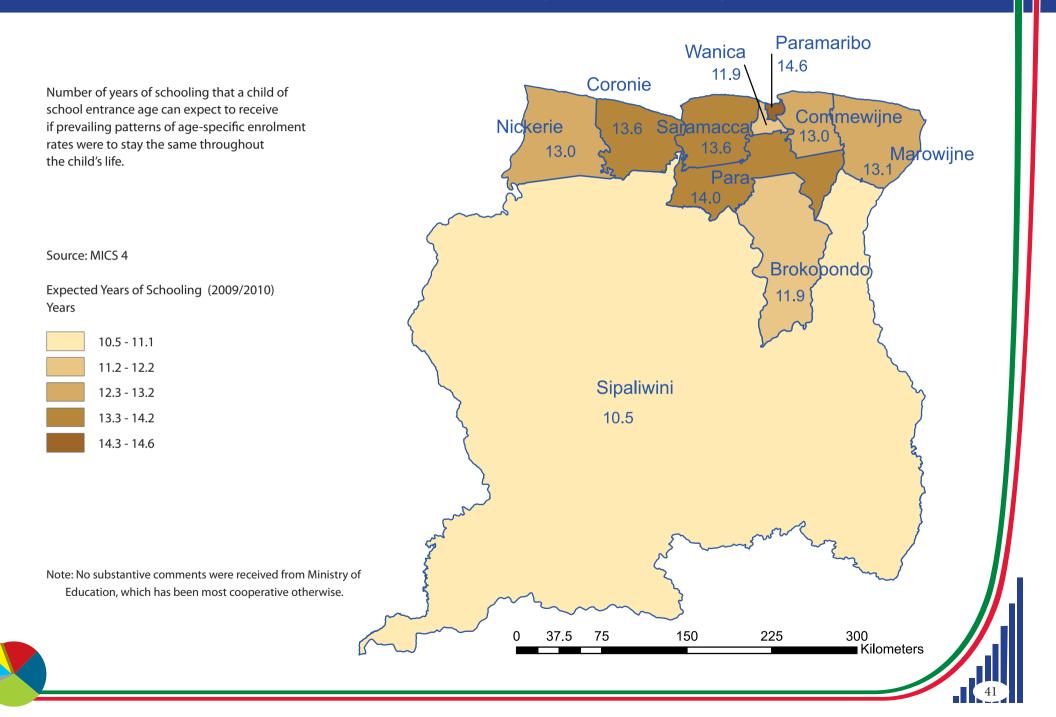
#### 11. Mean Years of Schooling (2006) by Districts



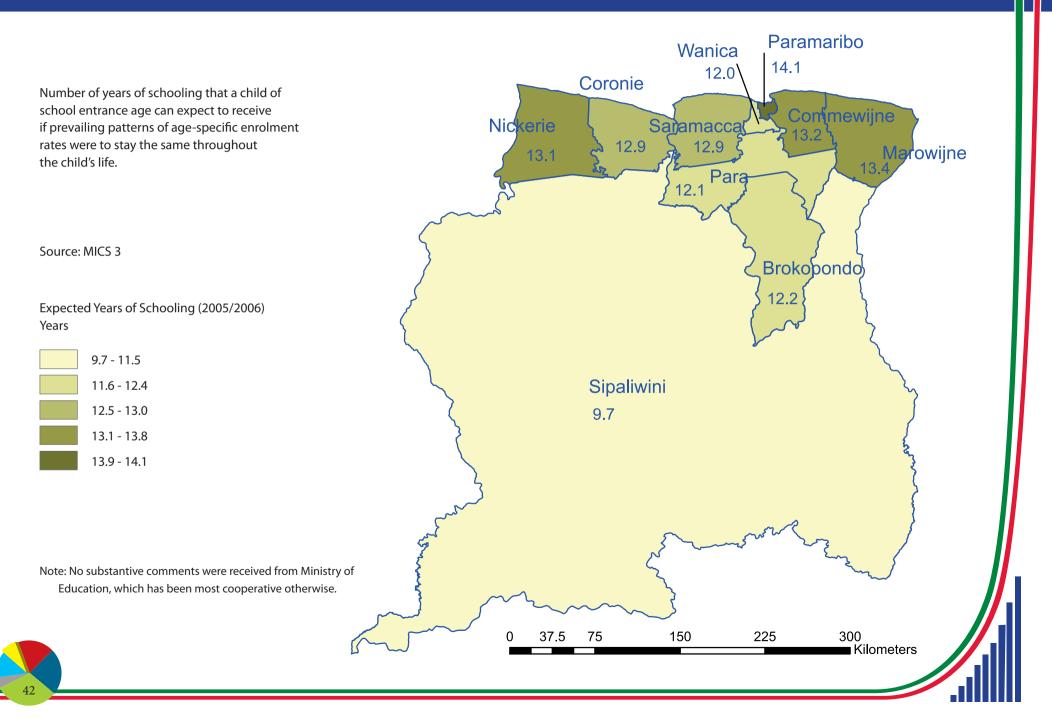
#### 12. Mean Years of Schooling (2010) and (2006) by Districts



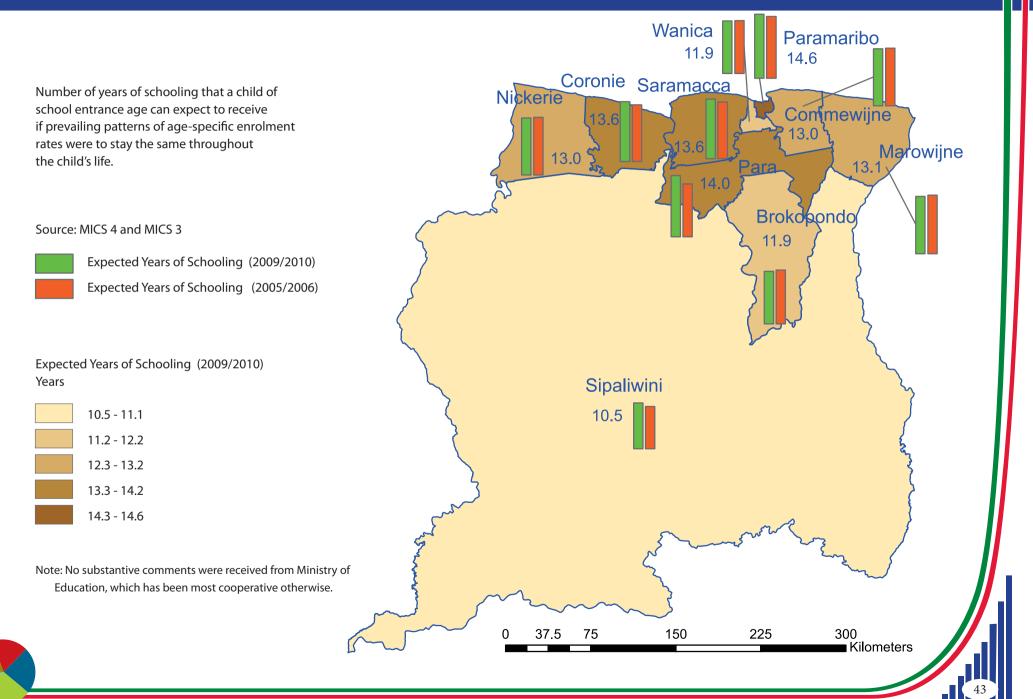
#### 13. Expected Years of Schooling (2009/2010) by Districts



#### 14. Expected Years of Schooling (2005/2006) by Districts



### 15. Expected Years of Schooling (2009/2010) and (2005/2006) by Districts

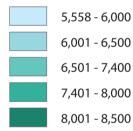


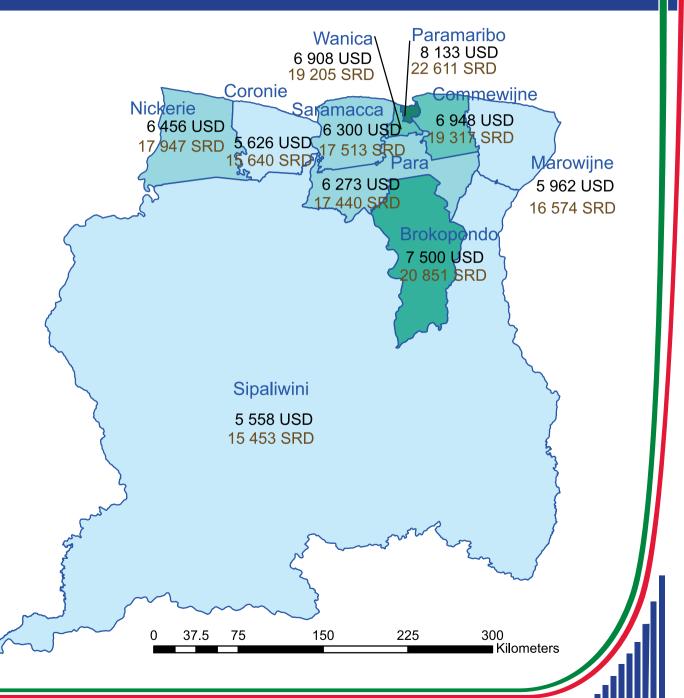
#### 16. Gross National Income per Capita (2009) by Districts

Sum of value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad, divided by midyear population. Value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs.

Source: General Bureau of Statistics

Gross National Income per Capita (2009) in USD





#### 17. Gross National Income per Capita (2004) by Districts

Sum of value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad, divided by midyear population. Value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs.

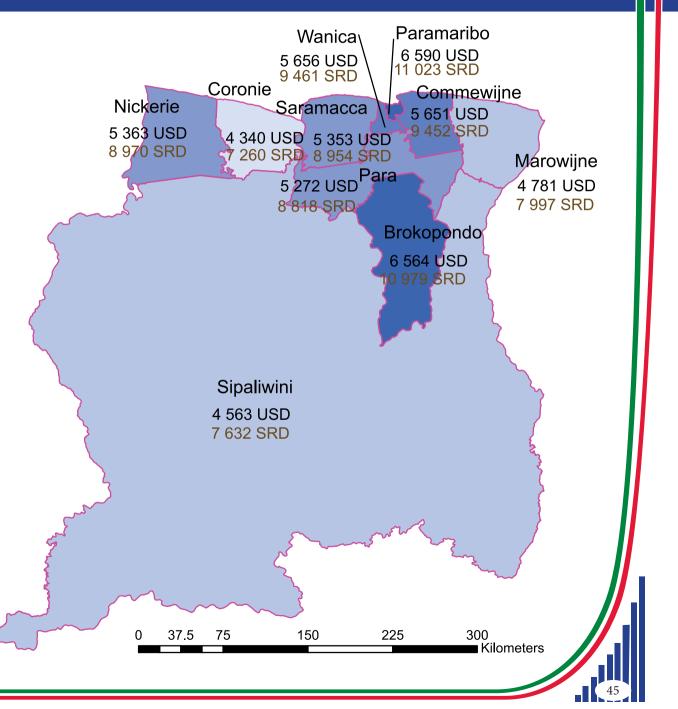
Gross National Income per Capita (2004) in USD in prices of 2009 4,340 - 4,500 4,501 - 5,000

Source: General Bureau of Statistics

5,501 - 6,000 6,001 - 7,000

5,001 - 5,500

Calculated using the GDP deflator 2004-2009 (166.2%) and Central Bank's exchange rate for 2009 (2.780)



#### 18. Gross National Income per Capita (2009) and (2004) by Districts

Wanica

Paramaribo

6 908 USD 8 133 USD Coronie Sum of value added by all resident producers in Nickerie the economy plus any product taxes (less subsidies) not included in the valuation of output plus net 6 456 USD Confimewijne Saramacca receipts of primary income (compensation of employees 6 948 USD 6 300 USD and property income) from abroad, divided by midyear 5 626 USD Marowijne Para population. Value added is the net output of an industry 5 962 USD after adding up all outputs and subtracting intermediate 6 273 USD inputs. Brokopondo 7 500 USD Source: General Bureau of Statistics Gross National Income per Capita (2009) Gross National Income per Capita (2004) Sipaliwini Gross National Income per Capita (2009) in USD 5 558 USD 5,558 - 6,000 6,001 - 6,500 6,501 - 7,400 7,401 - 8,000 8,001 - 8,500 37.5 75 150 225 300 0 Kilometers

# 1.3 Inequality adjusted Human Development Index

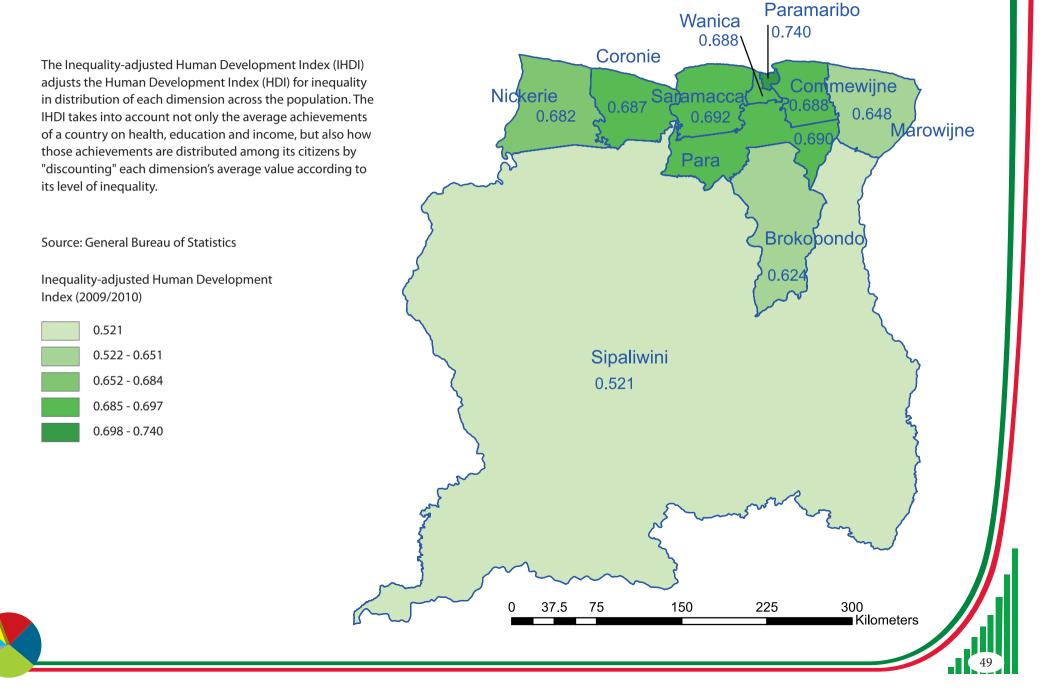


The Inequality-adjusted Human Development Index (IHDI) adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. The IHDI takes into account not only the average achievements of a country on a long and healthy life, access to knowledge and a decent standard of living dimensions, but also how those achievements are distributed among its citizens by "discounting" each dimension's average value according to its level of inequality.

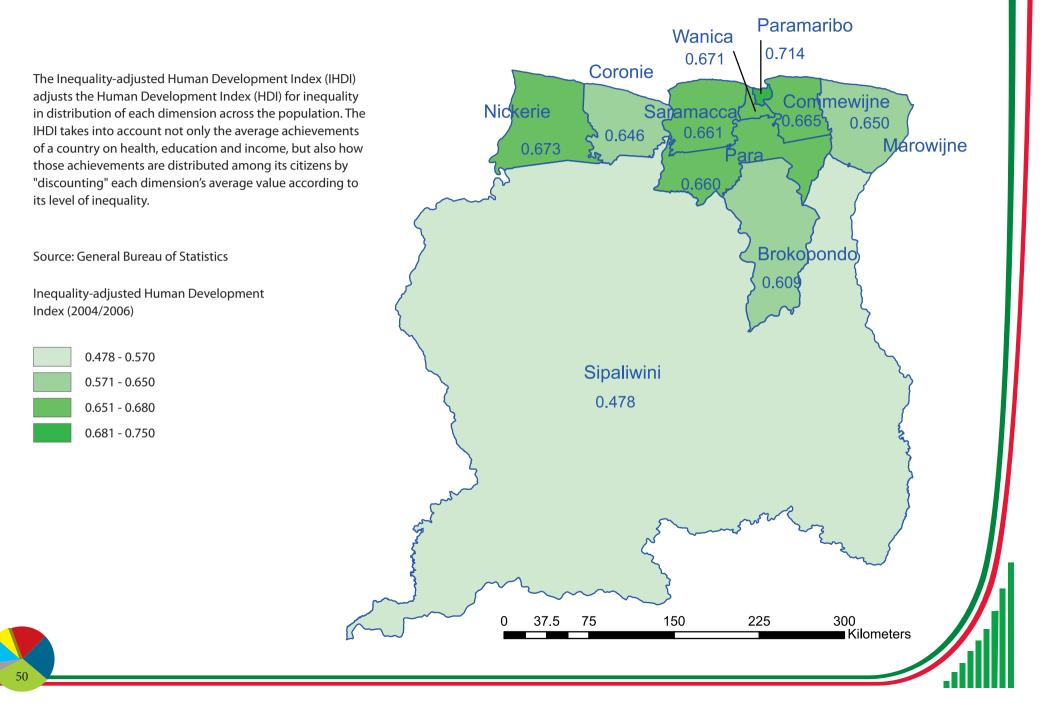
The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. In this sense, the IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality. The "loss" in potential human development due to inequality is the difference between the HDI and the IHDI and can be expressed as a percentage.

This section contains the maps related to Inequality adjusted Human Development Index and its dimension indicators. The maps included in this section compare the trends in Human Development level of districts of Suriname adjusted for inequalities over the periods 2004-2006 and 2009-2010.

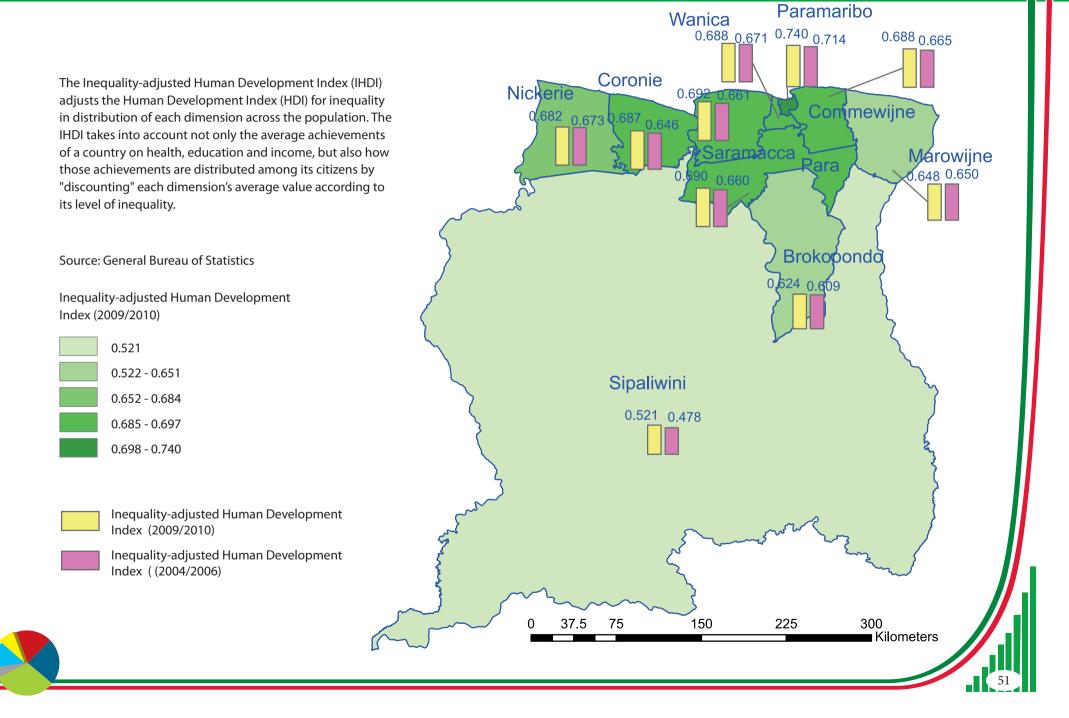
#### 19. Inequality-adjusted Human Development Index (2009/2010) by Districts



#### 20. Inequality-adjusted Human Development Index (2004/2006) by Districts



#### 21. Inequality-adjusted Human Development Index (2009/2010) and (2004/2006) by Districts



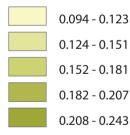
#### 22. Loss in Human Development Level due to inequalities (2009/2010) by Districts

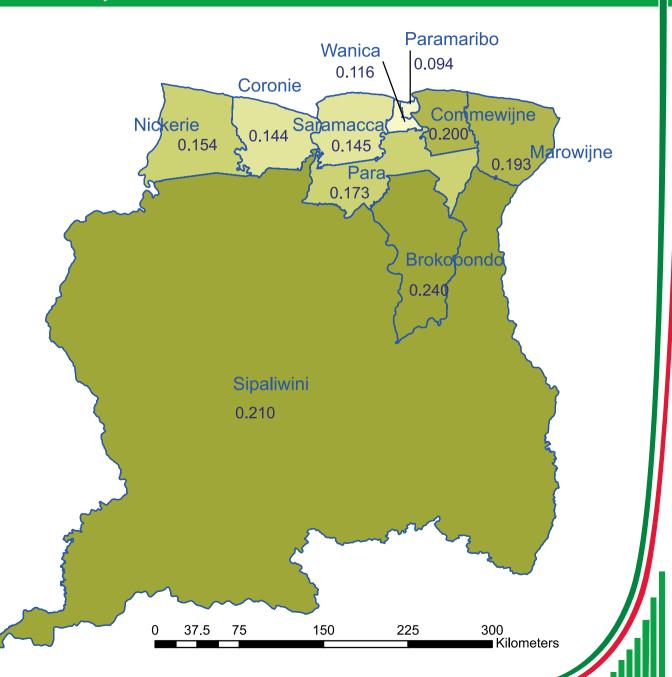
The "loss" in potential of human development due to inequality is the decrease in human development level due to inequalities, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

Source: General Bureau of Statistics

Loss in Human Development Level due to inequalities In percentage





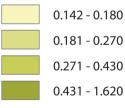
#### 23. Loss in Human Development Level due to inequalities (2004/2006) by Districts

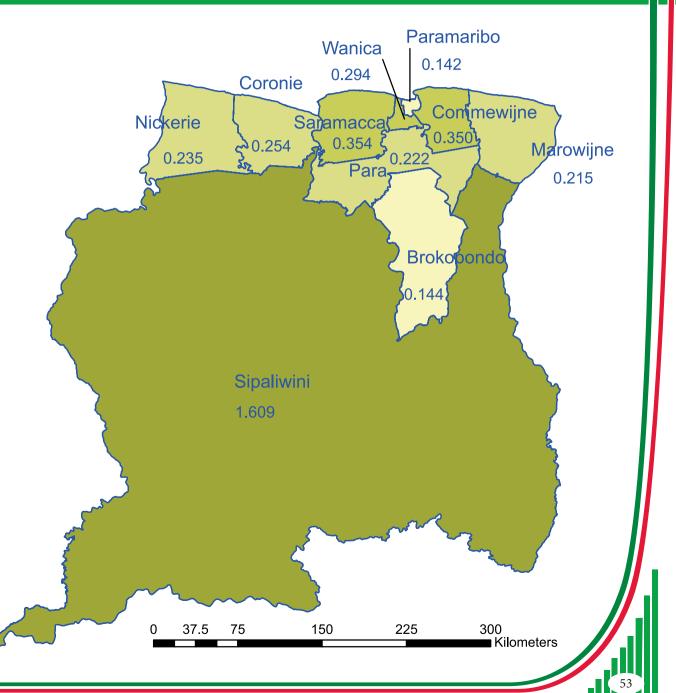
The "loss" in potential of human development due to inequality is the decrease in human development level due to inequalities, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

Source: General Bureau of Statistics

Loss in Human Development Level due to inequalities In percentage





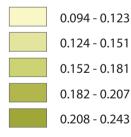
#### 24. Loss in Human Development Level due to inequalities (2009/2010) and (2004/2006) by Districts

The "loss" in potential of human development due to inequality is the decrease in human development level due to inequalities, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

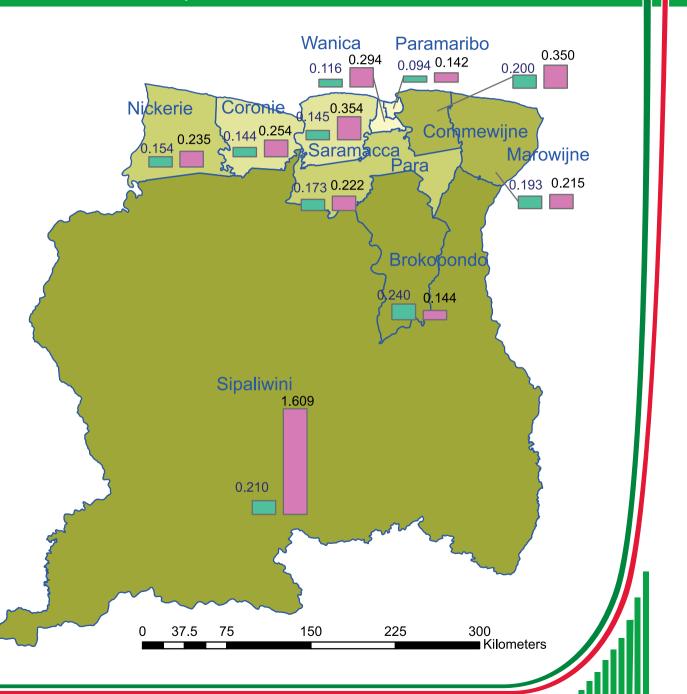
Source: General Bureau of Statistics

Loss in Human Development Level due to inequalities (2009/2010) In percentage



Inequality-adjusted Human Development Index (2009/2010)

Inequality-adjusted Human Development Index ((2004/2006)



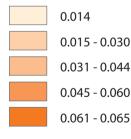
#### 25. Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2009) by Districts

The "loss" in potential of human development due to Inequalities in Life Expectancy at Birth Indicator is the decrease in human development level due to inequalities in Life Expectancy at Birth Indicator, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

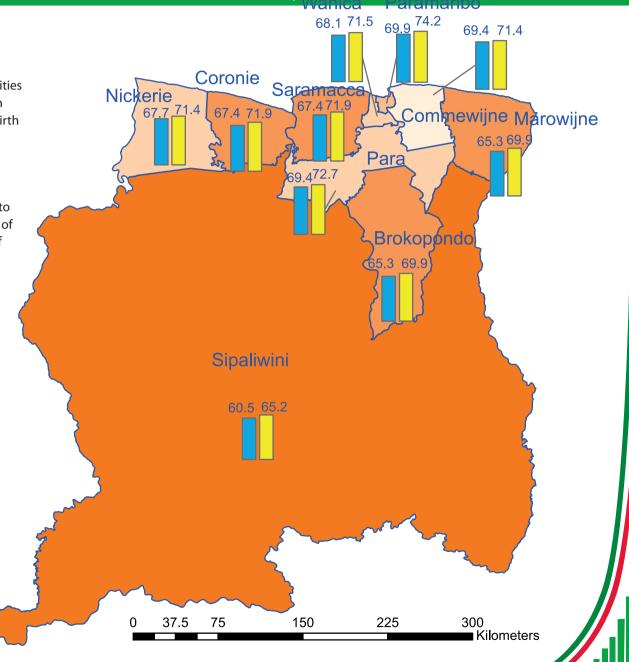
Source: General Bureau of Statistics

Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2009) In percentage



Life Expectancy at Birth (2009) Years





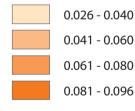
#### 26. Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2004) by Districts

The "loss" in potential of human development due to Inequalities in Life Expectancy at Birth Indicator is the decrease in human development level due to inequalities in Life Expectancy at Birth Indicator, expressed as percentage.

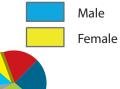
The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

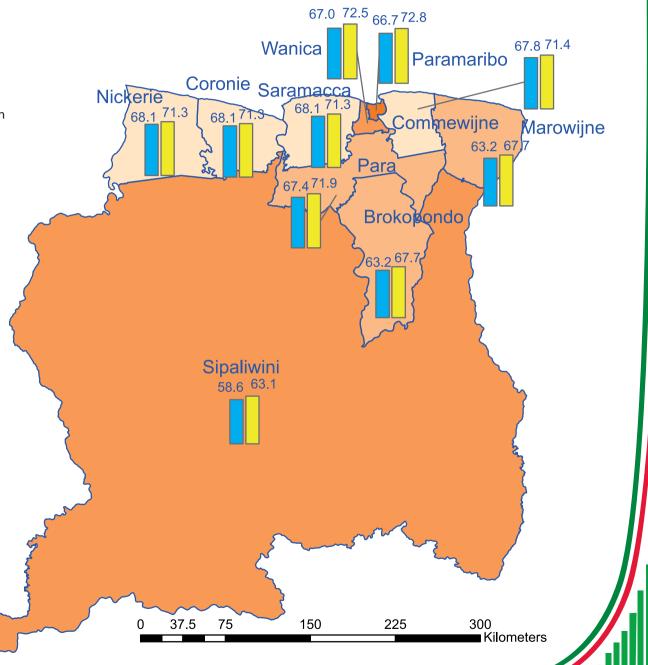
Source: General Bureau of Statistics

Loss in Human Development level due to Inequalities in Life Expectancy at Birth Indicator (2004) In percentage



Life Expectancy at Birth (2004) Years





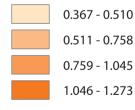
#### 27. Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2010) by Districts

The "loss" in potential of human development due to Inequalities in Mean Years of Schooling Indicator is the decrease in human development level due to inequalities in Mean Years of Schooling Indicator, expressed as percentage.

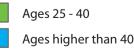
The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

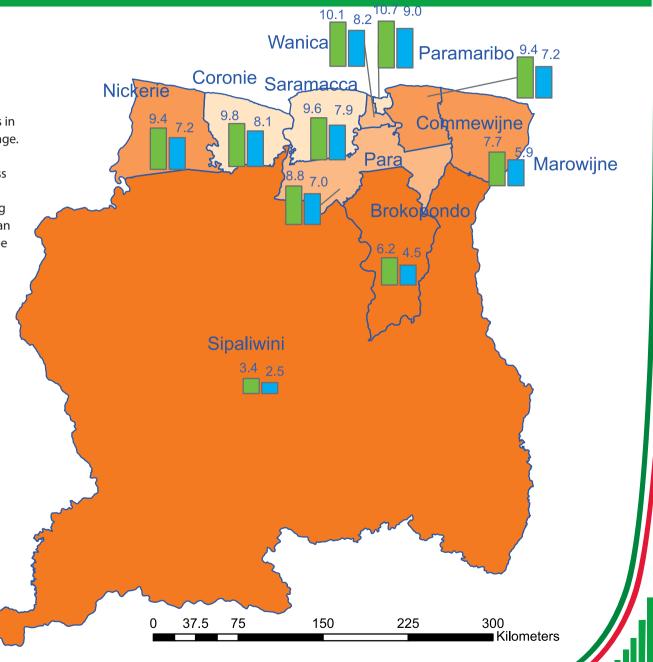
#### Source: MICS 4

Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2010) In percentage



Mean Years of Schooling (2010) Years





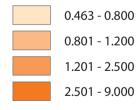
#### 28. Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2006) by Districts

The "loss" in potential of human development due to Inequalities in Mean Years of Schooling Indicator is the decrease in human development level due to inequalities in Mean Years of Schooling Indicator, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

#### Source: MICS 3

Loss in Human Development level due to Inequalities in Mean Years of Schooling Indicator (2006) In percentage

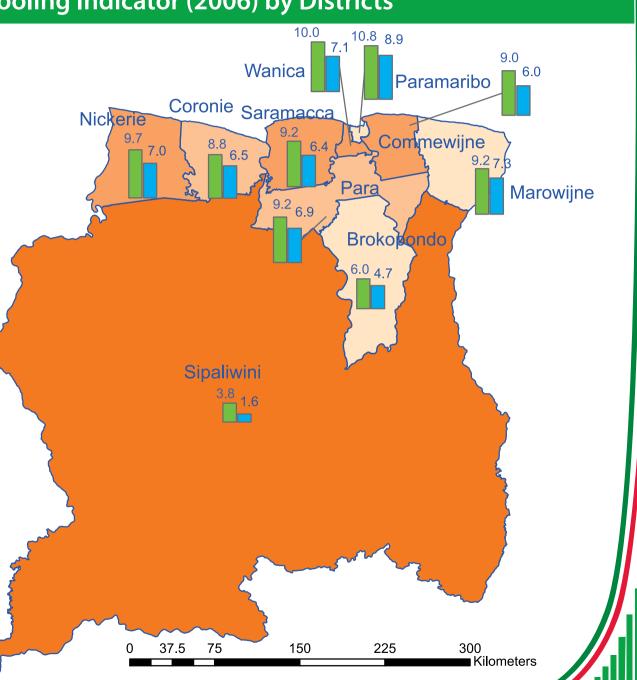


Mean Years of Schooling (2006) Years

Ages 25 - 40

Ages higher than 40





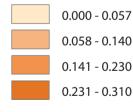
#### 29. Loss in Human Development level due to Inequalities in Expected Years of Schooling Indicator (2009/2010) by Districts

The "loss" in potential of human development due to Inequalities in Expected Years of Schooling Indicator is the decrease in human development level due to inequalities in Expected Years of Schooling Indicator, expressed as percentage.

The IHDI equals the HDI when there is no inequality across people but falls further below the HDI as inequality rises. The IHDI is the actual level of human development (taking into account inequality), while the HDI can be viewed as an index of the "potential" human development that could be achieved if there was no inequality.

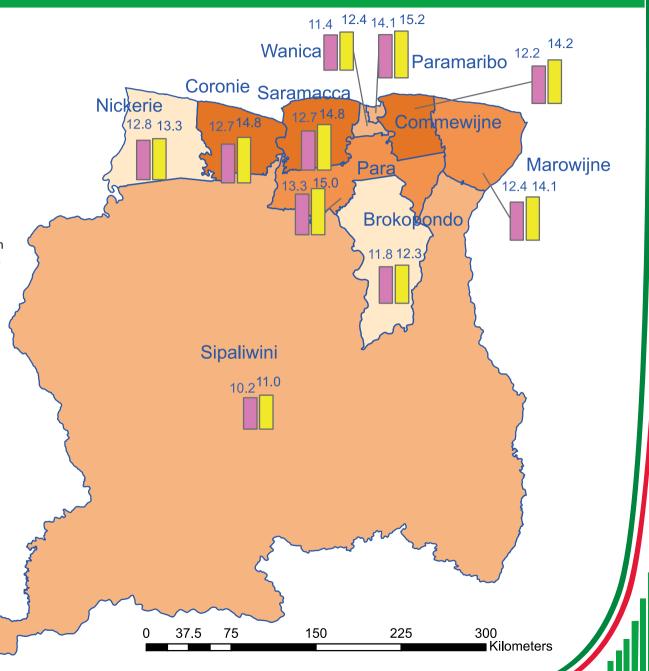
#### Source: MICS 4

Loss in Human Development level due to Inequalities in Expected Years of Schooling Indicator (2009/2010) In percentage

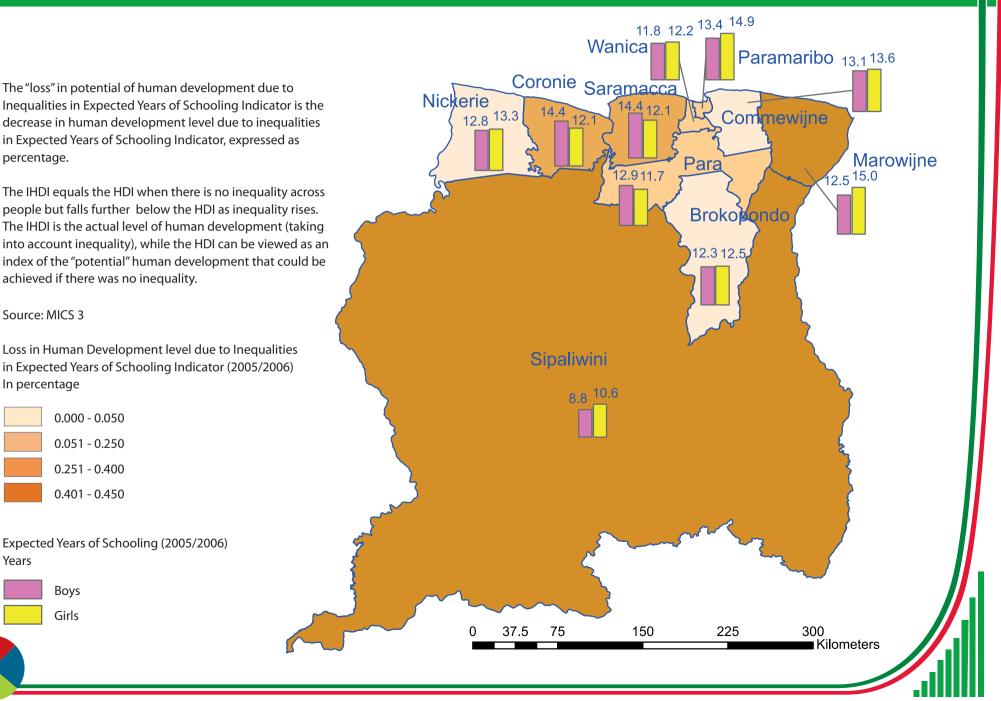


Expected Years of Schooling (2009/2010) Years





#### 30. Loss in Human Development level due to Inequalities in Expected Years of Schooling Indicator (2005/2006) by Districts



Years

# 1.4 Gender Inequality Index



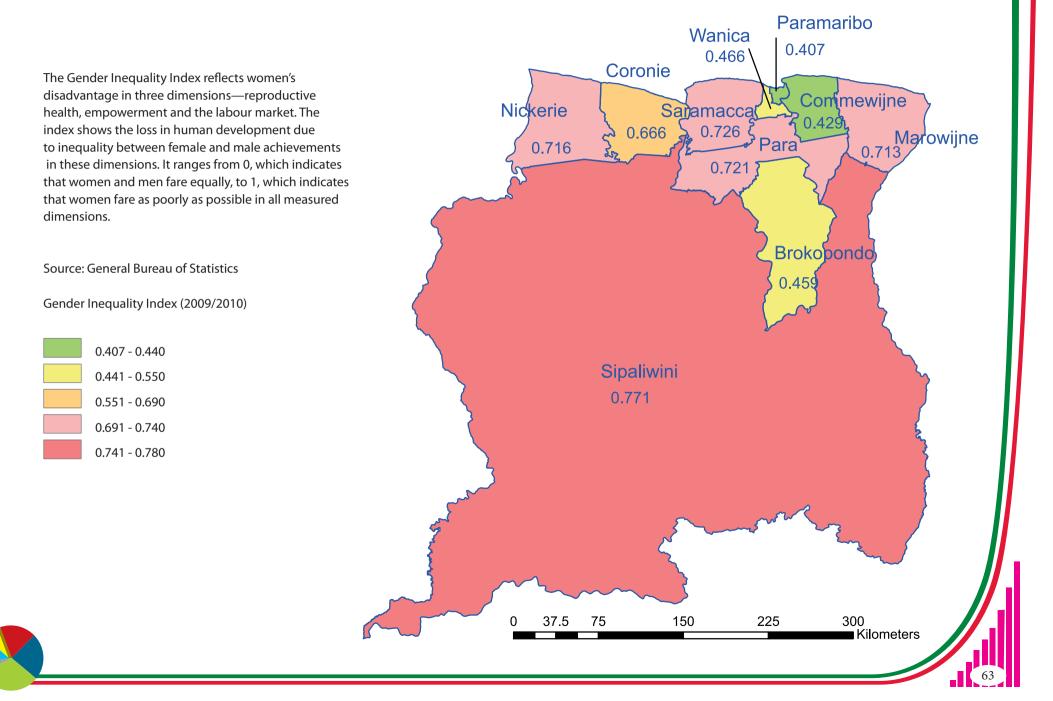
The Gender Inequality Index reflects women's disadvantage in three dimensions reproductive health, empowerment and the labour market. The Gender Inequality Index is designed to reveal the extent to which achievements in these aspects of human development are eroded by gender inequality, and to provide empirical foundations for policy analysis and advocacy efforts.

The health dimension is measured by two indicators: maternal mortality ratio and the adolescent fertility rate. The empowerment dimension is also measured by two indicators: the share of parliamentary seats held by each sex and by secondary and higher education attainment levels. The labour dimension is measured by women's participation in the work force.

The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equally, to 1, which indicates that women fare as poorly as possible in all measured dimensions.

The maps of this section present the Gender Inequality Index and its dimension indicators. The maps included in this section illustrate the gender inequalities in the districts of Suriname over the periods 2004-2006 and 2009-2010.

#### 31. Gender Inequality Index (2009/2010) by Districts

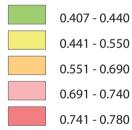


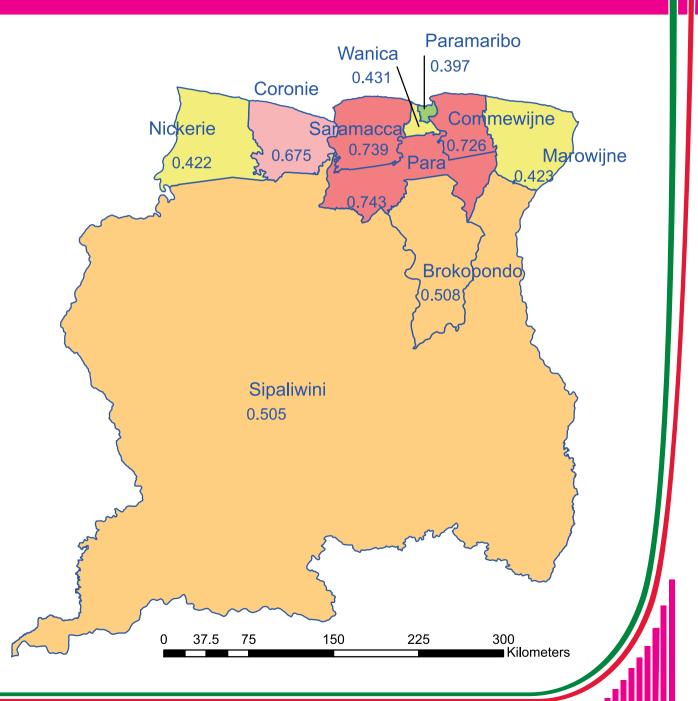
#### 32. Gender Inequality Index (2004/2005) by Districts

The Gender Inequality Index reflects women's disadvantage in three dimensions—reproductive health, empowerment and the labour market. The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equally, to 1, which indicates that women fare as poorly as possible in all measured dimensions.

