



# MAPPING POVERTY INDICATORS

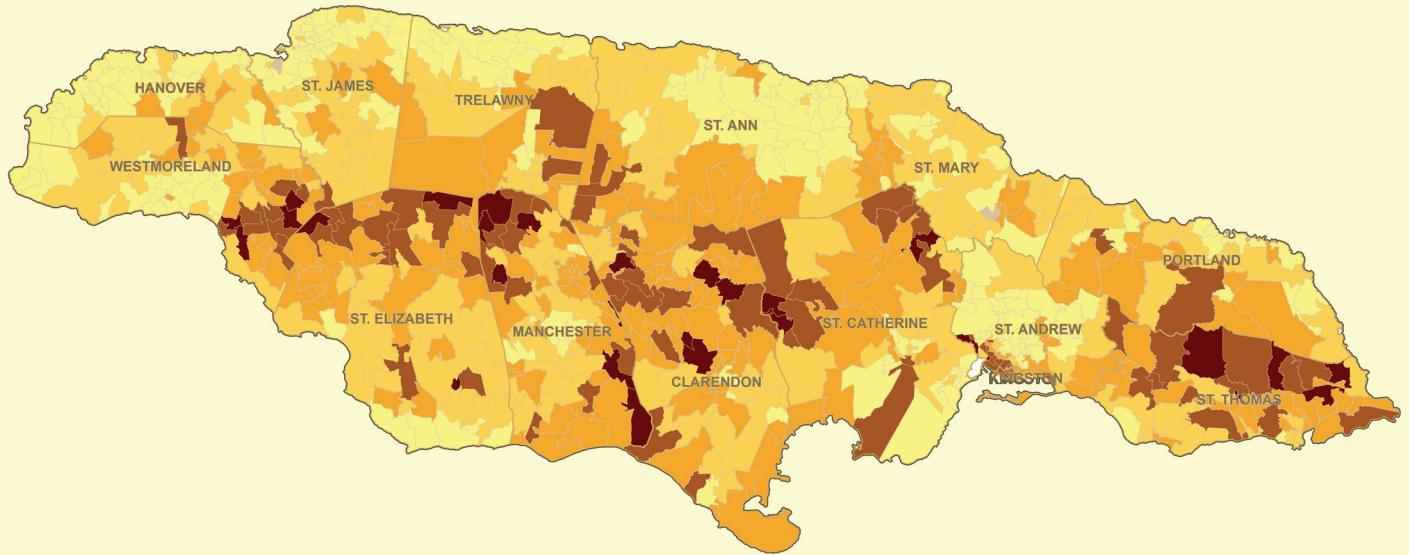
## CONSUMPTION BASED POVERTY IN JAMAICA

Data from the 2011 Population and Housing Census and the 2012 Jamaica Survey of Living Conditions





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A joint publication of  
the Planning Institute of Jamaica  
and  
the Statistical Institute of Jamaica,  
with assistance from the World Bank

April 2019

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A joint publication of:  
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# Contents

Tables and Figures.....	iv
Maps.....	v
Foreword.....	viii
Acknowledgements.....	ix
Introduction.....	1
Methodology and Data Sources.....	2
Modelling, Imputation of Consumption and Results.....	5

## APPENDICES

### Appendix I

Table A: Average annual consumption per adult equivalent, and incidence of poverty across communities, 2012.....	14-33
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### Appendix II

Poverty Maps for All Jamaica and by Parish.....	35-105
Definition of Geographical Areas.....	106
References.....	107

# Tables and Figures

## Tables

Table 1.	Summary of the Consumption Models.....	6
Table 2.	Predicted Poverty and Mean Consumption by Parish.....	8
Table 3.	Descriptive Statistics for Communities with Standard Errors for Poverty above the Acceptable Threshold.....	10

## Figures

Figure 1.	Comparison between the Estimates from Imputation and the Results from the JSLC.....	7
Figure 2.	Coefficients of Variation for Average Consumption per Adult Equivalent at the Community Level.....	10

# Maps

## Jamaica

Map 1.	Incidence of Food Poverty by Community, Jamaica 2012.....	35
Map 2.	Incidence of Poverty by Community, Jamaica 2012.....	37
Map 3.	Average Household Consumption per Adult Equivalent by Community, Jamaica 2012.....	39
Map 4.	Incidence of Poverty by Community, Jamaica 2002–2012.....	40

## Kingston and St. Andrew

Map 5.	Incidence of Food Poverty by Community, Kingston & St. Andrew (2012).....	41
Map 6.	Incidence of Food Poverty by Community, Kingston & St. Andrew (2012).....	42
Map 7.	Incidence of Poverty by Community, Kingston & St. Andrew (2012).....	43
Map 8.	Incidence of Poverty by Community, Kingston & St. Andrew (2012).....	44
Map 9.	Mean Household Consumption per Adult Equivalent by Community, Kingston & St. Andrew (2012).....	45

## St. Thomas

Map 10.	Incidence of Food Poverty by Community, St. Thomas (2012).....	46
Map 11.	Incidence of Food Poverty by Community, St. Thomas (2012).....	47
Map 12.	Incidence of Poverty by Community, St. Thomas (2012).....	48
Map 13.	Incidence of Poverty by Community, St. Thomas (2012).....	49
Map 14.	Mean Household Consumption per Adult Equivalent by Community, St. Thomas (2012).....	50

## Portland

Map 15.	Incidence of Food Poverty by Community, Portland (2012).....	51
Map 16.	Incidence of Food Poverty by Community, Portland (2012).....	52
Map 17.	Incidence of Poverty by Community, Portland (2012).....	53
Map 18.	Incidence of Poverty by Community, Portland (2012).....	54
Map 19.	Mean Household Consumption per Adult Equivalent by Community, Portland (2012).....	55

## **St. Mary**

Map 20. Incidence of Food Poverty by Community, St. Mary (2012).....	56
Map 21. Incidence of Food Poverty by Community, St. Mary (2012).....	57
Map 22. Incidence of Poverty by Community, St. Mary (2012).....	58
Map 23. Incidence of Poverty by Community, St. Mary (2012).....	59
Map 24. Mean Household Consumption per Adult Equivalent by Community, St. Mary (2012).....	60

## **St. Ann**

Map 25. Incidence of Food Poverty by Community, St. Ann (2012).....	61
Map 26. Incidence of Food Poverty by Community, St. Ann (2012).....	62
Map 27. Incidence of Poverty by Community, St. Ann (2012).....	63
Map 28. Incidence of Poverty by Community, St. Ann (2012).....	64
Map 29. Mean Household Consumption per Adult Equivalent by Community, St. Ann (2012).....	65

## **Trelawny**

Map 30. Incidence of Food Poverty by Community, Trelawny (2012).....	66
Map 31. Incidence of Food Poverty by Community, Trelawny (2012).....	67
Map 32. Incidence of Poverty by Community, Trelawny (2012).....	68
Map 33. Incidence of Poverty by Community, Trelawny (2012).....	69
Map 34. Mean Household Consumption per Adult Equivalent by Community, Trelawny (2012).....	70

## **St. James**

Map 35. Incidence of Food Poverty by Community, St. James (2012).....	71
Map 36. Incidence of Food Poverty by Community, St. James (2012).....	72
Map 37. Incidence of Poverty by Community, St. James (2012).....	73
Map 38. Incidence of Poverty by Community, St. James (2012).....	74
Map 39. Mean Household Consumption per Adult Equivalent by Community, St. James (2012).....	75

## **Hanover**

Map 40. Incidence of Food Poverty by Community, Hanover (2012).....	76
Map 41. Incidence of Food Poverty by Community, Hanover (2012).....	77
Map 42. Incidence of Poverty by Community, Hanover (2012).....	78
Map 43. Incidence of Poverty by Community, Hanover (2012).....	79
Map 44. Mean Household Consumption per Adult Equivalent by Community, Hanover (2012).....	80

## **Westmoreland**

Map 45. Incidence of Food Poverty by Community, Westmoreland (2012).....	81
Map 46. Incidence of Food Poverty by Community, Westmoreland (2012).....	82
Map 47. Incidence of Poverty by Community, Westmoreland (2012).....	83
Map 48. Incidence of Poverty by Community, Westmoreland (2012).....	84
Map 49. Mean Household Consumption per Adult Equivalent by Community, Westmoreland (2012).....	85

## **St. Elizabeth**

Map 50. Incidence of Food Poverty by Community, St. Elizabeth (2012).....	86
Map 51. Incidence of Food Poverty by Community, St. Elizabeth (2012).....	87
Map 52. Incidence of Poverty by Community, St. Elizabeth (2012).....	88
Map 53. Incidence of Poverty by Community, St. Elizabeth (2012).....	89
Map 54. Mean Household Consumption per Adult Equivalent by Community, St. Elizabeth (2012).....	90

## **Manchester**

Map 55. Incidence of Food Poverty by Community, Manchester (2012).....	91
Map 56. Incidence of Food Poverty by Community, Manchester (2012).....	92
Map 57. Incidence of Poverty by Community, Manchester (2012).....	93
Map 58. Incidence of Poverty by Community, Manchester (2012).....	94
Map 59. Mean Household Consumption per Adult Equivalent by Community, Manchester (2012).....	95

## **Clarendon**

Map 60. Incidence of Food Poverty by Community, Clarendon (2012).....	96
Map 61. Incidence of Food Poverty by Community, Clarendon (2012).....	97
Map 62. Incidence of Poverty by Community, Clarendon (2012).....	98
Map 63. Incidence of Poverty by Community, Clarendon (2012).....	99
Map 64. Mean Household Consumption per Adult Equivalent by Community, Clarendon (2012).....	100

## **St. Catherine**

Map 65. Incidence of Food Poverty by Community, St. Catherine (2012).....	101
Map 66. Incidence of Food Poverty by Community, St. Catherine (2012).....	102
Map 67. Incidence of Poverty by Community, St. Catherine (2012).....	103
Map 68. Incidence of Poverty by Community, St. Catherine (2012).....	104
Map 69. Mean Household Consumption per Adult Equivalent by Community, St. Catherine (2012).....	105



## Foreword

Poverty mapping combines survey and population census data to facilitate the spatial representation and analysis of indicators of human well-being and poverty within a region. This publication, produced jointly by the Planning Institute of Jamaica (PIOJ) and the Statistical Institute of Jamaica (STATIN), represents the third in the series, and provides detailed, disaggregated pictorials of poverty throughout the country, including the incidence of food and overall poverty.

Using a combination of data from the 2011 Population and Housing Census and the 2012 Jamaica Survey of Living Conditions, the maps provide data by parish at the individual, household and community levels. The availability of data at this granular level provides unique insights on consumption patterns and the occurrence of poverty.

We commend the efforts of the team members from the PIOJ and STATIN who collaborated to complete the report and thank our partner, the World Bank for the invaluable support provided in the execution of this project. It is our hope that this valuable resource will be utilized by all actors in development, including academia, students and policymakers, to garner a better perspective of the distribution and nature of poverty in Jamaica. On our part, the rich information provided by this report will be utilized as an important tool by both institutions, as we continue to provide data and policy advice to secure improved outcomes for all Jamaicans.



Wayne Henry, PhD, JP  
Director General, PIOJ



Carol Coy  
Director General, STATIN

# Preface

This publication is the third in a series. The first report produced in 1996 was based on the 1991 census and provided data and images for 506 communities. The 2008 report — the second in the series — utilised data from the 2001 census and the 2002 Jamaica Survey of Living Conditions (JSCLC) and provided information on 826 communities. The current publication is based on the 2011 census and the 2012 JSCLC and provides data and spatial images for 767 communities.

In 1996, the unsatisfied basic needs method was used, while in 2008 an additional approach — the consumption method — was added. The current report uses only the consumption method. The report outlines the methodology followed and provides tables and maps for Jamaica and the parishes, showing different levels of poverty.

The close to 70 maps included in this report show graphical representations of household consumption, poverty and food poverty by community for Jamaica and for each of the 14 parishes . The use of similar methodology between the last exercise and this one allows for an analysis and understanding of how poverty has shifted geographically in the country. This can be seen in Map 4. GIS shape files, which are also outputs of the exercise, facilitate detailed research using the maps and may be accessed through contact with either the PIOJ or STATIN.



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The core task team at PIOJ consisted of Caren Nelson (Director, Policy Research Unit), Christopher O'Connor (Policy Analyst), Hugh Morris (Director, Modelling & Research Unit), Jumaine Taylor (Senior Economist), Frederick Gordon (Director, JamStats), Patrine Cole (GIS Analyst), and Suzette Johnson (Senior Policy Analyst), while Roxine Ricketts and Shadae Miller provided administrative support.

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Other partners in this effort include representatives from the Social Development Commission, the University of Technology (UTech) Jamaica, and the Ministry of Water, Land, Environment and Climate Change who were a part of the technical team convened for the exercise.

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# Introduction

**M**apping Poverty Indicators is the third report of its kind, produced using data from the Jamaica Survey of Living Conditions (2012) and the Population and Housing Census (2011). The National Policy on Poverty and the National Poverty Reduction Programme document, published in September 2017 identifies the guiding principles, objectives and strategic actions for addressing poverty reduction in Jamaica. The policy and programme are consistent with Goals 1 and 2 of the Sustainable Development Goals (SDGs) and provide rigour for the targets established in the poverty reduction sector plan of Vision 2030 Jamaica – National Development Plan. This report is among the set of tools that aid in the measurement and monitoring of poverty and the country's performance against the established goals and targets.

The report presents a spatial representation of poverty, which complements the monetary measurement of poverty produced annually in the *Jamaica Survey of Living Conditions* (JSCLC). Its focus on communities facilitates targeting, which is critical for efficient resource allocation. In addition, parish-level disaggregation allows for a deeper understanding of poverty than is possible with the broad categorizations that are typical of the annual JSCLC report.

The first report, published in 1996, utilized the unsatisfied basic needs (UBN) approach. In the second report, published in 2008, the UBN approach was complemented by the consumption approach. In this the third instalment, only the consumption method has been utilized, with a determination of poverty in relation to a specified minimum level of consumption expenditure. The report captures and presents data — grouped by the 14 parishes — on 767 communities across Jamaica.

The report is divided into two main sections: the first describes the methodology followed and the second presents the results. Appendix I follows, with data on the communities, while Appendix II contains the maps.

# Methodology and Data Sources

This document shows the results of the estimation of consumption per adult equivalent and the incidence of poverty in Jamaica based on the small-area estimation technique using the Jamaica Survey of Living Conditions (JSCL) 2012 and the Population and Housing Census (PHC) 2011. The results are presented at the national level, for the Kingston Metropolitan Area (KMA) and Other Towns, for Rural Areas,<sup>1</sup> and for the 14 parishes and 767 communities of the country.

In providing statistical information for policy design and evaluation, there is usually a trade off between accuracy, precision and detail. On one hand, household surveys usually capture relatively accurate information on the consumption level of households using questionnaires applied to restricted samples, which reduce the possibility of reporting reliable well-being indicators at a greater level of geographical disaggregation. On the other hand, population and housing censuses are designed to capture information from the entire population in a given country, but generally do not collect accurate consumption data. In response to this dilemma, Elbers, Lanjouw and Lanjouw (2002) proposed a methodology which, using a survey dataset, first correlates the household consumption level with the characteristics of the household members, the characteristics of the dwelling inhabited by those households, and the characteristics of the geographical areas

where those dwellings are settled. Then, using the parameters obtained in the previous step, the methodology imputes the consumption level on the census dataset, which is therefore used to calculate poverty indicators at a greater level of geographical disaggregation.

Formally, through generalized least squares (GLS) the model uses the survey data to estimate the joint distribution of log consumption in households (either expressed in per capita or adult equivalent terms) living in the geographical unit , conditional on two sets of covariates  $X_{hl}$  and  $Z_l$ :

$$(1) \quad \log(Y_{hl}) = X_{hl}\beta + Z_l\gamma + \mu_{hl}$$

The  $X_{hl}$  and  $Z_l$  sets include, respectively, the household characteristics and the characteristics of the geographical unit that allow for the prediction of household consumption on the census — the  $X_{hl}$  set on the survey is restricted

1. See p. 106, Definitions of Geographical Areas, for definition of the three geographical groupings in this report.

to the subset of comparable covariates on the census, in both conceptual and statistical terms. The  $\beta$  and  $\gamma$  parameters reflect, respectively, the correlation between  $\log(Y_{hl})$  and  $X_{hl}$  and between  $\log(Y_{hl})$  and  $Z_l$ . Finally,  $\mu_{hl}$  represents the error term that includes two components: the error that is common for all the households in the same geographical unit ( $\eta_l$ , assumed to be independent and identically distributed and homoscedastic, due to the small number of geographical units), and the error that is specific to each household ( $\varepsilon_{hl}$  assumed to be heteroscedastic given that it depends on the household and geographical characteristics):

$$(2) \quad \mu_{hl} = \eta_l + \varepsilon_{hl}$$

Once the parameters and their distributions are estimated from equation (1), they are used to simulate (through the bootstrap method for a given number of repetitions, generally equal to or greater than 100 repetitions) the level of consumption of each household on the census and then estimate poverty rates — as well as other indicators such as the level of inequality — and their standard errors.

The application of the methodology in Jamaica used the following sources of information: the *Jamaica Survey of Living Conditions* (JSLC) 2012 and the *Population and Housing Census* (PHC) 2011. The PHC dataset contains information on basic services, information and communication technology (ICT), equipment and housing characteristics for a total of 717 216 households (881 037 when weights were applied), as well as

demographic, educational, and occupational characteristics for a total of 2 183 460 individuals (2 682 512 when weights were applied) — these totals were restricted to private dwellings and their members. The JSLC, on the other hand, contains general information on demographics, education, employment, consumption and housing characteristics for a total of 6 579 households and 20 532 individuals (890 109 households and 2 771 072 individuals when weights were applied). In the sample design of the survey, the target population is the individual and the observation unit the household, with national, urban (KMA and Other Towns), and Rural Area representativeness, as well as for the 14 parishes of the country.

The Jamaica Survey of Living Conditions (JSLC) uses three geographical divisions, namely the KMA, Other Towns and Rural Areas. The community of Devon Pen, St. Mary was excluded from the estimations because of its reduced number of individuals in the Population and Housing Census (PHC) (around 10 individuals), which prevented the methodology from producing reliable figures of consumption and poverty. The community of Reading, St. James was excluded from this report because the predicted consumption was significantly underestimated, thus producing unrealistic poverty figures with a large standard error. The contiguous communities of Brampton and Clarks Town, both in Trelawny, were treated as the same unit, so the figures on consumption and poverty for this combined unit were estimated accordingly.

Since the 2001 Census was used to design the sampling frame of the 2012 JSLC, and the 2011 Census is used for the estimation of this map, the 2012 JSLC weights were recalibrated to match the population projections (by STATIN) for 2012 based on the 2011 Census by five-year age group, sex, parish, urban/rural. If a particular cell (age group, sex, parish, urban/rural) had no observations in the 2012 JSLC, it was merged with the cell for the next age group, with all other characteristics being equal.

The measure of household consumption in the JSLC is expressed in annual Jamaican dollars, per adult equivalent. In order to estimate the poverty headcount, this measure of consumption is compared with the values of the food poverty line (extreme poverty) and the total poverty line. The food poverty line represents the cost of a food basket, equivalent to a minimum nutritional requirement of a certain amount of kilocalories per family. In 2012, the value of the food poverty line was \$95 069.00 per year for the Kingston Metropolitan Area (KMA), \$93 548.6 per year for Other Towns, and \$92 648.6 per year for Rural Areas. The total poverty line, in addition to the food basket, makes allowances for non-food items, which may include spending for clothing, footwear, transport, health and educational services, and other personal expenses. In 2012, the annual values of this line were \$152 393.00 for the KMA, \$145 237.00 for Other Towns, and \$135 240.00 for Rural Areas. In order to achieve a high degree of accuracy of the estimation, the

datasets of the JSLC and the PHC were divided into seven groups based on socioeconomic homogeneity, determined jointly by the Planning Institute of Jamaica (PIOJ) and the Statistical Institute of Jamaica (STATIN). There were:

- 1) Kingston Metropolitan Area
- 2) Other Parish Capitals
- 3) Other Urban Areas
- 4) Rural North: rural areas of Portland, St. Mary, and St. Ann
- 5) Rural North: rural areas of Trelawny, St. James, and Hanover
- 6) Rural South
- 7) Spanish Town and Portmore

Based on this stratification, a total of seven different models were estimated according to equation (1), and the resulting parameters were used to impute consumption to each household in the PHC. The imputed consumption was then used to obtain aggregated measures of poverty in Jamaica at the national level for each of the 14 parishes, and for each of the 767 communities of the country. Table 1 shows the number of observations used from the JSLC in each model.