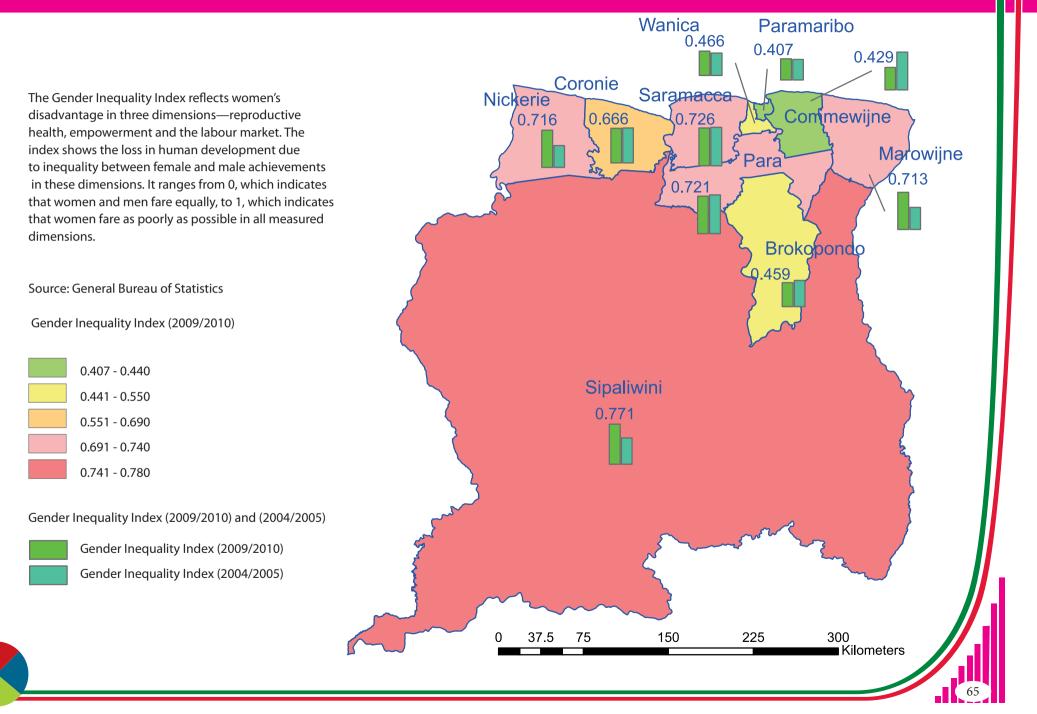
Source: General Bureau of Statistics

Gender Inequality Index (2004/2005)

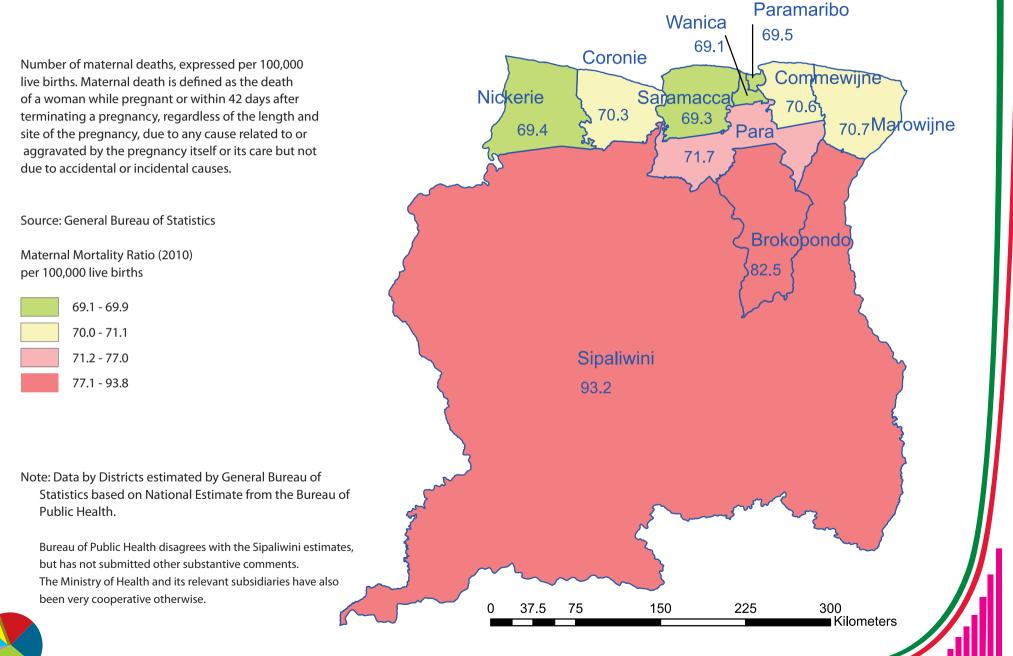




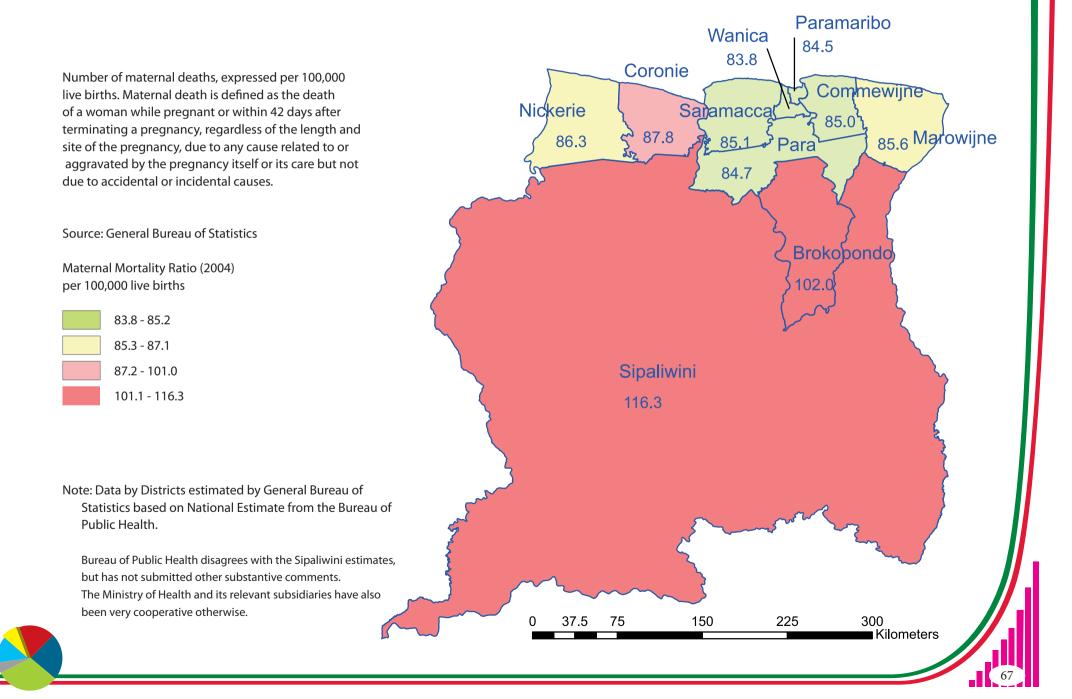
#### 33. Gender Inequality Index (2009/2010) and (2004/2005) by Districts



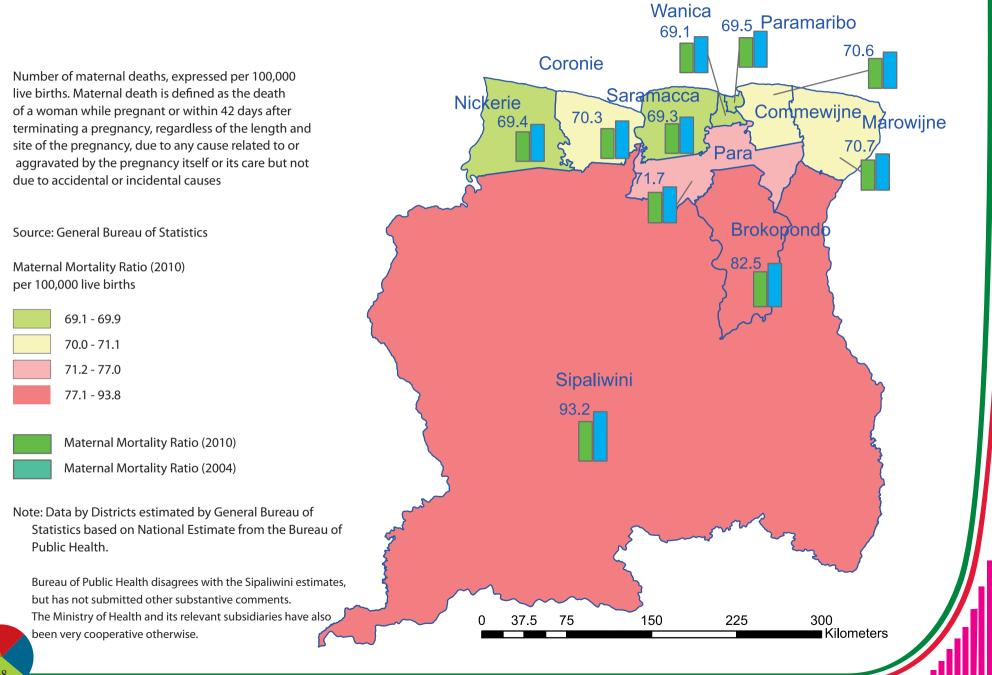
#### 34. Maternal Mortality Ratio (2010) by Districts



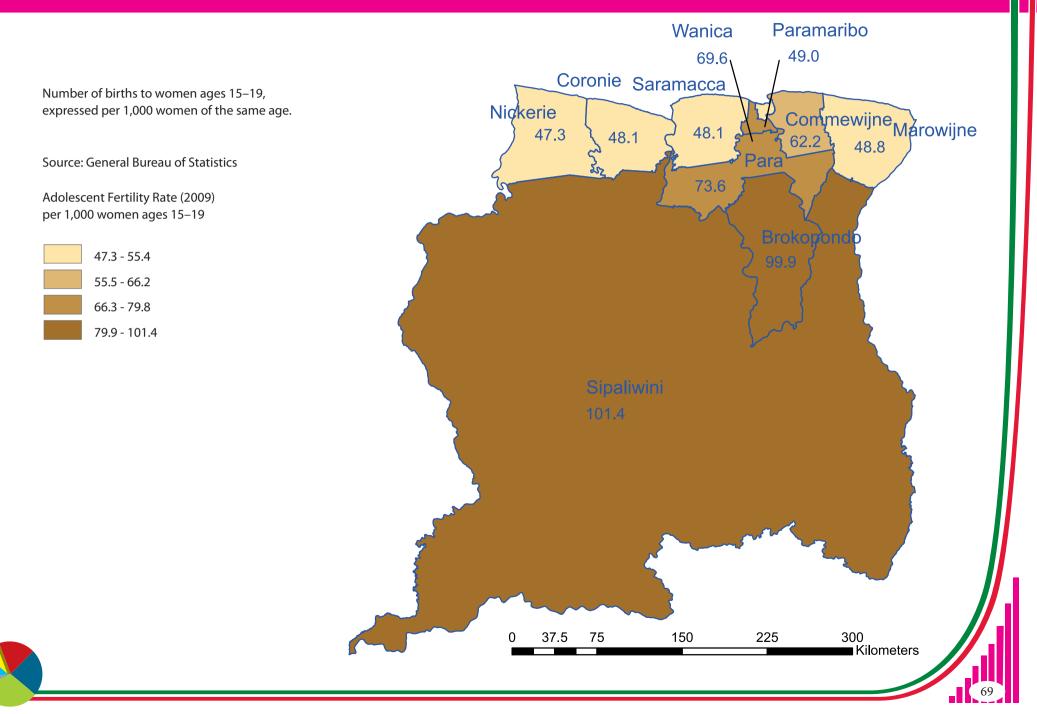
#### 35. Maternal Mortality Ratio (2004) by Districts



#### 36. Maternal Mortality Ratio (2010) and (2004) by Districts



#### 37. Adolescent Fertility Rate (2009) by Districts

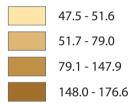


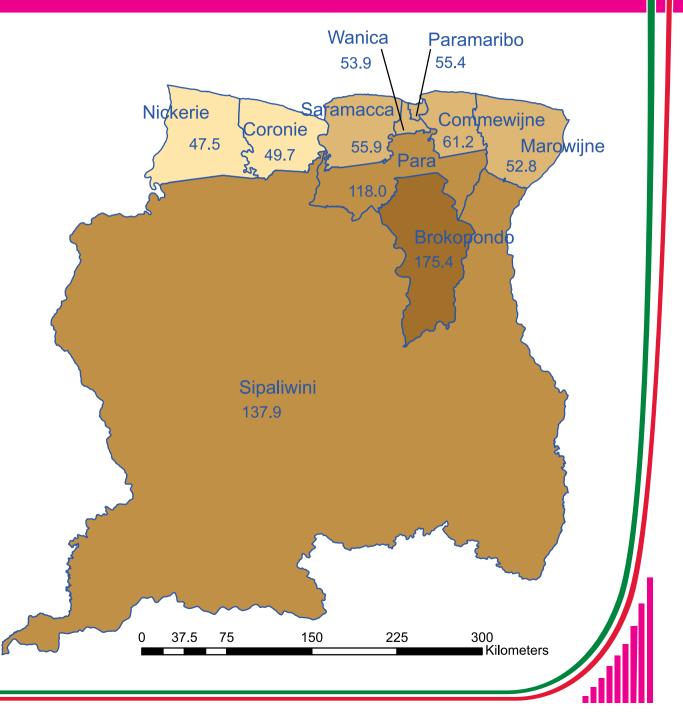
#### 38. Adolescent Fertility Rate (2004) by Districts

Number of births to women ages 15–19, expressed per 1,000 women of the same age.

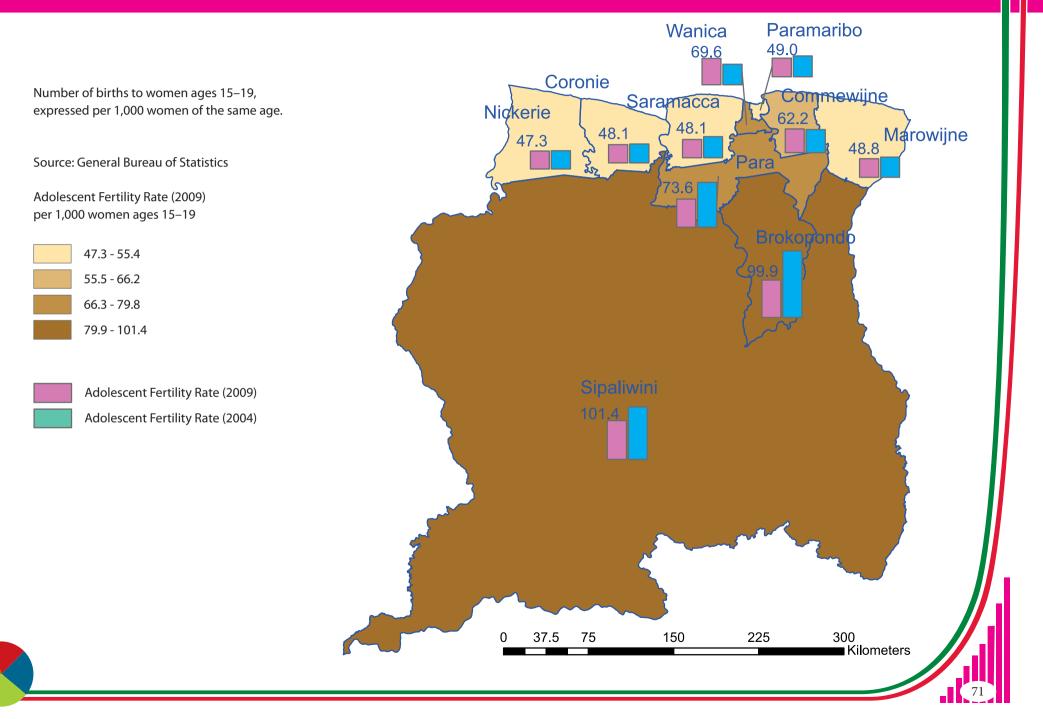
Source: General Bureau of Statistics

Adolescent Fertility Rate (2004) per 1,000 women ages 15–19

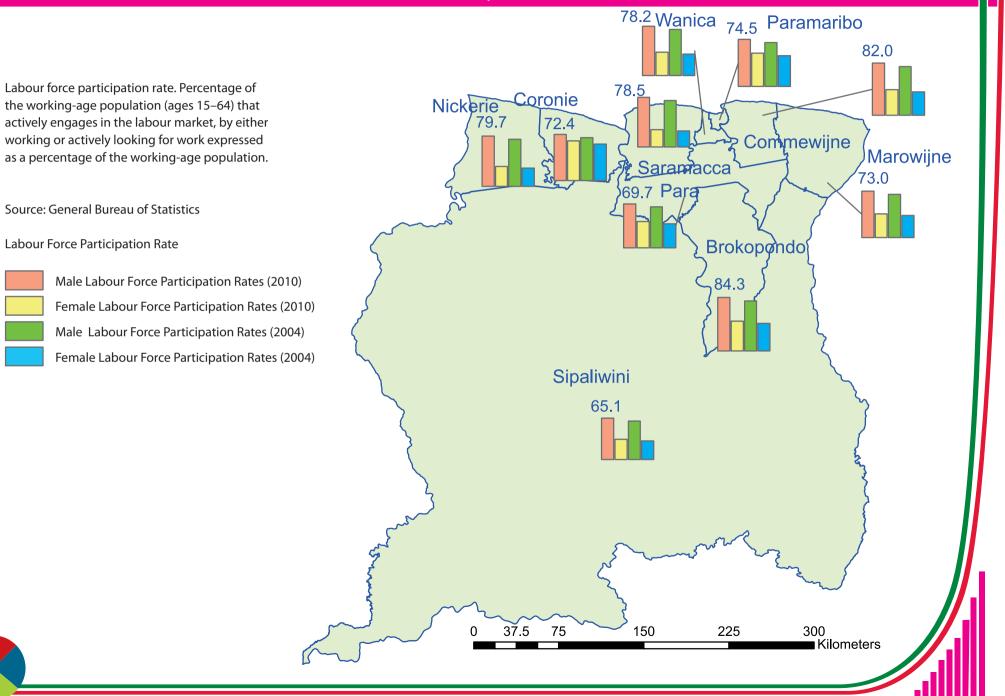




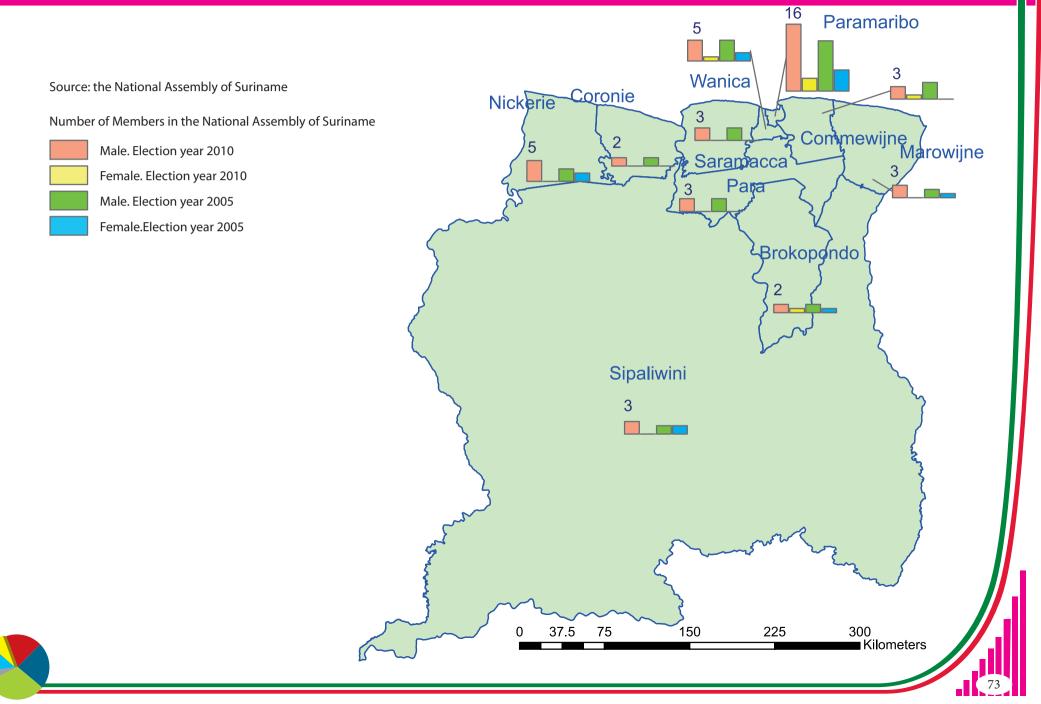
### 39. Adolescent Fertility Rate (2009) and (2004) by Districts



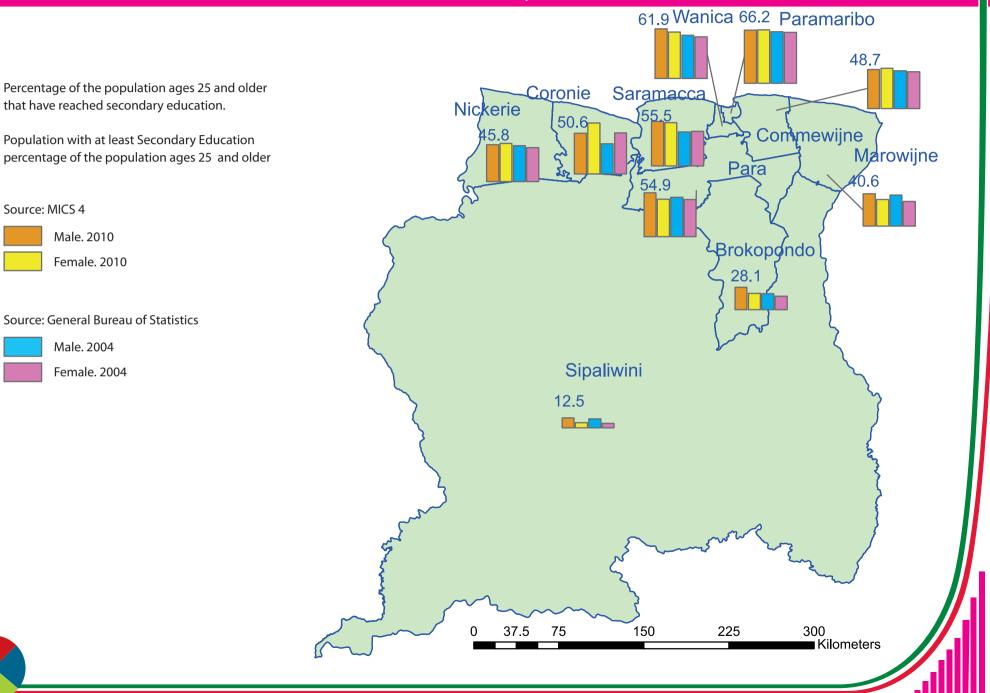
### 40. Male and Female Labour Force Participation Rates (2010) and (2004) by Districts



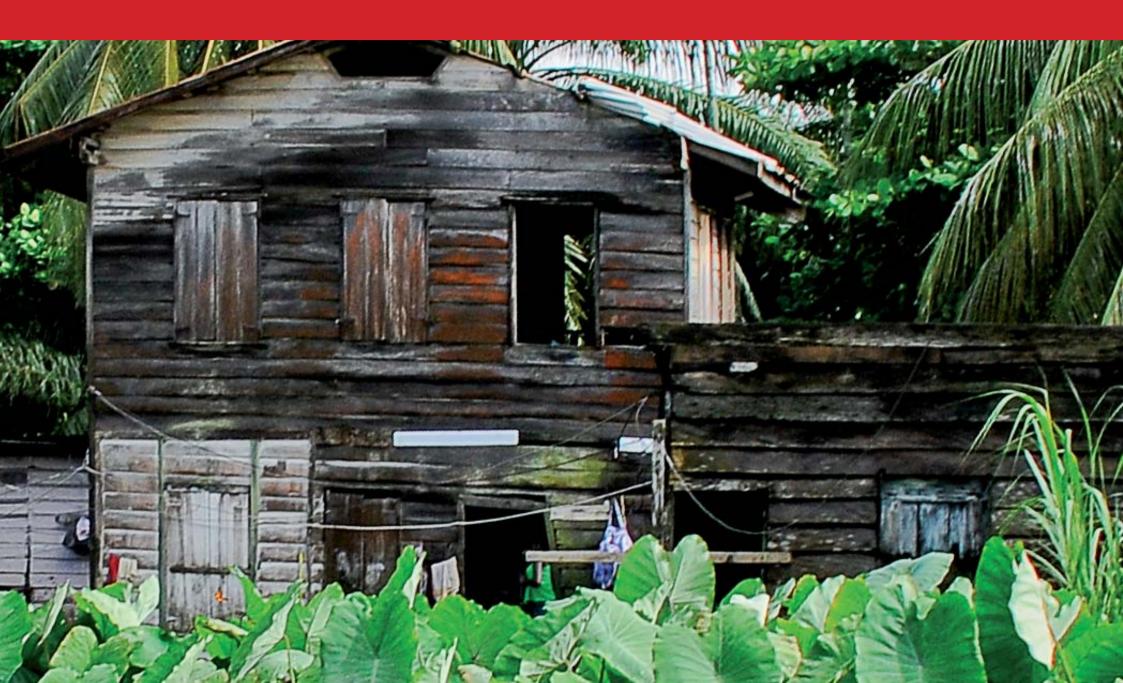
### 41. Male and Female Members in the National Assembly of Suriname (election year 2005 and 2010) by Districts



### 42. Male and Female Population with at least Secondary Education (2010) and (2004) by Districts



# 1.5 Uni-dimensional Poverty



Uni-dimensional poverty measure shows the poverty level based on uni-dimensional approach. Uni-dimensional poverty measure is based on one fundamental dimension which is usually income or consumption. The General Bureau of Statistics utilizes the definition of uni-dimensional poverty of the district as the percentage of population whose income is less than half of Gross National Income per capita of the district.

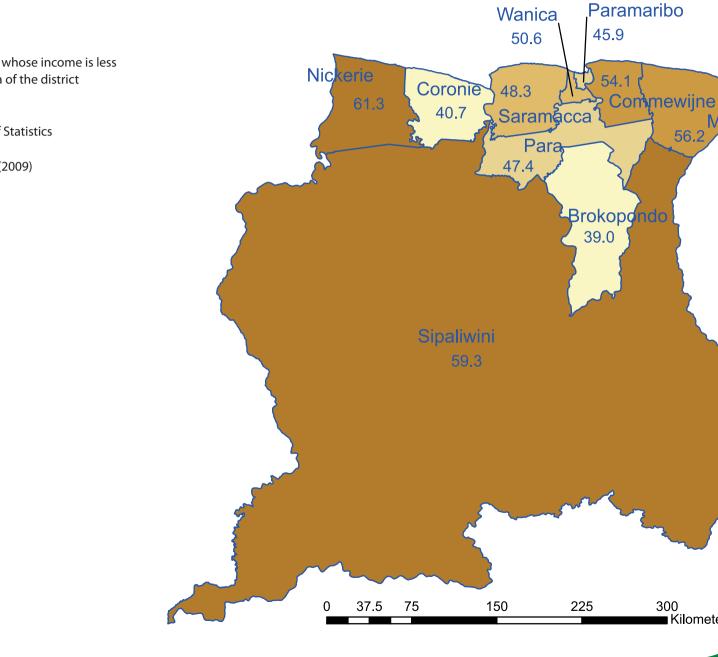
Maps included in this section illustrate the uni-dimensinal poverty level of the districts and compare the trends over the periods the periods 2004-2006 and 2009-2010.

### 43. Uni-dimensional Poverty (2009) by Districts

Marowijne

300

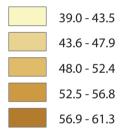
Kilometers



Percentage of population whose income is less than half of GNI per capita of the district

Source: General Bureau of Statistics

Uni-dimensional Poverty (2009) In percentage

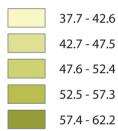


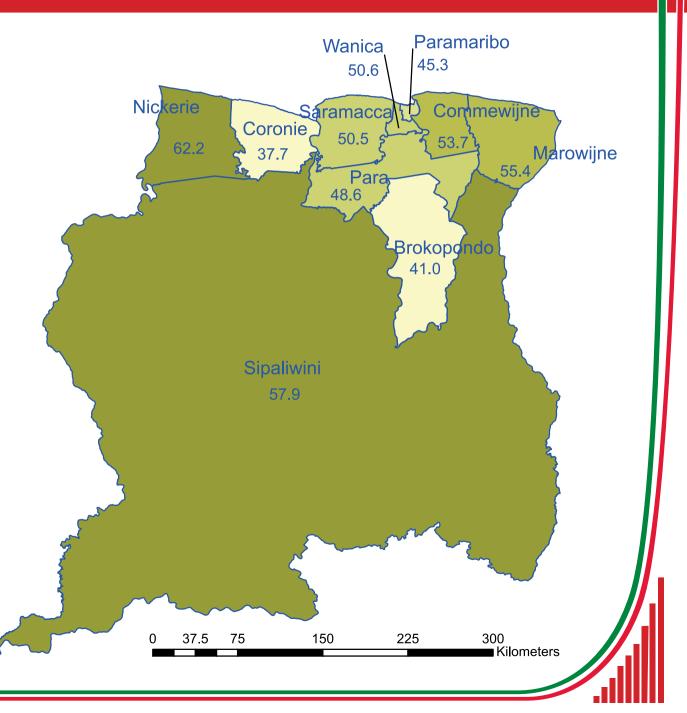
### 44. Uni-dimensional Poverty (2004) by Districts

Percentage of population whose income is less than half of GNI per capita of the district

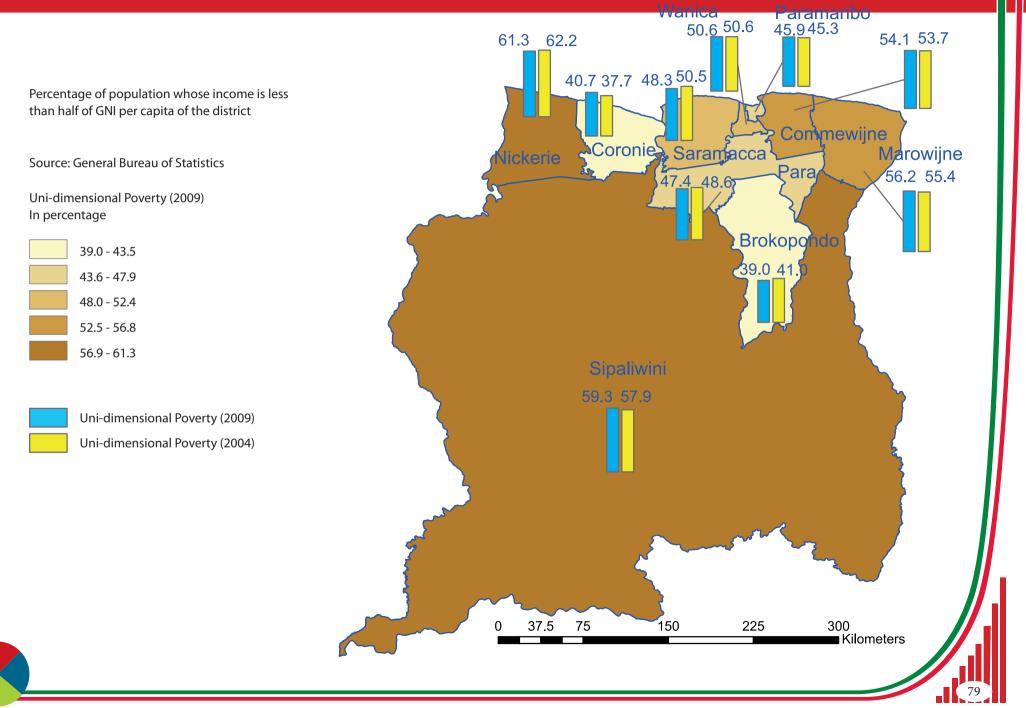
Source: General Bureau of Statistics

Uni-dimensional Poverty (2004) In percentage





### 45. Uni-dimensional Poverty (2009) and (2004) by Districts



# 1.6 Multidimensional Poverty Index



This section contains the maps on Multidimensional Poverty Index and its dimensions for the period 2005/2006 and 2009/2010.

The Multidimensional Poverty Index (MPI) is a measure designed to portray the many deprivations faced by the most severely disadvantaged. The MPI reflects both the incidence of multidimensional deprivation, and its intensity—how many deprivations people experience at the same time. The MPI builds on recent advances in theory and data to present the first global measure of its kind, and offers a valuable complement to incomebased poverty measures.

The MPI identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education) and shows the average number of poor people and deprivations with which poor households contend. For MPI calculation, household survey data is used.

The MPI value is the product of two measures: Multidimensional Headcount Ratio (H) and Intensity of Poverty (A):

H - Multidimensional Headcount Ratio is the proportion of population who are multidimensionality poor.

A - Intensity of Poverty of Multidimensionally Poor Population. It is equal to the mean of Intensity of Poverty of individuals who are considered multidimensionally poor (those who are deprived in at least 20 % of the weighted indicators).

MPI sets multiple deprivations for individuals in education, health and standard of living. Multiple dimension poverty level of individual is defined by the Intensity of Poverty. Depending on the level of poverty deprivation, Intensity of Poverty for individual varies from 0 to 1. The Intensity of Poverty that equals to 1 represents the case when the individual is deprived in all dimension indicators, i.e. the individual is absolutely "poor". When the Intensity of Poverty equals to 0, the individual is not deprived in all dimension indicators, i.e. the individual is absolutely "nonpoor". The Intensity of Poverty can be expressed in percentages and vary accordingly from 0 % to 100%. The Intensity of Poverty for population group is defined as the mean of intensities of individuals pertaining to the group.

A cut-off of value for Intensity of Poverty value is used to distinguish between the poor and non-poor. Household members with the Intensity of Poverty greater than or equal to the cut-off of value is considered multidimensionally poor. MPI for Suriname uses cut off value equal to 20 %.

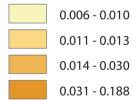
MPI for Suriname for 2005/2006 and 2009/2010 were calculated from Multiple Indicator Cluster Survey 3 (2005/2006) and Multiple Indicator Cluster Survey 4 (2009/2010)

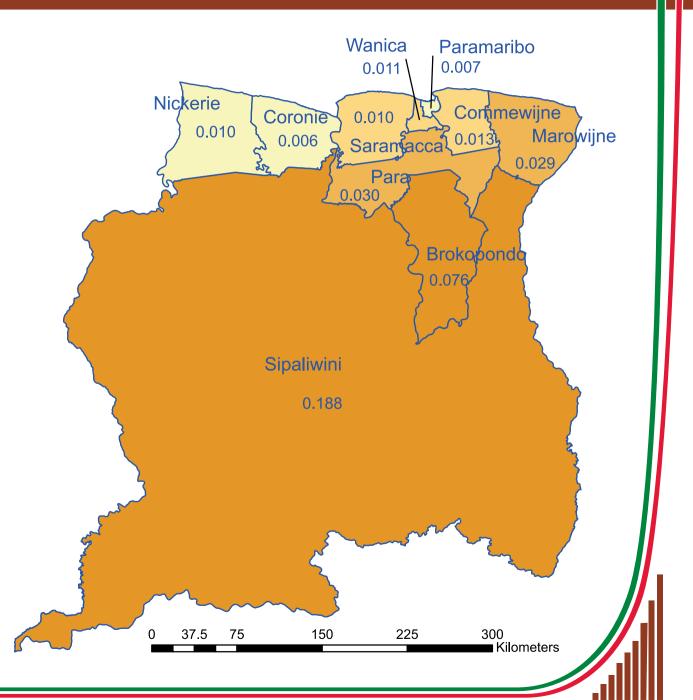
### 46. Multidimensional Poverty Index (2009/2010) by Districts

The Multidimensional Poverty Index is based on the concept of multiple deprivations. MPI allows to identify the poor, excluded and vulnerable group of population and to measure the level of poverty and deprivation of the vulnerable group using dimension indicators. The MPI identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education) and shows the average number of poor people and deprivations with which poor households contend.

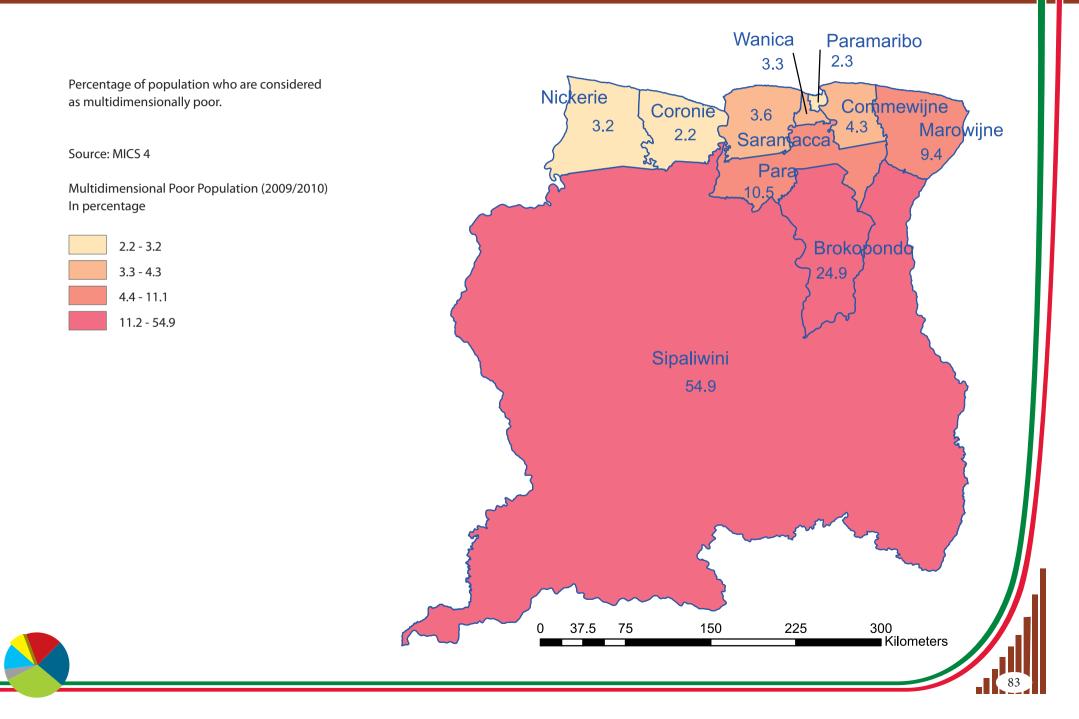
#### Source: MICS 4

Multidimensional Poverty Index (2009/2010)





### 47. Multidimensional Poor Population (2009/2010) by Districts



### 48. Intensity of Multidimensional Poverty (2009/2010) by Districts

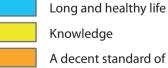
Intensity of Multidimensional Poverty shows the level of deprivations that people experience at the same time. Depending on the level of poverty, Intensity of Multidimensional Poverty for individual varies from 0% to 100%. The Intensity of Multidimensional Poverty that equals to 100% represents the case when the individuals are deprived in all dimension indicators i.e. the individuals are absolutely "poor". When the Intensity of Poverty equals to 0 %, the individuals are not deprived in all dimension indicators, i.e. the individuals are absolutely "non-poor".

#### Source: MICS 4

Intensity of Multidimensional Poverty (2009/2010) In percentage

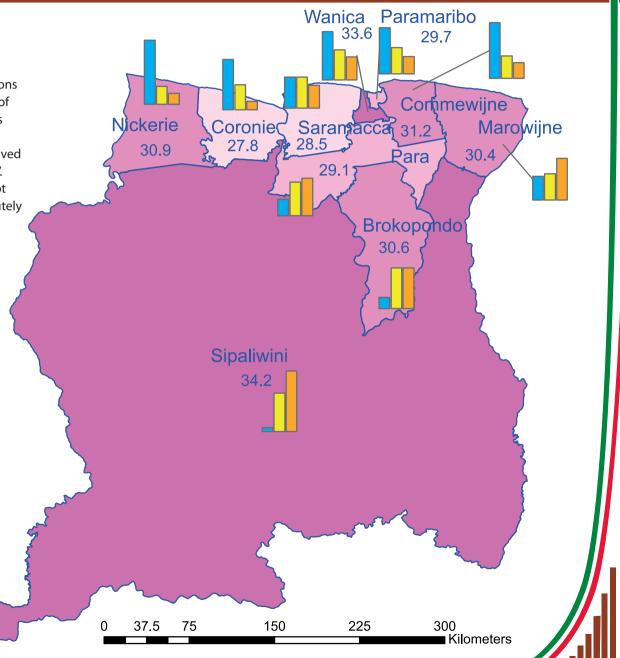
27.8 - 28.9
29.0 - 30.1
30.2 - 31.8
31.9 - 34.2

Intensity of Multidimensional Poverty by Dimensions



Knowledge A decent standard of living

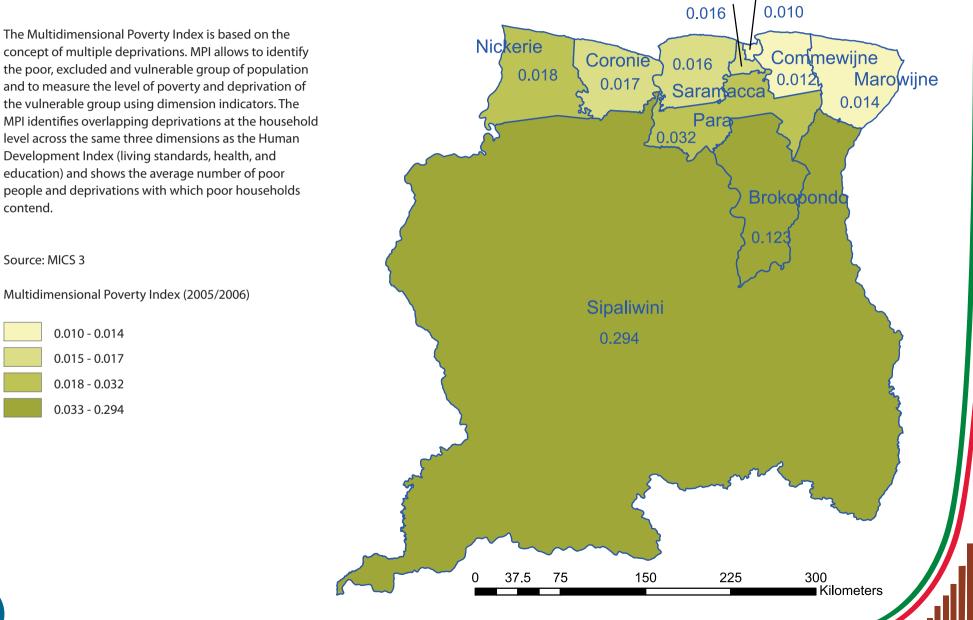
Intensity of Multidimensional Poverty is equal to the total of its dimension intensities



### 49. Multidimensional Poverty Index (2005/2006) by Districts

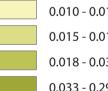
Wanica

Paramaribo

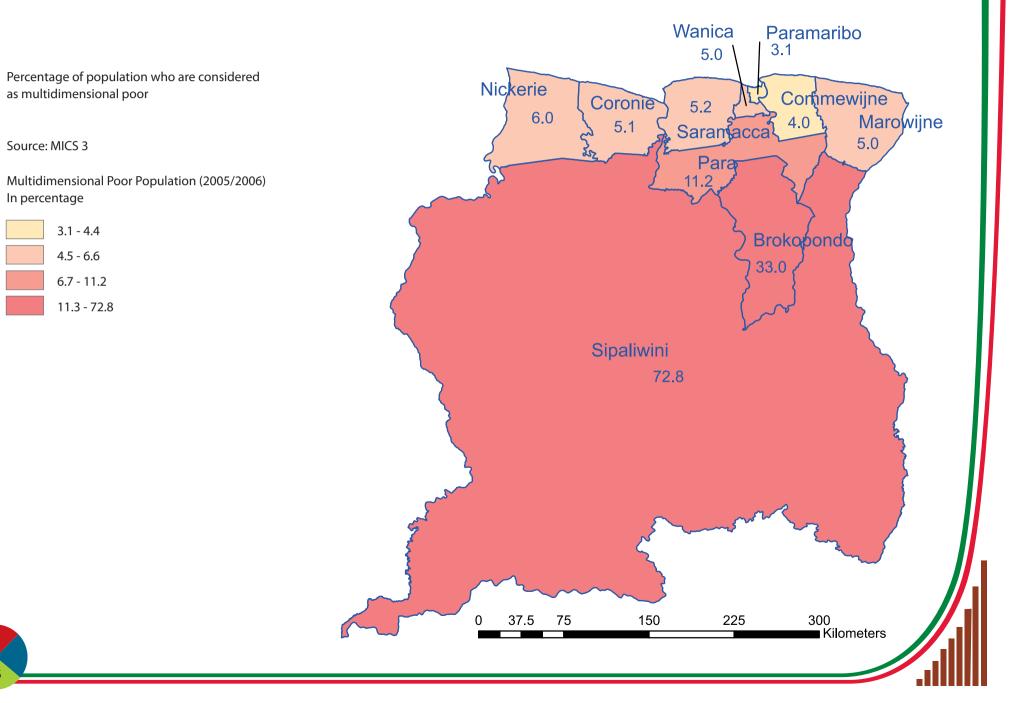


concept of multiple deprivations. MPI allows to identify the poor, excluded and vulnerable group of population and to measure the level of poverty and deprivation of the vulnerable group using dimension indicators. The MPI identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education) and shows the average number of poor people and deprivations with which poor households contend.

#### Source: MICS 3



### 50. Multidimensional Poor Population (2005/2006) by Districts

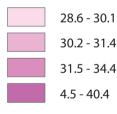


### 51. Intensity of Multidimensional Poverty (2005/2006) by Districts

Intensity of Multidimensional Poverty shows the level of deprivations that people experience at the same time. Depending on the level of poverty, Intensity of Multidimensional Poverty for individual varies from 0% to 100%. The Intensity of Multidimensional Poverty that equals to 100% represents the case when the individuals are deprived in all dimension indicators i.e. the individuals are absolutely "poor". When the Intensity of Poverty equals to 0 %, the individuals are not deprived in all dimension indicators, i.e. the individuals are absolutely "non-poor".

#### Source: MICS 3

Intensity of Multidimensional Poverty (2005/2006) In percentage



Intensity of Multidimensional Poverty by Dimensions

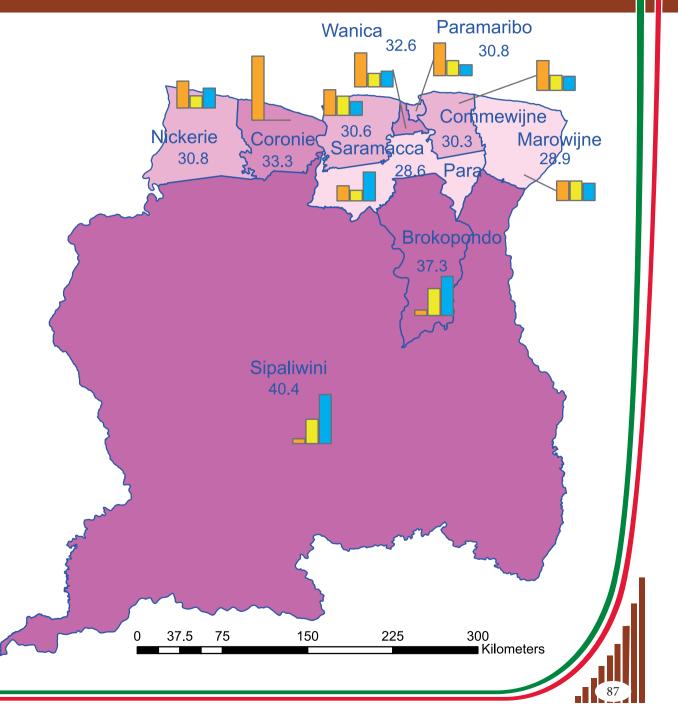


Long and healthy life

Knowledge

A decent standard of living

Intensity of Multidimensional Poverty is equal to the total of its dimension intensities





# PART 2 MILLENIUM DEVELOPMENT G O A L S

At the Millennium Summit in September 2000, the world leaders from 189 nations adopted the UN Millennium Declaration, committing their countries to a global partnership to reduce extreme poverty and setting out the development goals and targets to be achieved by 2015. These development goals and targets became known as the Millennium Development Goals (MDGs).

With the adoption of the Millennium Declaration, including the Millennium Development Goals (MDGs), Suriname, along with the rest of the international community, made a commitment to improve the lives of its people and to ensure a humane existence for each individual.

From "Suriname MDG Baseline Report, 2005"

The MDGs consist of eight main goals, 18 targets and 48 indicators. The first seven main goals are closely linked to one another, because these goals are aimed at sustainable poverty alleviation, while the last goal is aimed at partnership at a global level.

The section on Millennium Development Goals presents the district level maps on MDG indicators. The maps of this section show the regional disparities in MDG indicators and illustrate the attainment of all Millennium Development Goals by districts including poverty, gender, education, health, nutrition, HIV and sanitation.

# Goal 1: Eradicate Extreme Poverty and Hunger





#### Targets:

- 1A. Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day
- 1B. Achieve full and productive employment and decent work for all, including women and young people
- 1C. Halve, between 1990 and 2015, the proportion of people who suffer from hunger

One of the main challenges of poverty eradication is the transfer of economic growth into human development and poverty reduction.

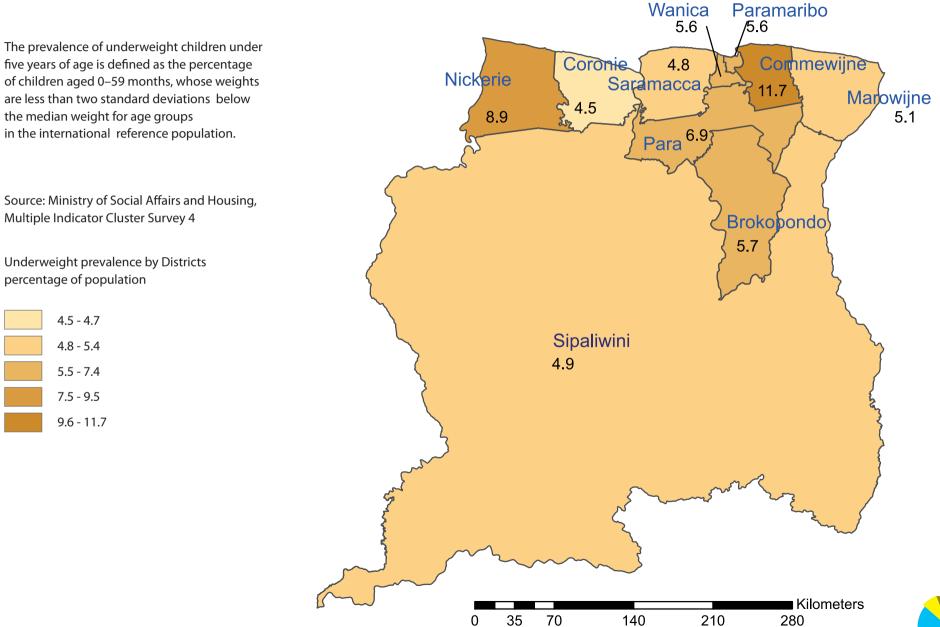
From "Suriname MDG Progress Report, 2009"

Suriname is faced with a number of challenges to improve the situation with respect to poverty as it affects the country and society. An integrated package of measures should lead to equal social and economic distribution including social protection, access to health and education, participation and decision making, sustained economic growth, re-distribution of income and transformation (diversification and structural change) of the economy

From "Suriname MDG Progress Report, 2009 "

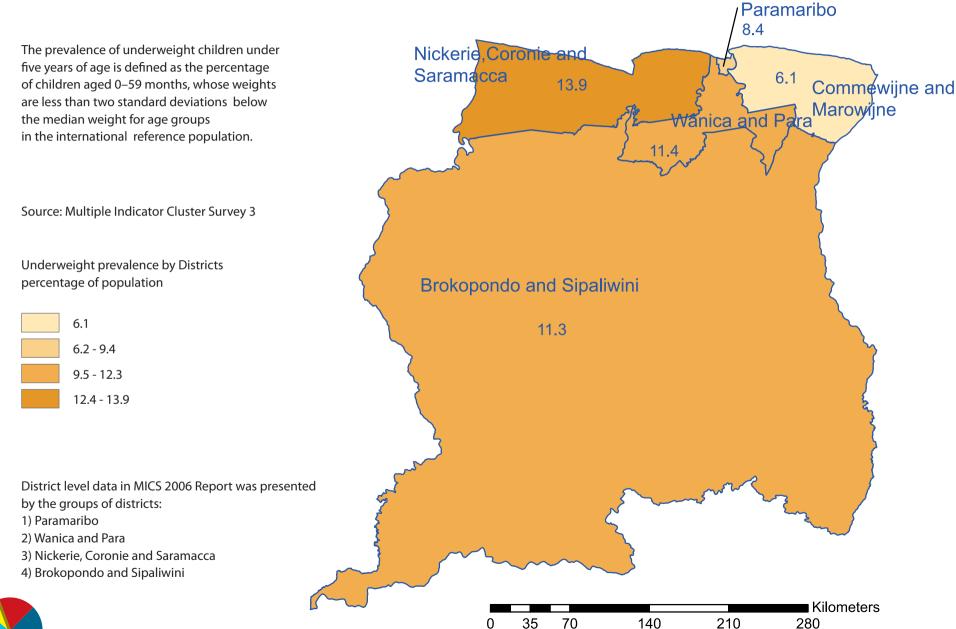
This section contains the maps illustrating the attainment of Goal 1 and the disparities in indicators related to Goal 1

### 52. Underweight Prevalence (2009/2010) by Districts



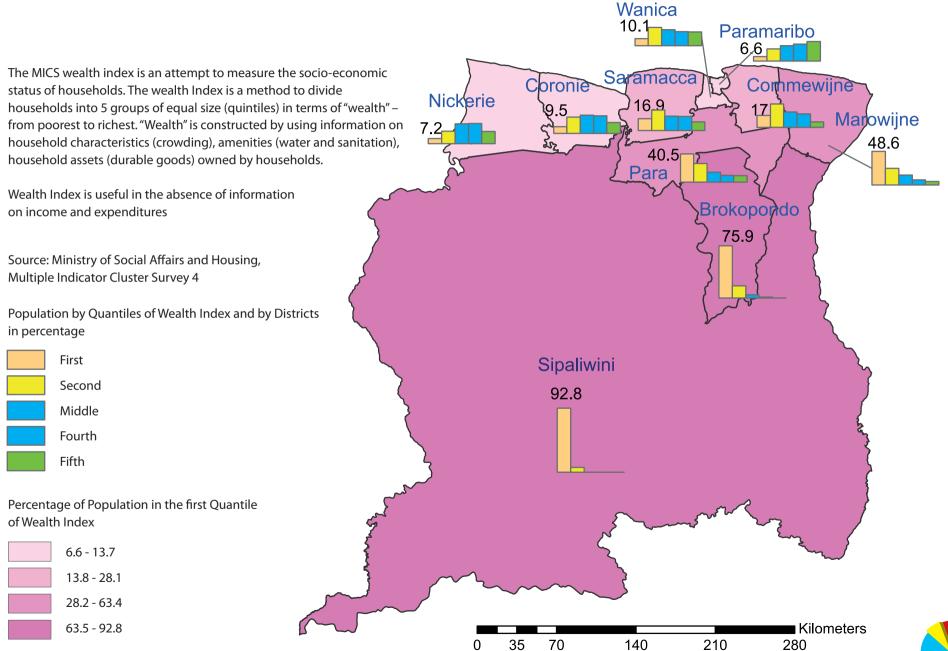


### 52A. Underweight Prevalence (2005/2006) by Districts



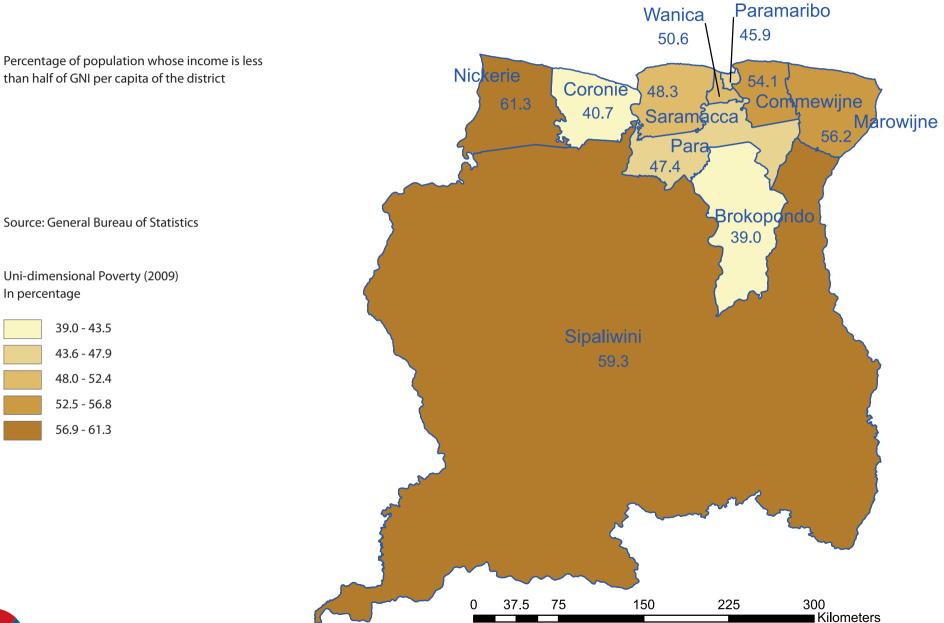


### 53. Population (2009/2010) by Quantiles of Wealth Index and by Districts



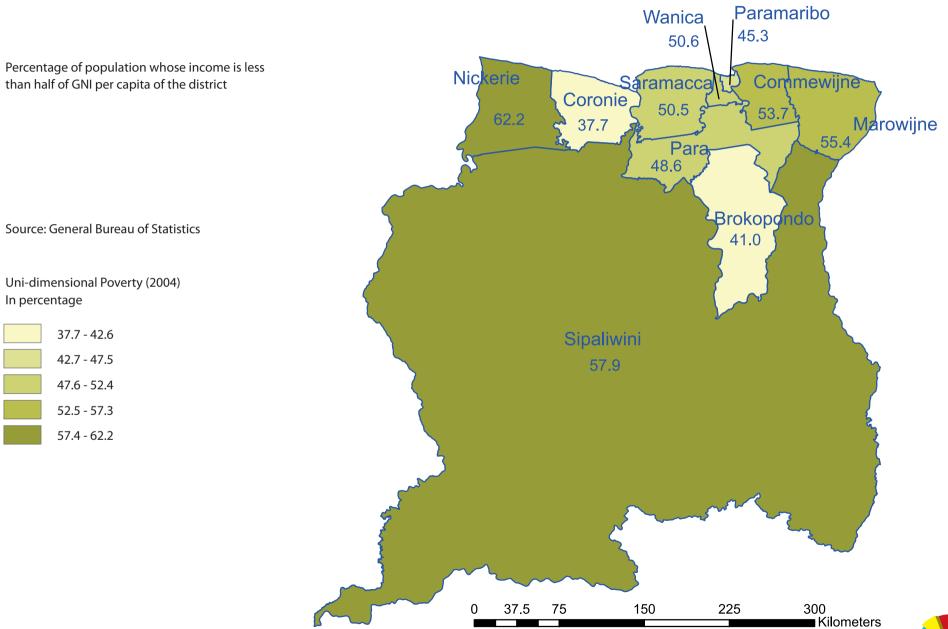


### 54. Uni-dimensional Poverty (2009) by Districts





### 55. Uni-dimensional Poverty (2004) by Districts







# Goal 2: Achieve Universal Primary Education



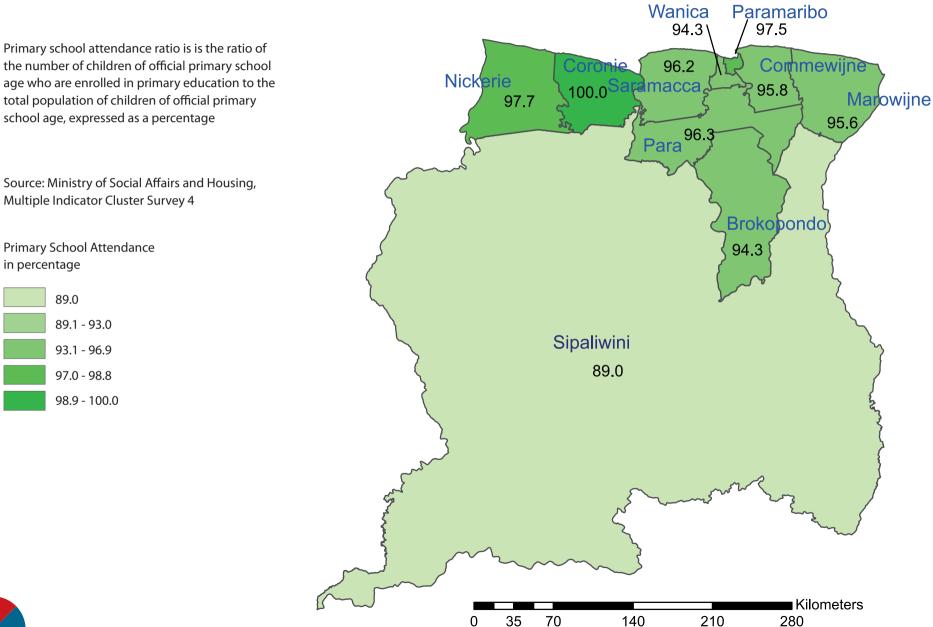
### Target:

2A. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

The policy of the government is aimed at providing 100% access by all children to Basic education and to guarantee equity regarding the quality of education. From "Suriname MDG Progress Report, 2009"

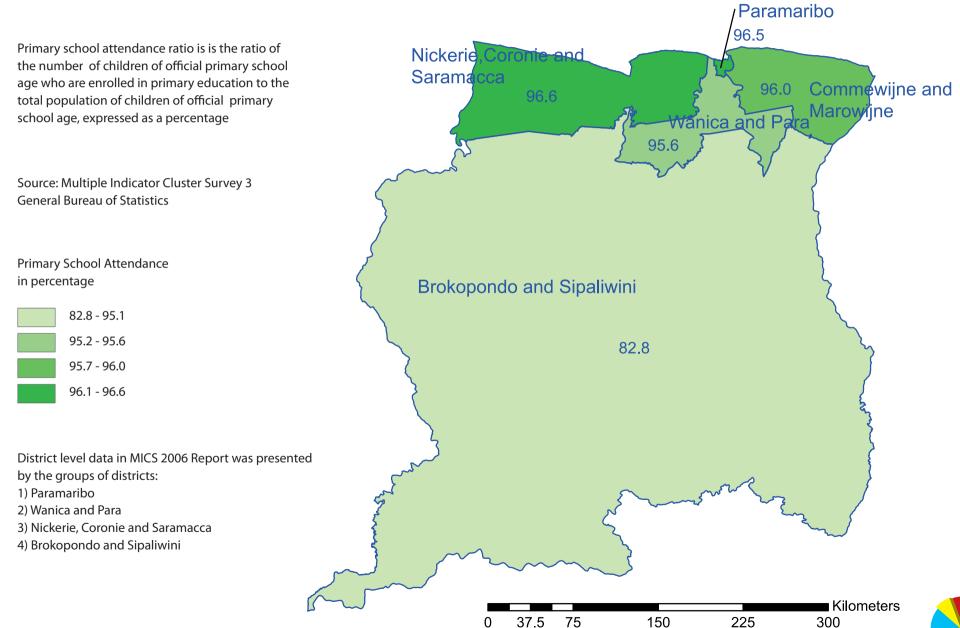
This section contains the maps illustrating the attainment of Goal 2 and the disparities in indicators related to Goal 2

### 56. Primary School Attendance (2010) by Districts





### 56A. Primary School Attendance (2006) by Districts



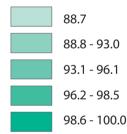


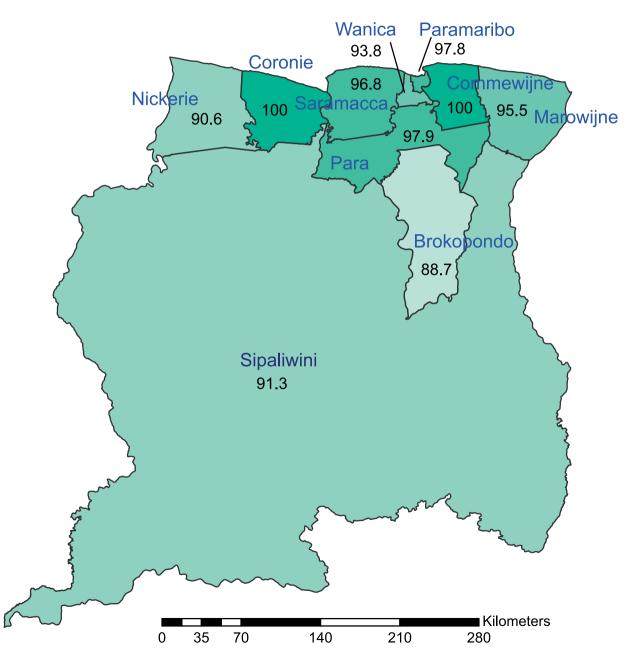
### 57. Children Reaching Last Grade of Primary School (2010) by Districts

The proportion of pupils starting grade 1 who reach last grade of primary measures the percentage of a cohort of pupils enrolled in grade 1 of the primary level of education in a given school year who are expected to reach the last grade of primary school, regardless of repetition.

Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4

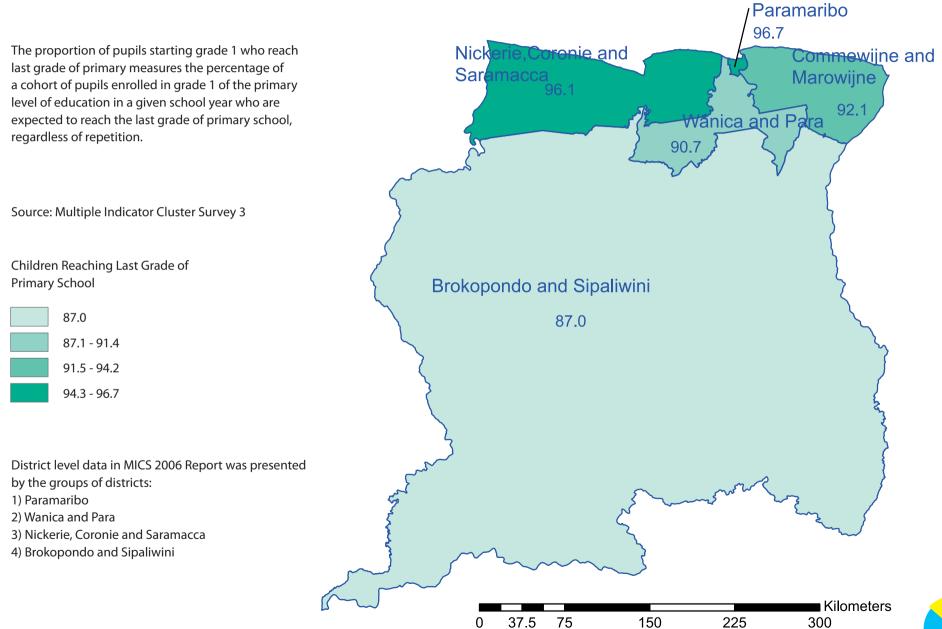
Children Reaching Last Grade of Primary School in percentage







### 57A. Children Reaching Last Grade of Primary School (2006) by Districts



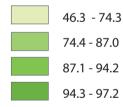


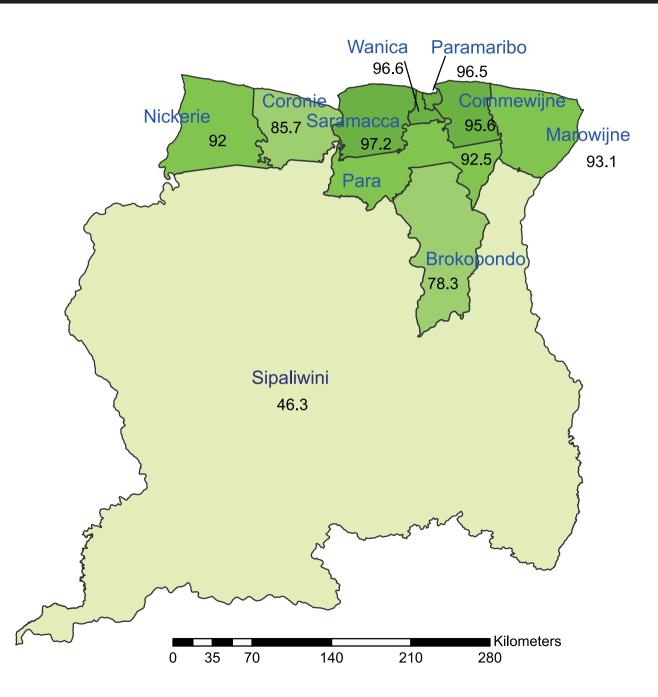
### 58. Literacy among Young Women (2010) by Districts

The literacy rate of 15–24 year-olds is defined as the proportion of the population aged 15–24 years who can both read and write with understanding a short simple statement on everyday life. Literacy, in addition to the ability to read and write with understanding a short simple statement, generally also encompass numeracy, that is, the ability to make simple arithmetic calculations.

Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4

Literacy among Young Women in percentage







### 58A. Literacy among Young Women (2006) by Districts

The literacy rate of 15–24 year-olds is defined as the proportion of the population aged 15–24 years who can both read and write with understanding a short simple statement on everyday life. Literacy, in addition to the ability to read and write with understanding a short simple statement, generally also encompass numeracy, that is, the ability to make simple arithmetic calculations.

Source: Multiple Indicator Cluster Survey 3

Literacy among Young Women in percentage

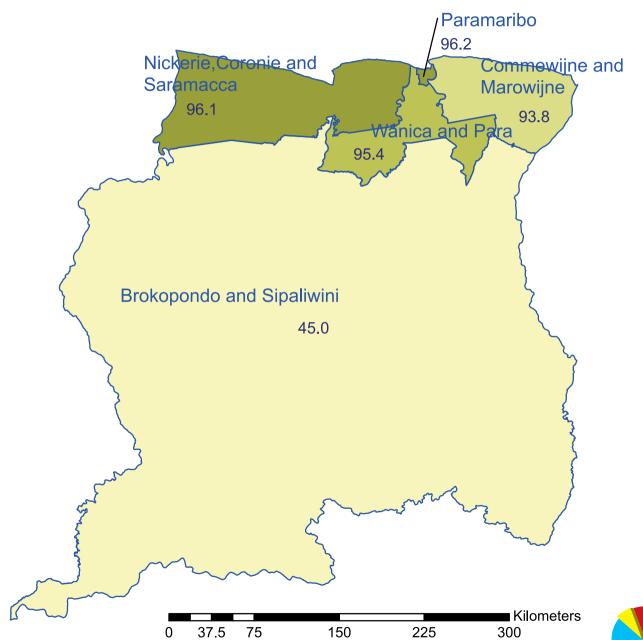
45.0 - 92.8 92.9 - 94.4 94.5 - 95.4 95.5 - 96.2

District level data in MICS 2006 Report was presented by the groups of districts: 1) Paramaribo

2) Wanica and Para

3) Nickerie, Coronie and Saramacca

4) Brokopondo and Sipaliwini





# Goal 3: Promote Gender Equality and Empower Women



#### Target:

3A. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

#### Government policies

Suriname is fully aware of its international commitment to gender equality. As a result, this concept is included in all its policy documents, in particular in its MOP 2006 – 2011. One of the principles of Suriname's human rights-based development strategy indicates that a cross-cutting gender perspective should be mainstreamed in all plans and programs.

From "Suriname MDG Progress Report, 2009"

This section contains the maps illustrating the attainment of Goal 3 and the disparities in indicators related to Goal 3.

#### 59. Gender Parity Index for Primary School (2010) by Districts

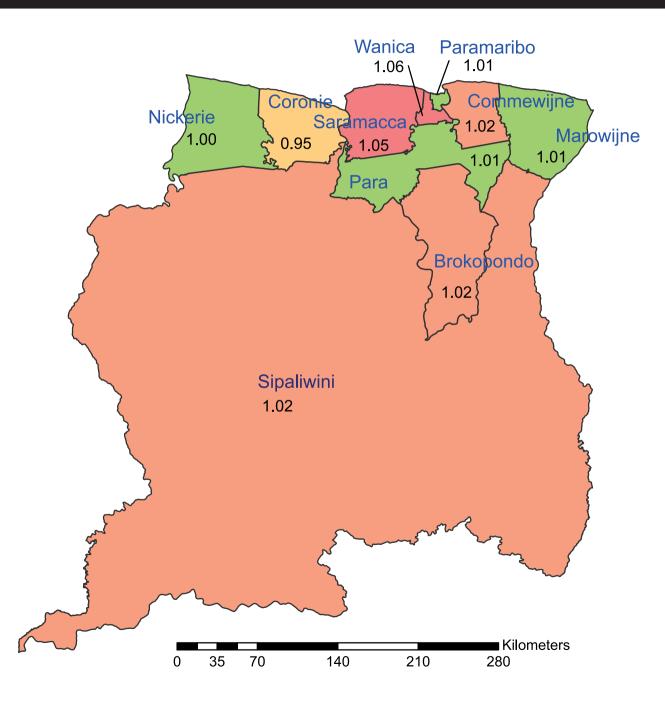
Gender Parity Index for primary school is the ratio of the female over the male net attendance rate for primary school.

A value of less than one indicates differences in favour of boys, whereas a value near one indicates that parity has been more or less achieved.

Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4

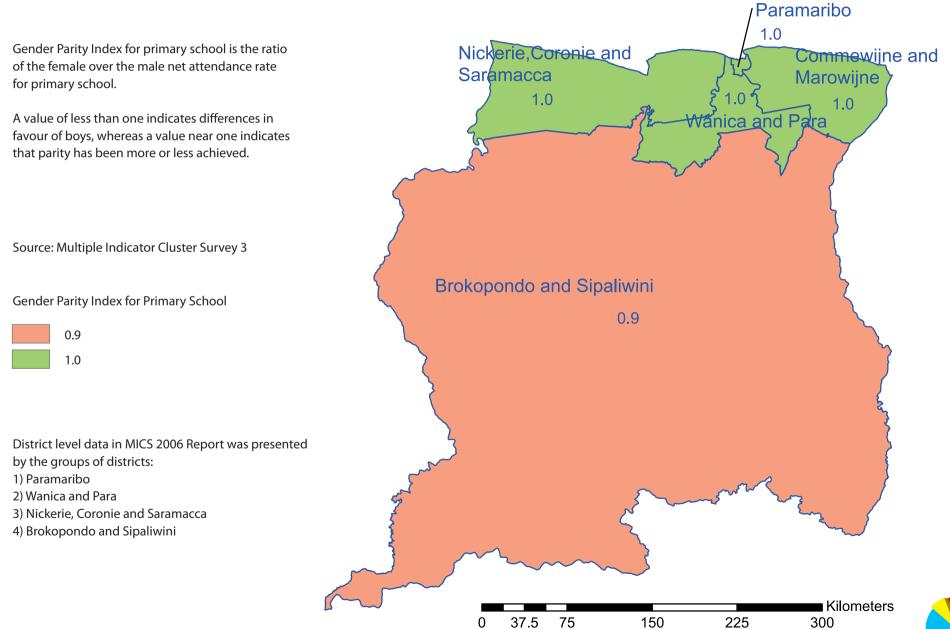
Gender Parity Index for Primary School







#### 59A. Gender Parity Index for Primary School (2006) by Districts





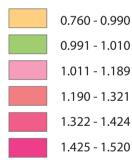
#### 60. Gender Parity Index for Secondary School (2010) by Districts

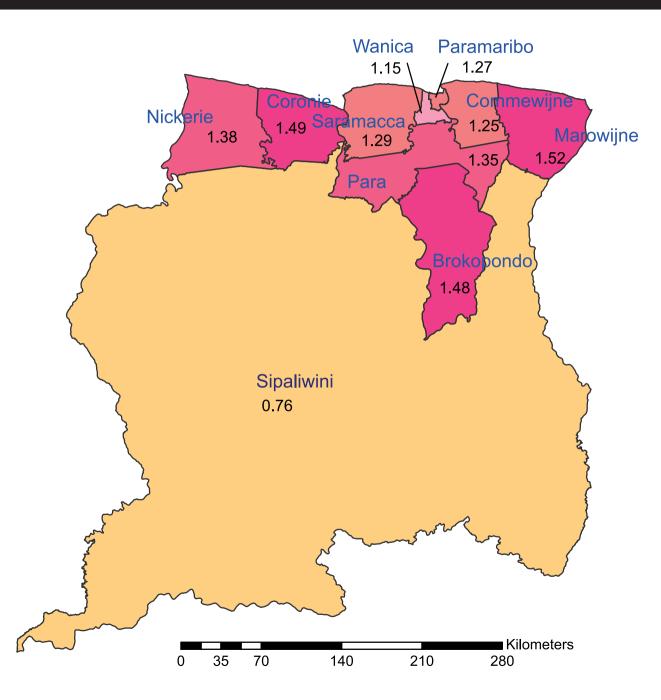
Gender Parity Index for secondary school is the ratio of the female over the male net attendance rate for secondary school.

A value of less than one indicates differences in favour of boys, whereas a value near one indicates that parity has been more or less achieved.

Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4

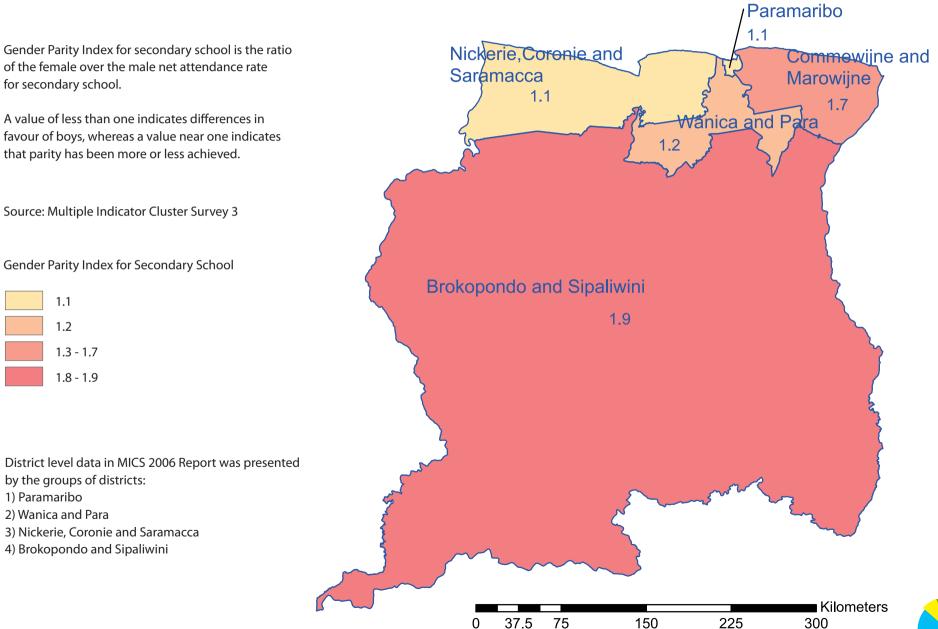
Gender Parity Index for Secondary School







#### 60A. Gender Parity Index for Secondary School (2006) by Districts





## 61. Proportion of Seats held by Women in the National Assembly of Suriname by Districts in the Election year 2010

Wanica

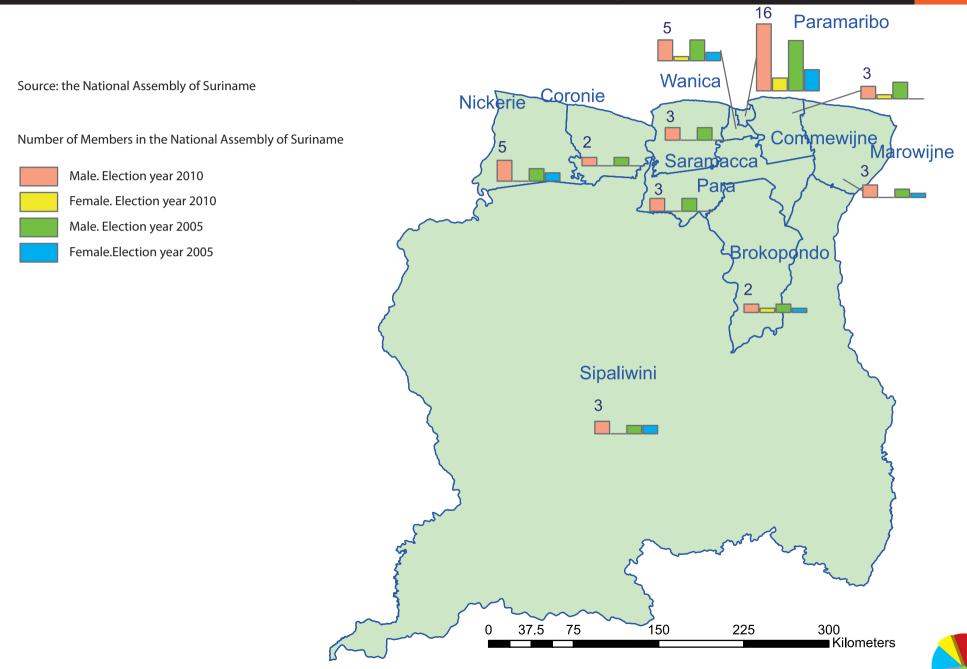
Paramaribo

280

15.8 16.7 The proportion of seats held by women in 25 national parliaments is the number of seats Coronie **Nickerie** held by women members in single or lower Saramacca Commewijne 0 chambers of national parliaments, expressed 0 as a percentage of all occupied seats. 0 Marowijne 0 Para Source: The National Assembly of Suriname Kopondo Proportion of Seats held by Women 33.3 in the National Assembly of Suriname in percentage 0.0 - 10.6 Sipaliwini 10.7 - 20.2 0 20.3 - 27.7 27.8 - 33.3 Kilometers 35 70 140 210

0

#### 62. Male and Female Members in the National Assembly of Suriname (election year 2005 and 2010) by Districts





## Goal 4: Reduce Child Mortality



#### Target:

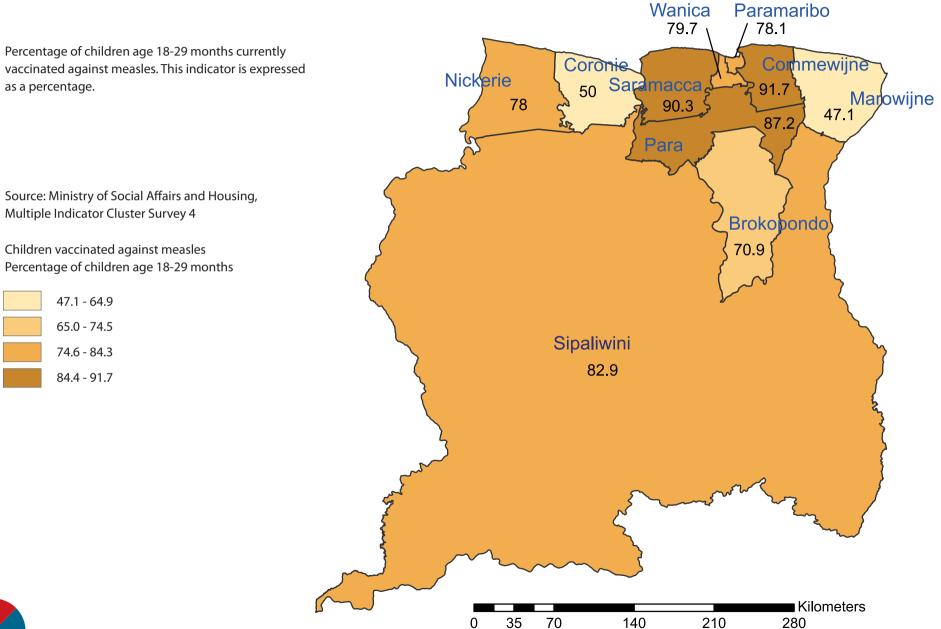
4A. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Reduction of child mortality by two thirds between 1990 and 2015 is a major challenge. Policy has to be put in place to have more decentralized programs for child health. A more aggressive and assertive approach in order to reduce child mortality is crucial to reach this goal by 2015.