# Modelling, Imputation of Consumption and Results

The estimation of consumption in each of the seven groups involved three methodological stages. First, the identification of the common variables (both conceptually and statistically) between the PHC and the JSLC that could potentially predict household consumption. Conceptually, a total of 77 identical variables between both sources were identified. These were related to the size and composition of the household; age, sex, occupation and education of the household head and other members; the quality of the building materials of the dwelling; access to basic services; and the ownership of household assets. Statistically, all of the 77 variables in each of the seven groups were tested for equality in order to verify whether the mean value of each variable in the PHC falls within the confidence interval of the respective mean value in the JSLC, with a confidence level of 95%. Table 1 shows the total number of variables that were statistically equal between both data sources and that were used to predict consumption in each group.

In addition to the variables at the household level, a total of 46 variables aggregated at the level of parish and community were included in the modelling stage, to control for differences between communities in terms of population,

climate, housing characteristics, public transfers and public services. These variables were obtained from the PHC and from administrative records.

The second stage estimated for each of the seven groups, the relationship between the logarithm of household consumption per adult equivalent, with the statistically equal and aggregated variables identified in the first stage, using a GLS regression approach. The objective of this process was to analyse the power of each model to predict consumption, based on two conditions. On one hand, that all the variables included in the model were statistically significant, and on the other, that the adjusted coefficient of determination, known as  $R^2$ , was around 0.50 which corresponds to the empirical regularity observed in the poverty mapping practice. This threshold may be lower, although not below 0.30 (Zhao and Lanjouw, 2009) in cases where the explanatory power does not significantly increase, even using all the potential information from both the survey and the external data sources. Table 1 shows that the values of the adjusted  $R^2$  range between 0.342 in the rural part of Portland, St. Mary, St. Ann and 0.642 in the Kingston Metropolitan Area, indicating that the goodness of fit of each model is consistent with the empirical regularity.

Finally, each model was evaluated in terms of the magnitude of the estimation error that is common to all households living in the same geographical unit; that is to say  $\eta_l$ . This assessment calculates the ratio of the variance of  $\eta_l$  relative to the total variance of errors ( $\mu_{hl}$ ), and indicates what proportion of the variance of errors is due to unexplained differences at the community level. As this ratio moves away from zero, the reliability of the estimations decreases as it reduces the accuracy of capturing the fact that households living in the same community are more similar among each other than their peers living in other communities. As a condition, the value of the ratio should be less than 10%, which is satisfied in all seven groups (Table 1, third column).

**Table 1:** Summary of the consumption models

Model	R <sup>2</sup>	Rat/Var	Obs.	Vars.
Kingston Metropolitan Area	0.642	4.5%	1,110	47/77
Other Parish Capitals	0.548	5.5%	813	56/77
Other Urban Areas	0.535	3.7%	650	52/77
Rural North - Portland, St. Mary, St. Ann	0.342	2.8%	895	42/77
Rural North - Trelawny, St. James, Hanover	0.493	1.4%	617	58/77
Rural South	0.477	7.0%	1,984	44/77
Spanish Town and Portmore	0.500	5.1%	510	50/77

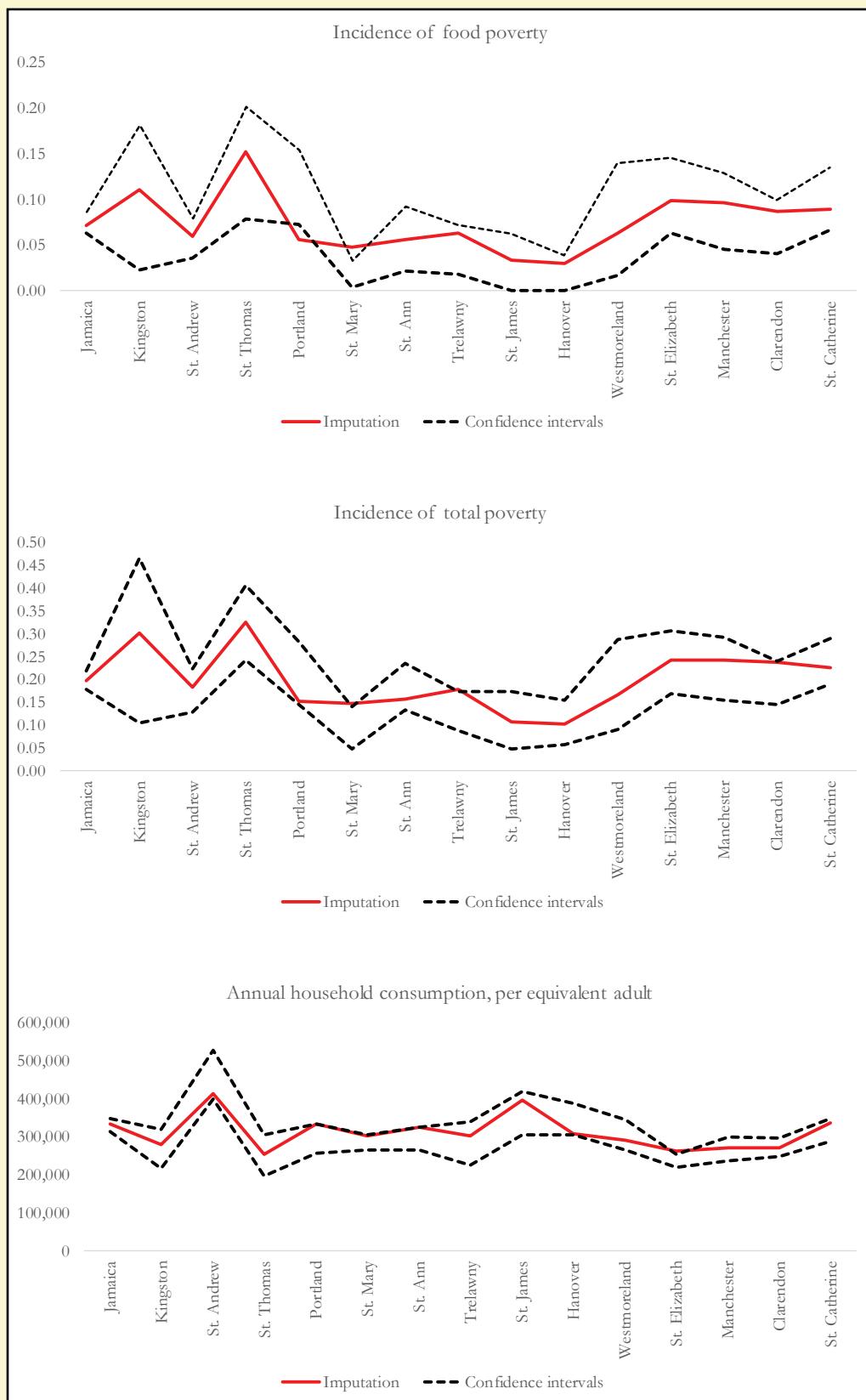
Once the equation (1) was estimated, based on the estimated parameters and distributions, a simulation process was performed to impute household consumption in the PHC. This process consisted of an iterative draw (200 repetitions) of the estimated residuals to calculate the household consumption per adult equivalent. The simulated

consumption on the PHC was then used to calculate the poverty rates based on the values of the food and total poverty lines.

In assessing the robustness of the consumption simulated, and thus the poverty rates measured, a first evaluation criterion is that consumption and poverty estimates derived from the simulation process are statistically equal to the respective values observed in the JSLC at the geographical units with statistical representativeness. That is, at the national level and for each of the 14 parishes of the country. Figure 1 and Table 2 show predicted consumption and poverty estimates for both the food and total poverty lines in each of these geographical units, as well as the lower and upper bounds of the confidence intervals computed from

the JSLC for these indicators. In most of the cases, the estimates fall within the confidence intervals of the JSLC with a confidence level of 95%, thus suggesting that the methodology produced estimates, with a relatively high degree of accuracy.

**Figure 1:** Comparison between the estimates from imputation and the results from the JSCLC



Source: Own estimates based on the JSCLC 2012 and the PHC 2011.

Note: The Urban category includes KMA and Other Towns.