From "Suriname MDG Progress Report, 2009"

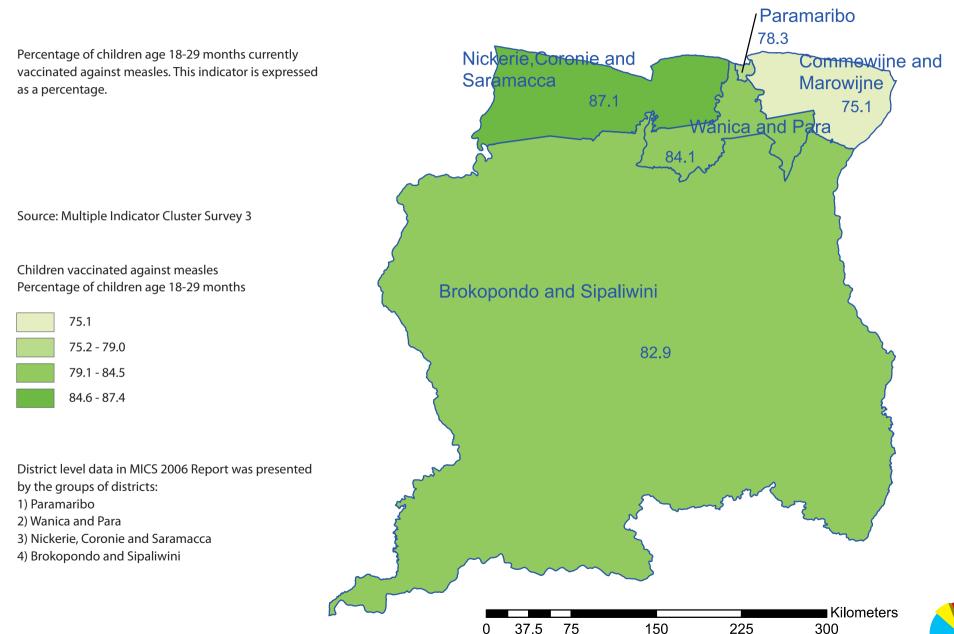
This section includes the map illustrating the attainment of Goal 4 and the disparities in indicators related to Goal 4.

#### 63. Children Vaccinated against Measles (2010) by Districts





#### 63A. Children Vaccinated against Measles (2006) by Districts







## Goal 5: Improve Maternal Health

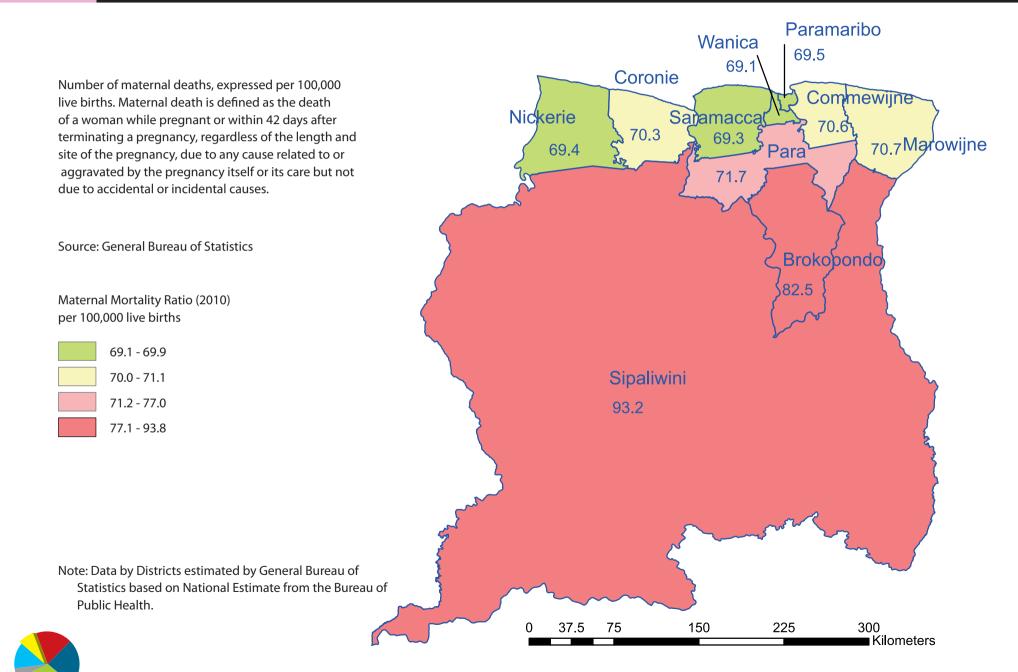


#### Targets:

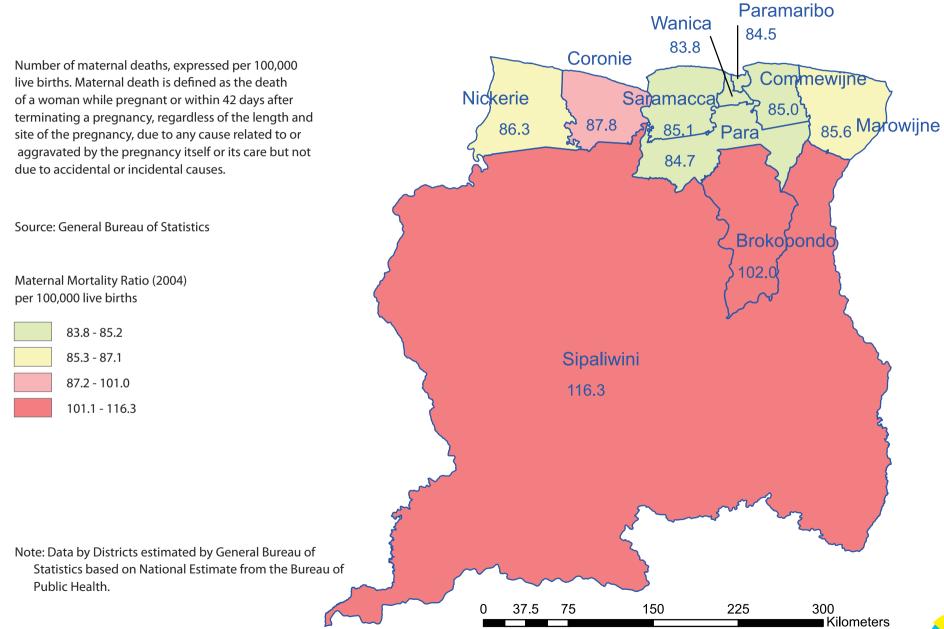
- 5A. Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
- 5B. Achieve, by 2015, universal access to reproductive health

This section contains the maps illustrating the attainment of Goal 5 and the district level disparities in indicators related to Goal 5. Maps included compare the trends in the Maternal Mortality Rate indicators over the periods 2004 and 2010

#### 64. Maternal Mortality Ratio (2010) by Districts

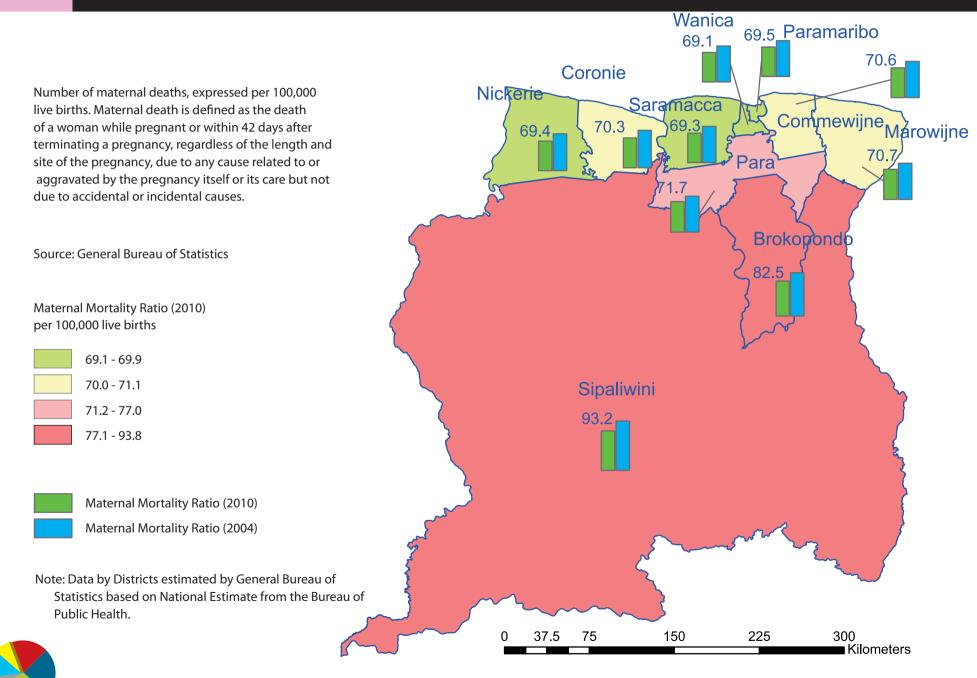


### 65. Maternal Mortality Ratio (2004) by Districts

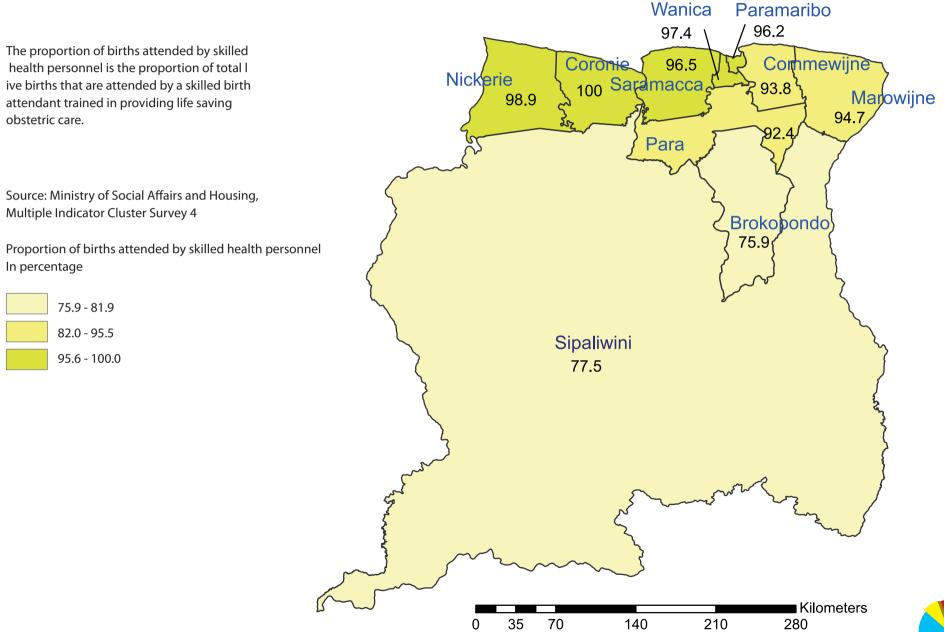




### 66. Maternal Mortality Ratio (2010) and (2004) by Districts

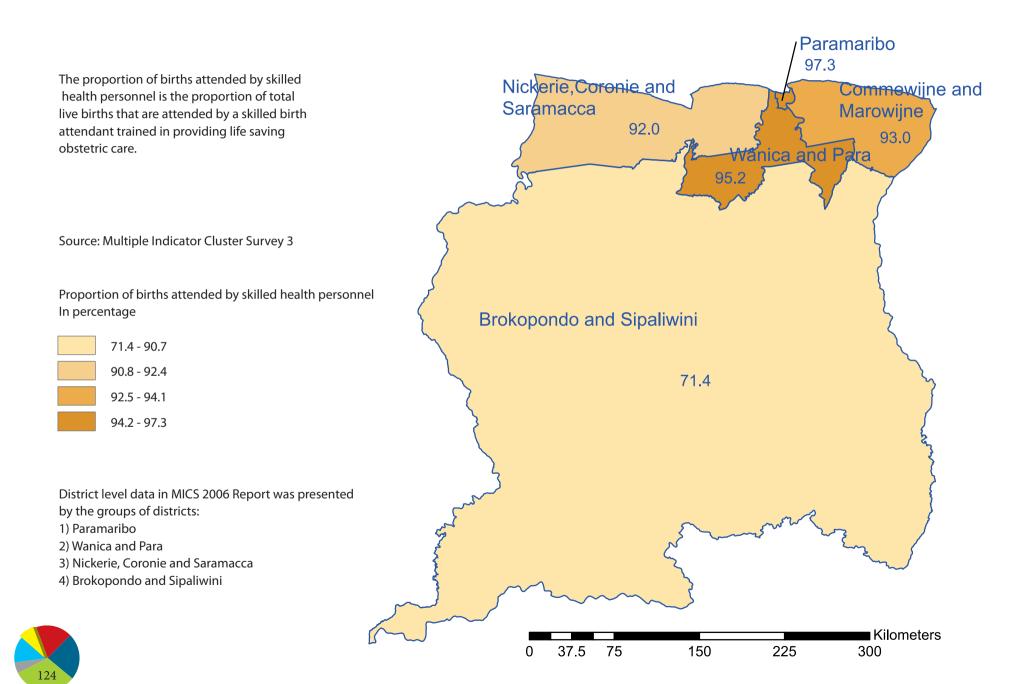


#### 67. Proportion of Births attended by Skilled Health Personnel (2010) by Districts





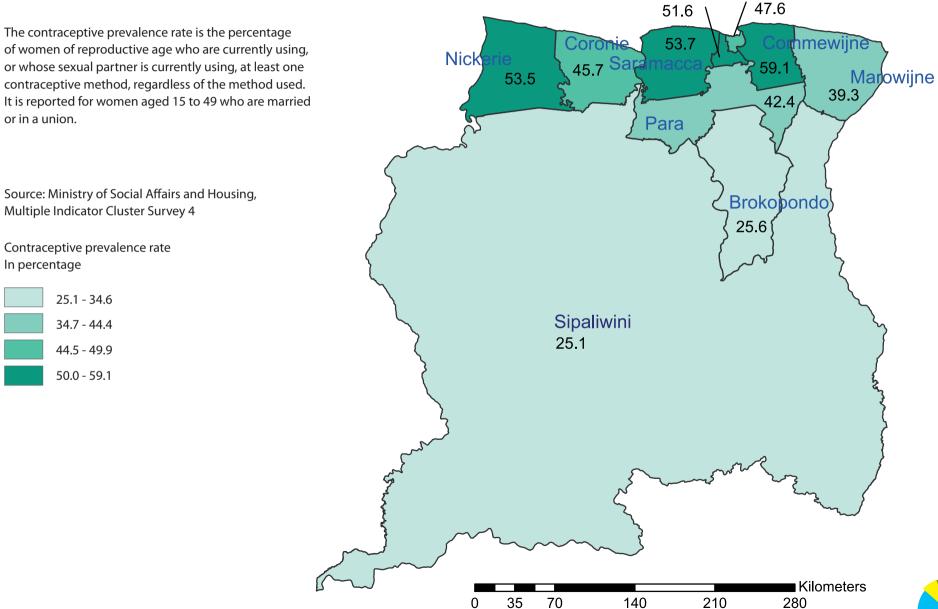
#### 67A. Proportion of Births attended by Skilled Health Personnel (2006) by Districts



#### 68. Contraceptive Prevalence Rate (2010) by Districts

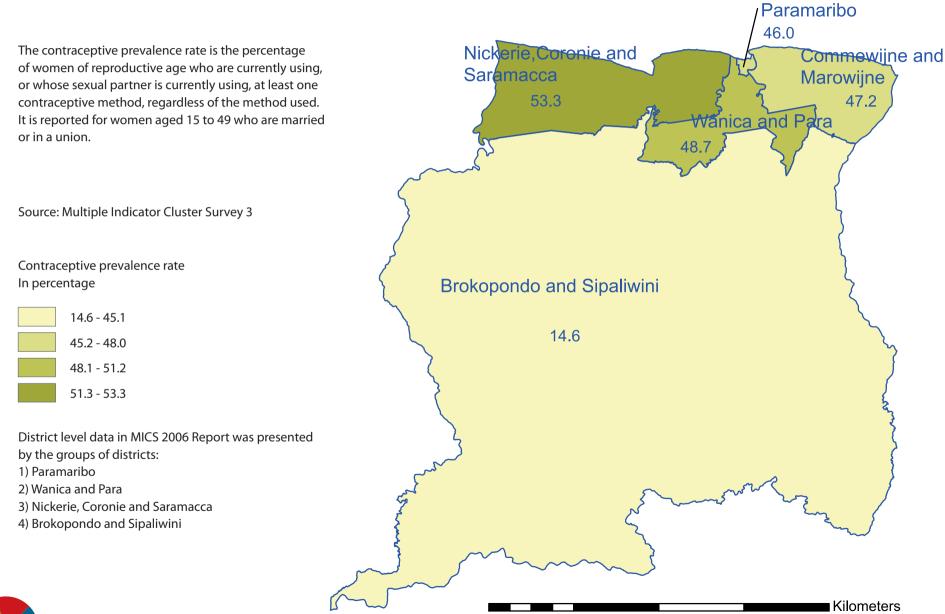
Wanica

Paramaribo





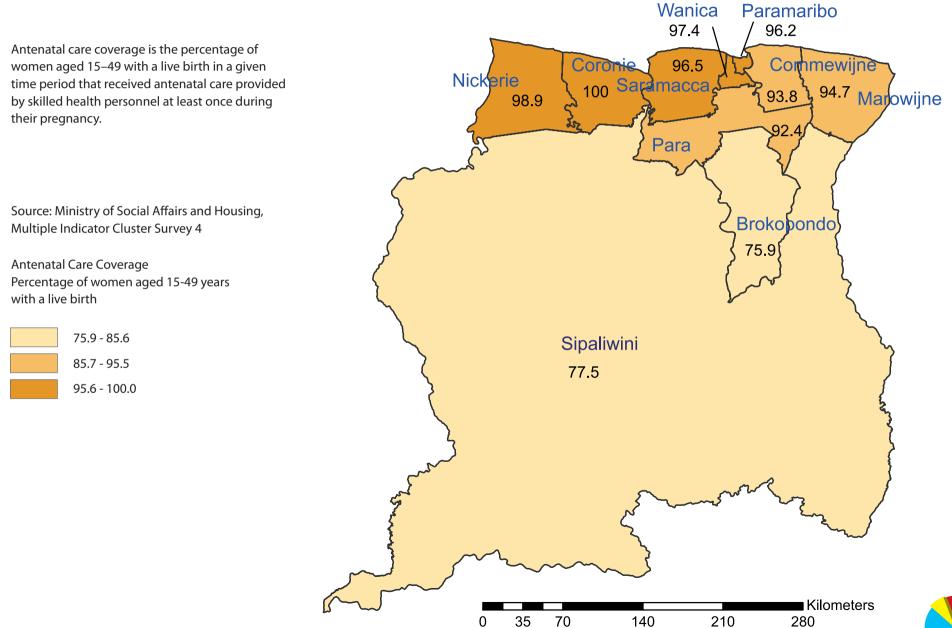
#### 68A. Contraceptive Prevalence Rate (2006) by Districts



37.5

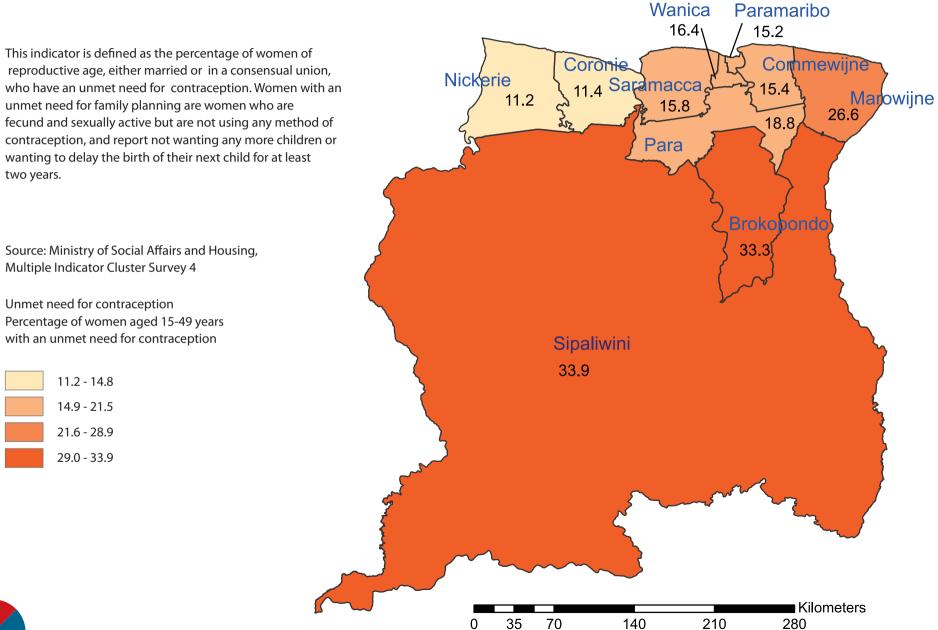


#### 69. Antenatal Care Coverage (2010) by Districts





#### 70. Unmet Need for Contraception (2010) by Districts





#### 70A. Unmet need for Contraception (2006) by Districts

Paramaribo

17.3 This indicator is defined as the percentage of women of Nickerie, Coronie and Commewijne and reproductive age, either married or in a consensual union, Sarámacca Marowijne who have an unmet need for contraception. Women with an unmet need for family planning are women who are 17.2 Wanica and Para 17.6 fecund and sexually active but are not using any method of contraception, and report not wanting any more children or 16.9 wanting to delay the birth of their next child for at least two years. Source: Multiple Indicator Cluster Survey 3 Brokopondo and Sipaliwini Unmet need for contraception Percentage of women aged 15-49 years with an unmet need for contraception 33.2 16.9 17.0 - 17.5 17.6 - 17.9 18.0 - 33.2 District level data in MICS 2006 Report was presented by the groups of districts: 1) Paramaribo 2) Wanica and Para 3) Nickerie, Coronie and Saramacca 4) Brokopondo and Sipaliwini ■ Kilometers 150 75 225 37.5 300



# Goal 6: Combat HIV/AIDS, Malaria and other diseases

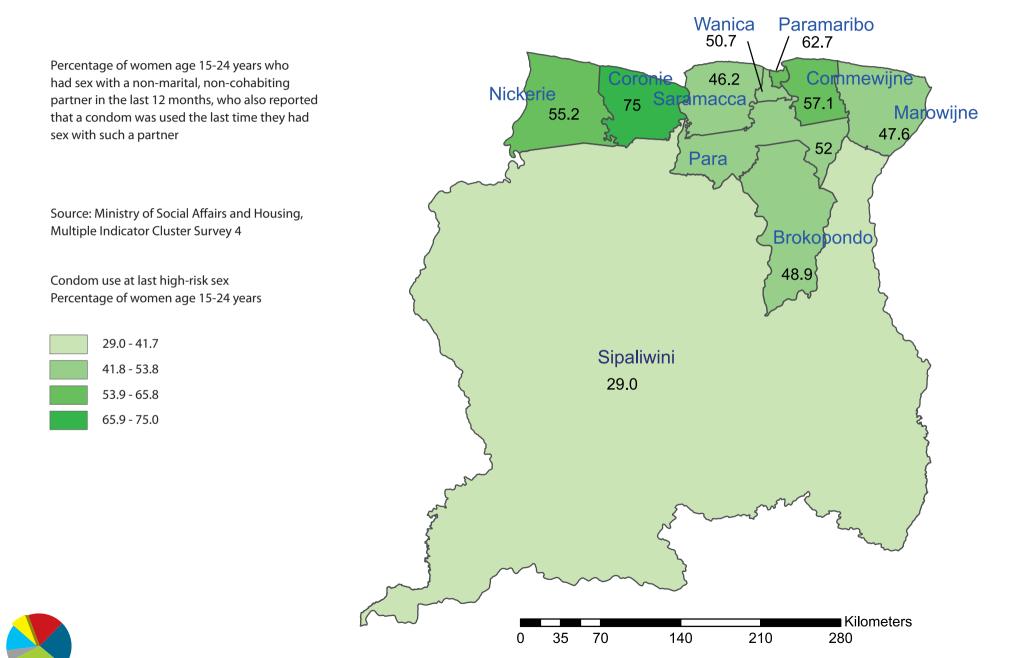


#### Targets:

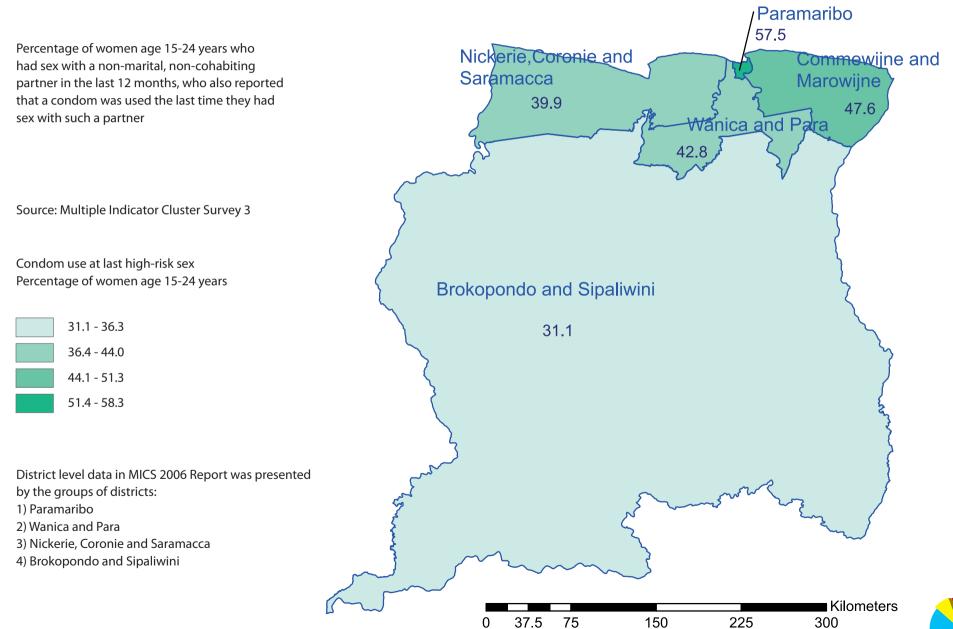
- 6A. Have halted by 2015 and begun to reverse the spread of HIV/AIDS
- 6B. Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
- 6C. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

This section contains the maps illustrating the attainment of Goal 6 and the district level disparities in indicators related to Goal 6.

#### 71. Condom Use at Last High-risk Sex (2010) by Districts



#### 71A. Condom Use at Last High-risk Sex (2006) by Districts





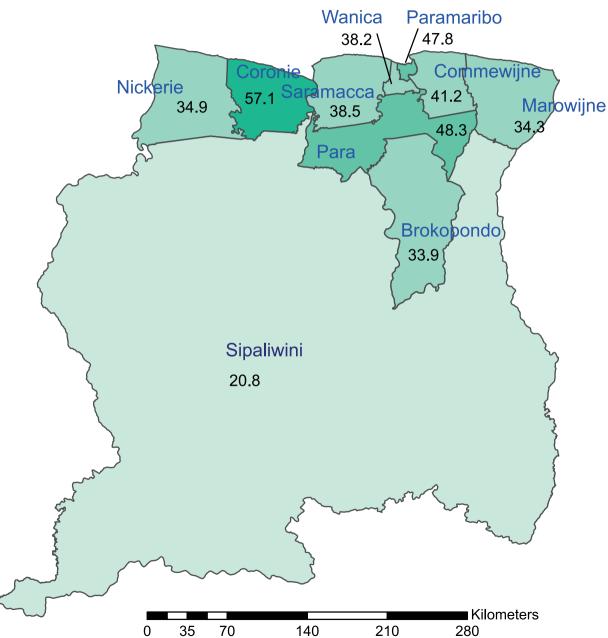
#### 72. Comprehensive Knowledge about HIV Transmission (2010) by Districts

Percentage of young women age 15-24 years have comprehensive knowledge about HIV transmission. Comprehensive correct knowledge of HIV/AIDS is correctly identifying the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), knowing that a healthy-looking person can transmit HIV and rejecting the two most common local misconceptions about HIV transmission.

Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4

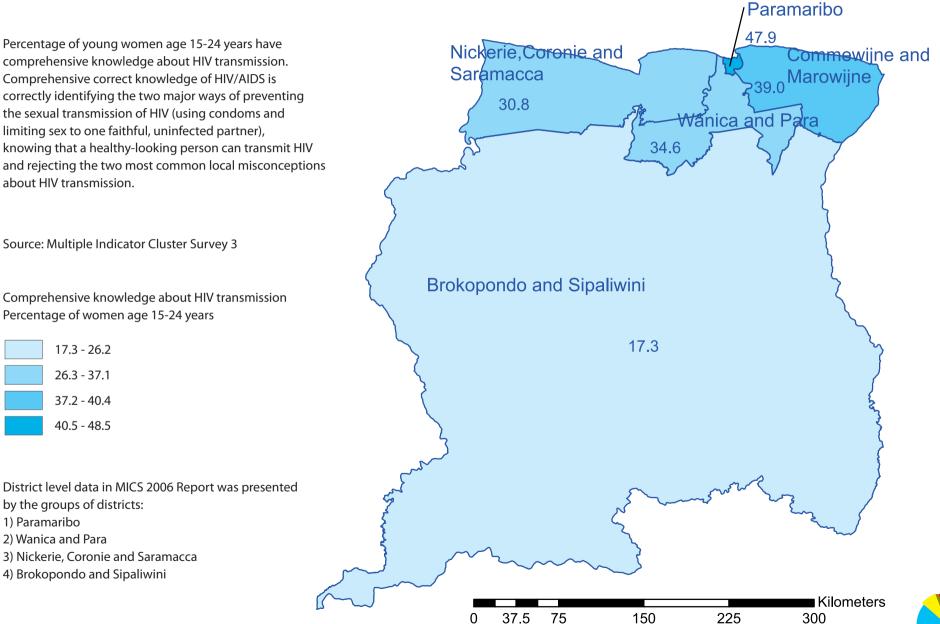
Comprehensive knowledge about HIV transmission Percentage of women age 15-24 years







#### 72A. Comprehensive Knowledge about HIV Transmission (2006) by Districts







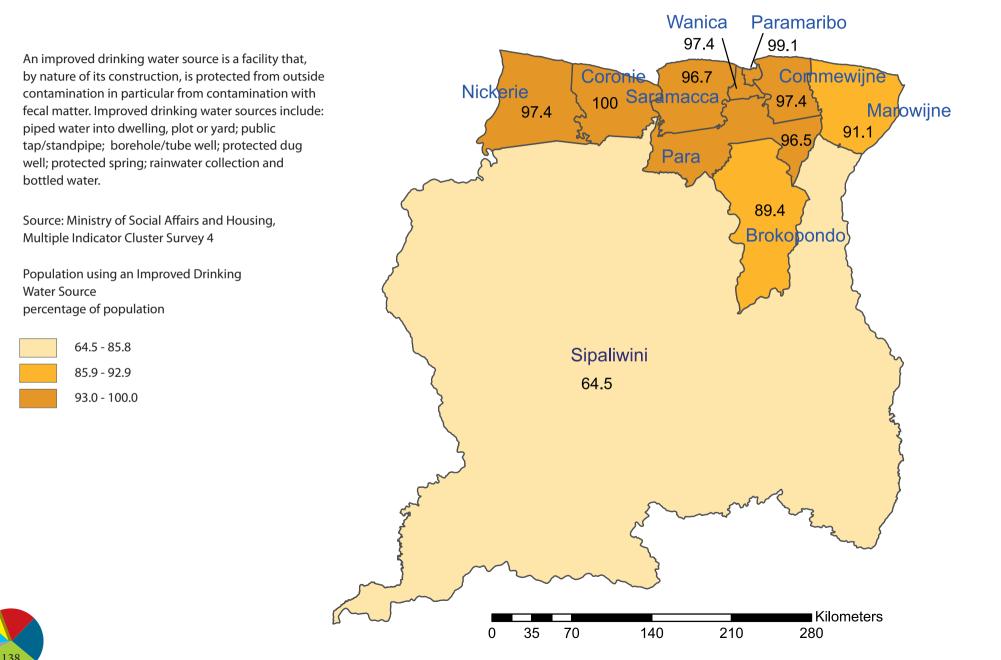
## Goal 7: Ensure Environmental Sustainability

#### Targets:

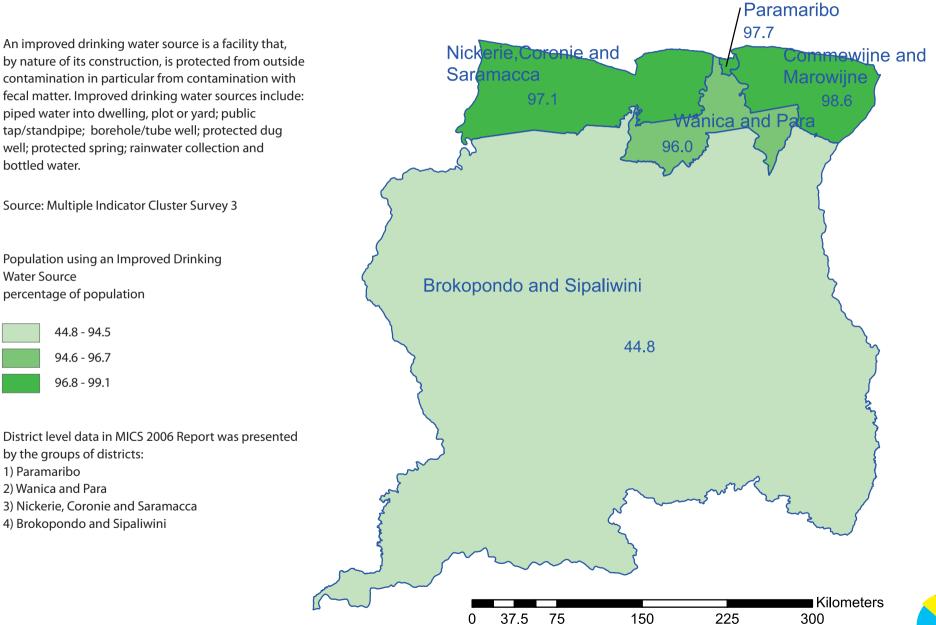
- 7A. Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
- 7B. Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
- 7C. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
- 7D. By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

This section contains the maps illustrating the attainment of Goal 5 and the district level disparities in indicators related to Goal 7 and Target 7C.

#### 73. Population using an Improved Drinking Water Source (2010) by Districts

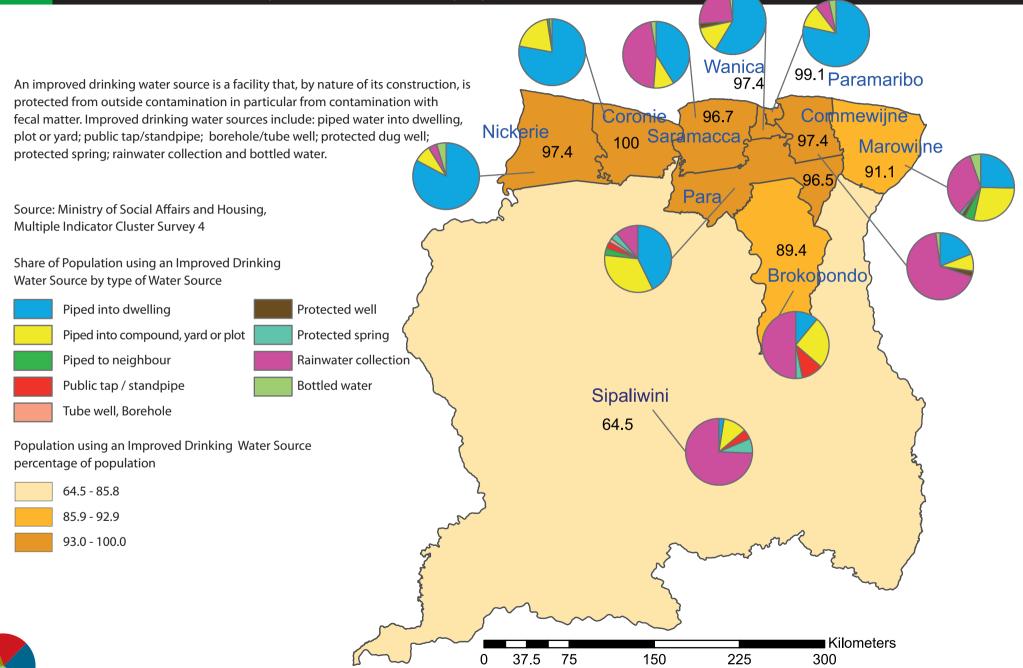


#### 73A. Population Using an Improved Drinking Water Source (2006) by Districts

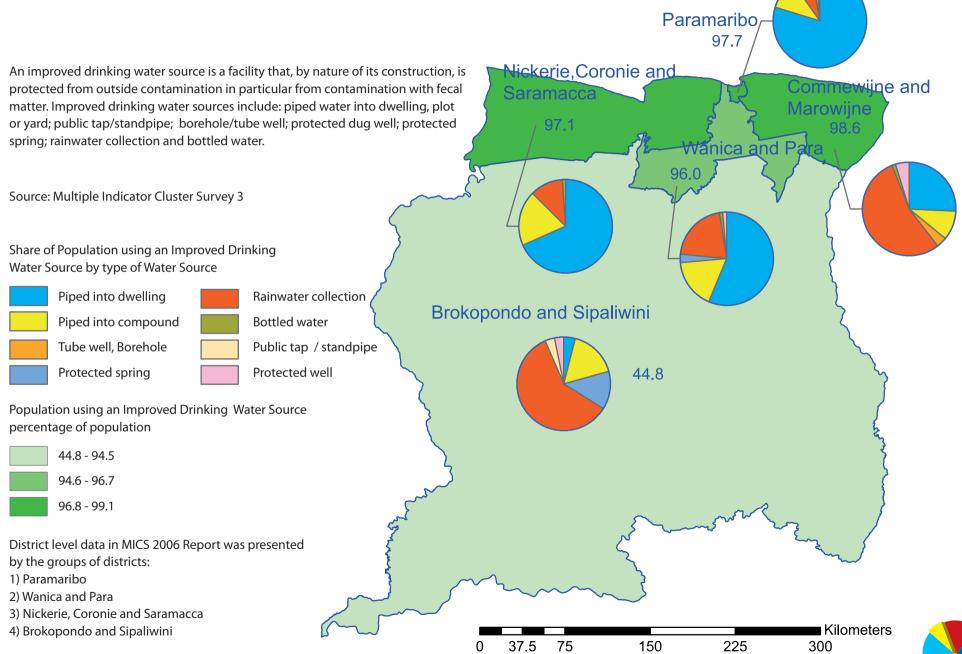




#### 74. Population using an Improved Drinking Water Source (2010) by Districts and by type of Water Source



#### 74A. Population Using an Improved Drinking Water Source (2006) by Districts and by type of Water Source





## 75. Population using an Improved Sanitation Facility (2010) by Districts

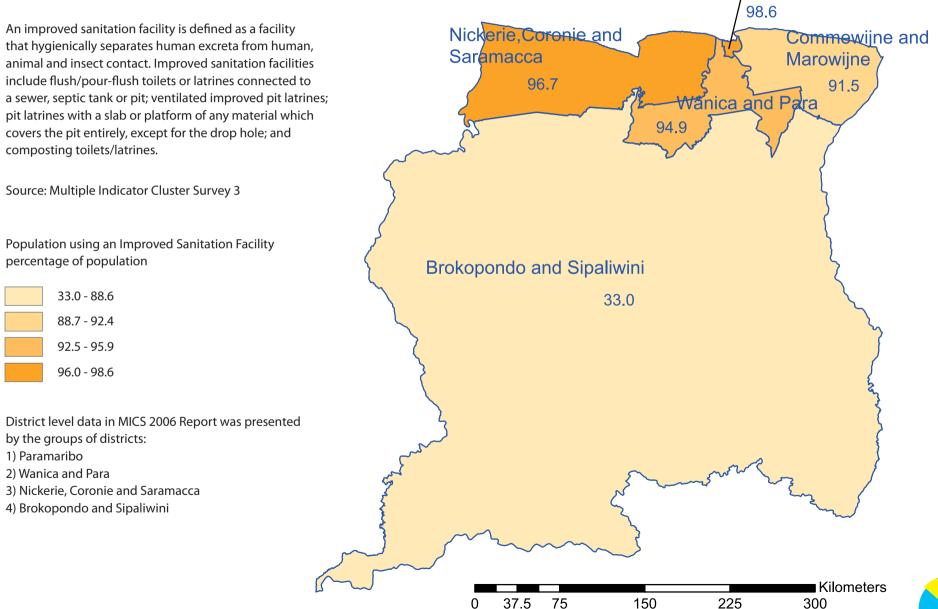
Wanica

Paramaribo

98.2 97.9 An improved sanitation facility is defined as a facility 94.4 Commewijne that hygienically separates human excreta from human, Nickerie animal and insect contact. Improved sanitation facilities 88.5<sup>Man</sup>owijne 95 98 99.2 include flush/pour-flush toilets or latrines connected to a sewer, septic tank or pit; ventilated improved pit latrines; 91.7 pit latrines with a slab or platform of any material which Para covers the pit entirely, except for the drop hole; and composting toilets/latrines. Brokopondo Source: Ministry of Social Affairs and Housing, 55.6 Multiple Indicator Cluster Survey 4 Population using an Improved Sanitation Facility percentage of population Sipaliwini 36.9 - 49.4 36.9 49.5 - 67.7 67.8 - 93.1 93.2 - 99.2 Kilometers 140 35 70 210 280 0



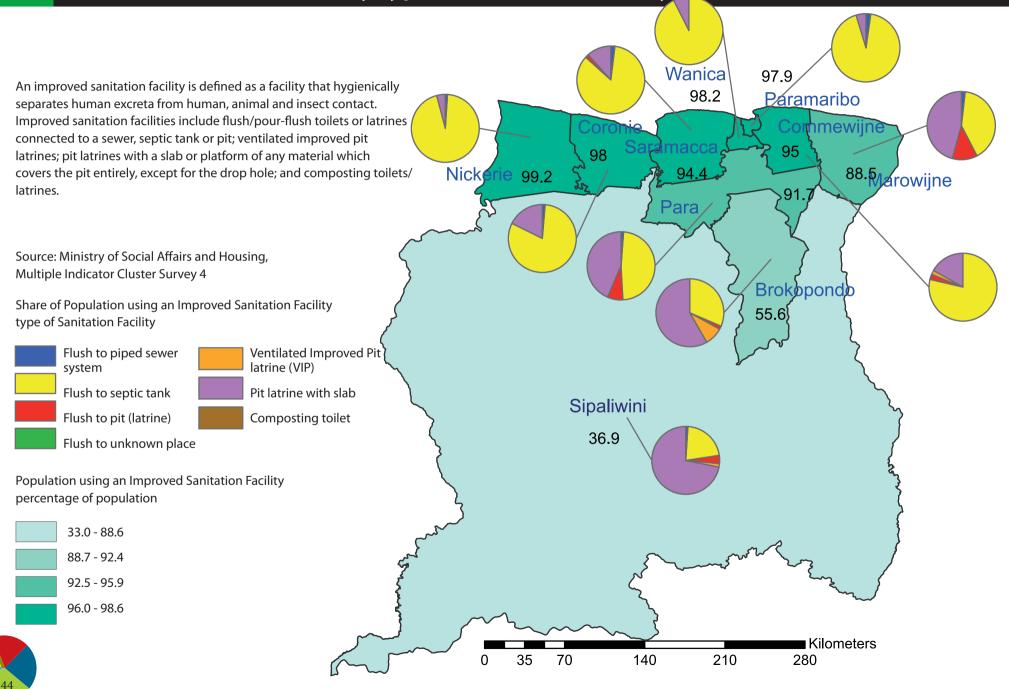
# 75A. Proportion of Population Using an Improved Sanitation Facility (2006) by Districts



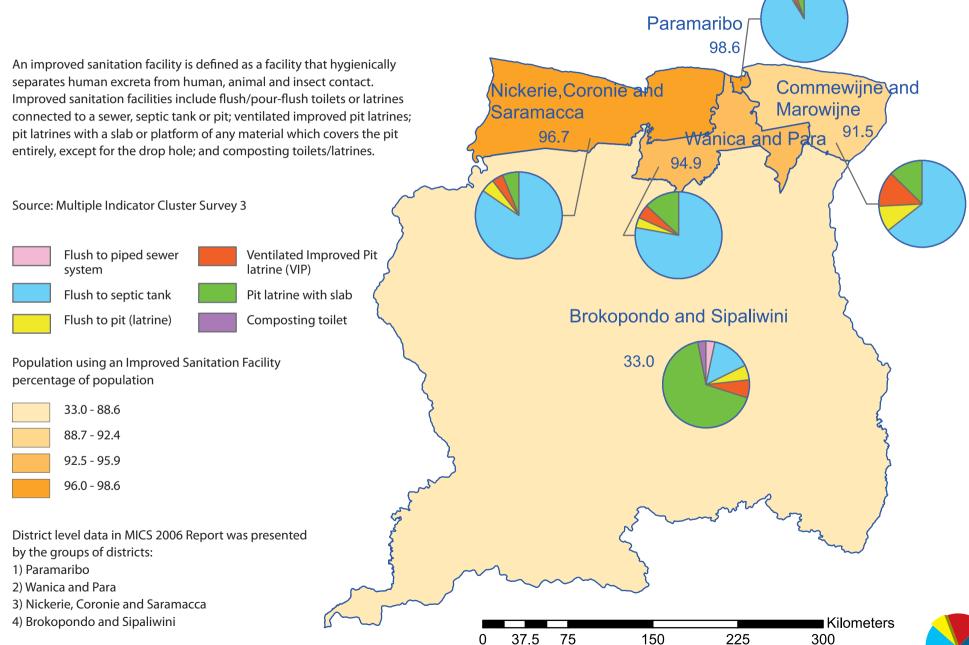


Paramaribo

#### 76. Population using an Improved Sanitation Facility (2010) by Districts and by type of Sanitation Facility



#### 76A. Population Using an Improved Sanitation Facility (2006) by Districts and by Type of Sanitation Facility







# PART 3 CRIME & VIOLENCE

Crime and Violence are the critical areas threatening people's security. Citizen's security is one of the issues that demand greater attention in the human development process. Insecurity restricts the capacity of people to exercise their freedom of choice and their autonomy. It reinforces inequalities because it mainly affects vulnerable people. It has a negative impact on economic growth.

"There is, of course, a link between human security and human development: progress in one area enhances the chances of progress in the other. But failure in one area also heightens the risk of failure in the other, and history is replete with examples. Failed or limited human development leads to a backlog of human deprivation poverty, hunger, disease or persisting disparities between ethnic communities or between regions. This backlog in access to power and economic opportunities can lead to violence."

From The UNDP Human Development Report "New Dimensions of Human Security" 1994

The part on Crime and Violence Maps presents the district level maps on crime and violence indicators and indicators calculated from Citizen Security Survey conducted in 2010 in Suriname.

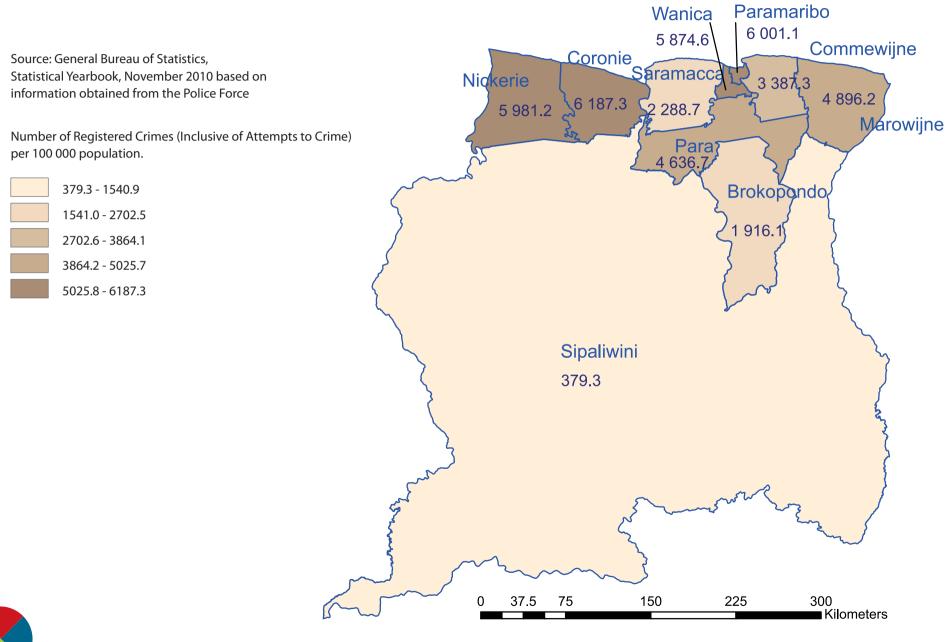
Crime and Violence Maps were produced using the crime statistics data provided by the General Bureau of Statistics of Suriname and Citizen Security Survey commissioned by UNDP as part of the UNDP Caribbean Human Development Report 2012.

# 3.1 Crime and Violence

This section includes the district level maps related to the crime and violence. The maps illustrate the disparities among the districts of Suriname in crime and violence indicators.

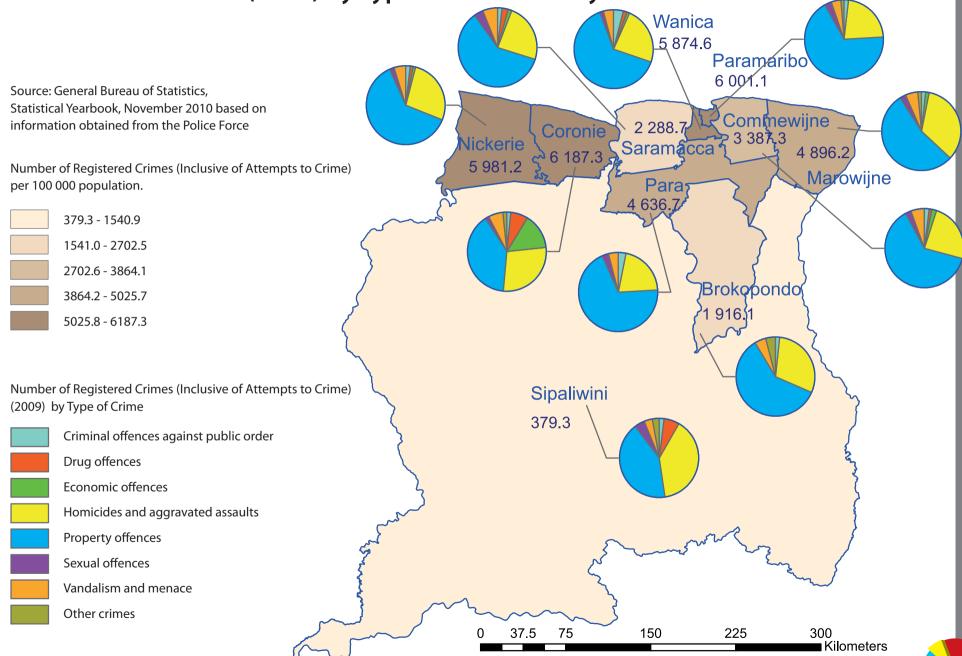
Crime and Violence Maps were produced using the crime statistics and data provided by the General Bureau of Statistics of Suriname

#### 77. Number of Registered Crimes (Inclusive of Attempts to Crime) (2009) by Districts

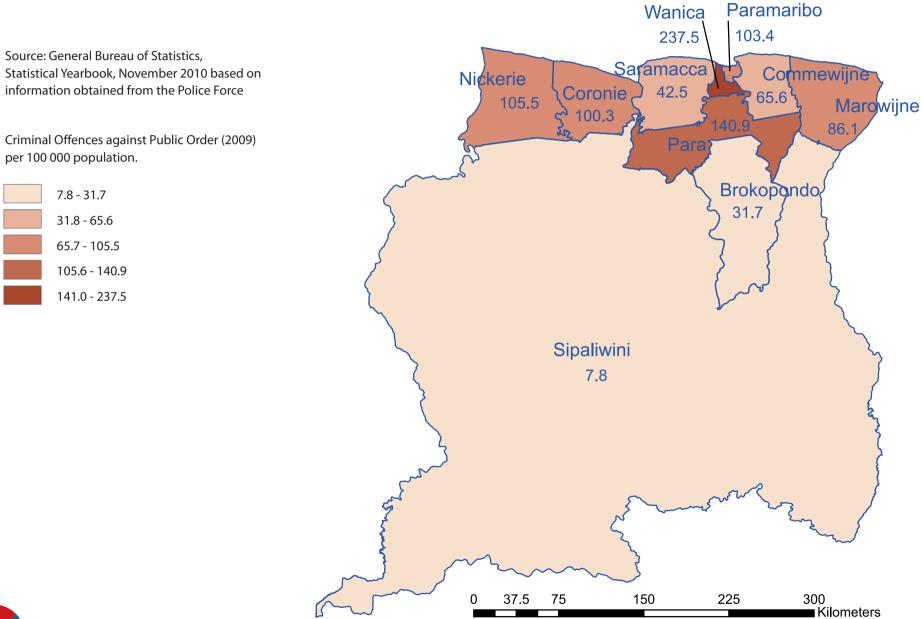




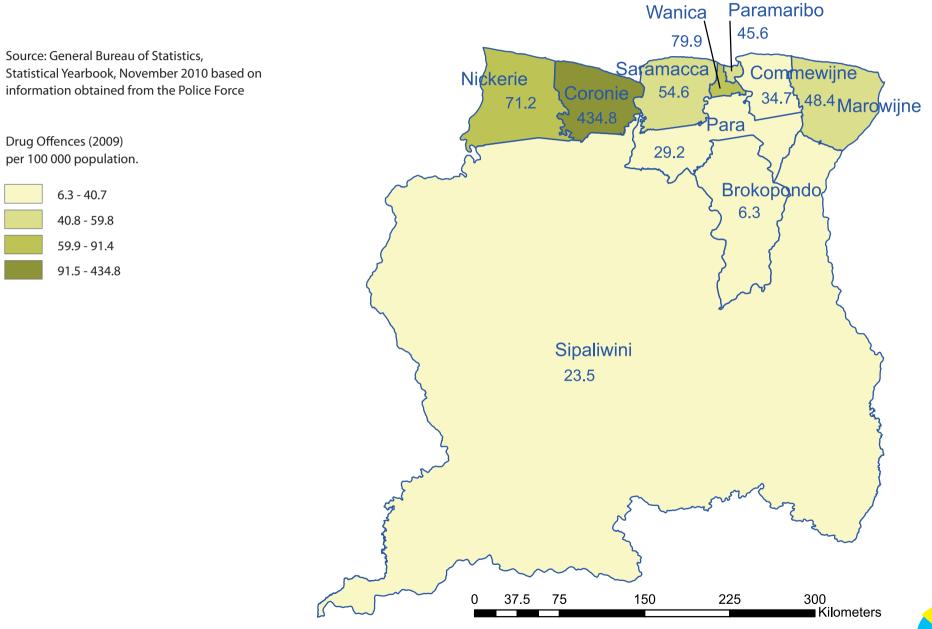
#### 78. Number of Registered Crimes (Inclusive of Attempts to Crime) (2009) by Type of Crime and by Districts.



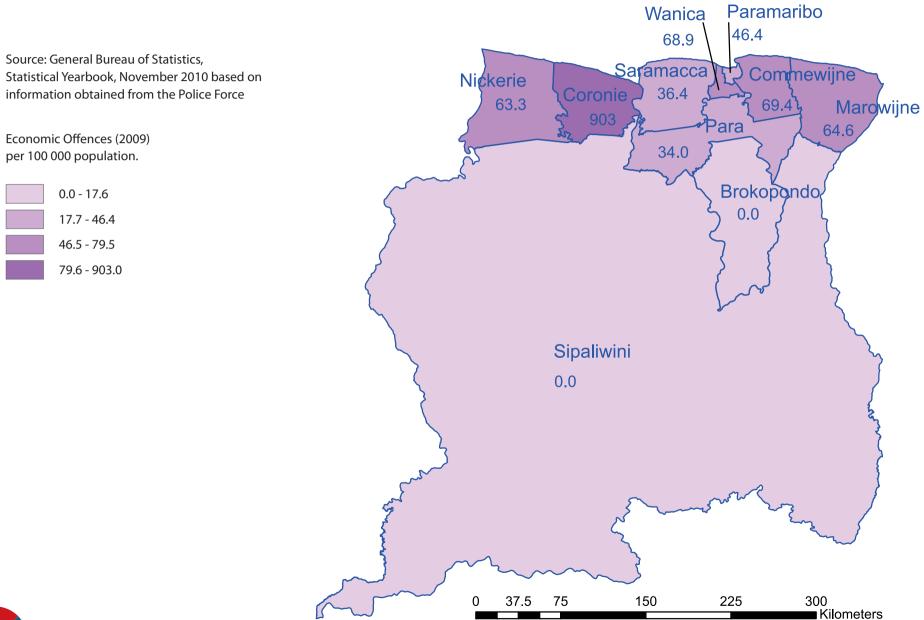
# 79. Criminal Offences against Public Order (2009) by Districts



# 80. Drug Offences (2009) by Districts

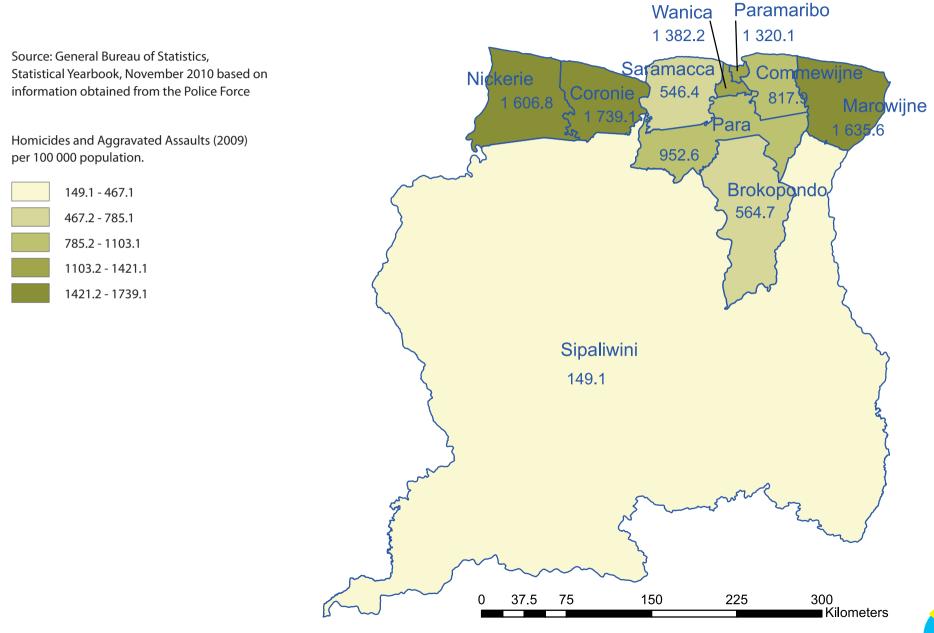


# 81. Economic Offences (2009) by Districts

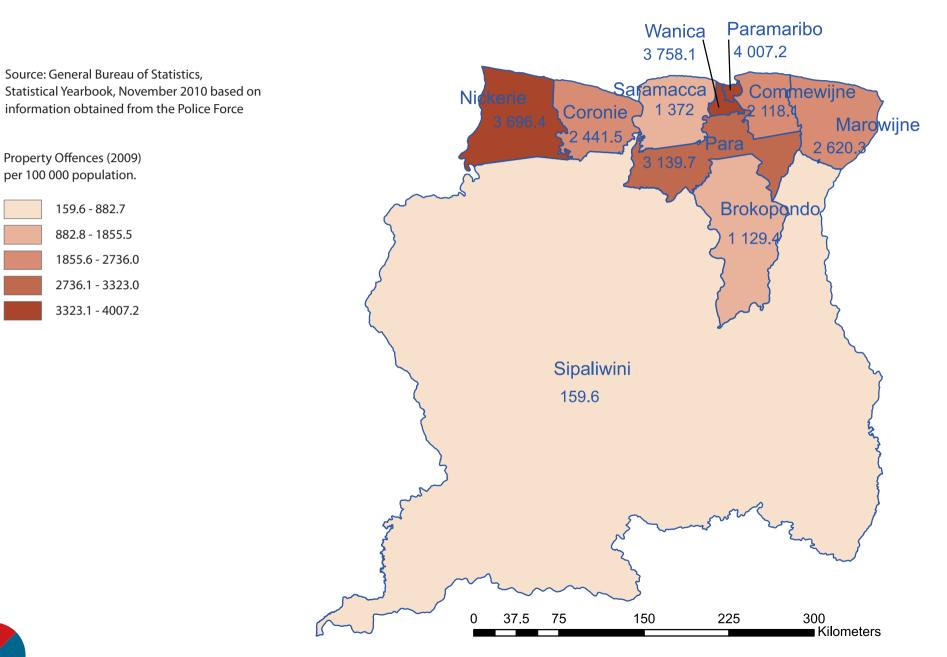




# 82. Homicides and Aggravated Assaults (2009) by Districts

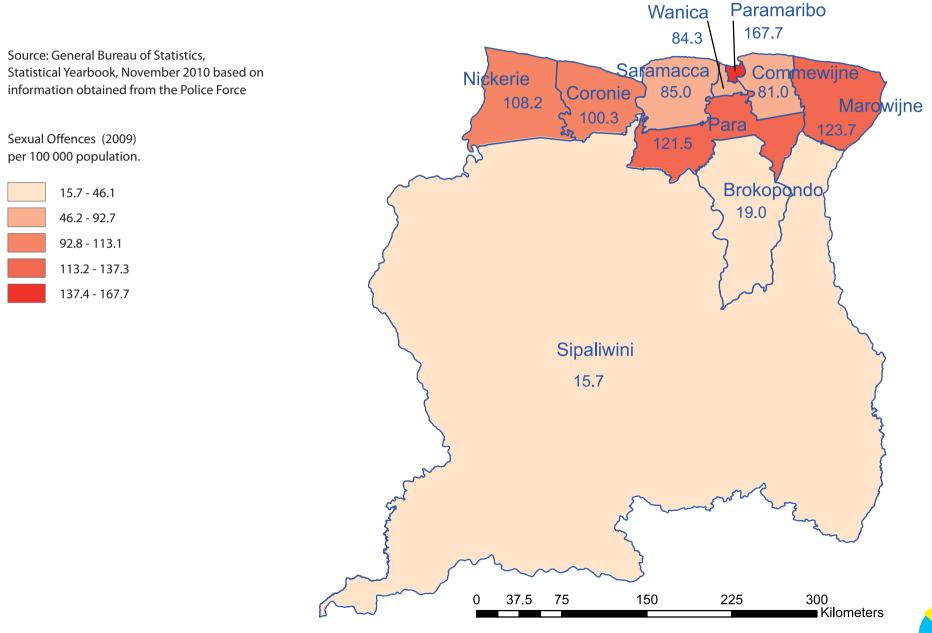


# 83. Property Offences (2009) by Districts

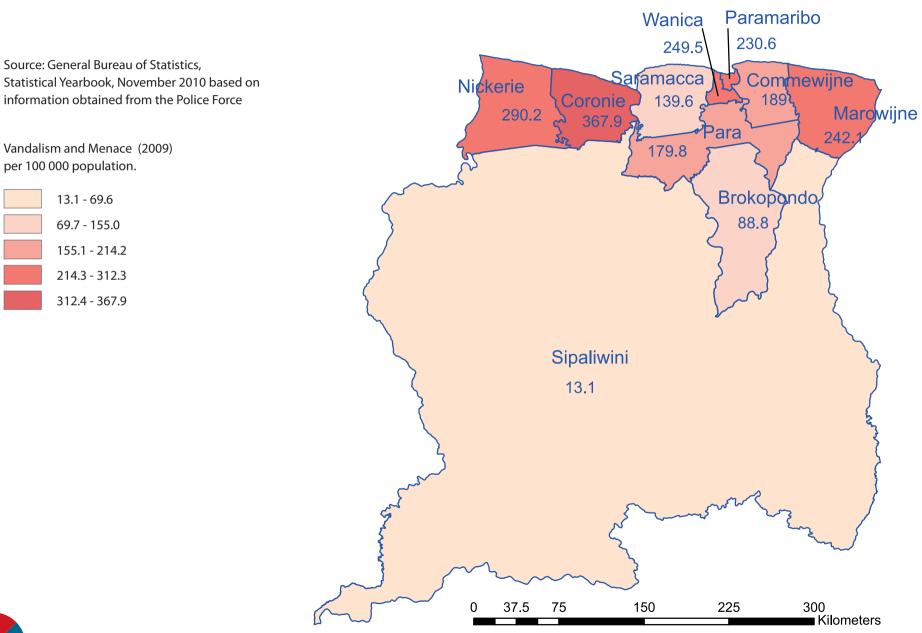




# 84. Sexual Offences (2009) by Districts

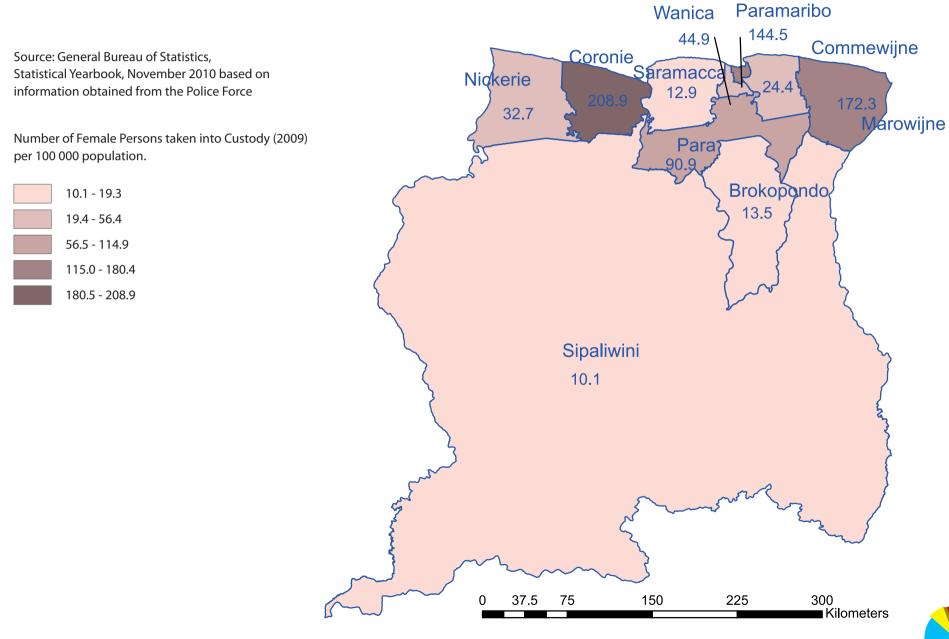


# 85. Vandalism and Menace (2009) by Districts

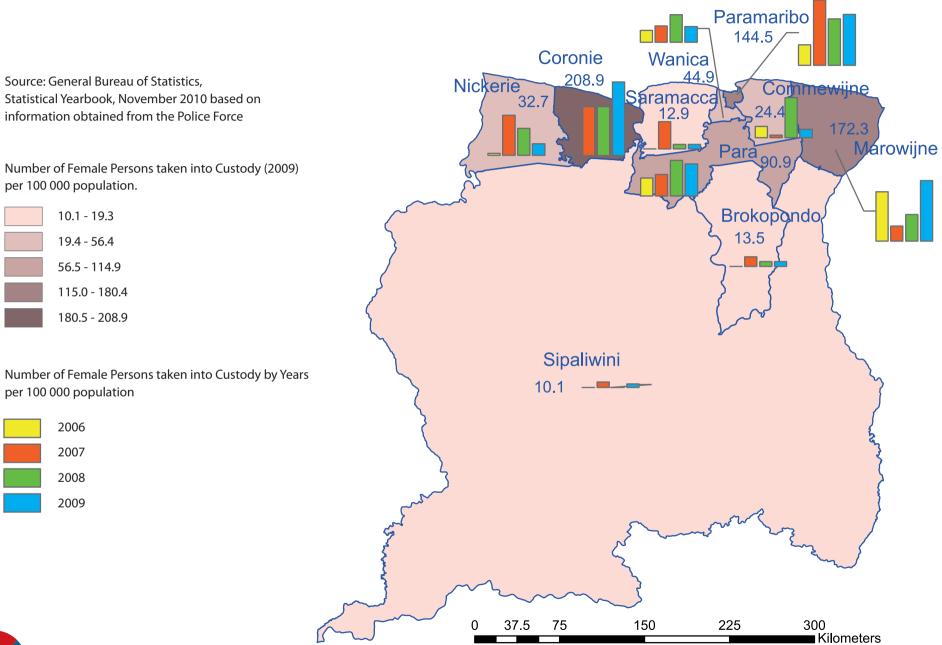




# 86. Number of Female Persons taken into Custody (2009) by Districts

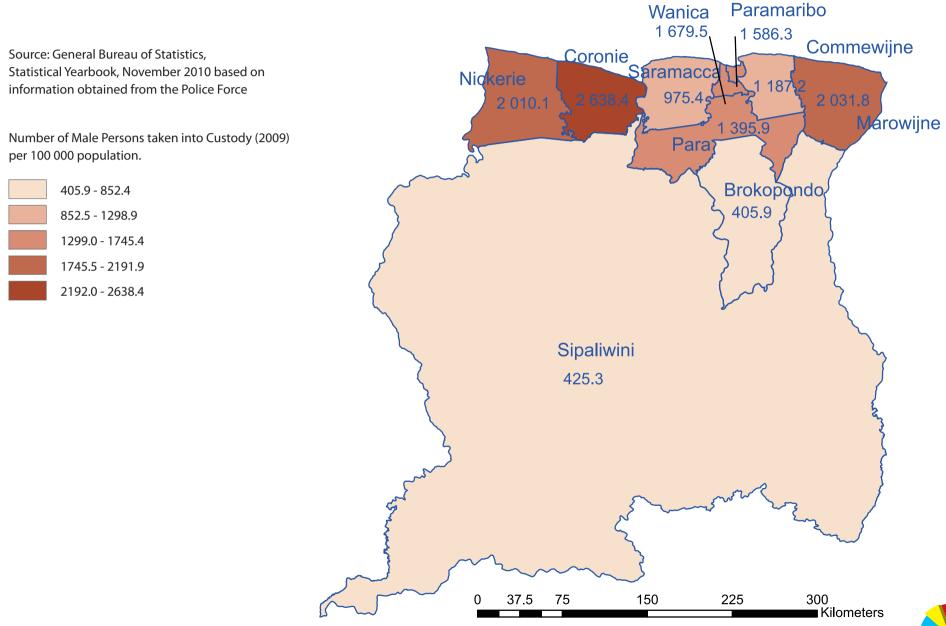


#### 87. Number of Female Persons taken into Custody by Districts and by Years

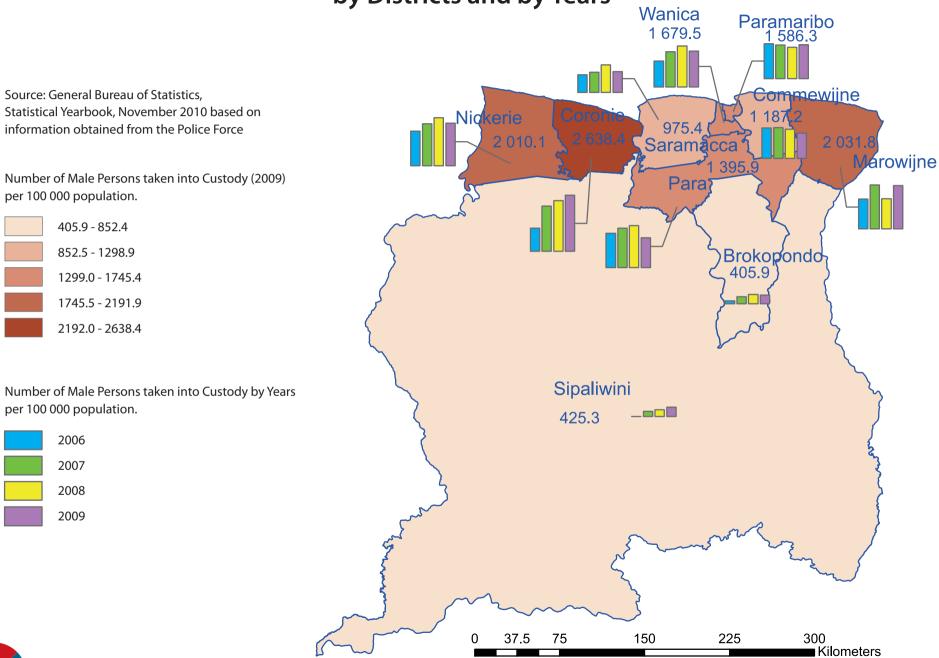




#### 88. Number of Male Persons taken into Custody (2009) by Districts

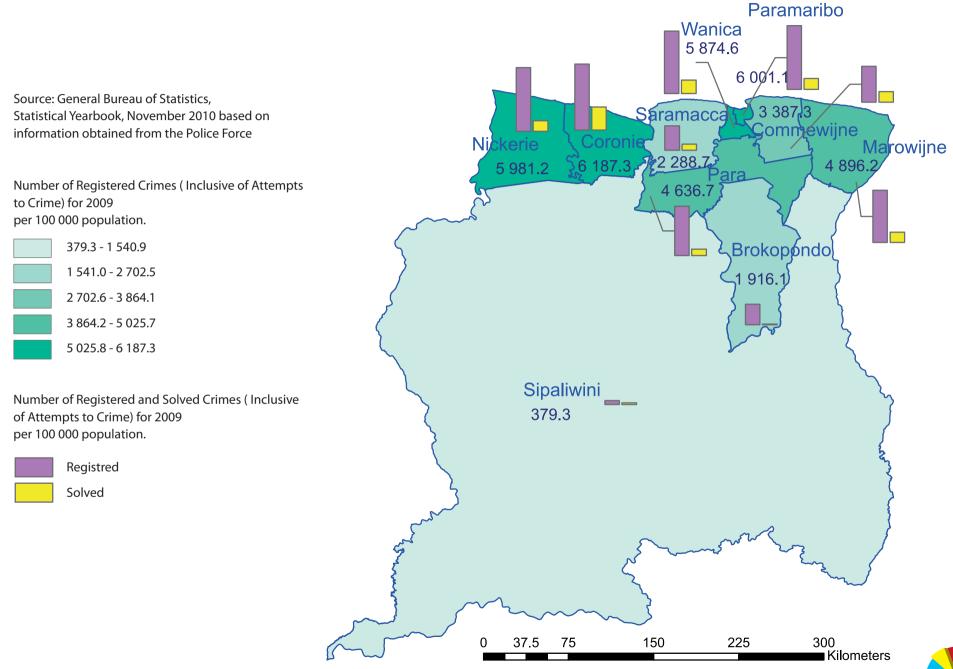


#### 89. Number of Male Persons taken into Custody by Districts and by Years





# 90. Number of Registered and Solved Crimes (2009) by Districts



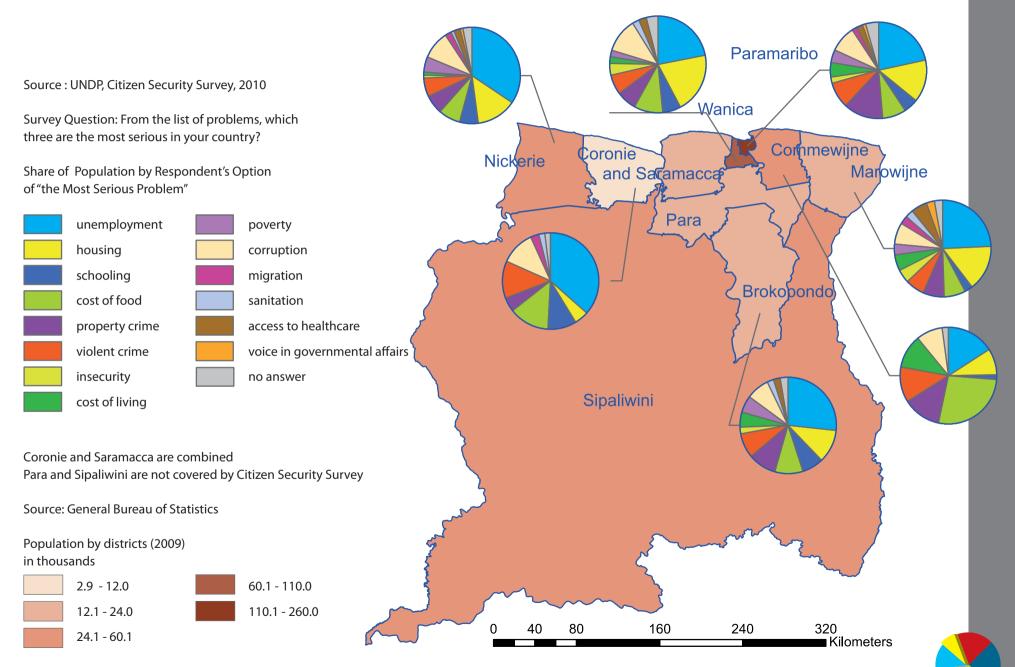
# 3.2 Citizen Security Survey

The maps of this section devoted to the results of the UNDP Citizen Security Survey 2010 in Suriname commissioned by the UNDP for the Caribbean Human Development Report. The survey was conducted in November – December 2010 and a total of 1512 persons took part in the survey. Respondent from all districts, except Sipaliwini and Para, were included to the survey. Sipaliwini and Para district were not covered by survey.

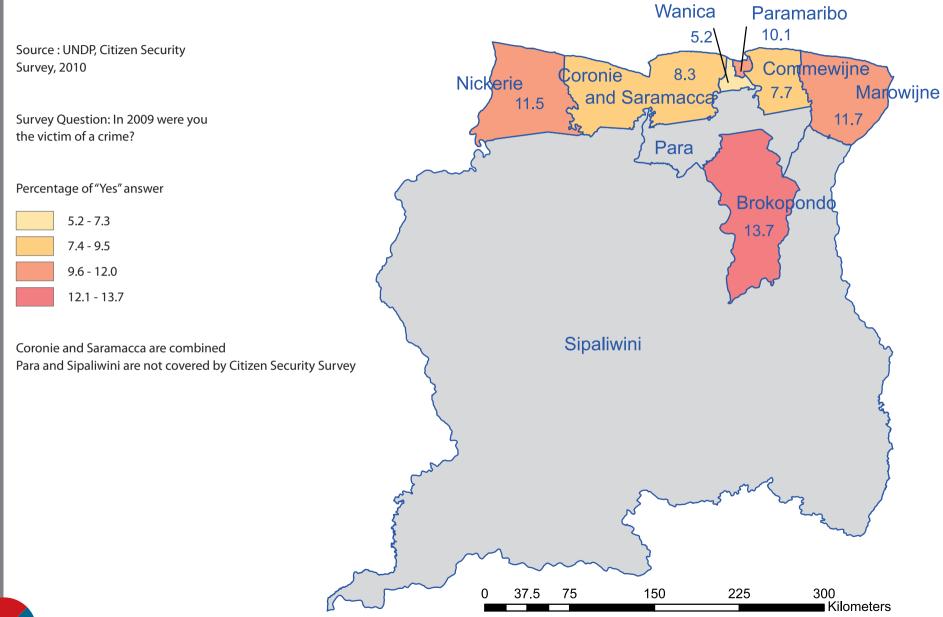
The survey results for Suriname contain data on general perceptions of crime, domestic violence, policy orientations of the population, evaluation of and confidence in the police and justice systems, community and societal cohesion and other areas that provide a profile of the respondents' perceptions of crime and violence in Suriname.

Citizen Security Survey Maps were produced for indicators calculated from the UNDP Citizen Security Survey 2010 and illustrate the district level disparities in those indicators.

# 91. The Most Serious Problems in the Country by Districts



# 92. Actual Victimization in 2009 by Districts

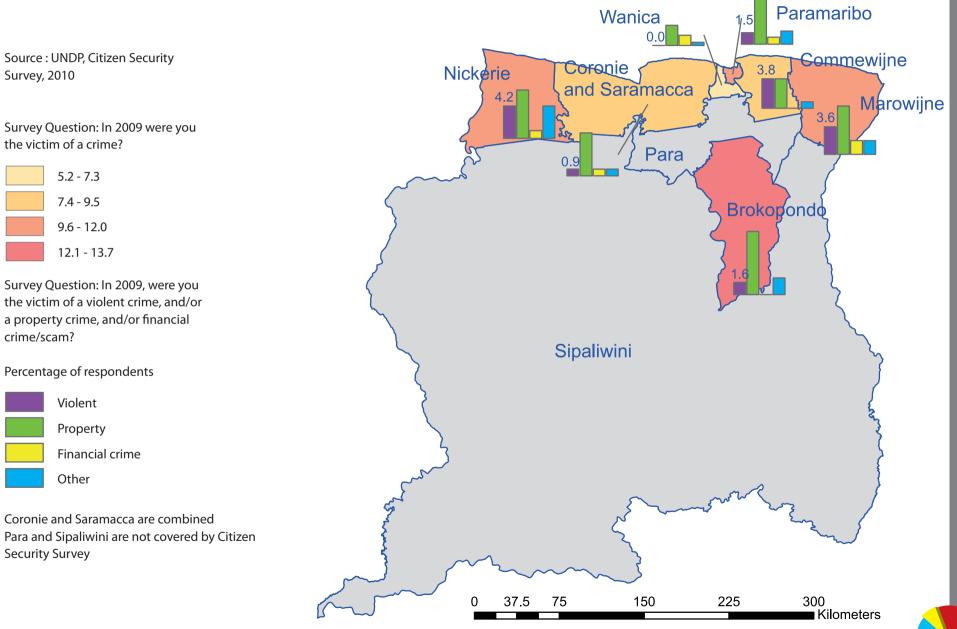




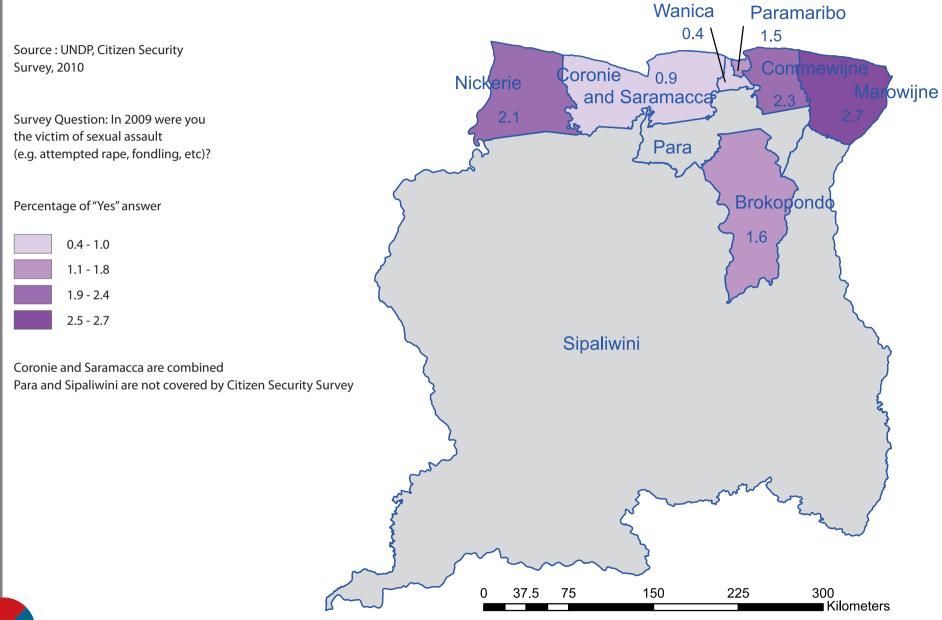
# 93. Comparative Map showing Actual Victimization in 2009 by Type of Crime and by Districts

Survey, 2010

crime/scam?