**Table 2:** Predicted Poverty and Mean Consumption by Parish

Incidence of food poverty							
	Imputation		JSLC			Result	
	Poverty	S.E.	Poverty	S.E.	Conf. Interval 95%		
<b>National</b>							
Jamaica	0.072	0.003	0.075	0.006	0.064	0.086	Within
<b>Parish</b>							
Kingston	0.111	0.011	0.102	0.040	0.023	0.182	Within
St. Andrew	0.059	0.006	0.058	0.011	0.036	0.080	Within
St. Thomas	0.152	0.016	0.140	0.031	0.079	0.202	Within
Portland	0.056	0.008	0.114	0.021	0.073	0.154	Out
St. Mary	0.048	0.007	0.018	0.007	0.004	0.033	Out
St. Ann	0.056	0.005	0.057	0.018	0.022	0.093	Within
Trelawny	0.063	0.010	0.045	0.014	0.019	0.072	Within
St. James	0.034	0.005	0.031	0.016	0.000	0.062	Within
Hanover	0.030	0.004	0.017	0.011	0.000	0.039	Within
Westmoreland	0.064	0.007	0.078	0.031	0.017	0.139	Within
St. Elizabeth	0.098	0.009	0.104	0.021	0.063	0.146	Within
Manchester	0.097	0.008	0.087	0.021	0.045	0.129	Within
Clarendon	0.087	0.007	0.070	0.015	0.041	0.099	Within
St. Catherine	0.089	0.007	0.101	0.018	0.066	0.136	Within
<b>Incidence of total poverty</b>							
	Imputation		JSLC			Result	
	Poverty	S.E.	Poverty	S.E.	Conf. Interval 95%		
<b>National</b>							
Jamaica	0.198	0.005	0.198	0.010	0.178	0.219	Within
<b>Parish</b>							
Kingston	0.302	0.017	0.286	0.091	0.106	0.466	Within
St. Andrew	0.183	0.009	0.177	0.024	0.129	0.225	Within
St. Thomas	0.325	0.020	0.325	0.042	0.244	0.407	Within
Portland	0.153	0.014	0.215	0.035	0.146	0.283	Within
St. Mary	0.148	0.012	0.094	0.024	0.048	0.141	Out
St. Ann	0.158	0.009	0.184	0.026	0.134	0.235	Within
Trelawny	0.179	0.010	0.132	0.022	0.090	0.175	Out
St. James	0.107	0.010	0.111	0.032	0.049	0.174	Within
Hanover	0.104	0.008	0.107	0.025	0.059	0.156	Within
Westmoreland	0.167	0.011	0.189	0.050	0.090	0.287	Within
St. Elizabeth	0.244	0.011	0.238	0.035	0.169	0.306	Within
Manchester	0.243	0.013	0.224	0.035	0.156	0.293	Within
Clarendon	0.238	0.010	0.193	0.025	0.145	0.242	Within
St. Catherine	0.227	0.009	0.240	0.026	0.190	0.291	Within

**Table 2 cont'd:** Predicted poverty and mean consumption by parish

Annual household consumption, per equivalent adult							
	Imputation		JSCLC			Result	
	Average	S.E.	Average	S.E.	Conf. Interval 95%		
<b>National</b>							
Jamaica	334323.5	3549.9	329123.5	9001.8	314231.2	349612.8	Within
<b>Parish</b>							
Kingston	281597.8	7480.5	269150.4	26010.0	217404.2	319636.5	Within
St. Andrew	413564.7	8614.8	479083.4	32774.7	398692.5	527513.6	Within
St. Thomas	254468.8	7405.8	251157.9	27382.1	196933.9	304559.2	Within
Portland	335228.0	8351.0	282964.0	20154.2	256189.0	335405.1	Within
St. Mary	303082.1	6120.6	288909.4	10594.1	264535.2	306175.1	Within
St. Ann	326494.6	7727.6	291338.7	15401.4	266570.5	327105.6	Within
Trelawny	304043.1	6984.2	288791.1	28813.3	226181.2	339431.9	Within
St. James	396925.0	15273.4	371982.3	28936.7	306395.6	420131.2	Within
Hanover	308763.9	11480.6	352159.2	21039.0	305080.5	387774.2	Within
Westmoreland	292167.9	5923.4	299205.5	20417.6	266038.0	346289.5	Within
St. Elizabeth	262059.0	5308.3	236395.5	8705.9	221508.1	255726.7	Out
Manchester	271509.3	6801.5	280643.1	15919.1	237391.7	299961.9	Within
Clarendon	272518.5	4729.9	269878.2	12372.4	249204.0	297833.5	Within
St. Catherine	337511.0	5977.3	312678.9	15794.5	287525.4	349605.5	Within

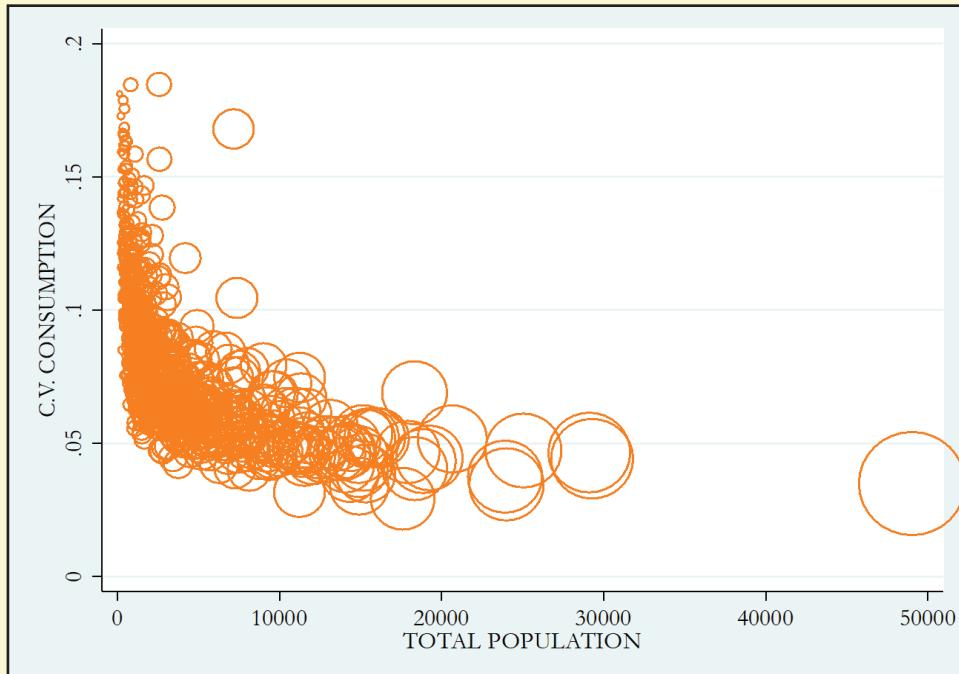
Source: Estimates based on the JSIC 2012 and the PHC 2011.

Note: The Urban category includes KMA and Other Towns

A second evaluation criterion is the analysis of the coefficients of variation (CV) for predicted consumption, and the standard errors of poverty estimates at the community level. In this study, the CV indicates how scattered the consumption estimates are relative to their average value, and it is defined as the ratio between the standard error and the mean of consumption. As measures of statistical accuracy, as both the CV and standard errors tend to zero, the statistical confidence of the consumption and poverty estimates tend to improve. In the case of the CV, the regularity is that when its values are below 14% the estimates are considered statistically reliable. Figure 2 shows that the CV for more than 95% of the communities is below this threshold. In the case of the standard errors for poverty, the empirical regularity used

in the poverty mapping practice is that if they are lower than 10%, then the estimates are also regarded as statistically reliable. In the case of food poverty, there is only one community with a standard error above 10%, whereas for the total poverty indicator the number of communities with standard errors above this reliability threshold is 12 (Table 3). The estimates of consumption and poverty are, overall, statistically reliable. When the CV and standard errors are higher than the thresholds, this situation may occur due to the combination of at least two interconnected factors: 1) because the population of a community is small, usually less than 1 000 inhabitants; and 2) because the power of the variables used in that community to predict consumption was low.

**Figure 2:** Coefficients of variation for average consumption per adult equivalent at the community level



Note: The area of the circles is proportional to the community's total population

**Table 3:** Descriptive statistics for communities with standard errors for poverty above the acceptable threshold

Parish	Community	Code	Population	Food poverty		Total poverty	
				Incidence	S.E.	Incidence	S.E.
<b>With standard error above 10% for the food poverty line</b>							
1	Clarendon	Pleasant Valley	13032	426	0.263	0.107	0.505
<b>With standard error above 10% for the total poverty line</b>							
1	St. Thomas	Jones Pen	03019	139	0.246	0.085	0.395
2	St. Thomas	Hillside	03023	222	0.141	0.084	0.563
3	St. Thomas	Johns Town	03034	355	0.139	0.073	0.300
4	Westmoreland	Content	10065	410	0.183	0.078	0.625
5	Westmoreland	Carmel	10069	436	0.128	0.072	0.343
6	St. Elizabeth	Hopeton	11051	322	0.134	0.086	0.548
7	Manchester	Top Hill	12015	430	0.074	0.056	0.242
8	Manchester	Banana Ground Part 1	12024	518	0.090	0.071	0.551
9	Manchester	Lyndhurst	12030	503	0.079	0.058	0.232
10	Manchester	Medina	12032	549	0.244	0.096	0.481
11	Clarendon	Pleasant Valley	13032	426	0.263	0.107	0.505
12	Clarendon	Cockpit	13069	425	0.095	0.058	0.300

Source: Own estimates based on the JSCLC 2012 and the PHC 2011

The results of the incidence of food and total poverty, and the average annual consumption per adult equivalent across communities are synthetized in Maps 1–3 (Appendix II) based on the information reported in Table A (Appendix I) — which also includes the results at the national level and across parishes.<sup>2</sup> Maps 1(A&B) and 2 (A&B) show that while poverty rates are higher in the parishes of St. Elizabeth, Portland, Manchester, Clarendon, and St. Thomas, than in the rest of the country, the absolute number of people living below the poverty line is disproportionately concentrated, as expected, in the three most populous parishes: Clarendon, St. Catherine and St. Andrew, which accounted for more than half the total number of poor people. Regarding the level of consumption, it is higher in most of the communities of Clarendon, St. Catherine and St. Andrew — the most populous parishes — and in the northern coast of the country than in the rest (Map 3 and Table A), thus mirroring the relative poverty maps, as expected.

A comparison of poverty rates between 2002 and 2012<sup>3</sup> shows that poverty across the communities of Jamaica experienced a significant redistribution (Map 4); however, it did not affect the overall poverty rate of the country. For instance, while in the parishes of St. James, Trelawny, St. Ann, and St. Mary poverty rates would have significantly declined by 2012, in the parishes of St. Elizabeth, Clarendon and St. Catherine poverty would have conversely increased during the decade. The net effect of the redistribution of poverty across communities during 2002–2012 is a virtual stagnation of poverty at the national level: 19.7% in 2002 and 19.9% in 2012, according to the JSCLC.

2. The maps of consumption and poverty rates for each of the 14 parishes are included in Appendix II.
3. The 2002 poverty rates come from the poverty map produced by the Planning Institute of Jamaica based on the PHC 2001 and the JSCLC 2002. The comparison should be taken with caution due to methodological differences between both exercises and changes in the definition of geographical units.