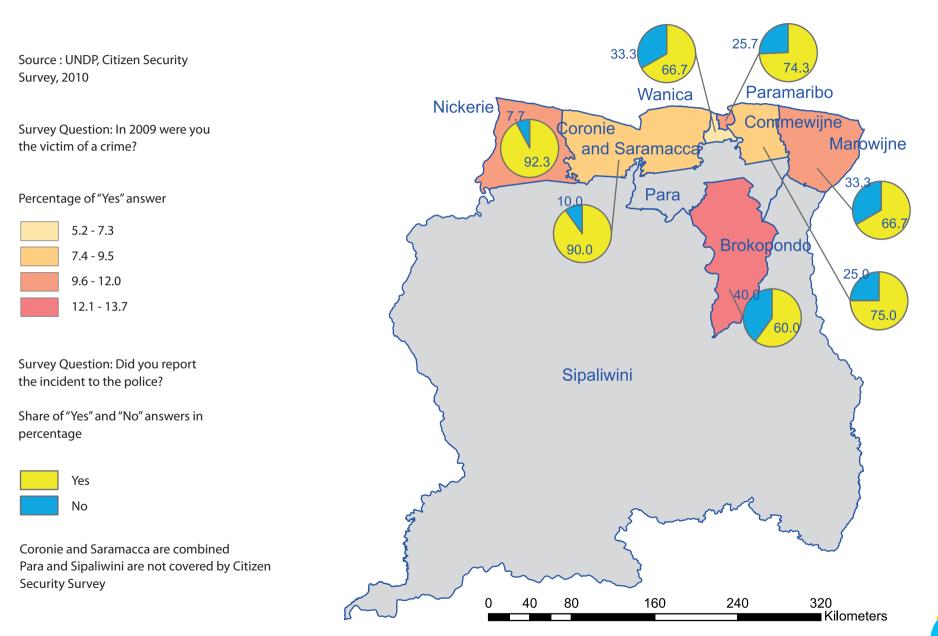


# 94. Actual Victims of Sexual Assault in 2009 by Districts

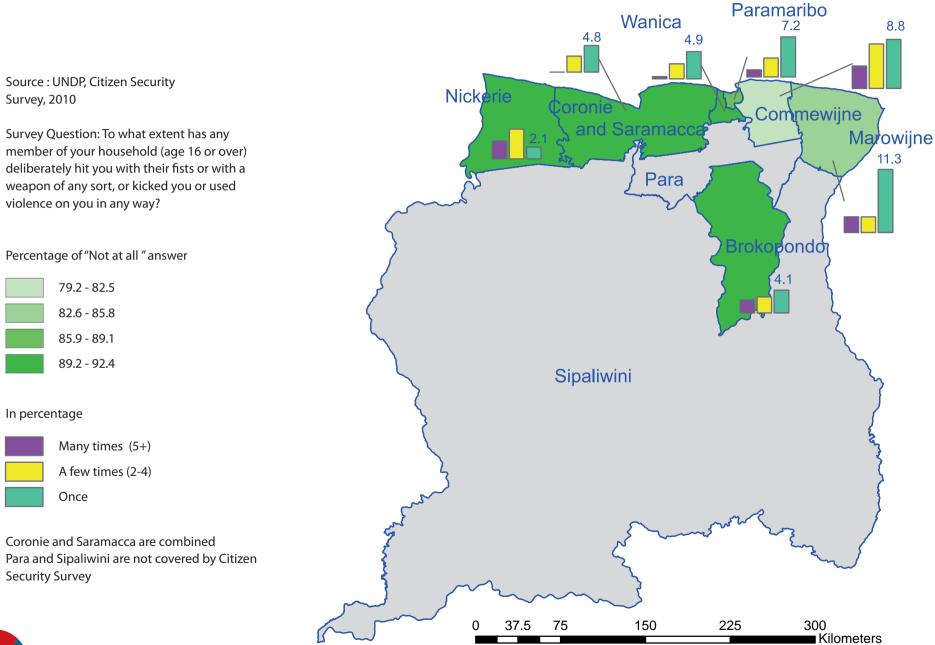




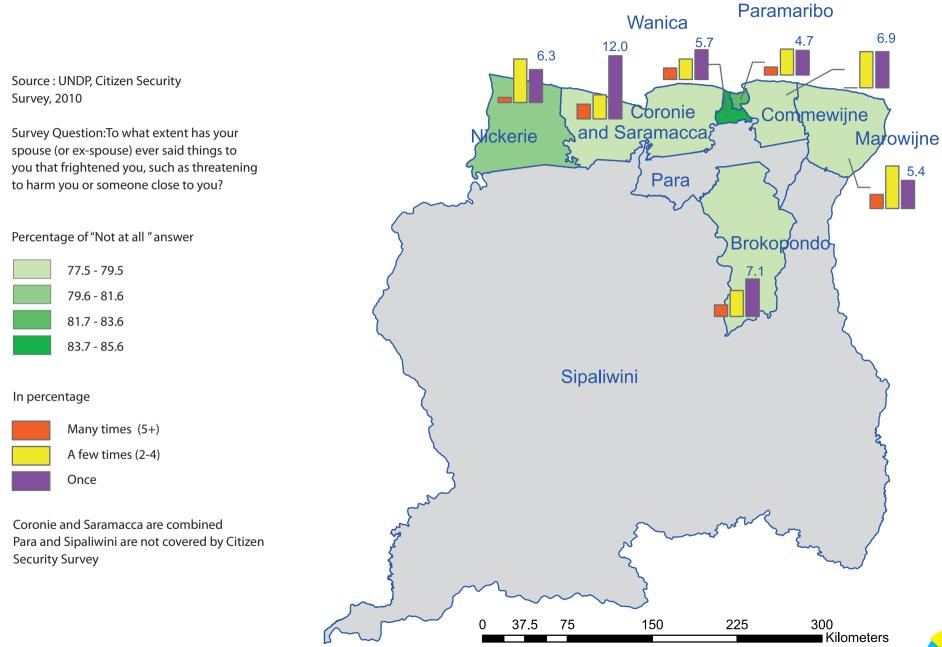
#### 95. Comparative Map showing Actual Victimization in 2009 and Share of Incidents Reported to Police by Districts



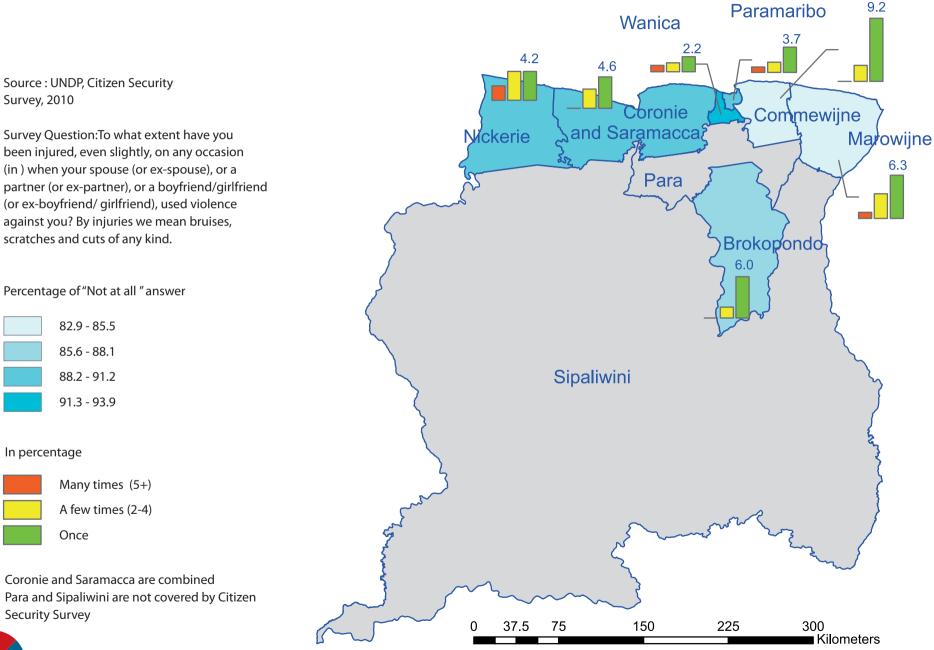
# 96. Frequency of Domestic Violence in Households by Districts



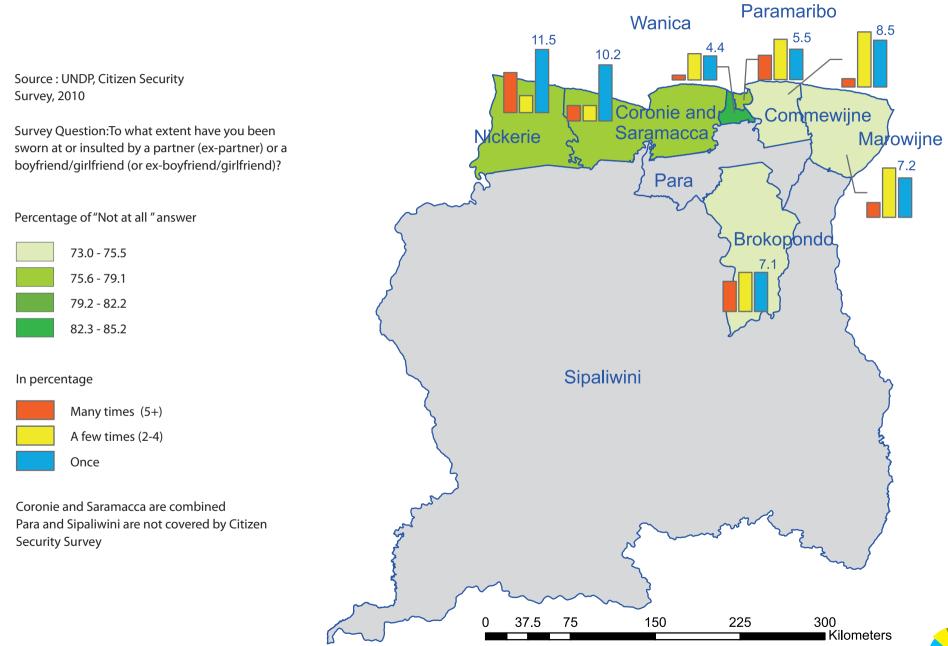
# 97. Frequency of Verbal Threats in Households by Districts



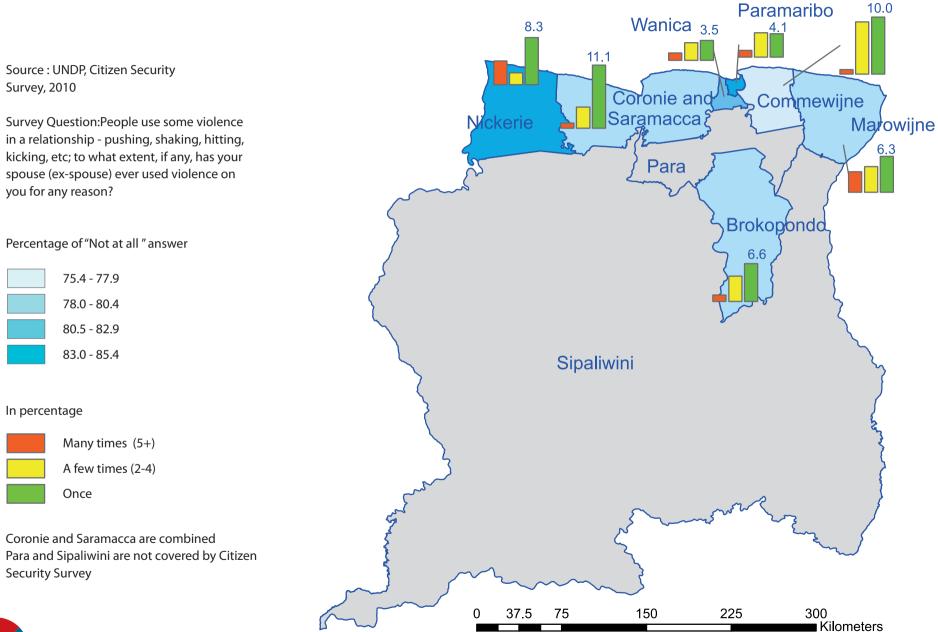
# 98. Frequency of Physical Injury from Partner by Districts



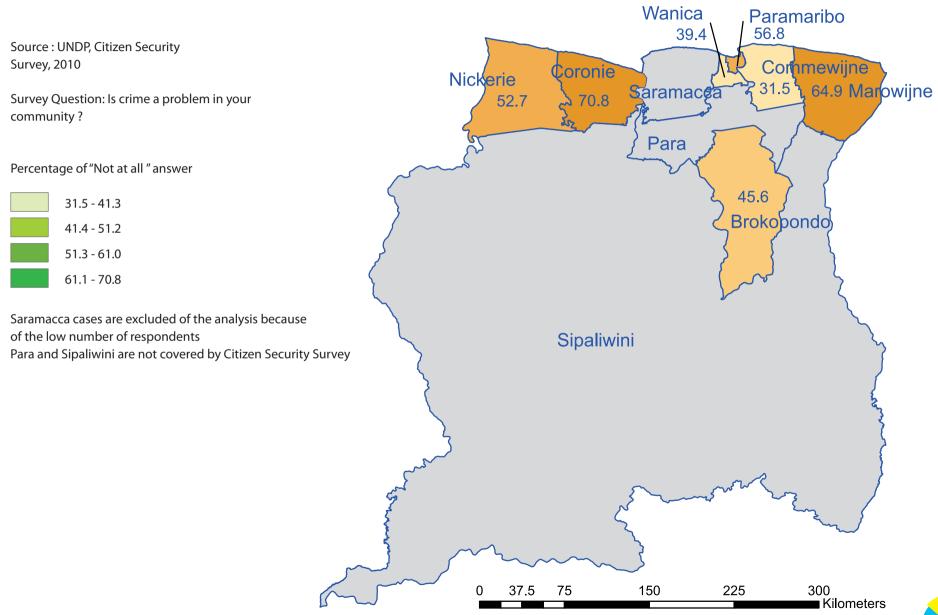
# 99. Frequency of Verbal Abuse from Partner by Districts



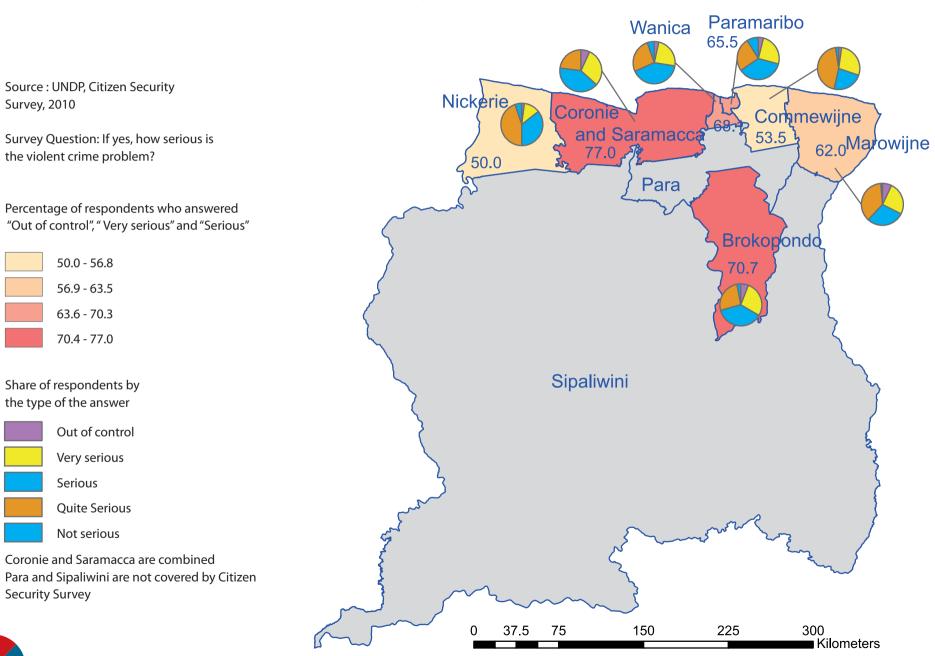
# 100. Frequency of Physical Abuse from Partner by Districts



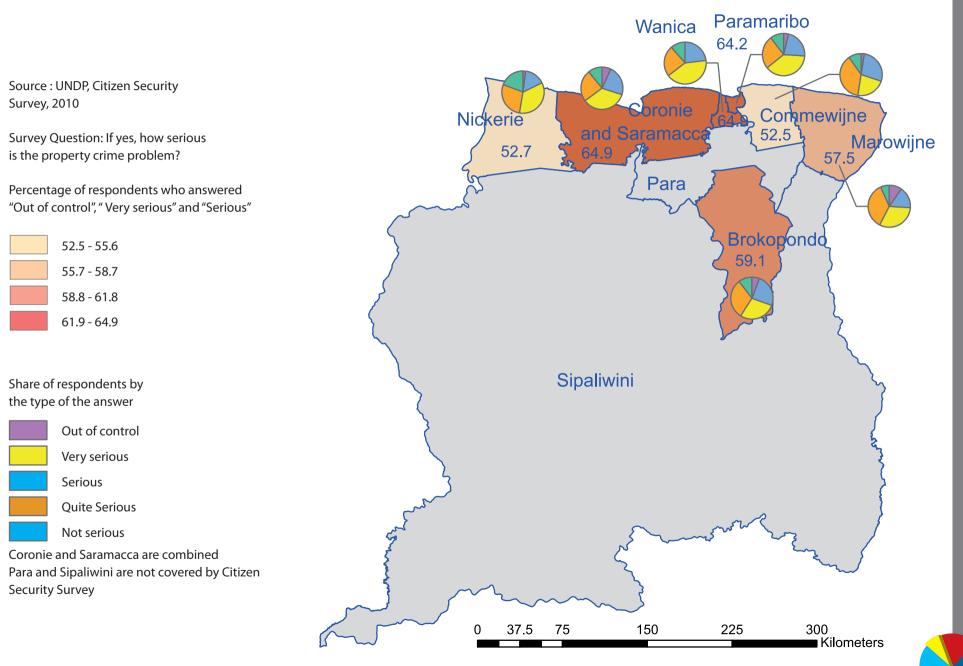
#### 101. Perceptions of Crime at the Local Community Level by Districts



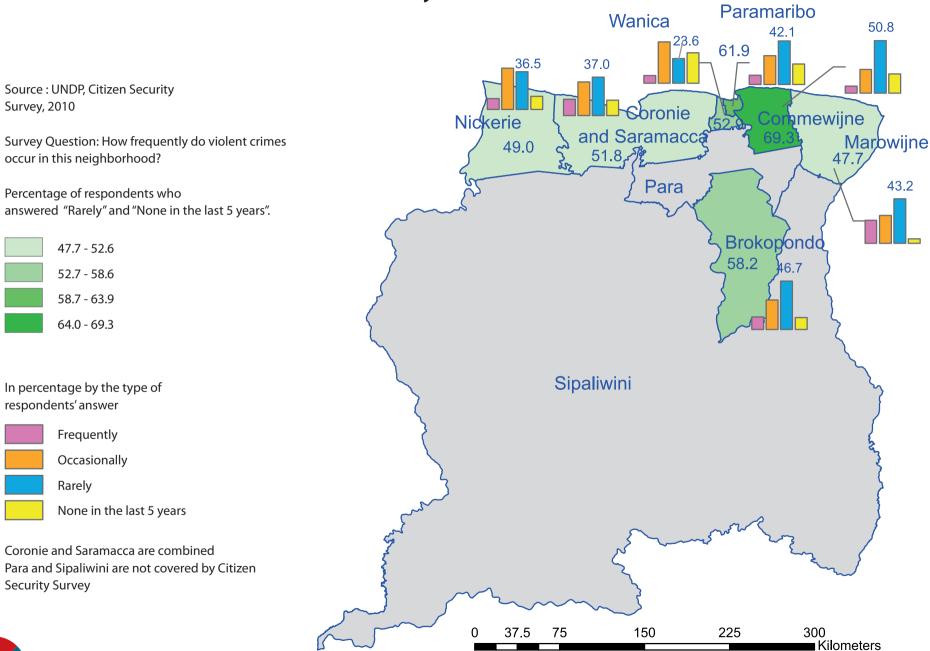
#### 102. Perceptions of Violent Crime at the Local Community Level by Districts



#### 103. Perceptions of Property Crime at the Local Community Level by Districts

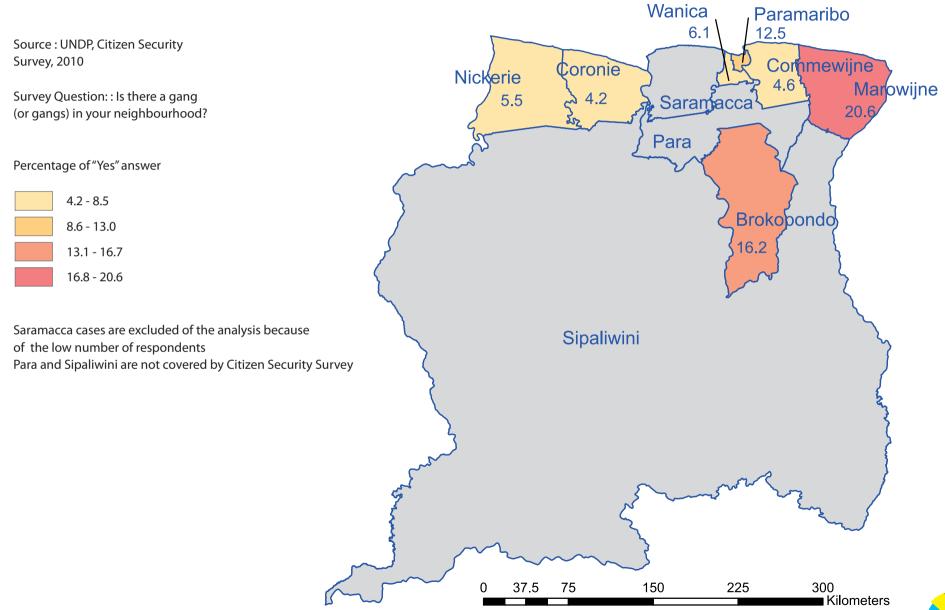


#### 104. Frequency of Violent Crimes in the Community by Districts



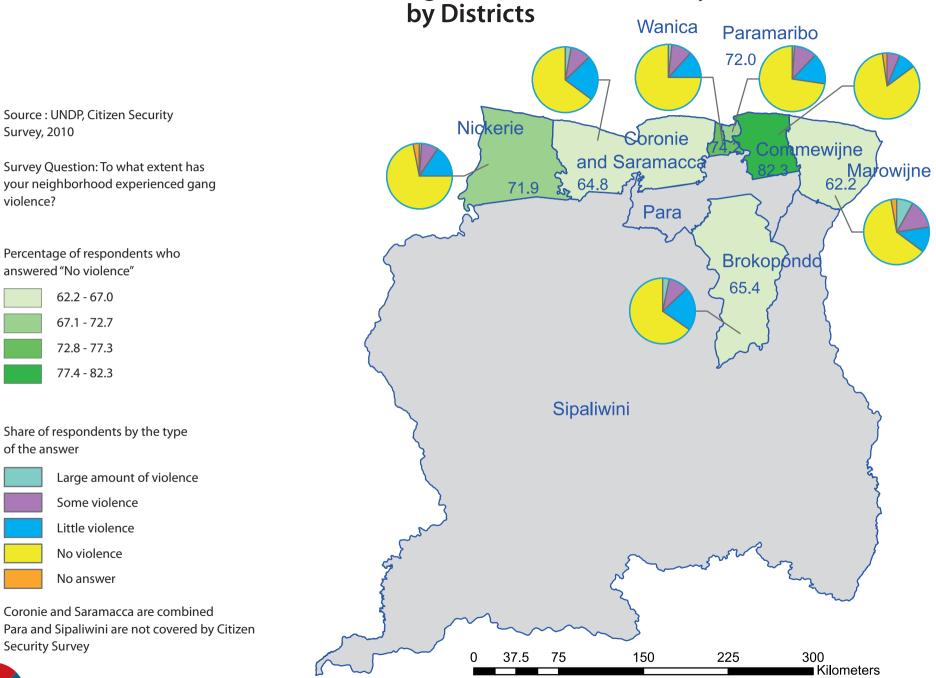


## 105. Gang Violence at Community Level by Districts

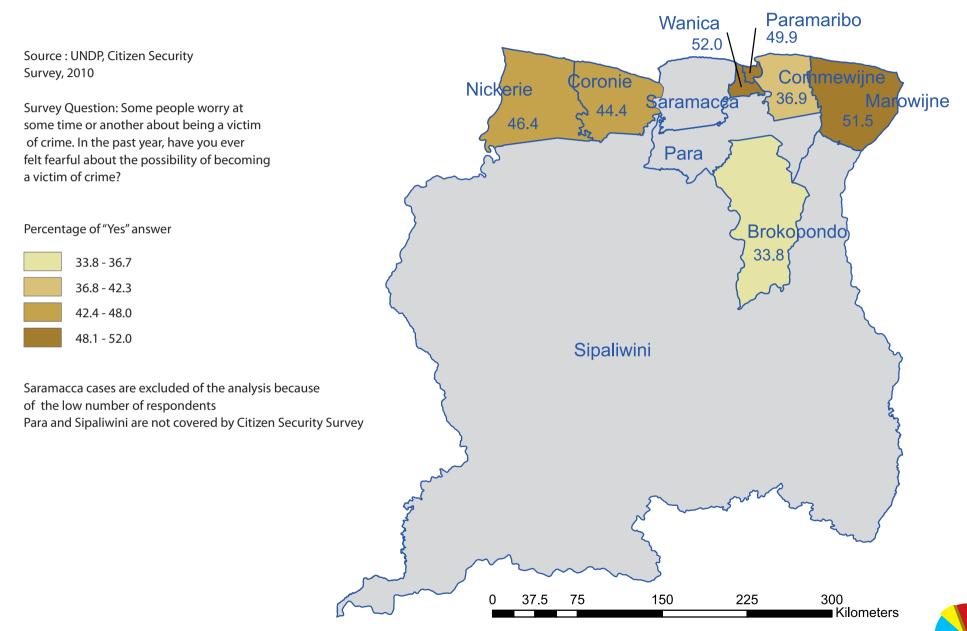


179

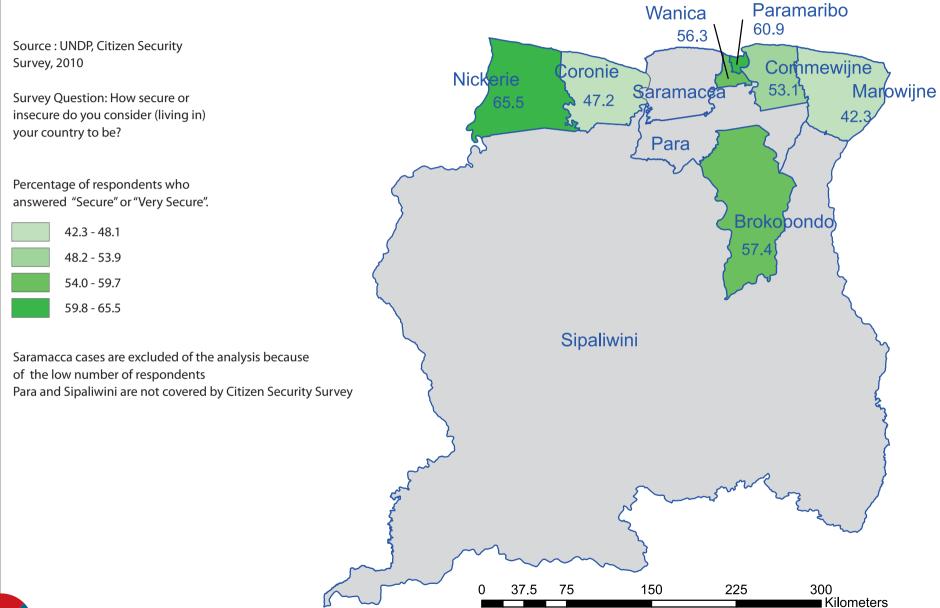
#### 106. The Extent of Gang Violence at Community Level by Districts



## 107. Fear of Crime in Past Year by Districts

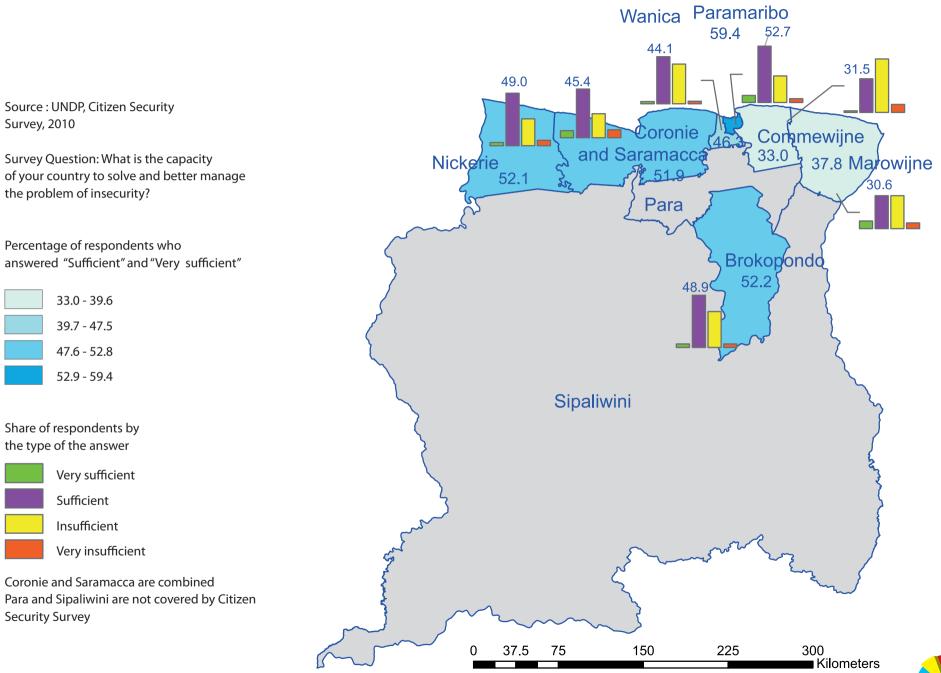


## **108. Feelings of Security by Districts**



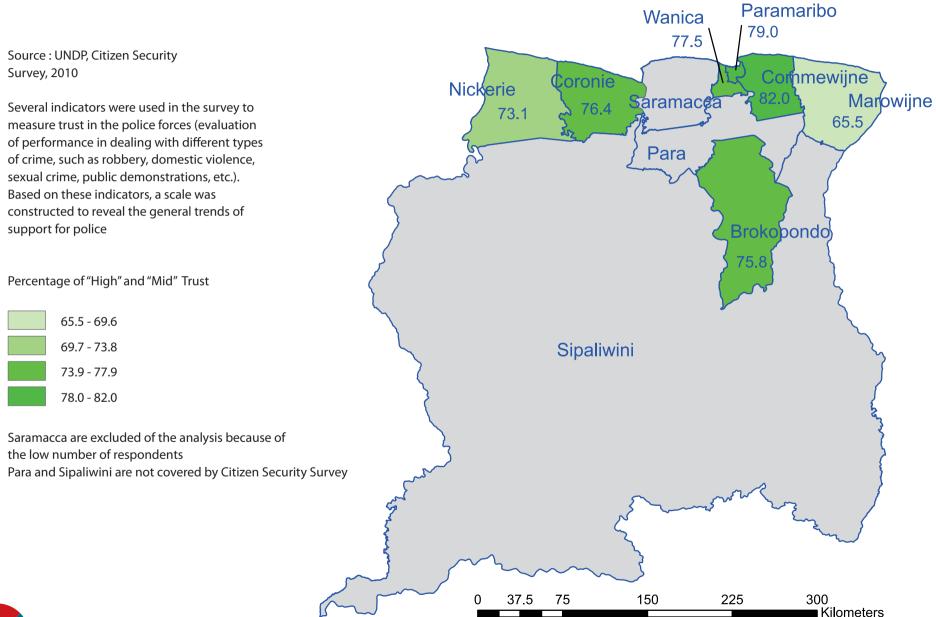


## 109. Perception of Country's Capabilities by Districts



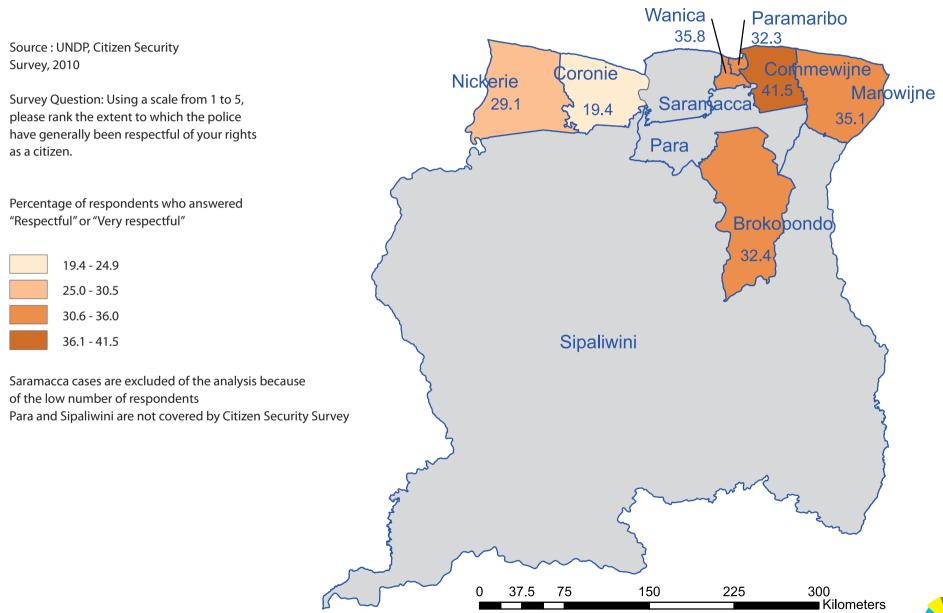


## 110. Trust in Police Forces by Districts

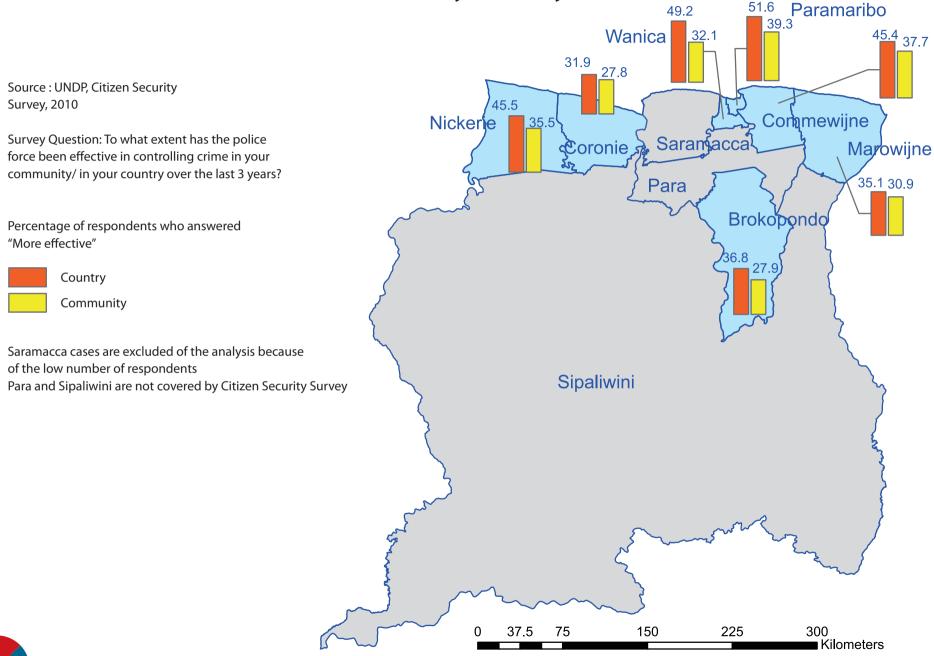




## 111. Personal Experience of Police Respect towards Citizens by Districts

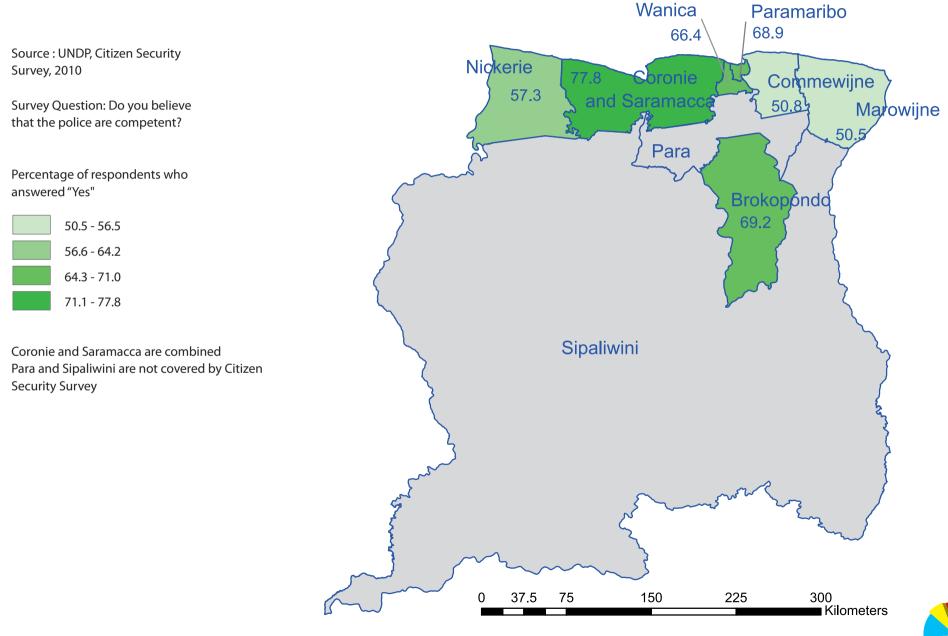


## 112. Perception of Change in Police Effectiveness at Country and Community Level by Districts



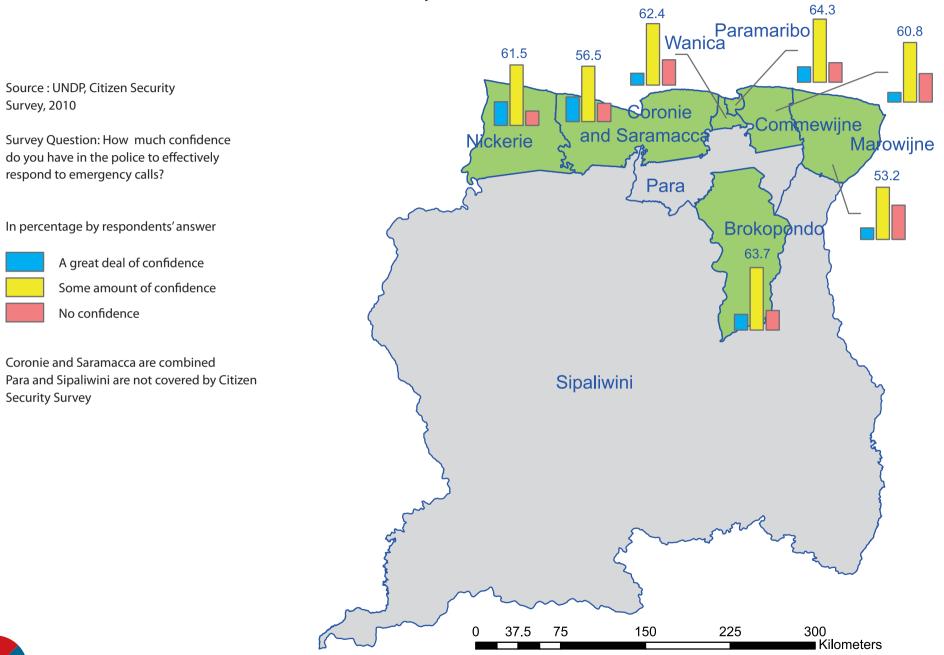


## **113. Perceived Police Competence by Districts**



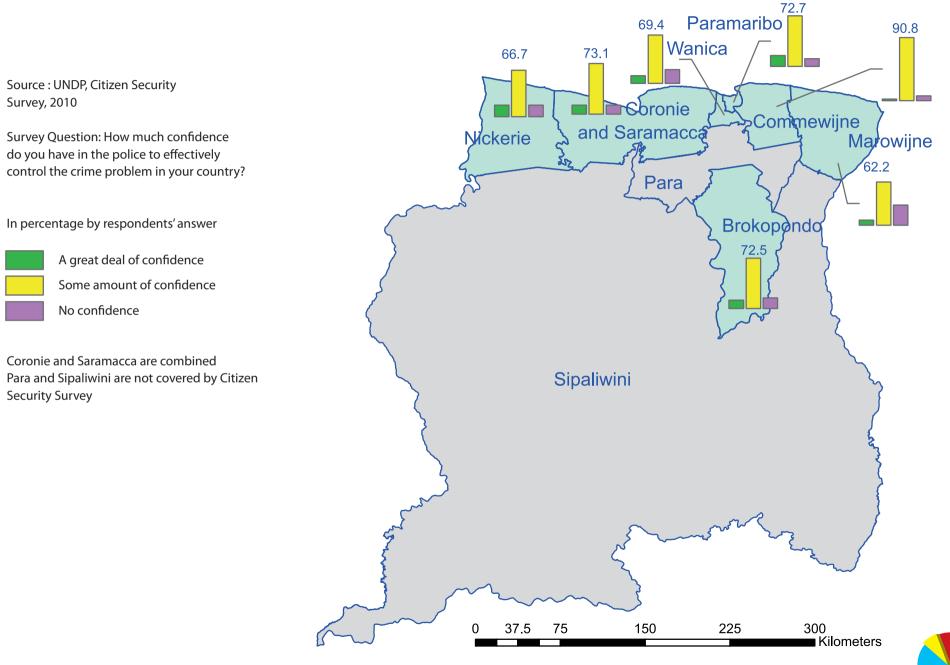
187

## 114. Perceived Confidence in Police Response to Emergency Calls by Districts



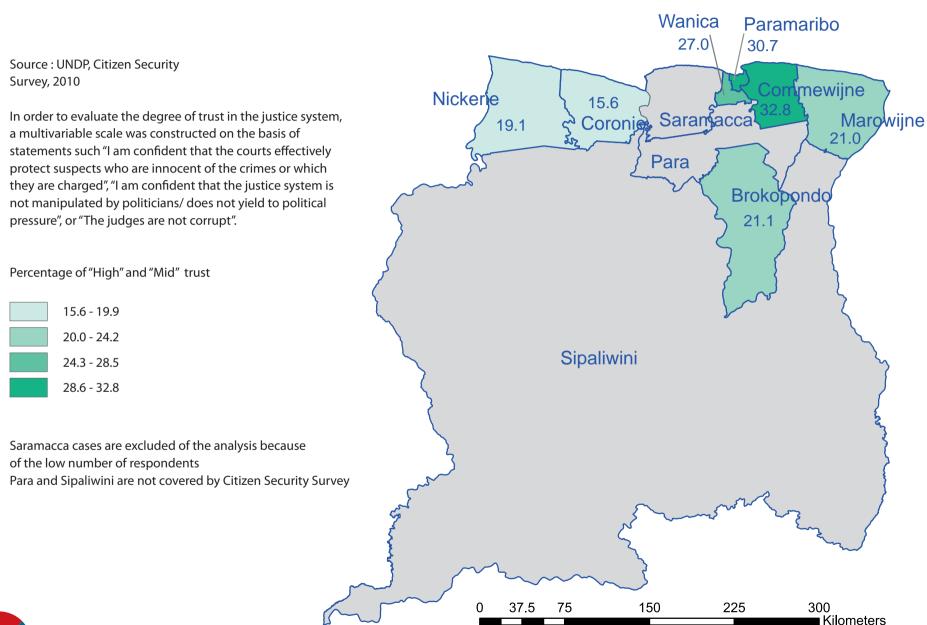


## 115. Perceived Confidence in the Police to Control Crime by Districts



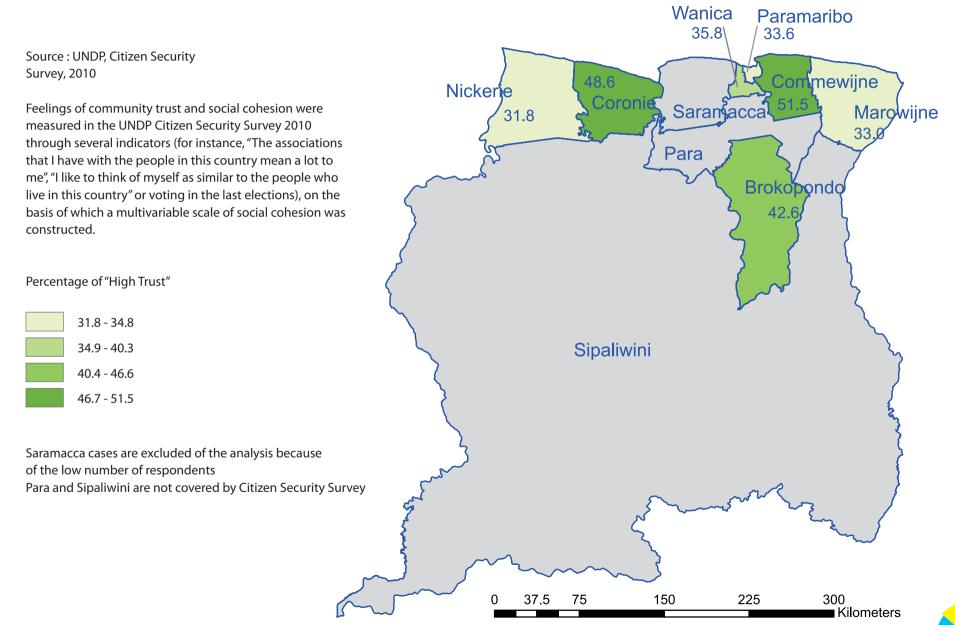
189

## 116. Trust in Justice System by Districts





## 117. Social Cohesion Scale by Districts





# ANNEXES

# Annex 1: Data Tables used for Preparation of the Maps included in the Atlas

## 1.1 Human Development Index, dimension indices and dimension Indicators

Districts	Human Development Index and its dimension indices 2009/2010						
Districts	Human Development Index	Health Index	Education Index	Income Index			
Paramaribo	0.741	0.814	0.792	0.630			
Wanica	0.689	0.779	0.693	0.607			
Nickerie	0.683	0.776	0.687	0.597			
Coronie	0.688	0.779	0.724	0.577			
Saramacca	0.693	0.779	0.720	0.593			
Commewijne	0.689	0.789	0.683	0.607			
Marowijne	0.649	0.743	0.628	0.585			
Para	0.691	0.800	0.696	0.593			
Brokopondo	0.626	0.743	0.534	0.618			
Sipaliwini	0.522	0.672	0.367	0.575			
Suriname	0.703	0.792	0.715	0.615			



Districts	Human Development Index and its dimension indices 2004/2006						
Districts	Human Development Index	Health Index	Education Index	Income Index			
Paramaribo	0.715	0.778	0.783	0.600			
Wanica	0.673	0.779	0.676	0.578			
Nickerie	0.675	0.776	0.694	0.570			
Coronie	0.648	0.776	0.651	0.540			
Saramacca	0.663	0.776	0.659	0.570			
Commewijne	0.667	0.776	0.663	0.578			
Marowijne	0.651	0.708	0.702	0.554			
Para	0.661	0.778	0.655	0.568			
Brokopondo	0.610	0.708	0.535	0.599			
Sipaliwini	0.486	0.640	0.328	0.547			
Suriname	0.687	0.784	0.707	0.586			

Life expectancy at birth (yea Source: General Bureau o Statistics, Civil Registration Office, Bureau Public Health		eral Bureau of cs, Civil ffice, Bureau for	Mean years of schooling (years) Source :MICS 3 and MICS 4		Expected years of schooling (years) Source :MICS 3 and MICS 4	
Districts	2004	2009	2006	2010	2005/2006	2009/2010
Paramaribo	69.3	71.6	9.8	9.7	14.1	14.6
Wanica	69.4	69.4	8.6	9.1	12.0	11.9
Nickerie	69.2	69.2	8.3	8.2	13.1	13.0
Coronie	69.2	69.4	7.4	8.7	12.9	13.6
Saramacca	69.2	69.4	7.6	8.6	12.9	13.6
Commewijne	69.2	70.0	7.5	8.1	13.2	13.0
Marowijne	64.9	67.1	8.3	6.8	13.4	13.1
Para	69.3	70.7	8.0	7.8	12.1	14
Brokopondo	64.9	67.1	5.3	5.4	12.2	11.9
Sipaliwini	60.6	62.6	2.5	2.9	9.7	10.5
Suriname	69.7	70.2	8.6	8.6	13.1	13.4

Districts	Current GNI per capita in SRD Source :GBS		GNI per capita in USD in prices of 2009 Calculated using the GDP deflator 2004-2009 (166.2%) and Central Bank's exchange rate for 2009 ( 2.780 )		
Districts	2004	2009	2004 <sup>(1)</sup>	2009	
Paramaribo	11 023	22 611	6 590	8 133	
Wanica	9 461	19 205	5 656	6 908	
Nickerie	8 970	17 947	5 363	6 456	
Coronie	7 260	15 640	4 340	5 626	
Saramacca	8 954	17 513	5 353	6 300	
Commewijne	9 452	19 317	5 651	6 948	
Marowijne	7 997	16 574	4 781	5 962	
Para	8 818	17 440	5 272	6 273	
Brokopondo	10 979	20 851	6 564	7 500	
Sipaliwini	7 632	15 453	4 563 5 558		
Suriname	10 008	20 325	5 983	7 311	

1) The GDP deflator 2004-2009 (166.2 %) and Central Bank's exchange rate for 2009 (2.780) have been used for obtaining of 2004 GNI per capita in USD in prices of 2009.