# Appendix I

















Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
Aboukir	06043	2,740	\$256,176.7	\$15,716.2	0.067	0.022	0.204	0.038
Calderwood	06044	5,757	\$240,549.7	\$12,558.7	0.079	0.021	0.232	0.034
Mcnie	06045	3,627	\$217,576.3	\$17,725.8	0.116	0.033	0.293	0.053
York Castle	06046	900	\$253,799.9	\$20,729.7	0.085	0.034	0.229	0.052
Bensonton	06047	1,885	\$240,642.8	\$20,569.5	0.107	0.029	0.255	0.046
Moneague	06048	4,473	\$344,648.6	\$21,102.8	0.021	0.008	0.072	0.018
Gibraltar Moneague	06049	1,885	\$238,929.0	\$18,583.1	0.061	0.027	0.267	0.045
Faiths Pen	06050	718	\$271,561.7	\$22,479.3	0.057	0.025	0.160	0.040
Rio Hoe/River Head	06051	1,746	\$301,307.3	\$19,437.0	0.039	0.016	0.130	0.030
Blackstonedge	06052	1,784	\$242,533.3	\$17,000.3	0.125	0.026	0.277	0.040
<b>TRELAWNY</b>	<b>07</b>	<b>74,679</b>	<b>\$304,043.1</b>	<b>\$6,984.2</b>	<b>0.063</b>	<b>0.010</b>	<b>0.179</b>	<b>0.010</b>
Salt Marsh	07001	2,659	\$390,725.0	\$31,137.9	0.017	0.007	0.058	0.016
Hampden	07002	555	\$220,982.6	\$21,891.4	0.056	0.030	0.179	0.060
Bounty Hall	07003	2,713	\$375,929.3	\$26,040.5	0.027	0.012	0.089	0.027
Granville/Martha Brae	07004	3,053	\$331,575.1	\$18,394.8	0.027	0.010	0.085	0.019
Falmouth	07005	8,958	\$452,811.0	\$22,968.2	0.018	0.006	0.071	0.015
Perth Town	07006	736	\$334,573.8	\$24,345.8	0.036	0.017	0.109	0.036
Daniel Town	07007	1,224	\$387,123.4	\$32,151.2	0.008	0.008	0.035	0.019
Refuge	07008	880	\$301,323.8	\$29,758.5	0.025	0.015	0.094	0.036
Spicy Hill	07009	1,446	\$365,926.4	\$33,844.1	0.014	0.009	0.054	0.025
Duanvale	07010	1,586	\$293,023.8	\$16,909.1	0.025	0.014	0.106	0.030
Kinloss	07011	1,810	\$186,817.2	\$13,366.8	0.117	0.028	0.277	0.047
Samuels Prospect	07013	4,677	\$276,498.8	\$16,253.5	0.060	0.016	0.186	0.030
Duncans	07014	1,028	\$277,492.5	\$19,105.3	0.027	0.015	0.115	0.036
Rio Bueno	07015	3,855	\$391,116.9	\$23,349.3	0.032	0.010	0.102	0.020
Brampton and Clarks Town	07016	1,267	\$245,661.1	\$16,384.9	0.007	0.008	0.029	0.022
Jackson Town	07017	2,832	\$269,240.2	\$17,202.8	0.071	0.018	0.196	0.034
Stewart Town	07018	941	\$266,563.4	\$23,745.0	0.048	0.021	0.140	0.038
Sawyers/The Alps	07019	1,300	\$195,229.9	\$12,635.2	0.133	0.032	0.373	0.051
St. Vincent	07020	463	\$296,261.8	\$31,521.8	0.017	0.021	0.076	0.047
Spring Gardens	07021	1,556	\$326,539.2	\$19,386.3	0.035	0.014	0.114	0.031
Stettin	07022	2,378	\$288,136.8	\$16,711.4	0.054	0.019	0.160	0.033
Albert Town	07023	1,117	\$261,597.1	\$15,124.7	0.054	0.022	0.188	0.037
Ulster Spring	07024	1,526	\$265,703.3	\$14,179.8	0.110	0.022	0.248	0.033
Freemans Hall	07025	572	\$185,628.9	\$19,656.6	0.152	0.060	0.381	0.088
Joe Hut	07026	570	\$202,471.3	\$19,503.3	0.102	0.045	0.250	0.081
Lorrimers	07027	3,901	\$207,518.4	\$10,796.1	0.066	0.019	0.206	0.036
Wait-A-Bit	07028	2,369	\$217,484.2	\$12,991.4	0.106	0.030	0.288	0.049
Wirefence	07029	2,291	\$270,814.2	\$17,444.3	0.055	0.020	0.169	0.040
Warsop	07030	3,581	\$231,146.9	\$12,102.3	0.079	0.018	0.218	0.033
Troy	07031	1,869	\$226,330.9	\$13,786.2	0.107	0.027	0.267	0.041

Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
Sherwood Content	07032	1,498	\$273,591.9	\$14,947.6	0.049	0.016	0.149	0.031
Wakefield	07033	4,005	\$288,123.4	\$14,462.0	0.037	0.011	0.135	0.026
Bunkers Hill	07034	1,653	\$265,936.8	\$13,699.3	0.059	0.021	0.180	0.035
Deeside	07035	2,559	\$235,611.3	\$13,185.6	0.080	0.022	0.236	0.039
Wilson Run	07036	1,250	\$164,821.9	\$15,266.2	0.153	0.039	0.329	0.056
<b>ST. JAMES</b>	<b>08</b>	<b>182,865</b>	<b>\$396,925.0</b>	<b>\$15,273.4</b>	<b>0.034</b>	<b>0.005</b>	<b>0.107</b>	<b>0.010</b>
Montego Bay Business District	08001	5,097	\$437,698.3	\$29,111.1	0.012	0.006	0.062	0.018
Flanker	08002	7,111	\$320,363.7	\$24,018.1	0.016	0.007	0.087	0.025
Ironshore	08003	869	\$476,081.1	\$44,926.8	0.006	0.007	0.044	0.030
Coral Gardens	08004	1,868	\$457,148.7	\$40,617.7	0.016	0.010	0.065	0.022
Rose Heights	08005	7,520	\$332,002.9	\$25,593.9	0.008	0.004	0.068	0.025
Cornwall	08006	2,574	\$890,656.2	\$164,531.8	0.000	0.000	0.001	0.002
Barrett Town	08007	2,827	\$337,631.7	\$22,540.2	0.017	0.008	0.068	0.022
Lilliput	08008	5,916	\$332,197.2	\$28,370.8	0.016	0.009	0.074	0.027
Spot Valley	08009	1,645	\$678,798.9	\$99,638.6	0.001	0.002	0.005	0.006
Barrett Hall	08010	2,544	\$301,502.8	\$24,840.7	0.017	0.011	0.061	0.026
Greenwood	08011	724	\$550,515.4	\$82,150.3	0.001	0.002	0.005	0.010
Goodwill	08012	1,097	\$345,121.2	\$28,940.5	0.010	0.007	0.040	0.022
Dumfries	08013	3,075	\$366,536.6	\$22,650.0	0.037	0.014	0.110	0.028
Adelphi	08014	2,659	\$298,483.0	\$18,820.7	0.051	0.017	0.148	0.031
Orange	08015	4,618	\$267,891.3	\$13,341.8	0.052	0.018	0.210	0.030
Flower Hill	08016	785	\$256,227.7	\$19,967.7	0.037	0.022	0.111	0.046
Orange Irwin	08017	2,041	\$361,184.9	\$29,220.1	0.015	0.009	0.078	0.028
Porto Bello	08018	1,515	\$450,552.4	\$42,410.6	0.001	0.002	0.016	0.015
Farm Heights	08019	2,257	\$568,036.3	\$42,743.4	0.000	0.001	0.007	0.008
Green Pond	08020	11,326	\$578,665.9	\$38,733.3	0.013	0.008	0.052	0.021
Salt Spring	08021	3,883	\$348,887.7	\$23,416.5	0.017	0.009	0.099	0.026
Norwood	08022	10,452	\$403,103.0	\$29,235.1	0.004	0.003	0.033	0.014
Paradise	08023	1,451	\$555,744.9	\$52,191.6	0.016	0.011	0.053	0.028
Albion	08024	2,435	\$396,276.4	\$28,448.8	0.029	0.014	0.112	0.031
Canterbury	08025	804	\$280,365.4	\$26,191.7	0.028	0.022	0.158	0.061
Brandon Hill	08026	597	\$377,783.7	\$48,988.0	0.047	0.031	0.150	0.062
Glendevon	08027	6,872	\$296,790.3	\$23,670.0	0.014	0.007	0.108	0.032
Rosemount	08028	1,573	\$395,279.3	\$29,376.9	0.007	0.007	0.057	0.025
Rose Hall	08029	253	\$370,847.8	\$50,779.1	0.034	0.032	0.135	0.060
Rosemount Gardens	08030	1,138	\$636,798.6	\$62,213.4	0.002	0.003	0.015	0.012
Mt. Horeb	08031	776	\$223,945.0	\$14,446.6	0.121	0.032	0.232	0.049
Catherine Mount	08032	1,051	\$363,078.3	\$44,226.2	0.016	0.018	0.093	0.047
Westgate Hills	08033	1,117	\$610,812.7	\$86,357.0	0.000	0.001	0.003	0.005
Fairfield	08034	1,590	\$360,240.2	\$32,527.7	0.014	0.011	0.084	0.034

Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
West Green	08035	1,496	\$647,244.6	\$56,119.7	0.001	0.002	0.010	0.009
Catherine Hall	08036	2,777	\$636,393.7	\$43,181.5	0.073	0.049	0.138	0.069
Bogue	08037	7,375	\$592,184.5	\$61,918.2	0.003	0.003	0.016	0.007
Reading	08038	889	--	--	--	--	--	--
Belmont/Tower Hill	08039	604	\$324,098.9	\$31,788.4	0.026	0.021	0.121	0.043
Spring Gardens	08040	360	\$541,191.6	\$79,966.9	0.004	0.008	0.016	0.021
Moy Hall	08041	474	\$281,990.8	\$26,563.1	0.037	0.028	0.121	0.055
Unity Hall	08042	823	\$393,808.9	\$57,795.8	0.004	0.012	0.015	0.030
Anchovy	08043	4,506	\$384,144.0	\$23,072.5	0.030	0.010	0.094	0.021
Comfort Hall	08044	969	\$310,160.7	\$25,492.1	0.034	0.021	0.112	0.041
Roehampton	08045	1,034	\$273,462.6	\$20,354.3	0.047	0.022	0.123	0.037
Pitfour	08046	2,135	\$508,888.8	\$65,134.2	0.004	0.008	0.051	0.023
Granville	08047	5,117	\$340,726.5	\$18,264.2	0.012	0.006	0.077	0.020
Tucker	08048	1,960	\$401,626.5	\$32,090.0	0.007	0.004	0.047	0.021
Retirement	08049	4,157	\$295,463.9	\$17,221.7	0.045	0.016	0.187	0.032
Hopeton	08050	2,014	\$267,638.4	\$16,670.1	0.067	0.021	0.188	0.040
Johns Hall	08051	4,203	\$250,827.0	\$12,829.7	0.051	0.021	0.254	0.035
Sunderland	08052	531	\$401,423.3	\$46,167.3	0.014	0.014	0.056	0.034
Lottery	08053	2,121	\$268,383.9	\$16,433.3	0.059	0.021	0.177	0.037
Somerton	08054	2,682	\$259,454.5	\$12,313.2	0.088	0.021	0.225	0.034
Flagstaff	08055	729	\$331,013.3	\$34,323.0	0.014	0.015	0.066	0.039
Summer Hill	08056	1,255	\$317,080.9	\$27,785.6	0.028	0.015	0.101	0.036
Maroon Town	08057	860	\$281,490.6	\$21,584.4	0.087	0.028	0.215	0.045
Mafoota	08058	1,472	\$346,311.9	\$26,926.8	0.034	0.016	0.110	0.032
Tangle River	08059	970	\$297,995.1	\$22,012.4	0.048	0.022	0.157	0.043
Welcome Hall	08060	2,790	\$240,924.3	\$11,320.1	0.049	0.014	0.148	0.026
Mt. Salem	08061	5,915	\$553,272.4	\$37,135.6	0.001	0.001	0.014	0.008
Maldon	08062	509	\$304,567.6	\$22,994.5	0.051	0.027	0.158	0.048
Montpelier	08063	1,713	\$311,923.7	\$21,343.2	0.036	0.016	0.124	0.033
Mt. Carey	08064	1,770	\$299,089.5	\$22,615.5	0.053	0.024	0.160	0.041
Seven Rivers	08065	1,239	\$252,620.1	\$20,257.2	0.037	0.022	0.113	0.045
Bickersteth	08066	1,580	\$291,160.1	\$24,391.4	0.065	0.024	0.178	0.043
Cambridge	08067	4,162	\$307,877.9	\$23,075.1	0.039	0.014	0.106	0.028
Retrieve	08068	890	\$347,320.0	\$33,012.5	0.045	0.021	0.117	0.039
Catadupa	08069	2,287	\$234,438.6	\$13,709.4	0.092	0.026	0.204	0.035
Garlands	08070	771	\$275,973.0	\$27,450.0	0.062	0.030	0.183	0.058
Flamstead Gardens	08071	2,008	\$246,807.9	\$14,903.9	0.063	0.020	0.209	0.038
Vaughansfield	08072	1,048	\$272,710.4	\$19,414.7	0.036	0.022	0.202	0.043
Arcadia	08073	472	\$281,975.5	\$26,471.9	0.044	0.028	0.166	0.057
Mocho	08074	386	\$272,112.6	\$26,307.8	0.042	0.027	0.137	0.059
Niagara	08075	863	\$233,725.7	\$17,214.9	0.059	0.028	0.200	0.056

Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
Stonehenge	08076	890	\$188,083.0	\$16,267.2	0.180	0.051	0.394	0.065
<b>HANOVER</b>	<b>09</b>	<b>69,337</b>	<b>\$308,763.9</b>	<b>\$11,480.6</b>	<b>0.030</b>	<b>0.004</b>	<b>0.104</b>	<b>0.008</b>
Orange Bay	09001	2,109	\$492,847.9	\$40,058.3	0.000	0.001	0.008	0.006
Logwood	09002	1,876	\$302,449.8	\$18,837.4	0.025	0.011	0.096	0.026
Santoy	09003	1,671	\$326,444.6	\$20,744.9	0.010	0.007	0.055	0.020
Green Island	09004	3,746	\$266,885.2	\$11,260.7	0.023	0.008	0.093	0.019
March Town	09005	2,060	\$207,988.3	\$12,893.7	0.033	0.014	0.109	0.030
Rock Spring	09006	1,562	\$282,532.3	\$17,641.9	0.036	0.016	0.131	0.033
Kendal	09007	994	\$324,000.6	\$22,135.1	0.013	0.009	0.051	0.022
Cauldwell	09008	1,612	\$325,482.0	\$21,033.4	0.008	0.006	0.040	0.017
Pell River	09009	810	\$288,936.3	\$23,126.8	0.033	0.018	0.109	0.035
Kingsvale	09010	2,773	\$309,344.3	\$18,781.1	0.017	0.008	0.068	0.018
Cacoon	09011	1,074	\$271,931.6	\$18,348.1	0.016	0.012	0.107	0.033
Cousins Cove	09012	1,639	\$297,433.3	\$17,607.8	0.019	0.010	0.071	0.029
Lances Bay	09013	368	\$307,298.8	\$32,535.9	0.019	0.020	0.092	0.042
Lucea	09014	11,227	\$358,481.7	\$11,322.4	0.025	0.007	0.100	0.016
Dias	09015	3,422	\$253,946.5	\$11,320.2	0.025	0.008	0.093	0.017
Chambers Pen	09016	684	\$321,659.2	\$25,781.9	0.026	0.017	0.094	0.035
Askenish	09017	1,586	\$213,492.5	\$12,764.9	0.085	0.023	0.327	0.039
Maryland	09018	779	\$250,101.7	\$21,917.4	0.011	0.011	0.052	0.033
Mount Peace	09019	643	\$285,762.1	\$24,682.7	0.029	0.017	0.100	0.040
Jericho	09020	1,184	\$205,850.1	\$14,165.6	0.048	0.020	0.154	0.041
Sandy Bay	09021	5,789	\$322,129.7	\$18,355.2	0.027	0.009	0.096	0.021
Cascade	09022	1,097	\$225,760.1	\$12,555.0	0.020	0.011	0.079	0.027
Cash Hill	09023	333	\$278,553.9	\$23,669.1	0.047	0.029	0.144	0.054
Woodsville	09024	236	\$302,124.1	\$35,057.7	0.063	0.035	0.126	0.041
Success	09025	856	\$236,887.3	\$16,616.2	0.088	0.028	0.221	0.046
Pondside	09026	396	\$194,217.7	\$23,949.8	0.075	0.040	0.222	0.080
Great Valley	09027	1,300	\$224,784.7	\$14,317.9	0.058	0.020	0.159	0.035
Hopewell	09028	6,894	\$440,628.8	\$28,423.5	0.005	0.003	0.022	0.008
Woodlands	09029	630	\$339,253.0	\$44,968.7	0.006	0.010	0.029	0.031
Haddington	09030	347	\$201,258.3	\$20,976.7	0.017	0.021	0.083	0.059
Cacoon Castle	09031	2,178	\$292,205.4	\$19,934.7	0.033	0.012	0.117	0.031
Content	09032	384	\$275,533.3	\$27,250.8	0.061	0.032	0.177	0.056
Mount Peto	09033	1,106	\$264,909.2	\$17,501.0	0.064	0.022	0.189	0.041
Ramble	09034	2,710	\$296,695.6	\$17,037.5	0.017	0.009	0.071	0.021
Copse	09035	1,025	\$248,199.3	\$18,422.1	0.081	0.028	0.303	0.045
Chester Castle	09036	2,238	\$315,575.1	\$23,988.1	0.019	0.011	0.082	0.026
<b>WESTMORELAND</b>	<b>10</b>	<b>143,976</b>	<b>\$292,167.9</b>	<b>\$5,923.4</b>	<b>0.064</b>	<b>0.007</b>	<b>0.167</b>	<b>0.011</b>
Negril	10001	7,466	\$384,439.9	\$22,982.6	0.021	0.008	0.088	0.021
Mount Airy	10002	1,287	\$339,423.5	\$29,410.0	0.027	0.014	0.114	0.034

Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
Orange Hill	10003	1,203	\$356,803.6	\$37,299.7	0.006	0.007	0.045	0.030
Revival	10004	1,730	\$263,486.0	\$30,571.8	0.031	0.019	0.141	0.057
Sheffield	10005	3,700	\$306,589.8	\$16,933.3	0.025	0.009	0.094	0.024
Delveland	10006	1,745	\$253,747.7	\$17,896.1	0.053	0.019	0.183	0.042
Jerusalem Heights/Jerusalem Mountain	10007	1,067	\$189,957.9	\$18,500.2	0.061	0.032	0.252	0.068
Grange Hill	10008	9,187	\$323,682.1	\$20,271.6	0.037	0.011	0.135	0.026
Fullersfield/Alma	10009	1,526	\$225,660.1	\$20,186.9	0.044	0.020	0.175	0.056
Paul Island	10010	1,123	\$262,357.0	\$23,632.8	0.029	0.018	0.139	0.047
Little London	10011	7,691	\$284,429.8	\$14,449.8	0.030	0.009	0.124	0.022
Broughton	10012	1,294	\$266,445.8	\$24,410.2	0.014	0.009	0.084	0.033
Big Bridge	10013	2,377	\$332,033.9	\$29,711.6	0.013	0.008	0.065	0.028
Llandilo	10014	3,740	\$450,429.6	\$40,469.0	0.007	0.006	0.042	0.019
Savanna-la-mar Business District	10015	12,461	\$382,192.7	\$17,766.6	0.013	0.005	0.071	0.019
Smithfield	10016	2,520	\$268,867.4	\$20,530.4	0.023	0.012	0.113	0.036
Amity Savanna-la-mar	10017	1,361	\$206,769.9	\$18,872.5	0.026	0.016	0.108	0.040
Strath bogie	10018	2,357	\$248,878.3	\$26,433.8	0.070	0.033	0.253	0.066
Chantilly	10019	1,516	\$367,606.9	\$47,535.5	0.018	0.013	0.087	0.042
Farm Pen	10020	1,694	\$337,514.3	\$25,420.8	0.013	0.008	0.062	0.025
Bath	10021	1,071	\$324,109.7	\$32,362.6	0.024	0.019	0.114	0.046
Three Miles River	10022	894	\$342,404.2	\$37,584.7	0.013	0.012	0.067	0.042
Georges Plain	10023	3,056	\$258,442.8	\$18,228.4	0.036	0.014	0.148	0.038
Frome	10024	1,705	\$360,594.7	\$30,126.9	0.008	0.008	0.055	0.027
Red Hills	10025	1,311	\$230,813.0	\$19,716.2	0.073	0.025	0.228	0.053
Burnt Savannah	10026	3,550	\$270,396.4	\$17,656.2	0.032	0.013	0.135	0.033
Truro	10027	1,272	\$248,239.3	\$23,697.6	0.035	0.020	0.153	0.052
Town Head	10028	1,057	\$268,245.0	\$26,240.6	0.018	0.016	0.119	0.051
Bath Mountain	10029	734	\$159,530.3	\$16,159.8	0.163	0.057	0.377	0.074
Grange	10030	701	\$211,546.2	\$19,734.3	0.080	0.036	0.283	0.070
Strawberry	10031	949	\$231,492.0	\$23,152.7	0.057	0.030	0.227	0.064
Williamsfield	10032	928	\$240,764.8	\$20,063.3	0.044	0.020	0.157	0.045
Porters Mountain	10033	490	\$223,838.7	\$26,594.3	0.037	0.027	0.159	0.068
Roaring River	10034	717	\$213,575.3	\$19,992.0	0.101	0.036	0.273	0.064
Fort William	10035	762	\$261,400.8	\$25,983.8	0.043	0.024	0.160	0.055
Hertford	10036	3,421	\$306,068.9	\$21,229.8	0.021	0.010	0.093	0.027
Petersfield	10037	4,955	\$341,249.3	\$19,893.2	0.012	0.006	0.065	0.021
Water Works	10038	3,600	\$294,769.4	\$19,150.2	0.030	0.011	0.108	0.032
Ferris	10039	863	\$271,772.9	\$31,196.4	0.025	0.021	0.125	0.062
Cave	10040	827	\$264,730.3	\$29,059.7	0.016	0.017	0.090	0.052
Mearnsville/Auldayr	10041	868	\$152,891.3	\$15,204.4	0.152	0.050	0.405	0.071













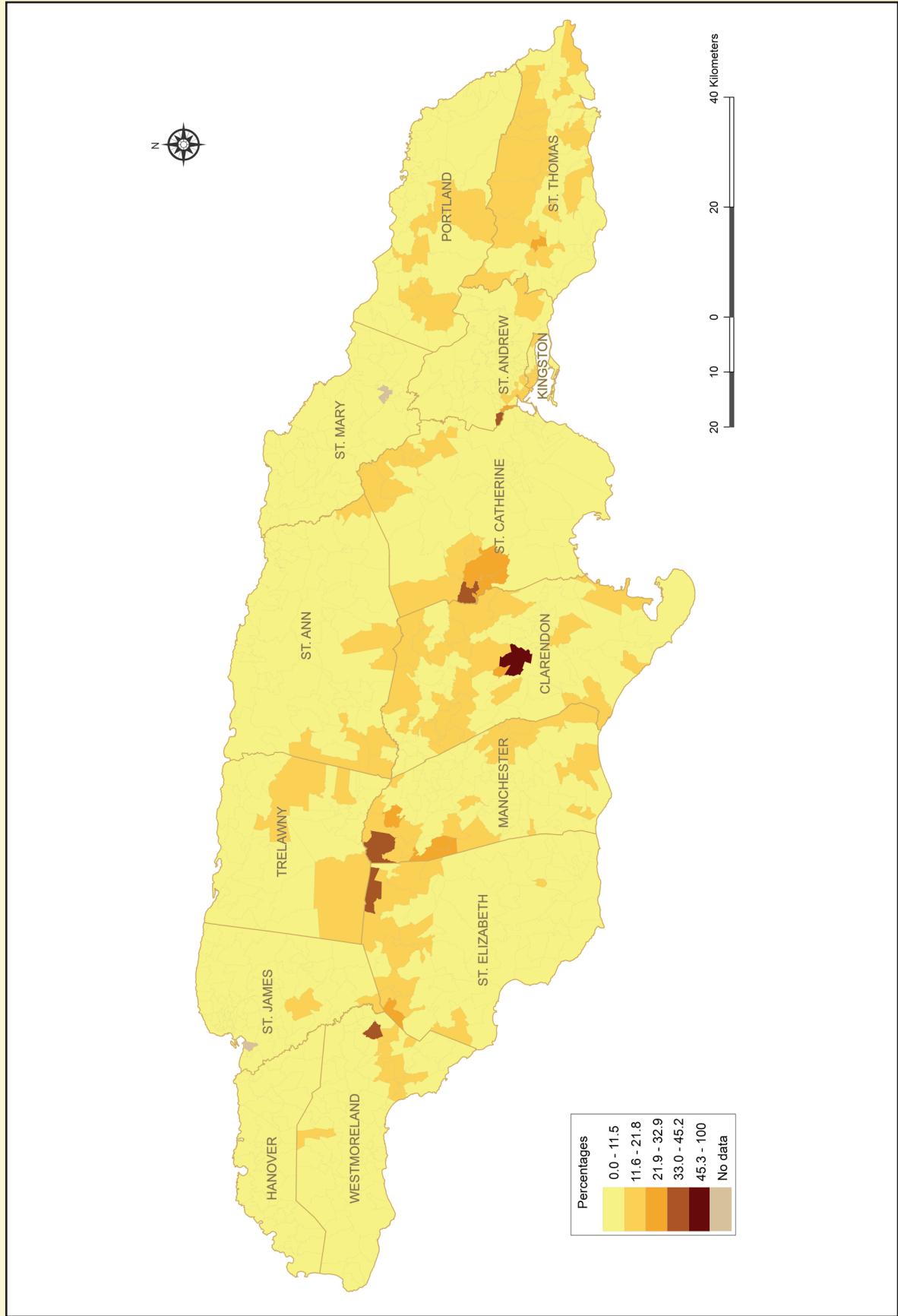


Geographic unit	ID	Population	Consumption		Food poverty		Total poverty	
			Mean	S.E.	Incidence	S.E.	Incidence	S.E.
Bridgeport	14038	10,271	\$513,870.8	\$25,462.4	0.003	0.002	0.024	0.008
Naggo Head	14039	10,452	\$329,776.2	\$16,524.3	0.036	0.010	0.115	0.023
Braeton	14040	11,513	\$393,732.3	\$17,079.4	0.010	0.005	0.048	0.012
Greater Portmore	14041	49,024	\$466,986.3	\$16,276.4	0.006	0.002	0.038	0.006
Bernard Lodge	14042	9,669	\$277,118.8	\$18,976.9	0.079	0.019	0.214	0.034
Central Village	14043	20,661	\$256,791.1	\$13,263.4	0.088	0.015	0.230	0.026
Greendale	14044	11,456	\$309,612.5	\$14,480.7	0.070	0.012	0.197	0.021
Keystone	14045	4,074	\$517,819.9	\$35,867.8	0.018	0.007	0.060	0.015
Ensom	14046	23,918	\$450,748.3	\$16,894.2	0.028	0.006	0.090	0.013
Hampton Green	14047	5,596	\$367,852.2	\$20,132.0	0.040	0.012	0.116	0.021
Spanish Town Central	14048	14,886	\$235,593.5	\$10,782.7	0.098	0.017	0.400	0.028
Cromarty	14049	8,983	\$239,686.1	\$12,749.9	0.103	0.020	0.345	0.031
Sydenham	14050	10,352	\$398,983.2	\$24,664.0	0.028	0.008	0.102	0.018
St. Johns East	14051	11,501	\$253,663.0	\$12,731.2	0.086	0.016	0.250	0.028
Willowdene	14052	8,665	\$412,708.6	\$21,126.2	0.032	0.008	0.100	0.018
Old Harbour Road	14053	7,153	\$341,520.9	\$24,262.2	0.035	0.012	0.114	0.024
Hellshire	14054	4,913	\$425,919.4	\$31,695.9	0.006	0.005	0.053	0.015