## 1.2 Inequality Adjusted Human Development Index and dimension Indicators.

Districts	Inequality adjusted Human Development Index	Human Development Index	Loss due to inequalities (%)
	2009/2010	2009/2010	2009/2010
Paramaribo	0.740	0.741	0.094
Wanica	0.688	0.689	0.116
Nickerie	0.682	0.683	0.154
Coronie	0.687	0.688	0.144
Saramacca	0.692	0.693	0.145
Commewijne	0.688	0.689	0.200
Marowijne	0.648	0.649	0.193
Para	0.690	0.691	0.173
Brokopondo	0.624	0.626	0.240
Sipaliwini	0.521	0.522	0.210
Suriname	0.702	0.703	0.104

Districts	Inequality adjusted Human Development Index	Human Development Index	Loss due to inequalities (%)
	2004/2006	2004/2006	2004/2006
Paramaribo	0.714	0.715	0.142
Wanica	0.671	0.673	0.294
Nickerie	0.673	0.675	0.235
Coronie	0.646	0.648	0.254
Saramacca	0.661	0.663	0.354
Commewijne	0.665	0.667	0.350
Marowijne	0.650	0.651	0.215
Para	0.660	0.661	0.222
Brokopondo	0.609	0.61	0.144
Sipaliwini	0.478	0.486	1.609
Suriname	0.686	0.687	0.173



Source : General Bureau of Statistics, Civil Registration Office, Bureau for Public Health							
Districts	Male	Female	Geometric Mean	Arithmetic Mean	Loss in %		
Paramaribo	69.9	74.2	72.02	72.05	0.042		
Wanica	68.1	71.5	69.78	69.80	0.029		
Nickerie	67.7	71.4	69.53	69.55	0.029		
Coronie	67.4	71.9	69.61	69.65	0.057		
Saramacca	67.4	71.9	69.61	69.65	0.057		
Commewijne	69.4	71.4	70.39	70.40	0.014		
Marowijne	65.3	69.9	67.56	67.60	0.059		
Para	69.4	72.7	71.03	71.05	0.028		
Brokopondo	65.3	69.9	67.56	67.60	0.059		
Sipaliwini	60.5	65.2	62.81	62.85	0.064		
Suriname	68.5	72.7	70.57	70.60	0.042		

Life expectancy at birth (years). 2009

Life expectancy at birth (years). 2004 Source : General Bureau of Statistics, Civil Registration Office, Bureau for Public Health

Districts	Male	Female	Geometric Mean	Arithmetic Mean	Loss in %
Paramaribo	66.7	72.8	69.68	69.75	0.100
Wanica	67.0	72.5	69.70	69.75	0.072
Nickerie	68.1	71.3	69.68	69.70	0.029
Coronie	68.1	71.3	69.68	69.70	0.029
Saramacca	68.1	71.3	69.68	69.70	0.029
Commewijne	67.8	71.4	69.58	69.60	0.029
Marowijne	63.2	67.7	65.41	65.45	0.061
Para	67.4	71.9	69.61	69.65	0.057
Brokopondo	63.2	67.7	65.41	65.45	0.061
Sipaliwini	58.6	63.1	60.81	60.85	0.066
Suriname	67.4	72.8	70.05	70.10	0.071



Mean years of schooling (years). 2010 Source: MICS 4						
Districts	Ages 25 - 40	Ages higher than 40	Geometric Mean (weighed)	Arithmetic Mean (weighed)	Loss in %	
Paramaribo	10.7	9.0	9.68	9.72	0.412	
Wanica	10.1	8.2	8.99	9.04	0.553	
Nickerie	9.4	7.2	8.03	8.10	0.864	
Coronie	9.8	8.1	8.69	8.73	0.458	
Saramacca	9.6	7.9	8.60	8.64	0.463	
Commewijne	9.4	7.2	8.05	8.12	0.862	
Marowijne	7.7	5.9	6.69	6.75	0.889	
Para	8.8	7.0	7.76	7.82	0.767	
Brokopondo	6.2	4.5	5.26	5.33	1.313	
Sipaliwini	3.4	2.5	2.88	2.91	1.031	
Suriname	9.5	7.9	8.55	8.59	0.466	

Mean years of schooling (years). 2006 Source: MICS 3							
Districts	Ages 25 - 40	Ages higher than 40	Geometric Mean (weighed)	Arithmetic Mean (weighed)	Loss in %		
Paramaribo	10.8	8.9	9.69	9.74	0.513		
Wanica	10.0	7.1	8.37	8.50	1.529		
Nickerie	9.7	7.0	8.06	8.17	1.346		
Coronie	8.8	6.5	7.29	7.37	1.085		
Saramacca	9.2	6.4	7.61	7.74	1.680		
Commewijne	9.0	6.0	7.25	7.40	2.027		
Marowijne	9.2	7.3	8.15	8.21	0.731		
Para	9.2	6.9	7.87	7.96	1.131		
Brokopondo	6.0	4.7	5.37	5.41	0.739		
Sipaliwini	3.8	1.6	2.39	2.62	8.779		
Suriname	9.8	7.5	8.47	8.54	0.820		



Expected years of schooling (years). 2009/2010 Source: MICS 4						
Districts	Boys	Girls	Geometric Mean (weighed)	Arithmetic Mean (weighed)	Loss in %	
Paramaribo	14.1	15.2	14.63	14.64	0.068	
Wanica	11.4	12.4	11.88	11.89	0.084	
Nickerie	12.8	13.3	13.04	13.04	0.000	
Coronie	12.7	14.8	13.68	13.72	0.292	
Saramacca	12.7	14.8	13.67	13.71	0.292	
Commewijne	12.2	14.2	13.13	13.17	0.304	
Marowijne	12.4	14.1	13.22	13.24	0.151	
Para	13.3	15.0	14.11	14.14	0.212	
Brokopondo	11.8	12.3	12.04	12.04	0.000	
Sipaliwini	10.2	11.0	10.59	10.60	0.094	
Suriname	12.9	14.0	13.43	13.44	0.074	

Expected years of schooling (years). 2005/2006 Source: MICS 4						
Districts	Boys	Girls	Geometric Mean (weighed)	Arithmetic Mean (weighed)	Loss in %	
Paramaribo	13.4	14.9	14.12	14.14	0.141	
Wanica	11.8	12.2	11.99	12.00	0.083	
Nickerie	12.8	13.3	13.04	13.04	0.000	
Coronie	14.4	12.1	13.30	13.35	0.375	
Saramacca	14.4	12.1	13.26	13.31	0.376	
Commewijne	13.1	13.6	13.34	13.34	0.000	
Marowijne	12.5	15.0	13.69	13.75	0.436	
Para	12.9	11.7	12.31	12.32	0.081	
Brokopondo	12.3	12.5	12.40	12.40	0.000	
Sipaliwini	8.8	10.6	9.68	9.72	0.412	
Suriname	12.7	13.6	13.13	13.14	0.076	



## 1.3 Gender Inequality Index and dimension Indicators.

Districts	Gender Inequality Index						
Districts	2004/2005	2009/2010					
Paramaribo	0.397	0.407					
Wanica	0.431	0.466					
Nickerie	0.422	0.716					
Coronie	0.675	0.666					
Saramacca	0.739	0.726					
Commewijne	0.726	0.429					
Marowijne	0.423	0.713					
Para	0.743	0.721					
Brokopondo	0.508	0.459					
Sipaliwini	0.505	0.771					
Suriname	0.435	0.464					

Districts	(per 100,00	ortality ratio 0 live births) BS & BOG	Adolescent Fertility Rate (births to women ages 15–19, expres per 1,000 women) Source : GBS & CBB				
	2004	2010	2004	2009			
Paramaribo	84.5	69.5	55.4	49.0			
Wanica	83.8	69.1	53.9	69.6			
Nickerie	86.3	69.4	47.5	47.3			
Coronie	87.8	70.3	49.7	48.1			
Saramacca	85.1	69.3	9.3 55.9	48.1			
Commewijne	85.0	70.6	61.2	62.2			
Marowijne	85.6	70.7	52.8	48.8			
Para	84.7	71.7	118.0	73.6			
Brokopondo	102.0	82.5	175.4	99.0			
Sipaliwini	116.3	93.2	137.9	101.4			
Suriname	88.3	72.1	65.1	66.2			

		Population with at le (% of the populati	ast secondary education. on ages 25 and older)	
	Source	: MICS 4	Source: GBS,	CENSUS-2004
Districts	20	010	20	004
Γ	2004	2010	2004	2009
Paramaribo	84.5	69.5	55.4	49.0
Wanica	83.8	69.1	53.9	69.6
Nickerie	86.3	69.4	47.5	47.3
Coronie	87.8	70.3	49.7	48.1
Saramacca	85.1	69.3	55.9	48.1
Commewijne	85.0	70.6	61.2	62.2
Marowijne	85.6	70.7	52.8	48.8
Para	84.7	71.7	118.0	73.6
Brokopondo	102.0	82.5	175.4	99.0
Sipaliwini	116.3	93.2	137.9	101.4
Suriname	88.3	72.1	65.1	66.2

1) The value for female population of Sipaliwini was estimated by sources that are different from MICS 4.

	of Suriname me			
Districts	the Election	n year 2005	the Election	n year 2010
	Male	Female	Male	Female
Paramaribo	12	5	16	3
Wanica	5	2	5	1
Nickerie	3	2	5	0
Coronie	2	0	2	0
Saramacca	3	0	3	0
Commewijne	4	0	3	1
Marowijne	2	1	3	0
Para	3	0	3	0
Brokopondo	2	1	2	1
Sipaliwini	2	2 2 3		
Suriname	38	13	45	6

202

	Labor force participation rate (%) Source: GBS								
Districts		2004			2010				
	Male	Female	Both	Male	Female	Both			
Paramaribo	69.6	48.5	58.8	74.5	52.7	63.4			
Wanica	73.0	33.9	54.0	78.2	36.8	58.1			
Nickerie	74.4	29.2	52.5	79.7	31.7	56.4			
Coronie	67.6	57.3	62.8	72.4	62.3	67.7			
Saramacca	73.3	25.5	51.0	78.5	27.7	54.8			
Commewijne	76.6	36.9	58.1	82.0	40.1	62.5			
Marowijne	68.2	34.5	51.4	73.0	37.5	55.3			
Para	65.1	38.3	52.0	69.7	41.6	56.0			
Brokopondo	78.7	43.5	62.8	84.3	47.3	67.6			
Sipaliwini	60.8	29.4	43.5	65.1	31.9	46.8			
Suriname	70.8	41.2	56.0	75.8	44.8	60.3			

## 1.4 Uni-dimensional poverty

Districts	Uni-dimensional Poverty (%) Source: GBS						
	2004	2009					
Paramaribo	45.3	45.9					
Wanica	50.6	50.6					
Nickerie	62.2	61.3					
Coronie	37.7	40.7					
Saramacca	50.5	48.3					
Commewijne	53.7	54.1					
Marowijne	55.4	56.2					
Para	48.6	47.4					
Brokopondo	41.0	39.0					
Sipaliwini	57.9	59.3					
Suriname	48.8	48.8					

1.5 Multidimensional Poverty Index and its dimensions	
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Districts		MPI and its dimensions 2010. Source : MICS 4													
Districts	MPI	Poor Population	Intensity	Health	Education	Living standard	x1	y1	y2	z1	z2	z3	z4	z5	z6
Paramaribo	0.0068	2.3	29.7	15.3	8.7	5.7	15.3	8.0	0.7	0.8	3.2	0.1	0.0	0.4	1.1
Wanica	0.0111	3.3	33.6	16.0	10.0	7.6	16.0	8.0	2.0	1.8	2.2	0.4	0.0	1.3	1.8
Nickerie	0.0098	3.2	30.9	21.3	6.0	3.6	21.3	5.3	0.7	0.2	0.7	0.4	0.0	1.1	1.1
Coronie	0.0060	2.2	27.8	16.7	8.3	2.8	16.7	8.3	0.0	0.0	2.8	0.0	0.0	0.0	0.0
Saramacca	0.0102	3.6	28.5	10.4	10.4	7.6	10.4	8.3	2.1	1.0	2.8	0.3	0.3	2.1	1.0
Commewijne	0.0134	4.3	31.2	18.5	7.4	5.2	18.5	6.5	0.9	0.9	2.2	0.0	0.0	1.5	0.6
Marowijne	0.0286	9.4	30.4	7.9	8.7	13.8	7.9	8.7	0.0	3.0	2.6	1.6	1.5	2.1	2.9
Para	0.0304	10.5	29.1	5.4	11.2	12.4	5.4	10.9	0.4	1.9	3.2	1.0	1.2	2.7	2.3
Brokopondo	0.0764	24.9	30.6	3.7	13.5	13.5	3.7	12.8	0.6	0.8	5.1	1.3	1.2	2.3	2.7
Sipaliwini	0.1880	54.9	34.2	1.3	12.8	20.1	1.3	12.1	0.7	2.0	5.2	2.9	2.8	3.9	3.4
Suriname	0.0230	7.5	30.7	13.9	9.2	7.6	13.9	8.3	0.9	1.1	2.9	0.5	0.3	1.2	1.5

Districts		MPI and its dimensions 2006. Source: MICS 3													
Districts	MPI	MPIPoor PopulationIntensityHealthEducationLiving standardx1y1								z1	z2	z3	z4	z5	z6
Paramaribo	0.0095	3.1	30.8	17.1	7.9	5.8	17.1	6.8	1.1	1.5	2.0	0.3	0.1	0.7	1.2
Wanica	0.0163	5.0	32.6	17.6	6.9	8.1	17.6	5.7	1.3	1.6	2.0	1.2	0.1	1.8	1.5
Nickerie	0.0185	6.0	30.8	14.1	6.4	10.3	14.1	5.8	0.6	2.8	1.9	1.5	0.0	2.1	1.9
Coronie	0.0171	5.1	33.3	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saramacca	0.0158	5.2	30.6	13.3	10.0	7.2	13.3	8.3	1.7	0.6	1.7	0.6	0.0	2.8	1.7
Commewijne	0.0121	4.0	30.3	15.4	7.7	7.3	15.4	7.7	0.0	1.3	1.3	0.0	0.4	2.1	2.1
Marowijne	0.0144	5.0	28.9	10.0	10.0	8.9	10.0	10.0	0.0	1.1	2.2	1.1	1.1	0.6	2.8
Para	0.0321	11.2	28.6	7.9	5.6	15.1	7.9	4.8	0.8	3.2	3.7	0.3	1.6	3.2	3.2
Brokopondo	0.1228	33.0	37.3	2.9	14.1	20.3	2.9	13.8	0.3	3.9	5.3	0.7	2.4	3.3	4.8
Sipaliwini	0.2944	72.8	40.4	2.4	12.6	25.4	2.4	12.0	0.6	2.9	5.1	4.7	3.5	4.4	4.9
Suriname	0.0322	10.1	31.9	14.7	8.2	9.0	14.7	7.2	0.9	1.8	2.3	0.9	0.5	1.6	1.9



## 1.6. Millennium Development Goals (MDG) Indicators

#### Goal 1: Eradicate extreme poverty and hunger

Districts	Population by quantiles of Wealth Index and by districts (%) 2009/2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4							
	First	Second	Middle	Fourth	Fifth			
Paramaribo	6.6	17.6	22.5	24.6	28.7			
Wanica	10.1	26.3	23.2	20.3	20.1			
Nickerie	7.2	18.1	28.6	28.9	17.3			
Coronie	9.5	23.5	26.2	25.2	15.6			
Saramacca	16.9	29.4	20.9	20.3	12.5			
Commewijne	17	33.8	22.3	19.2	7.9			
Marowijne	48.6	24.3	14.4	7.4	5.2			
Para	40.5	26.6	14.2	9.4	9.2			
Brokopondo	75.9	17.7	4.6	1.5	0.3			
Sipaliwini	92.8	6.9	0.3	0	0			
Suriname	34	19.3	16.7	15.8	14.3			

and the second se	Districts	Underweight prevalence by districts (%). (2005/2006) Source: Multiple Indicator Cluster Survey 3 below -2 standard
		deviations
	Paramaribo	8.4
	Wanica and Para	11.4
	Nickerie,Coronie, Saramacca	13.9
	Commewijne,Marowijne	6.1
	Brokopondo, Sipaliwini	11.3
1	Suriname	5.8

Districts	Underweight preval ( 2009/ Source: Ministry of Soci Multiple Indicator	(2010 ) ial Affairs and Housing,
	below -2 standard deviations	below -3 standard deviations
Paramaribo	5.6	1.1
Wanica	5.6	1.5
Nickerie	8.9	2.0
Coronie	4.5	.0
Saramacca	4.8	.8
Commewijne	11.7	1.0
Marowijne	5.1	2.6
Para	6.9	1.4
Brokopondo	5.7	.4
Sipaliwini	4.9	1.3
Suriname	5.8	1.3



## Goal 2: Achieve universal primary education

Districts	Primary school attendance by districts (%) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4		al Affairs	Children reaching last grade of primary school by districts (%) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4	Literacy among young women by districts (%) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4
Districts	Male	Female	Total		
Paramaribo	97.2	97.9	97.5	97.8	96.5
Wanica	92.5	96.5	94.3	93.8	96.6
Nickerie	98.3	97.0	97.7	90.6	92.0
Coronie	100.0	100.0	100.0	100.0	85.7
Saramacca	94.4	98.0	96.2	96.8	97.2
Commewijne	92.0	98.1	95.8	100.0	95.6
Marowijne	95.0	96.3	95.6	95.5	93.1
Para	95.3	97.3	96.3	97.9	92.5
Brokopondo	93.5	95.2	94.3	88.7	78.3
Sipaliwini	87.9	90.1	89.0	91.3	46.3
Suriname	94.7	96.3	95.5	95.8	92.1

Districts	Primary school attendance by districts (%)	Percentage of children entering first grade of primary school who eventually reach grade 5	Percentage of women aged 15-24 years that are literate, Suriname, (%)	
	(2005/2006) Source: Multiple Indicator Cluster Survey 3			
Paramaribo	96.5	96.7	96.2	
Wanica and Para	95.6	90.7	95.4	
Nickerie,Coronie and Saramacca	96.6	96.1	96.1	
Commewijne and Marowijne	96.0	92.1	93.8	
Brokopondo and Sipaliwini	82.8	87.0	45.0	
Suriname	94.5	93.7	91.9	



## Goal 3: Promote gender equality and empower women

Districts	Gender Parity Index 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4		
	Primary school	Secondary school	
Paramaribo	1.01	1.27	
Wanica	1.06	1.15	
Nickerie	1.00	1.38	
Coronie	.95	1.49	
Saramacca	1.05	1.29	
Commewijne	1.02	1.25	
Marowijne	1.01	1.52	
Para	1.01	1.35	
Brokopondo	1.02	1.48	
Sipaliwini	1.02	.76	
Suriname	1.02 1.24		

Districts	Gender Parity Index (2005/2006) Source: Multiple Indicator Cluster Survey 3		
	Primary school	Secondary school	
Paramaribo	1.0	1.1	
Wanica and Para	1.0	1.2	
Nickerie,Coronie and Saramacca	1.0	1.1	
Commewijne and Marowijne	1.0	1.7	
Brokopondo and Sipaliwini	0.9	1.9	
Suriname	1.0	1.2	



Districts	Proportion of Seats in the National Assembly of Suriname by Sex and Districts in the Election year 2010 (%) Source: General Bureau of Statistics		
	Male	Female	
Paramaribo	84.2	15.8	
Wanica	83.3	16.7	
Nickerie	100.0	0.0	
Coronie	100.0	0.0	
Saramacca	100.0	0.0	
Commewijne	75.0	25.0	
Marowijne	100.0	0.0	
Para	100.0	0.0	
Brokopondo	66.7	33.3	
Sipaliwini	100.0	0.0	
Suriname	88.2	11.8	



## Goal 4: Reduce child mortality

Districts	Children vaccinated against measles by districts (%) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4
Paramaribo	78.1
Wanica	79.7
Nickerie	78
Coronie	50
Saramacca	90.3
Commewijne	91.7
Marowijne	47.1
Para	87.2
Brokopondo	70.9
Sipaliwini	82.9
Suriname	77.6

Districts	Children vaccinated against measles by districts (%) (2005/2006) Source: Multiple Indicator Cluster Survey 3
Paramaribo	78.3
Wanica and Para	84.1
Nickerie, Coronie and Saramacca	87.1
Commewijne and Marowijne	75.1
Brokopondo and Sipaliwini	82.9
Suriname	79.5



### Goal 5: Improve maternal health

Districts	Proportion of births attended by skilled health personnel by districts (%) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4	Contraceptive prevalence rate by districts (% of women aged 15 to 49) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4	Antenatal care coverage by districts ( % of women aged 15–49 with a live birth) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4	Unmet need for contraception by districts (% women aged 15-49 years) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4
Paramaribo	96.2	47.6	96.2	15.2
Wanica	97.4	51.6	97.4	16.4
Nickerie	98.9	53.5	98.9	11.2
Coronie	100.0	45.7	100	11.4
Saramacca	96.5	53.7	96.5	15.8
Commewijne	93.8	59.1	93.8	15.4
Marowijne	94.7	39.3	94.7	26.6
Para	92.4	42.4	92.4	18.8
Brokopondo	75.9	25.6	75.9	33.3
Sipaliwini	77.5	25.1	77.5	33.9
Suriname	97.2	45	88.6	19.4



Districts	Proportion of births attended by skilled health personnel by districts (%)	Contraceptive prevalence rate by districts ( % of women aged 15 to 49)	Unmet need for contraception by districts ( % women aged 15-49 years )
	(2005/2006) Source: Multiple Indicator Cluster Survey 3		
Paramaribo	97.3	46.0	17.3
Wanica and Para	95.2	48.7	16.9
Nickerie, Coronie and Saramacca	92.0	53.3	17.2
Commewijne and Marowijne	93.0	47.2	17.6
Brokopondo and Sipaliwini	71.4	14.6	33.2
Suriname	89.9	45.6	18.4



### Goal 6: Combat HIV/AIDS, malaria and other diseases

Districts	Condom use at last high-risk sex by districts (% of women age 15-24 years) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4	Comprehensive knowledge about HIV transmission by districts (% of women age 15-24 years) 2010 Source: Ministry of Social Affairs and Housing, Multiple Indicator Cluster Survey 4
Paramaribo	62.7	47.8
Wanica	50.7	38.2
Nickerie	55.2	34.9
Coronie	75.0	57.1
Saramacca	46.2	38.5
Commewijne	57.1	41.2
Marowijne	47.6	34.3
Para	52.0	48.3
Brokopondo	48.9	33.9
Sipaliwini	29.0	20.8
Suriname	55.5	41.9



Districts	Comprehensive knowledge about HIV transmission by districts (% of women age 15-24 years)	Condom use at last high-risk sex by districts (% of women age 15-24 years)				
	(2005/2006) Source: Multiple Indicator Cluster Survey 3					
Paramaribo	47.9	57.5				
Wanica and Para	34.6	42.8				
Nickerie,Coronie and Saramacca	30.8	39.9				
Commewijne and Marowijne	39.0	47.6				
Brokopondo and Sipaliwini	17.3	31.1				
Suriname	39.3	48.9				



### Goal 7: Ensure environmental sustainability

		Р	roportion of	population using a	an improved sa	nitation facilit	t <b>y</b> (%)					
		2010										
		Source: N	/linistry of So	cial Affairs and Ho	using, Multiple	Indicator Clu	ster Survey 4					
Districts	Flush to piped sewer system	Flush to septic tank	Flush to pit (latrine)	Flush to unknown place / Not sure / DK where	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab	Composting toilet	Total				
Paramaribo	2.2	90.4	.5	.1	.2	4.5	.0	97.9				
Wanica	.8	89.0	.9	.0	.4	7.2	.0	98.2				
Nickerie	1.0	93.6	.5	.0	.0	4.1	.0	99.2				
Coronie	1.4	79.3	.0	.0	.0	17.3	.0	98.0				
Saramacca	1.8	79.7	1.7	.0	.2	10.9	.0	94.4				
Commewijne	.5	74.2	2.3	.1	2.0	15.8	.0	95.0				
Marowijne	1.7	35.7	10.4	.0	.0	40.5	.1	88.5				
Para	1.1	43.6	6.7	.1	.5	39.6	.0	91.7				
Brokopondo	.0	17.4	.9	.0	4.8	32.4	.0	55.6				
Sipaliwini	.4	.4 7.9 1.4 .1 .6 26.3 .3 36.9										
Suriname	1.2	61.9	2.0	.1	.7	16.6	1	82.5				



	Proportion of population using an improved drinking water source (%) (2005/2006) Source: Multiple Indicator Cluster Survey 3									
Districts	Piped into dwellingPiped into compound, yard or plotPublic tap / standpipeTube well, BoreholeProtected 								Total	
Paramaribo	77.6	10.1	1.1	0.2	0.4	0.0	6.8	1.6	97.7	
Wanica and Para	53.8	16.5	0.5	0.0	1.4	2.8	20.0	1.0	96	
Nickerie,Coronie and Saramacca	66.4	18.6	0.0	0.0	0.0	0.0	11.1	1.1	97.1	
Commewijne and Marowijne	25.0	9.8	0.8	3.5	4.6	0.8	52.8	1.2	98.6	
Brokopondo and Sipaliwini	1.8	1.8         7.5         1.5         0.0         1.4         5.9         26.7         0.1         44.8								
Suriname	57.3	12.3	0.8	0.4	1.1	1.4	17.2	1.2	91.7	



		Proportion of population using an improved drinking water source (%)										
		2010										
Districts		Source	: Ministry of	f Social Affai	rs and Hou	sing, Multip	ole Indicato	r Cluster Su	rvey 4			
Districts	Piped into dwelling	Piped into compound, yard or plot	Piped to neighbour	Public tap / standpipe	Tube well, Borehole	Protected well	Protected spring	Rainwater collection	Bottled water	Total		
Paramaribo	76.8	11.2	.3	.6	.0	.1	.1	6.7	3.4	99.1		
Wanica	56.2	12.4	.6	.3	.0	2.3	.6	22.9	2.0	97.4		
Nickerie	79.4	8.0	.8	.5	.0	.1	.0	4.1	4.4	97.4		
Coronie	77.9	19.7	1.0	.0	.0	.0	.0	.0	1.4	100.0		
Saramacca	39.5	9.6	.6	.0	.2	.3	.0	44.0	2.6	96.7		
Commewijne	18.4	8.0	.3	.0	.0	2.6	.8	65.2	2.1	97.4		
Marowijne	23.0	25.6	4.2	.1	.0	1.5	1.2	30.7	4.8	91.1		
Para	40.6	32.2	3.3	3.1	1.8	.8	3.2	10.7	.7	96.5		
Brokopondo	9.6	22.5	.6	9.3	.0	.0	2.8	44.5	.2	89.4		
Sipaliwini	1.5	1.5         7.5         .0         3.0         .2         .1         4.5         47.7         .0         64.5										
Suriname	44.9	13.2	.8	1.6	.2	.6	1.4	25.6	2.3	90.7		



	Proportion of population using an improved drinking water source (%) (2005/2006) Source: Multiple Indicator Cluster Survey 3								
Districts	Flush to piped sewer systemFlush to septic tankFlush to pit (latrine)Ventilated Improved 								
Paramaribo	0.6	89.3	1.2	2.2	5.3	0.0	98.6		
Wanica and Para	0.7	73.4	3.6	4.9	12.4	0.0	94.9		
Nickerie, Coronie and Saramacca	0.2	81.5	4.9	4.1	5.9	0.0	96.7		
Commewijne and Marowijne	0.3	58.8	8.9	12.0	11.6	0.0	91.5		
Brokopondo and Sipaliwini	1.1	4.8	1.8	2.2	22.2	1.0	33.0		
Suriname	0.6	72.6	3.1	4.0	9.5	0.1	89.8		

### 1.7 Crime and Violence Data

Districts	Criminal offences against public order	Drug offences	Economic offences	Homicides and aggravated assaults	Other crimes	Property offences	Sexual offences	Vandalism and menace	Total
Paramaribo	265	117	119	3 384	205	10 272	430	591	15 383
Wanica	217	73	63	1 263	13	3 434	77	228	5 368
Nickerie	40	27	24	609	15	1 401	41	110	2 267
Coronie	3	13	27	52	3	73	3	11	185
Saramacca	7	9	6	90	2	226	14	23	377
Commewijne	17	9	18	212	3	549	21	49	878
Marowijne	16	9	12	304	14	487	23	45	910
Para	29	6	7	196	8	646	25	37	954
Brokopondo	5	1	-	89	12	178	3	14	302
Sipaliwini	3	9	-	57	4	61	6	5	145

#### Number of registered crimes (inclusive of attempts to crime) by type of crime and district. (2009)

Source : The General Bureau of Statistics Statistical Yearbook November 2010 based on information obtained from the Police Force

### Number of persons taken into custody by district

Districts		Fen	nale		Male			
Districts	2006	2007	2008	2009	2006	2007	2008	2009
Paramaribo	75	239	170	186	2093	2018	1870	2025
Wanica	15	21	35	20	570	777	904	786
Nickerie	1	21	14	6	318	386	444	393
Coronie	-	2	2	3	17	33	37	41
Saramacca	-	6	1	1	72	82	113	85
Commewijne	4	1	14	3	195	196	187	162
Marowijne	13	4	7	16	130	192	132	189
Para	5	6	10	9	172	198	211	149
Brokopondo	-	2	1	1	11	28	36	34
Sipaliwini		3	-	2		43	56	78

Source : The General Bureau of Statistics\_Statistical Yearbook\_November 2010 based on information obtained from the Police Force



Districts	Number of registered offences (inclusive of attempts to crime)				Number of solved offences (inclusive of attempts to crime)			
Districts	2006	2007	2008	2009	2006	2007	2008	2009
Paramaribo	12 792	13 357	15 259	15 383	4 1 3 1	2 472	2 442	2 660
Wanica	3 856	3 748	4 390	5 368	843	929	1 1 2 6	1 167
Nickerie	2 663	1 670	2 172	2 267	648	383	349	370
Coronie	184	172	178	185	80	59	52	64
Saramacca	404	391	450	377	143	155	132	94
Commewijne	793	882	969	878	226	207	190	262
Marowijne	679	791	753	910	182	182	200	180
Para	1 267	1 006	904	954	278	228	273	127
Brokopondo	28	151	170	302	8	28	41	8
Sipaliwini	•	82	100	145	•	35	47	56

### Number of offences (inclusive of attempts to crime) by district

Source : The General Bureau of Statistics Statistical Yearbook November 2010 based on information obtained from the Police Force



### 1.8 UNDP Citizen Security Survey

### The Most Serious Problems in the Country by Districts.

#1 problem \ Districts		Paramaribo	Wanica	Nickerie	Coronie and Saramacca	Commewijne	Marowijne	Brokopondo	Suriname
Unemployment	%	21.5	21.8	34.4	35.2	15.4	24.3	26.4	23.6
Housing	%	14.2	20.1	13.5	4.6	8.5	15.3	11	13.6
Schooling	%	4.9	6.1	6.3	9.3	1.5	2.7	7.1	5.3
Cost of food	%	7.8	9.6	7.3	13	26.2	7.2	9.3	10.1
Property crime	%	13.3	6.6	6.3	4.6	12.3	7.2	9.3	10.2
Violent crime	%	8.7	6.6	6.3	12	11.5	6.3	8.2	8.5
Insecurity	%	2.1	3.9	1	0.9	0.8	4.5	2.2	2.3
Cost of living	%	4.9	2.2	1	0.9	10.8	5.4	5	4.5
Poverty	%	4.3	2.2	5.2	0.9	0.8	3.6	5.5	3.6
Corruption	%	8.8	11.4	9.4	11.1	8.5	7.2	7.7	9.1
Migration	%	1.7	0.4	2.1	2.8	0.8	2.7	0.6	1.5
Sanitation	%	0.3	2.2	1	1.9	0	2.7	2.2	1.1
Access to healthcare	%	2.1	2.6	2.1	0	0	5.4	2.2	2.1
Voice in governmental affairs	%	1.1	0.4	1	0.9	0.8	2.7	0.6	1
No answer	%	4.3	3.9	3.1	1.9	2.1	2.8	2.7	3.5
Total	%	100	100	100	100	100	100	100	100

### From the list of problems mentioned above, which three are the most serious in your country?



	In the last year were you the victim of a crime?	In the last year, were you the victim of a violent crime, and/ or a property crime, and/or financial crime/scam?					
Districts	yes	violent	property	financial crime	other		
	%	%	%	%	%		
Paramaribo	10.1	1.5	6.6	0.9	1.7		
Wanica	5.2	0	2.6	1.3	0.4		
Nickerie	11.5	4.2	6.3	1	4.2		
Coronie and Saramacca	8.3	0.9	5.6	0.9	0.9		
Commewijne	7.7	3.8	3.8	0	0.8		
Marowijne	11.7	3.6	6.3	1.8	1.8		
Brokopondo	13.7	1.6	8.2	0	2.2		
Suriname	9.7	1.8	5.8	0.9	1.6		

Districts	In the last year were you the victim of sexual assault ?	Did you report the (violent) incident to the police?			
	yes	yes	no		
	%	%	%		
Paramaribo	10.1	74.3	25.7		
Wanica	5.2	66.7	33.3		
Nickerie	11.5	92.3	7.7		
Coronie and Saramacca	8.3	90	10		
Commewijne	7.7	75	25		
Marowijne	11.7	66.7	33.3		
Brokopondo	13.7	60	40		
Suriname	9.7	73.4	26.6		



	To what extent has any member of your household (age 16 or over) deliberately hit you with their fists or with a weapon of any sort, or kicked you or used violence on you in any way?								
Districts	many times (5+)	a few times (2-4)	once	not at all					
	%	%	%	%					
Paramaribo	1.3	3.4	7.2	88.1					
Wanica	0.4	2.7	4.9	92					
Nickerie	3.2	5.3	2.1	89.5					
Coronie and Saramacca	0	2.9	4.8	92.4					
Commewijne	4	8	8.8	79.2					
Marowijne	2.8	2.8	11.3	83					
Brokopondo	2.3	2.9	4.1	90.6					
Suriname	1.7	3.7	6.4	88.3					

	To what extent has your spouse (or ex-spouse) ever said things to you that frightened you, such as threatening to harm you or someone close to you?								
Districts	many times (5+)	a few times (2-4)	once	not at all	don't know				
	%	%	%	%	%				
Paramaribo	1.5	4.9	4.7	81.7	6.6				
Wanica	2.2	3.9	5.7	85.6	2.2				
Nickerie	1	8.3	6.3	81.3	2.1				
Coronie and Saramacca	2.8	4.6	12	78.7	1.9				
Commewijne	0	6.9	6.9	79.2	6.9				
Marowijne	2.7	8.1	5.4	77.5	6.3				
Brokopondo	2.2	2.2 4.9 7.1 78 7.7							
Suriname	1.7	5.4	6	81.1	5.4				



	To what extent have you been injured, even slightly, on any occasion (in ) when your spouse (or ex-spouse), or a partner (or ex-partner), or a boyfriend/girlfriend (or ex-boyfriend/ girlfriend), used violence against you? By injuries we mean bruises, scratches and cuts of any kind.								
Districts	many times (5+)	a few times (2-4)	once	not at all	don't know				
	%	%	%	%	%				
Paramaribo	0.8	1.5	3.7	88.4	5				
Wanica	0.9	1.3	2.2	93.9	1.7				
Nickerie	2.1	4.2	4.2	88.5	1				
Coronie and Saramacca	0	2.8	4.6	89.8	2.8				
Commewijne	0	2.3	9.2	83.8	4.6				
Marowijne	0.9	0.9 3.6 6.3 82.9 6.3							
Brokopondo	0	0 1.6 6 85.7 6							
Suriname	0.7	2	4.5	88.2	4.3				

	To what extent have you been sworn at or insulted by a partner (ex-partner) or a boyfriend/ girlfriend (or ex-boyfriend/girlfriend)?								
Districts	many times (5+)	a few times (2-4)	once	not at all	don't know				
	%	%	%	%	%				
Paramaribo	4.4	7.3	5.5	76.2	5.3				
Wanica	0.9 4.8 4.4 85.2								
Nickerie	7.3	3.1	11.5	76	2.1				
Coronie and Saramacca	2.8	2.8	10.2	75.9	8.3				
Commewijne	1.5	10	8.5	73.8	6.2				
Marowijne	2.7 9 7.2 73 8.1								
Brokopondo	5.5	5.5 7.1 7.1 73.6 6							
Suriname	3.7	6.7	6.6	76.8	5.6				



	People use some violence in a relationship - pushing, shaking, hitting, kicking, etc; to extent, if any, has your spouse (ex-spouse) ever used violence on you for any rease						
Districts	many times (5+)	a few times (2-4)	once	not at all	don't know		
	%	%	%	%	%		
Paramaribo	1.2	4.3	4.1	83.5	4		
Wanica	1.3	3.1	3.5	80.8	3.5		
Nickerie	4.2	2.1	8.3	85.4	0		
Coronie and Saramacca	0.9	3.7	11.1	79.6	4.6		
Commewijne	0.8	9.2	10	75.4	4.6		
Marowijne	3.6	4.5	6.3	78.4	7.2		
Brokopondo	1.1	4.4	6.6	79.1	6.6		
Suriname	1.5	4.4	5.8	81.3	4.3		

	If yes, how serious is the violent crime problem?						
Districts	out of control	very serious	serious	quite serious	not serious		
	%	%	%	%	%		
Paramaribo	3.9	25.2	36.4	25.8	8.8		
Wanica	3.5	23.9	40.7	26.5	5.3		
Nickerie	1.8	12.5	35.7	44.6	5.4		
Coronie and Saramacca	6.8	29.7	40.5	23	0		
Commewijne	2.3	27.9	23.3	44.2	2.3		
Marowijne	7	25.4	29.6	36.6	1.4		
Brokopondo	5.9	27.5	37.3	26.5	2.9		
Suriname	4.4	25	36.1	29	5.4		



	If yes, how serious is the property crime problem?								
Districts	out of control	very serious	serious	quite serious	not serious				
	%	%	%	%	%				
Paramaribo	3.6	22.4	38.2	25.4	10.4				
Wanica	0.9	22.8	41.2	23.7	11.4				
Nickerie	1.8	15.8	35.1	28.1	19.3				
Coronie and Saramacca	6.8	23	35.1	24.3	10.8				
Commewijne	2.5	27.5	22.5	37.5	10				
Marowijne	9.6 16.4 31.5 35.6 6.8								
Brokopondo	5.7	5.7 24.8 28.6 30.5 10.5							
Suriname	4.1	22.1	35.5	27.4	10.9				

	How frequently do violent crimes occur in this neighborhood?								
Districts	frequently	occasionally	rarely	none in the last 5 years	no answer				
	%	%	%	%	%				
Paramaribo	9.1	27.9	42.1	19.8	1.1				
Wanica	7.4	39.7	23.6	29.3	0				
Nickerie	10.4	39.6	36.5	12.5	1				
Coronie and Saramacca	15.7	32.4	37	14.8	0				
Commewijne	6.9	23.1	50.8	18.5	0.8				
Marowijne	22.5	27	43.2	4.5	2.7				
Brokopondo	12.1	12.1 28.6 46.7 11.5 1.1							
Suriname	10.6	30.4	39.9	18.2	0.9				



	To what extent has your neighborhood experienced gang violence?								
	large amount of	some	little	no	no				
Districts	violence	violence	violence	violence	answer				
	%	%	%	%	%				
Paramaribo	1.1	11	15.1	72	0.9				
Wanica	1.7	10	13.1	74.2	0.9				
Nickerie	1	8.3	15.6	71.9	3.1				
Coronie and Saramacca	2.8	10.2	22.2	64.8	0				
Commewijne	0.8	6.2	8.5	82.3	2.3				
Marowijne	8.1	14.4	12.6	62.2	2.7				
Brokopondo	3.3	9.9	21.4	65.4	0				
Suriname	2.1	10.3	15.3	71.2	1.1				

	What is the capacity of your country to solve and better manage the problem of insecurity?							
Districts	very sufficient	sufficient	insufficient	very insufficient	don't know			
	%	%	%	%	%			
Paramaribo	6.7	52.7	25	3.8	10.8			
Wanica	2.2	44.1	37.1	2.6	13.5			
Nickerie	3.1	49	25	5.2	17.7			
Coronie and Saramacca	6.5	45.4	22.2	7.4	18.5			
Commewijne	1.5	31.5	50	7.7	8.5			
Marowijne	7.2	30.6	30.6	5.4	25.2			
Brokopondo	3.3	48.9	33.5	3.3	11			
Suriname	5	46.8	30.2	4.4	13.1			



	How much confidence do you have in the police to effectively respond to emergency calls?			How much confidence do you have in the police to effectively control the crime problem in your country?			Do you believe that the police are competent?
	no	some amount	a great deal of	no	some amount	a great deal of	yes
Districts	confidence	of confidence	confidence	confidence	of confidence	confidence	
	%	%	%	%	%	%	%
Paramaribo	19.8	64.3	15.7	11.1	72.7	15.9	68.9
Wanica	25.8	62.4	11.8	19.7	69.4	10.9	66.4
Nickerie	14.6	61.5	24	16.7	66.7	16.7	57.3
Coronie and Saramacca	18.5	56.5	25	13	73.1	13	77.8
Commewijne	29.2	60.8	10	6.9	90.8	2.3	50.8
Marowijne	35.1	53.2	11.7	28.8	62.2	7.2	50.5
Brokopondo	19.8	63.7	15.9	15.4	72.5	12.1	69.2
Suriname	22.2	62.1	15.5	14.4	72.6	12.7	65.5

	Question: ls crime a problem in your community?	Question: Is there a gang (or gangs) in your neighborhood?	Some people worry at some time or another about being a victim of crime. In the past year, have you ever felt fearful about the possibility of becoming a victim of crime?	Question: How secure or insecure do you consider (living in) your country to be?	Trust in police forces by Districts	Question: Using a scale from 1 to 5, please rank the extent to which the police have generally been respectful of your rights as a citizen.
Districts					% of "High" and "	% of "Respectful" or "Very
	% of "yes"	% of "yes"	% of "yes"	"Very Secure".	Mid" Trust	respectful"
Paramaribo	56.8	12.5	49.9	60.9	79	32.3
Wanica	39.4	6.1	52	56.3	77.5	35.8
Nickerie	52.7	5.5	46.4	65.5	73.1	29.1
Coronie and Saramacca	70.8	4.2	44.4	47.2	76.4	19.4
Commewijne	31.5	4.6	36.9	53.1	82	41.5
Marowijne	64.9	20.6	51.5	42.3	65.5	35.1
Brokopondo	45.6	16.2	33.8	57.4	75.8	32.4
Suriname	51.5	10.3	48.3	57.6	77.6	33.2



	Question: To what extent has the police force been effective in controlling crime in your community/ in your country over the last 3 years?		Trust in justice system.	Social cohesion scale by Districts
Districts	country	country community		
	% of More effective	% of More effective	% of Mid + High	% of "High Trust"
Paramaribo	51.6	39.3	30.7	33.6
Wanica	49.2	32.1	27	35.8
Nickerie	45.5	35.5	19.1	31.8
Coronie and Saramacca	31.9	27.8	15.6	48.6
Commewijne	45.4	37.7	32.8	51.5
Marowijne	35.1	30.9	21	33
Brokopondo	36.8	27.9	21.1	42.6
Suriname	47.4	35.6	27.3	36.7



### 1.9 Population in Suriname

Districts		Population by districts and sex Source: GBS												
Districts		2004			2009									
	Male	Female	Total	Male	Female	Total								
Paramaribo	120 427	122 519	242 946	127 656	128 681	256 337								
Wanica	44 013	41 973	85 986	46 801	44 575	4 575 91 376								
Nickerie	18 879	18 879 17 760 36 639 19 551 18 351		18 351	37 902									
Coronie	1 526	1 361	2 887	1 554	1 436	2 990								
Saramacca	8 454	7 526	15 980	8 714	7 757	16 471								
Commewijne	13 009	11 640	24 649	13 646	12 274	25 920								
Marowijne	8 304	8 338	16 642	9 302	9 284	18 586								
Para	9 705	9 044	18 749	10 674	9 901	20 575								
Brokopondo	7 584	6 631	14 215	8 377	7 384	15 761								
Sipaliwini	16 143	17 993	34 136	18 338 19 887 38 2										
Suriname	248 044	244 785	492 829	264 613	259 530	524 143								



# Annex 2: Technical Note on the Calculation of the Human Development Index for Suriname

The Human Development Index (HDI) is a summary measure of human development. It measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living

#### Dimensions

#### Long and healthy life

X - Life expectancy at birth (years) for districts.

Country and district level data for life expectancy at birth indicator were provided by General Bureau of Statistics of Suriname

#### Knowledge

Y - Mean years of schooling (years) for districts **U** - Expected years of schooling (years) for districts

Country and district level data for Mean yea schooling were calculated form MICS 3 and

#### A decent standard of living

#### **Z** - GNI per capita for districts

Country and district level data on GNI per capita were provided by General Bureau of Statistics of Suriname. The GDP deflator 2004/2009 (166.2) and Central Bank's exchange rates for 2004 (2.769) and 2009 (2.780) have been used for obtaining 2004 GNI per capita in USD in prices of 2009.

The HDI is the geometric mean of normalized indices measuring achievements in each dimension:

Mean years of schooling and Expected years of  
CS 3 and MICS 4 survey datasets for Suriname.  

$$HDI = \sqrt[3]{I_x * I_y * I_z}$$
Life expectancy index:  $I_x = \frac{X - 20}{83.4 - 20}$ ; Education index:  $I_y = \frac{\sqrt{\frac{Y}{13.1} * \frac{U}{18}}}{0.978}$ ; GNI index:  $I_z = \frac{\ln(Z) - \ln(100)}{\ln(107721) - \ln(100)}$ ;



Districts	Human De	evelopment Index 2009/2	and its dimension 2010	indices
	Human Development Index	Health Index	Education Index	Income Index
Paramaribo	0.741	0.814	0.792	0.630
Wanica	0.689	0.779	0.693	0.607
Nickerie	0.683	0.776	0.687	0.597
Coronie	0.688	0.688 0.779 0.724		0.577
Saramacca	0.693	0.779	0.720	0.593
Commewijne	0.689	0.789	0.683	0.607
Marowijne	0.649	0.743	0.628	0.585
Para	0.691	0.800	0.696	0.593
Brokopondo	0.626	0.743	0.534	0.618
Sipaliwini	0.522	0.672	0.367	0.575
Suriname	0.703	0.792	0.715	0.615

Districts	Human De	evelopment Index 2004/2	and its dimension 2006	indices
Districts	Human Development Index	Health Index	Education Index	Income Index
Paramaribo	0.715	0.778	0.783	0.600
Wanica	0.673	0.779	0.676	0.578
Nickerie	0.675	0.776	0.694	0.570
Coronie	0.648	0.776	0.651	0.540
Saramacca	0.663	0.776	0.659	0.570
Commewijne	0.667	0.776	0.663	0.578
Marowijne	0.651	0.708	0.702	0.554
Para	0.661	0.778	0.655	0.568
Brokopondo	0.610	0.708	0.535	0.599
Sipaliwini	0.486	0.640	0.328	0.547
Suriname	0.687	0.784	0.707	0.586



# Annex 3:

# Technical Note on the Calculation of the Inequality Adjusted Human Development Index for Suriname

The Inequality-adjusted Human Development Index (IHDI) adjusts the Human Development Index (HDI) for inequality in distribution of each dimension across the population. The IHDI takes into account not only the average achievements of a country on health, education and income, but also how those achievements are distributed among its citizens by "discounting" each dimension's average value according to its level of inequality.

To identify inequalities for some region, the statistical data for sub-population group of the region is needed. To identify inequalities for districts, data for sub-population groups of districts are used.

#### Dimensions

#### Long and healthy life

X - Life expectancy at birth (years) for district

 $X_1, X_2, \dots, X_n$  - Life expectancy at birth (years) for sub-population groups that constitute the district.

 $m_1, m_2, m_3, \dots, m_n$  - the population size in each sub-population group accordingly.

Country and district level data for life expectancy at birth indicator for male and female population groups were provided by General Bureau of Statistics of Suriname.

#### Knowledge

Y - Mean years of schooling (years) for district.

**Y**<sub>1</sub>,**Y**<sub>2</sub>, ..., **Y**<sub>n</sub> - Mean years of schooling (years) for sub-population groups that constitute the district.

 $m_1, m_2, m_3, \dots, m_n$  - the population size in each sub-population group



U - Expected years of schooling (years) for district.

 $U_1, U_2, ..., U_n$  - Expected years of schooling (years) for sub-population groups that constitute the district.

 $m_1, m_2, m_3, \dots, m_n$  - the population size in each sub-population group accordingly.

Country and district level data for Mean years of schooling and Expected years of schooling for population groups were calculated form MICS 3 and MICS 4 survey datasets for Suriname.

#### A decent standard of living

**Z** - GNI per capita (PPP US\$) for district.

 $Z_1, Z_2, ..., Z_n$  - GNI per capita (PPP US\$) for sub-population groups that constitute the district.

 $m_1, m_2, m_3, \dots, m_n$  - the population size in each sub-population group accordingly.

Country and district level data on GNI per capita at district level, were provided by General Bureau of Statistics of Suriname. Inequalities for decent standard of living dimension were not considered.

If we denote  $\pmb{N}$  as total number of population for all group then N is defined as follows:

 $N = m_1 + m_2 + m_3 + \dots + m_n$ 

Inequality adjusted Human Development Index (IHDI) is calculated using HDI:

$$IHDI = \sqrt[3]{(1 - A_{Health}) * (1 - A_{Education}) * (1 - A_{Income})} * HDI;$$

*AHealth*, *AEducation*, *Alncome* - the loses due to inequality in dimensions (Long and healthy life, Education and a Decent standard of living dimensions)

$$A_{Health} = 1 - \frac{\sqrt[N]{X_1^{m_1} * X_2^{m_2} * \dots * X_n^{m_n}}}{X}; \quad A_{Eduction} = 1 - \sqrt{(1 - A_y) * (1 - A_u)};$$

$$A_Y = 1 - \frac{\sqrt[N]{Y_1^{m_1} * Y_2^{m_2} * \dots * Y_n^{m_n}}}{Y}; \quad A_U = 1 - \frac{\sqrt[N]{U_1^{m_1} * U_2^{m_2} * \dots * U_n^{m_n}}}{U};$$

$$A_{Income} = 1 - \frac{\sqrt[N]{Z_1^{m_1} * Z_2^{m_2} * \dots * Z_n^{m_n}}}{Z};$$

Districts	Inequality adjusted Human Development Index	Human Development Index	Loss due to inequalities (%)
	2009/2010	2009/2010	2009/2010
Paramaribo	0.740	0.741	0.094
Wanica	0.688	0.689	0.116
Nickerie	0.682	0.683	0.154
Coronie	0.687	0.688	0.144
Saramacca	0.692	0.693	0.145
Commewijne	0.688	0.689	0.200
Marowijne	0.648	0.649	0.193
Para	0.690	0.691	0.173
Brokopondo	0.624	0.626	0.240
Sipaliwini	0.521	0.522	0.210
Suriname	0.702	0.703	0.104

Districts	Inequality adjusted Human Development Index	Human Development Index	Loss due to inequalities (%)
	2004/2006	2004/2006	2004/2006
Paramaribo	0.714	0.715	0.142
Wanica	0.671	0.673	0.294
Nickerie	0.673	0.675	0.235
Coronie	0.646	0.648	0.254
Saramacca	0.661	0.663	0.354
Commewijne	0.665	0.667	0.350
Marowijne	0.650	0.651	0.215
Para	0.660	0.661	0.222
Brokopondo	0.609	0.61	0.144
Sipaliwini	0.478	0.486	1.609
Suriname	0.686	0.687	0.173



# Annex 4: Technical Note on the Calculation of the Gender Inequality Index for Suriname

The Gender Inequality Index (GII) reflects women's disadvantage in three dimensions—reproductive health, empowerment and the labour market. The index shows the loss in human development due to inequality between female and male achievements in these dimensions. It ranges from 0, which indicates that women and men fare equally, to 1, which indicates that women fare as poorly as possible in all measured dimensions.

#### Dimensions

#### Health

X - Maternal mortality ratio (per 100 000 live births) for districts.
 V - Adolescent fertility rate (per 1,000 women ages 15 – 19) for districts.

Country and district level data for Maternal Mortality ratio and Adolescent fertility rate indictors were provided by General Bureau of Statistics of Suriname. Bureau for Public Health disagrees with the Sipaliwini estimates of Maternal Mortality ratio, but has not submitted other substantive comments. The Ministry of Health and its relevant subsidiaries have also been most cooperative otherwise.

#### **Empowerment**

- Y<sub>F</sub> Female population with at least secondary education (% ages 25 and older) for districts
- $Y_{M}$  Male population with at least secondary education (% ages 25 and older) for districts

 $U_F$  - Female shares of parliamentary seats (%) for districts  $U_M$  - Male shares of parliamentary seats (%) for districts

Country and district level data for male and female population with at least secondary education indicator for 2009/2010 were calculated form MICS 4 survey dataset for Suriname. Country and district level data for male and female population with at least secondary education indicator for 2004 were provided by General Bureau of Statistics of Suriname.

#### Labour market

 $Z_F$  - Female labour force participation rates (%) for districts  $Z_M$  - Male labour force participation rates(%) for districts

Country and district level data for Male and Female labour force participation rates were provided by General Bureau of Statistics of Suriname.



The Gender Inequality Index (GII) is calculated using the following formulas:

$$GII = 1 - \frac{H}{A};$$

$$A = \frac{1}{2} * \sqrt[3]{\left(\sqrt{\frac{10}{X} * \frac{1}{V}} + 1\right)} * \left(\sqrt{Y_F * U_F} + \sqrt{Y_M * U_M}\right) * \left(Z_F + Z_M\right)};$$

$$H = \left(\frac{(G_F)^{-1} + (G_M)^{-1}}{2}\right)^{-1};$$

$$G_F = \sqrt[3]{\left(\frac{10}{X} * \frac{1}{V}\right)^{1/2}} * \left(Y_F * U_F\right)^{1/2} * Z_F}; \qquad G_M = \sqrt[3]{1* \left(Y_M * U_M\right)^{1/2} * Z_M};$$

	Gender In	equality In	dex 2009/2	010		Gender Inequality Index 2004/2005							
Districts	Α	Gf	Gm	н	GII	Districts	A	Gf	Gm	Н	GII		
Paramaribo	1.215	0.452	1.772	0.721	0.407	Paramaribo	1.195	0.459	1.673	0.720	0.397		
Wanica	1.157	0.374	1.778	0.618	0.466	Wanica	1.121	0.395	1.655	0.637	0.431		
Nickerie	1.009	0.156	1.754	0.287	0.716	Nickerie	1.080	0.390	1.567	0.624	0.422		
Coronie	1.094	0.204	1.727	0.366	0.666	Coronie	1.014	0.184	1.607	0.330	0.675		
Saramacca	1.025	0.152	1.802	0.280	0.726	Saramacca	0.953	0.134	1.682	0.249	0.739		
Commewijne	1.153	0.408	1.705	0.658	0.429	Commewijne	1.015	0.151	1.738	0.278	0.726		
Marowijne	0.984	0.154	1.669	0.283	0.713	Marowijne	1.037	0.373	1.514	0.599	0.423		
Para	1.035	0.158	1.729	0.289	0.721	Para	0.988	0.138	1.658	0.254	0.743		
Brokopondo	1.058	0.351	1.540	0.572	0.459	Brokopondo	0.980	0.290	1.421	0.482	0.508		
Sipaliwini	0.768	0.094	1.320	0.176	0.771	Sipaliwini	0.775	0.231	1.126	0.384	0.505		
Suriname	1.149	0.374	1.751	0.616	0.464	Suriname	1.132	0.397	1.647	0.640	0.435		



# Annex 5: Technical Note on the Calculation of the Multidimensional Poverty Index

The Multidimensional Poverty Index (MPI) is a measure designed to portray the many deprivations faced by the most severely disadvantaged. The MPI reflects both the incidence of multidimensional deprivation, and its intensity—how many deprivations people experience at the same time. The MPI builds on recent advances in theory and data to present the first global measure of its kind, and offers a valuable complement to income-based poverty measures.

The MPI identifies overlapping deprivations at the household level across the same three dimensions as the Human Development Index (living standards, health, and education) and shows the average number of poor people and deprivations with which poor households contend. For MPI calculation, household survey data is used.

The MPI value is the product of two measures: Multidimensional Headcount Ratio (**H**) and Intensity of Poverty (**A**):

*H* - Multidimensional Headcount Ratio is the proportion of population who are multidimensionality poor.
 *A* - Intensity of Poverty of Multidimensional Poor Population. It is equal to the mean of Intensity of Poverty of individuals who are considered multidimensionally poor.

MPI sets multiple deprivations for individuals in education, health and standard of living. Multiple dimension poverty level of individual is defined by the Intensity of Poverty. Depending on the level of poverty deprivation, Intensity of Poverty for individual varies from 0 to 1. The Intensity of Poverty that equals to 1 represents the case when the individual is deprived in all dimension indicators, i.e. the individual is absolutely "poor". When the Intensity of Poverty equals to 0, the individual is not deprived in all dimension indicators, i.e. the individual is absolutely "non-poor". The Intensity of Poverty can be expressed in percentages and vary accordingly from 0 % to 100%. The Intensity of Poverty for population group is defined as the mean of intensities of individuals pertaining to the group.

A cut-off of value for Intensity of Poverty value is used to distinguish between the poor and non-poor. Household members with the Intensity of Poverty greater than or equal to the cut-off of value is considered multidimensionally poor. MPI for Suriname uses cut off value equal to 20 %. MPI for Suriname for 2005/2006 and 2009/2010 were calculated from Multiple Indicator Cluster Survey 3 and Multiple Indicator Cluster Survey 4.

#### **Dimensions and dimension indicators**

MPI has three dimensions. Indicators for each dimension were selected based on internationally accepted definition and availability of indicator in MICS 3 and MICS 4 surveys for Suriname. Weights are equal for dimensions and weights are also equal for indicators across each dimension.

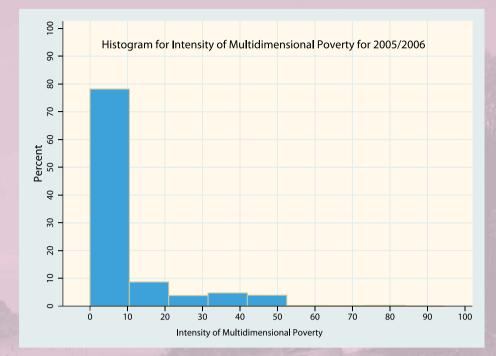


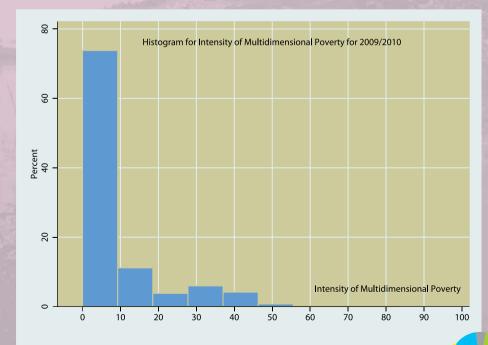
The below table shows the dimensions, dimension indicators, weights and conditions for considering household deprived

Dimensions	Weights for dimensions	Indicators	Weights	Variables	Deprived				
Health	1/3	Nutrition: Prevalence of underweight children under-five years of age	1/3	x1	If any underweight child under-five years of age is observed in the household				
Education	1/3	Years of Schooling	1/6	y1	If no household member has completed 5 years of schooling				
Education	1/5	Child School Attendance	1/6 <b>y2</b> I		If any school-aged child (5-12 years) is out of school				
		Electricity	city 1/18 <b>z1</b> If household does not have						
		Sanitation	1/18	z2	The household's sanitation facility is not improved or it is improved but shared with other households ( the toilet is shared)				
Standard of Living	1/3	Drinking water	1/18	z3	The household does not have access to clean drinking water or clean water is 30 minutes or more to go to source of drinking water, get water and return				
		Flooring	1/18 <b>z4</b>		If the floor is dirt, sand, or dung				
		Cooking Fuel	1/18	z5	If they cook with wood, charcoal, or dung				
		Assets	1/18	z6	If do not own more than one of: radio, tv, telephone, bike, motorbike, boat or refrigerator and do not own a car or truck.				

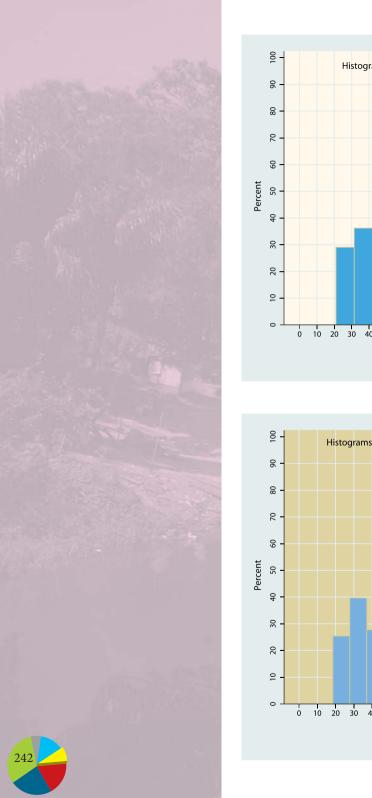


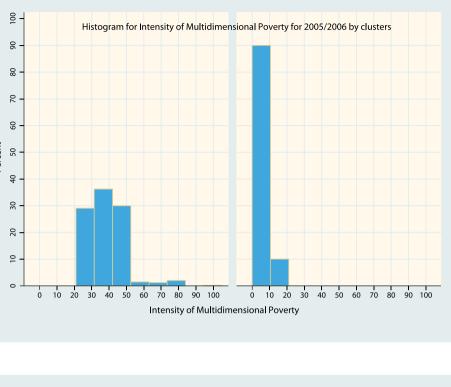
A cut-off of value for Intensity of Multidimensional Poverty, equal to 20 %, was chosen as result of analysis of distributions and histograms of Intensity of Multidimensional Poverty for Suriname for periods 2009/2010 and 2004/2005. Distribution function of Intensity of Multidimensional Poverty for total population is considered as the mixture of distribution function of the multidimensional non-poor and poor population. Histograms of Intensity of Multidimensional Poverty for periods 2009/2010 and 2004/2005 suggest the cut-off value, equal to 20 %. Clustering Intensity of Multidimensional Poverty into two clusters, using k-means method, divided the population into two groups. The results of clustering into two clusters showed that cut-off value, equal to 20 %, was appropriate for both time periods 2009/2010 and 2004/2005. Histograms of Intensity of Multidimensional Poverty for total population and histograms of Intensity of Multidimensional Poverty for the multidimensional non-poor and poor population are shown below for periods 2009/2010 and 2004/2005.

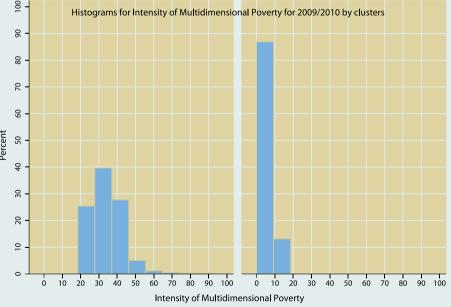




241









Districts		MPI and its dimensions 2010. Source : MICS 4														
Districts -	MPI	Poor Population	Intensity	Health	Education	Living standard	x1	y1	y2	z1	z2	z3	z4	z5	z6	
Paramaribo	0.0068	2.3	29.7	15.3	8.7	5.7	15.3	8.0	0.7	0.8	3.2	0.1	0.0	0.4	1.1	
Wanica	0.0111	3.3	33.6	16.0	10.0	7.6	16.0	8.0	2.0	1.8	2.2	0.4	0.0	1.3	1.8	
Nickerie	0.0098	3.2	30.9	21.3	6.0	3.6	21.3	5.3	0.7	0.2	0.7	0.4	0.0	1.1	1.1	
Coronie	0.0060	2.2	27.8	16.7	8.3	2.8	16.7	8.3	0.0	0.0	2.8	0.0	0.0	0.0	0.0	
Saramacca	0.0102	3.6	28.5	10.4	10.4	7.6	10.4	8.3	2.1	1.0	2.8	0.3	0.3	2.1	1.0	
Commewijne	0.0134	4.3	31.2	18.5	7.4	5.2	18.5	6.5	0.9	0.9	2.2	0.0	0.0	1.5	0.6	
Marowijne	0.0286	9.4	30.4	7.9	8.7	13.8	7.9	8.7	0.0	3.0	2.6	1.6	1.5	2.1	2.9	
Para	0.0304	10.5	29.1	5.4	11.2	12.4	5.4	10.9	0.4	1.9	3.2	1.0	1.2	2.7	2.3	
Brokopondo	0.0764	24.9	30.6	3.7	13.5	13.5	3.7	12.8	0.6	0.8	5.1	1.3	1.2	2.3	2.7	
Sipaliwini	0.1880	54.9	34.2	1.3	12.8	20.1	1.3	12.1	0.7	2.0	5.2	2.9	2.8	3.9	3.4	
Suriname	0.0230	7.5	30.7	13.9	9.2	7.6	13.9	8.3	0.9	1.1	2.9	0.5	0.3	1.2	1.5	

Districts		MPI and its dimensions 2006. Source: MICS 3													
Districts	MPI	Poor Population	Intensity	Health	Education	Living standard	x1	y1	y2	z1	z2	z3	z4	z5	z6
Paramaribo	0.0095	3.1	30.8	17.1	7.9	5.8	17.1	6.8	1.1	1.5	2.0	0.3	0.1	0.7	1.2
Wanica	0.0163	5.0	32.6	17.6	6.9	8.1	17.6	5.7	1.3	1.6	2.0	1.2	0.1	1.8	1.5
Nickerie	0.0185	6.0	30.8	14.1	6.4	10.3	14.1	5.8	0.6	2.8	1.9	1.5	0.0	2.1	1.9
Coronie	0.0171	5.1	33.3	33.3	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saramacca	0.0158	5.2	30.6	13.3	10.0	7.2	13.3	8.3	1.7	0.6	1.7	0.6	0.0	2.8	1.7
Commewijne	0.0121	4.0	30.3	15.4	7.7	7.3	15.4	7.7	0.0	1.3	1.3	0.0	0.4	2.1	2.1
Marowijne	0.0144	5.0	28.9	10.0	10.0	8.9	10.0	10.0	0.0	1.1	2.2	1.1	1.1	0.6	2.8
Para	0.0321	11.2	28.6	7.9	5.6	15.1	7.9	4.8	0.8	3.2	3.7	0.3	1.6	3.2	3.2
Brokopondo	0.1228	33.0	37.3	2.9	14.1	20.3	2.9	13.8	0.3	3.9	5.3	0.7	2.4	3.3	4.8
Sipaliwini	0.2944	72.8	40.4	2.4	12.6	25.4	2.4	12.0	0.6	2.9	5.1	4.7	3.5	4.4	4.9
Suriname	0.0322	10.1	31.9	14.7	8.2	9.0	14.7	7.2	0.9	1.8	2.3	0.9	0.5	1.6	1.9



# Definitions

## Human Development Index Dimension indicators

#### Life expectancy at birth.

Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth were to stay the same throughout the infant's life.

#### Mean years of schooling.

Average number of years of education received by people ages 25 and older in their lifetime based on education attainment levels of the population converted into years of schooling based on theoretical durations of each level of education attended.

#### Expected years of schooling.

Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates were to stay the same throughout the child's life.

#### GNI (gross national income) per capita.

Sum of value added by all resident producers in the economy plus any product taxes (less subsidies) not included in the valuation of output plus net receipts

of primary income (compensation of employees and property income) from abroad, divided by midyear population. Value added is the net output of an industry after adding up all outputs and subtracting intermediate inputs.

# Gender Inequality Indicator Dimension indicators

#### Mortality ratio, maternal

Number of maternal deaths, expressed per 100,000 live births. Maternal death is defined as the death of a woman while pregnant or within 42 days after terminating a pregnancy, regardless of the length and site of the pregnancy, due to any cause related to or aggravated by the pregnancy itself or its care but not due to accidental or incidental causes.

#### Fertility rate, adolescent

Number of births to women ages 15–19, expressed per 1,000 women of the same age.

#### Female and male population with at least secondary education.

Percentage of the population ages 25 and older that have finished secondary education.



#### Female and male shares of parliamentary seats

Seats in parliament held by gender. Percentage of seats held by a respective gender in a lower or single house or an upper house or senate expressed as percentage of total seats.

#### Female and male labour force participation rates.

Labour force participation rate. Percentage of the working-age population (ages 15–64) that actively engages in the labour market, by either working or actively looking for work expressed as a percentage of the working-age population.

#### Female and male life expectancy at birth.

Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth were to stay the same throughout the infant's life.

## Millennium Development Goal Indicator Definitions

#### Goal 1: Eradicate extreme poverty and hunger

#### 1.8 Underweight prevalence

The prevalence of underweight children under five years of age is defined as the percentage of children aged 0–59 months, whose weights are less than two standard deviations below the median weight for age groups in the international reference population.

The international reference population is a population against which the growth of children can be compared. The reference population is defined by the World Health Organisation (WHO) Child Growth Standards. The standards are based on more than 8,000 children from Brazil, Ghana, India, Norway, Oman and the United States of America. These children were selected based on their exposure to an optimal environment for proper growth including recommended infant and young child feeding practices, good healthcare, non-smoking mothers, and other factors associated with good health outcomes.

#### Wealth Index

The MICS wealth index is an attempt to measure the socio-economic status of households. The wealth index is a method to divide households into 5 groups of equal size (quintiles) in terms of "wealth" – from poorest to richest. "Wealth" is constructed by using information on household characteristics (crowding), amenities (water and sanitation), household assets (durable goods) owned by households.



Wealth Index is useful in the absence of information on income and expenditures

#### Goal 2: Achieve universal primary education

#### 2.1 Primary school net attendance ratio

The net enrolment rate (NER) in primary education is the ratio of the number of children of official primary school age who are enrolled in primary education to the total population of children of official primary school age, expressed as a percentage

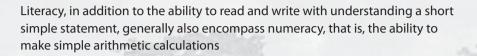
Primary education normally consists of programmes designed on a unit or project basis to give pupils a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, art and music.

#### 2.2 Children reaching of last grade of primary

The proportion of pupils starting grade 1 who reach last grade of primary measures the percentage of a cohort of pupils enrolled in grade 1 of the primary level of education in a given school year who are expected to reach the last grade of primary school, regardless of repetition.

#### 2.3 Literacy rate of 15-24 year-olds, women and men

The literacy rate of 15–24 year-olds is defined as the proportion of the population aged 15–24 years who can both read and write with understanding a short simple statement on everyday life.



# Goal 3: Promote gender equality and empower women

#### 3.1 Gender parity index primary/secondary school

Gender parity index primary/secondary school: The Gender parity index is the ratio of the female over the male net attendance rate. At gender parity the Gender parity index is exactly 1. If the female net attendance rate is smaller than the male net attendance rate the Gender parity index is less than 1. If the female net attendance rate, the Gender parity index is greater than the male net attendance rate, the Gender parity index is greater than 1.

A value of less than one indicates differences in favour of boys, whereas a value near one indicates that parity has been more or less achieved.

#### 3.3 Proportion of seats held by women in national parliament

The proportion of seats held by women in national parliaments is the number of seats held by women members in single or lower chambers of national parliaments, expressed as a percentage of all occupied seats. Seats refer to the number of parliamentary mandates, also known as the number of members of parliament. Seats are usually won by members in general parliamentary elections. Seats may also be filled by nomination, appointment, indirect election, rotation of members and by-election.



#### Goal 4: Reduce child mortality

#### 4.3 Children vaccinated against measles

Percentage of children age 18-29 months currently vaccinated against measles. This indicator is expressed as a percentage.

Measles-containing vaccines are live attenuated viral measles vaccines consisting of one dose given by the intramuscular or subcutaneous route, with the opportunity for a second dose at least one month after the first. It is generally recommended for children to be immunized against measles at the age of 9 months. In certain countries in Latin America and the Caribbean it is recommended for children to be immunized between the ages of 12 months and 15 months.

#### Goal 5: Improve maternal health

#### 5.2 Proportion of births attended by skilled health personnel

The proportion of births attended by skilled health personnel is the proportion of total live births that are attended by a skilled birth attendant trained in providing life saving obstetric care.

The indicator is expressed as a percentage.

Alive birth is the complete expulsion or extraction, from its mother, of a product of conception, irrespective of the duration of the pregnancy, which, after such

separation, breathes or shows any other evidence of life—such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered a live birth.

A skilled birth attendant is an accredited health professional—such as a midwife, doctor or nurse—who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period; and in the identification, management and referral of complications in women and newborns. Traditional birth attendants either trained or not, are excluded from the category of skilled health workers.

Traditional birth attendants are traditional, independent (of the health system), non-formally trained and community-based providers of care during pregnancy, childbirth and the postnatal period.

#### 5.3 Contraceptive prevalence rate

The contraceptive prevalence rate is the percentage of women of reproductive age who are currently using, or whose sexual partner is currently using, at least one contraceptive method, regardless of the method used. It is reported for women aged 15 to 49 who are married or in a union.

Contraceptive methods include modern and traditional methods. Modern methods of contraception include female and male sterilization, oral hormonal pills, intra-uterine devices (IUD), male and female condoms, injectables, implants (including Norplant), vaginal barrier methods and spermicides. Traditional methods of contraception include the rhythm method (periodic abstinence), withdrawal, lactational amenorrhea method (LAM) and folk methods. Note that LAM is classified in some surveys as a modern method. For MDG reporting on this indicator, LAM is classified as a traditional method.



#### 5.5 Antenatal care coverage

Antenatal care coverage is the percentage of women aged 15–49 with a live birth in a given time period that received antenatal care provided by skilled health personnel at least once during their pregnancy.

A live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life—such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles—whether or not the umbilical cord has been cut or the placenta is attached.

Antenatal care constitutes screening for health and socioeconomic conditions likely to increase the possibility of specific adverse pregnancy outcomes; providing therapeutic interventions known to be effective; and educating pregnant women about planning for safe birth and emergencies during pregnancy and how to deal with them.

Skilled health personnel are accredited health professionals—such as a midwifes, doctors or nurses—who have been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies; childbirth and the immediate postnatal period; and in the identification, management and referral of complications in women and newborns. Both trained and untrained traditional birth attendants are excluded.

Traditional birth attendants are traditional, independent (of the health system), non-formally trained and community-based providers of care during pregnancy, childbirth and the postnatal period.

#### 5.6 Unmet need for family planning

This indicator is defined as the percentage of women of reproductive age, either married or in a consensual union, who have an unmet need for family planning.

Women of reproductive age include all women aged 15 to 49.

Women with an unmet need for family planning are women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the birth of their next child for at least two years. Included are:

- all pregnant women (married or in a consensual union) whose pregnancies were unwanted or mistimed at the time of conception;
- all postpartum amenorrheic women (married or in consensual union) who are not using family planning and whose last birth was unwanted or mistimed;
- and all fecund women (married or in consensual union) who are neither pregnant nor postpartum amenorrheic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years or do not know when or if they want another child (want to space births), but are not using any contraceptive method.

Infecund women are not included in the numerator.

Infecund women are women who were first married five or more years ago, have not had a birth in the past five years, are not currently pregnant, and have never used any kind of contraceptive method. Also included are women who self-report that they are infecund, menopausal or have had a hysterectomy, never menstruated, have been postpartum amenorrheic for 5 years or longer, or (for women who are not pregnant or in postpartum amenorrhea) if the last menstrual period occurred more than six months prior to the survey.

248

Postpartum amenorrheic women are women who have not had a menstrual period since the birth of their last child and their last child was born in the period 0-23 months prior of the survey interview. If their period has not returned and their last child was born 24 months or more prior to the interview, women are considered fecund, unless they fall into one of the infecund categories above. Note that in previous definitions of unmet need for family planning, women were classified as being postpartum amenorrheic if their period had not returned for up to 5 years after the birth of their last child.

The methods of contraception considered for the calculation of this indicator include both modern and traditional methods of contraception. Modern methods of contraception include female and male sterilization, oral hormonal pills, intra-uterine devices (IUD), male and female condoms, injectables, implants (including Norplant), vaginal barrier methods and spermicides. Traditional methods of contraception include the rhythm method (periodic abstinence), withdrawal, lactational amenorrhea method (LAM) and folk methods. Note that LAM is classified in some surveys as a modern method. For computation of this indicator for MDG reporting, current contraceptive use is use of any method (whether modern or traditional).

#### Goal 6: Combat HIV/AIDS, malaria and other diseases

#### 6.2 Condom use at last high-risk sex

Percentage of women age 15-24 years who had sex with a non-marital, noncohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner Condom use at last *high-risk sex* is the percentage of young men and women aged 15–24 reporting the use of a condom the last time they had sexual intercourse with a non-marital, non-cohabiting sexual partner of those who had sex with such a partner in the last 12 months.

High-risk sex is defined as sex with a non-marital, non-cohabiting sexual partner

#### 6.3 Comprehensive knowledge about HIV transmission

Percentage of young women age 15-24 years have comprehensive knowledge about HIV transmission

*Comprehensive correct knowledge* of HIV/AIDS is correctly identifying the two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), knowing that a healthy-looking person can transmit HIV and rejecting the two most common local misconceptions about HIV transmission.

#### Goal 7: Ensure environmental sustainability

# 7.8 Proportion of population using an improved drinking water source

The proportion of population using an *improved drinking water source* is the share of the population that uses any types of improved *drinking water supplies*. This indicator is expressed as a percentage.



An *improved drinking water source* is a facility that, by nature of its construction, is protected from outside contamination in particular from contamination with fecal matter. *Improved drinking water sources* include: piped water into dwelling, plot or yard; public tap/standpipe; borehole/tube well; protected dug well; protected spring; rainwater collection and bottled water. Users of bottled water are considered to have access to improved sources only when they have a secondary source which is of an otherwise improved type. *Improved drinking water sources* do not include unprotected wells, unprotected springs, water provided by carts with small tanks/drums, tanker truck-provided water and bottled water (if the secondary source is not improved) or surface water taken directly from rivers, ponds, streams, lakes, dams, or irrigation channels.

*Drinking water* is defined as water used for ingestion, food preparation and basic hygiene purposes.

The population using *improved sources* of drinking water are those using any of the following types of supply: piped water (into dwelling, yard or plot), public tap/standpipe, tube well/borehole, protected well, protected spring, rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking.

# 7.9 Proportion of population using an improved sanitation facility

The proportion of population using an *improved sanitation facility*. The indicator is expressed as a percentage.

An *improved sanitation facility* is defined as a facility that hygienically separates human excreta from human, animal and insect contact. *Improved sanitation facilities* include flush/pour-flush toilets or latrines connected to a sewer, septic tank or pit; ventilated improved pit latrines; pit latrines with a slab or platform of any material which covers the pit entirely, except for the drop hole; and composting toilets/latrines. *Unimproved facilities* include public or shared facilities of an otherwise improved type; flush/pour-flush toilets that discharge directly into an open sewer or ditch or elsewhere; pit latrines without a slab; bucket latrines; hanging toilets or latrines; and the practice of open defecation in the bush, field or bodies of water.



# Bibliography

- 1. General Bureau of Statistics, Ministry of Planning and Development Cooperation and Ministry of Social Affairs and Housing, 2009. Suriname Multiple Indicator Cluster Survey 2006, Final Report: Paramaribo, Suriname.
- 2. Ministry of Planning and Development Cooperation (PLOS) and General Bureau of Statistics (ABS), SURINAME MDG PROGRESS REPORT 2009.
- 3. Ministry of Social Affairs and Housing, 2012. Suriname Multiple Indicator Cluster Survey 2010, Final Report: Paramaribo, Suriname.
- 4. Oxford Poverty & Human Development Initiative (OPHI), OPHI WORKING PAPER NO. 38, Sabina Alkire and Maria Emma Santos, Acute Multidimensional Poverty: A New Index for Developing Countries
- 5. Suriname. Millennium Development Goals Baseline Report. 2005
- 6. UNDP, Caribbean Human Development Report 2012 Human Development and the Shift to Better Citizen Security, New York.
- 7. UNDP, Human Development Report 2013 The Rise of the South: Human Progress in a Diverse World, New York.
- 8. UNDP, Human Development Report 2011 Sustainability and Equity: A Better Future for All, New York.
- 9. UNDP, Human Development Report 2010 The Real Wealth of Nations: Pathways to Human Development, New York.
- 10. UNDP, Human Development Report 1994 New Dimensions of Human Security, New York.
- 11. UNDP, Human Development Reports Research Paper 2010/28, Sabina Alkire and James Foster, Designing the Inequality-Adjusted Human Development Index (IHDI)
- 12. UNDP, Human Development Research Paper 2010/46, Amie Gaye, Jeni Klugman, Milorad Kovacevic, Sarah Twigg and Eduardo Zambrano, Measuring Key Disparities in Human Development: The Gender Inequality Index.
- 13. UNDP, Technical notes for Human Development Report 2013
- 14. UNDP, Technical notes for Human Development Report 2011
- 15. UNDP, Technical notes for Human Development Report 2010
- 16. WHO, Child Growth Standards: length/height-for-age, weight-for-age, weight-for-length, weight-for height and body mass index-for-age : methods and development, 2006.