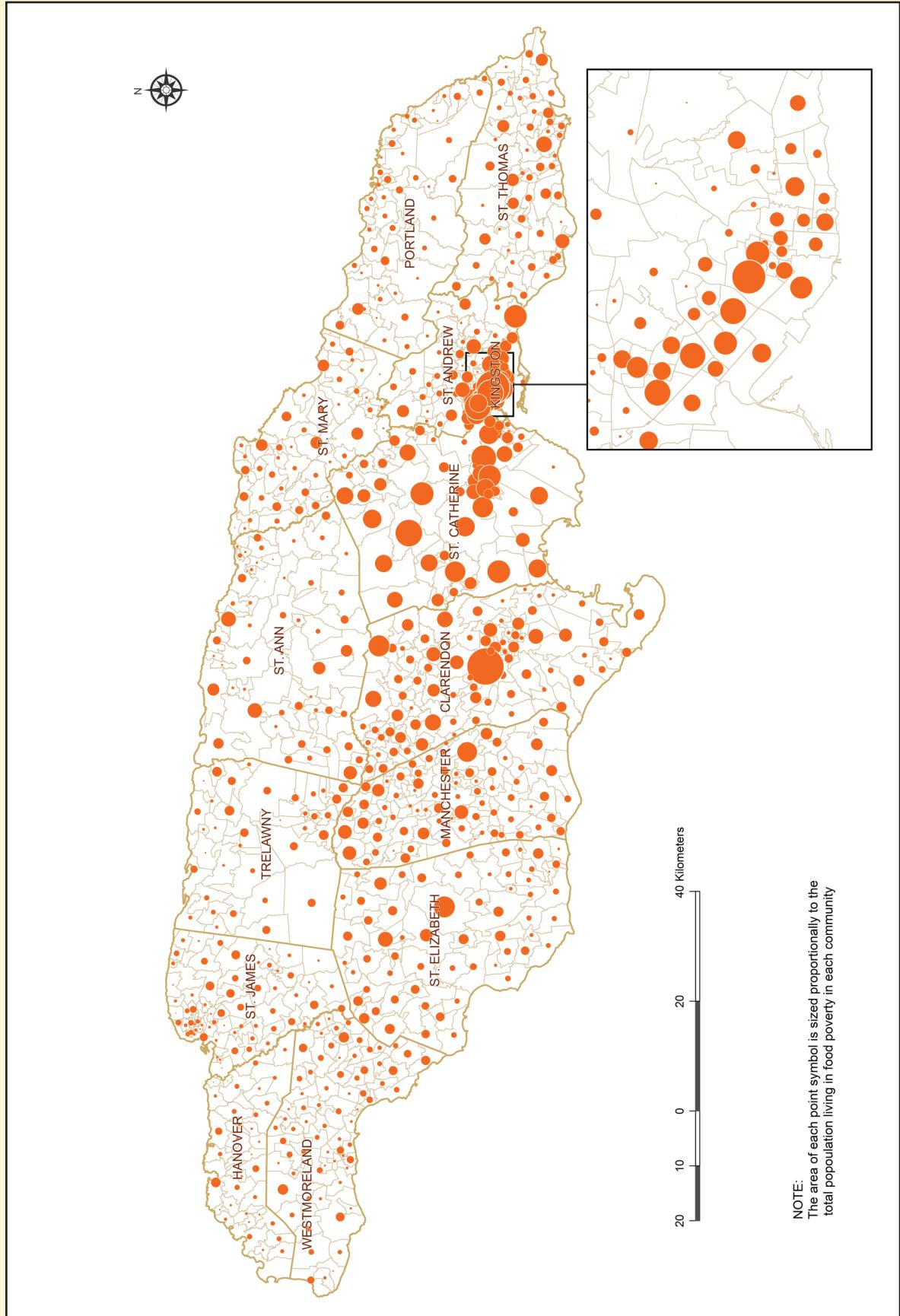
## Appendix II

# Poverty Maps for All Jamaica and by Parish

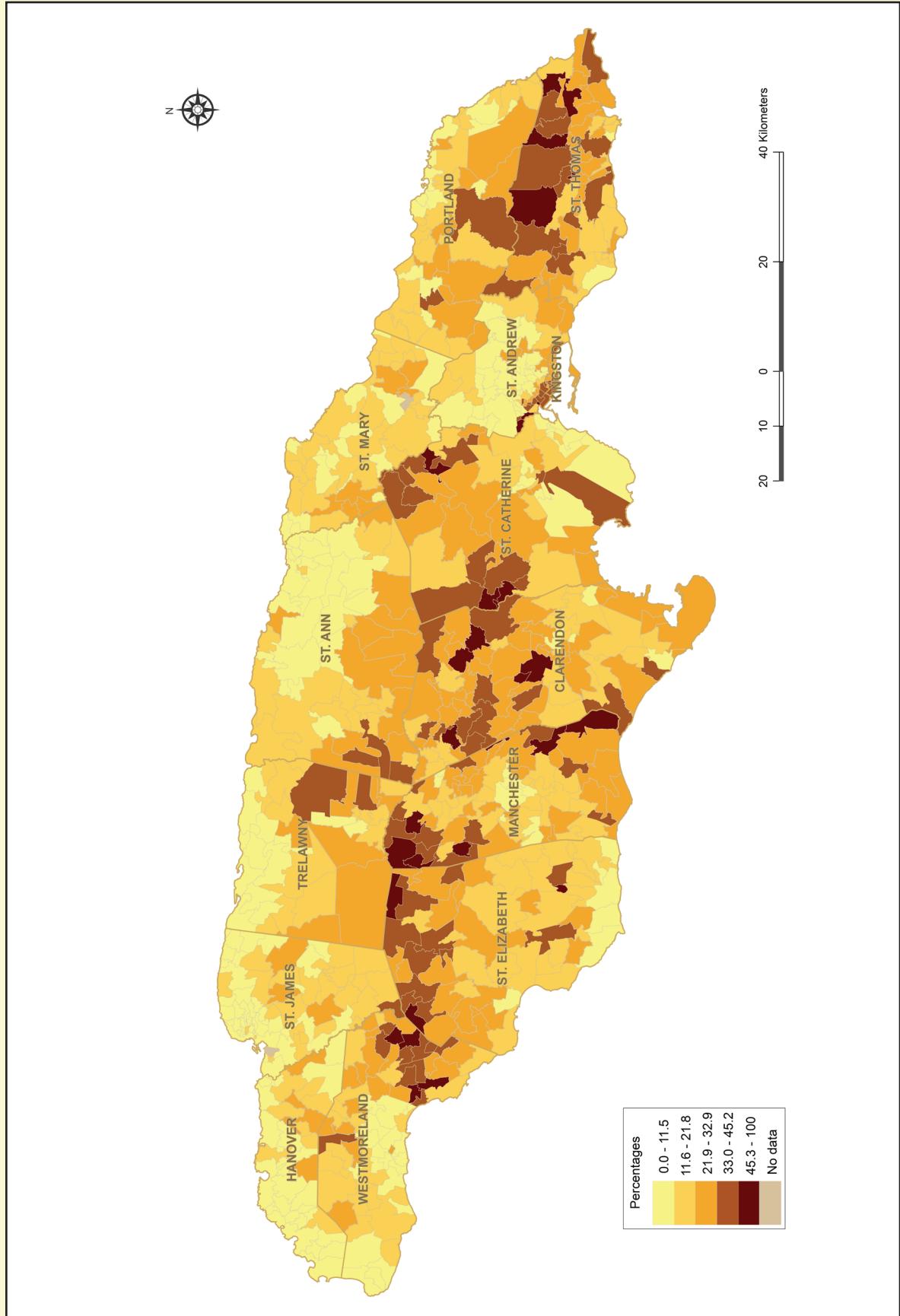
**Map 1A: Incidence of Food Poverty by Community, Jamaica 2012**  
Per cent of Population Living in Food Poverty by Community



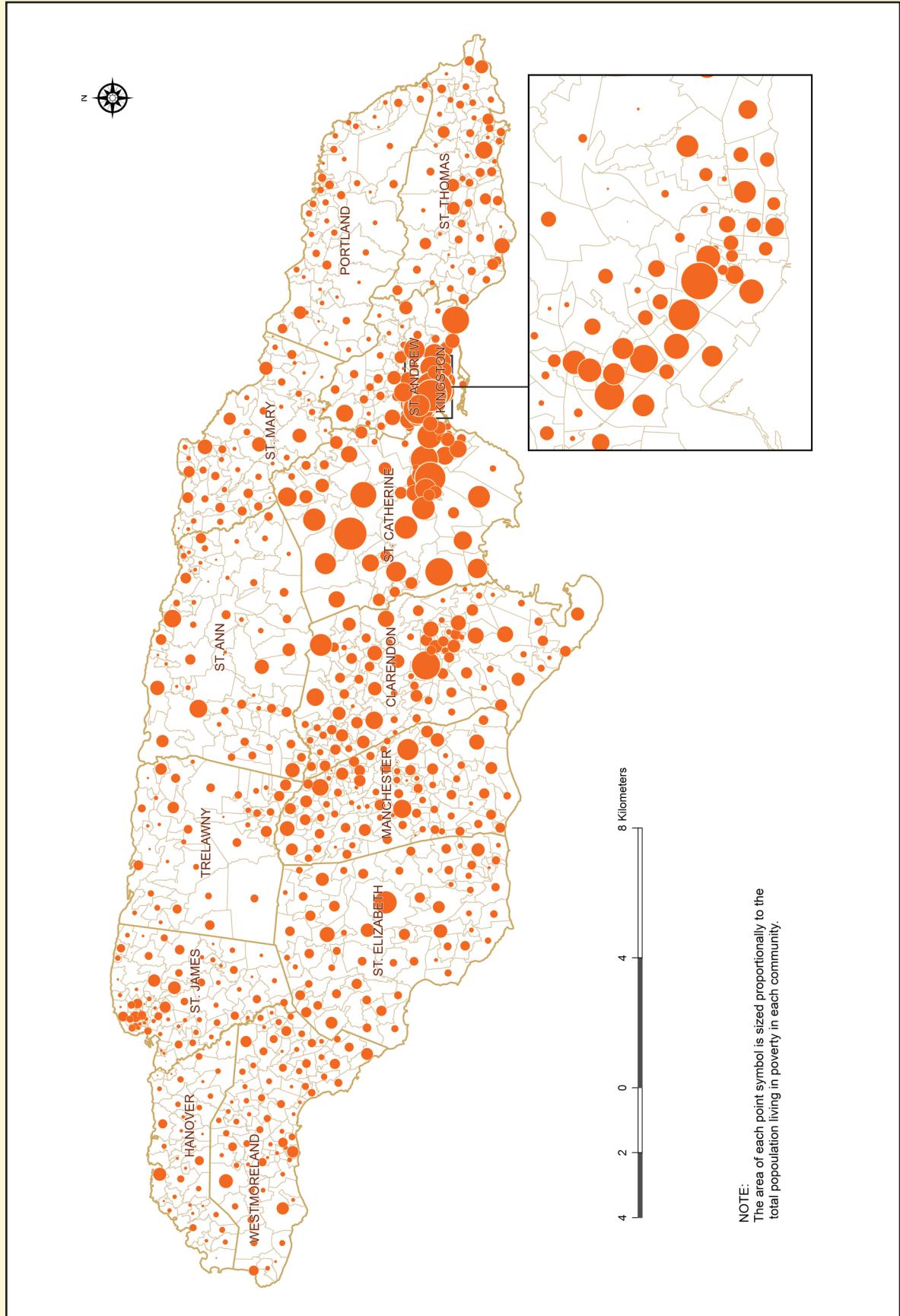
**Map 1B: Incidence of Food Poverty by Community, Jamaica 2012**  
Total Population Living in Food Poverty by Community



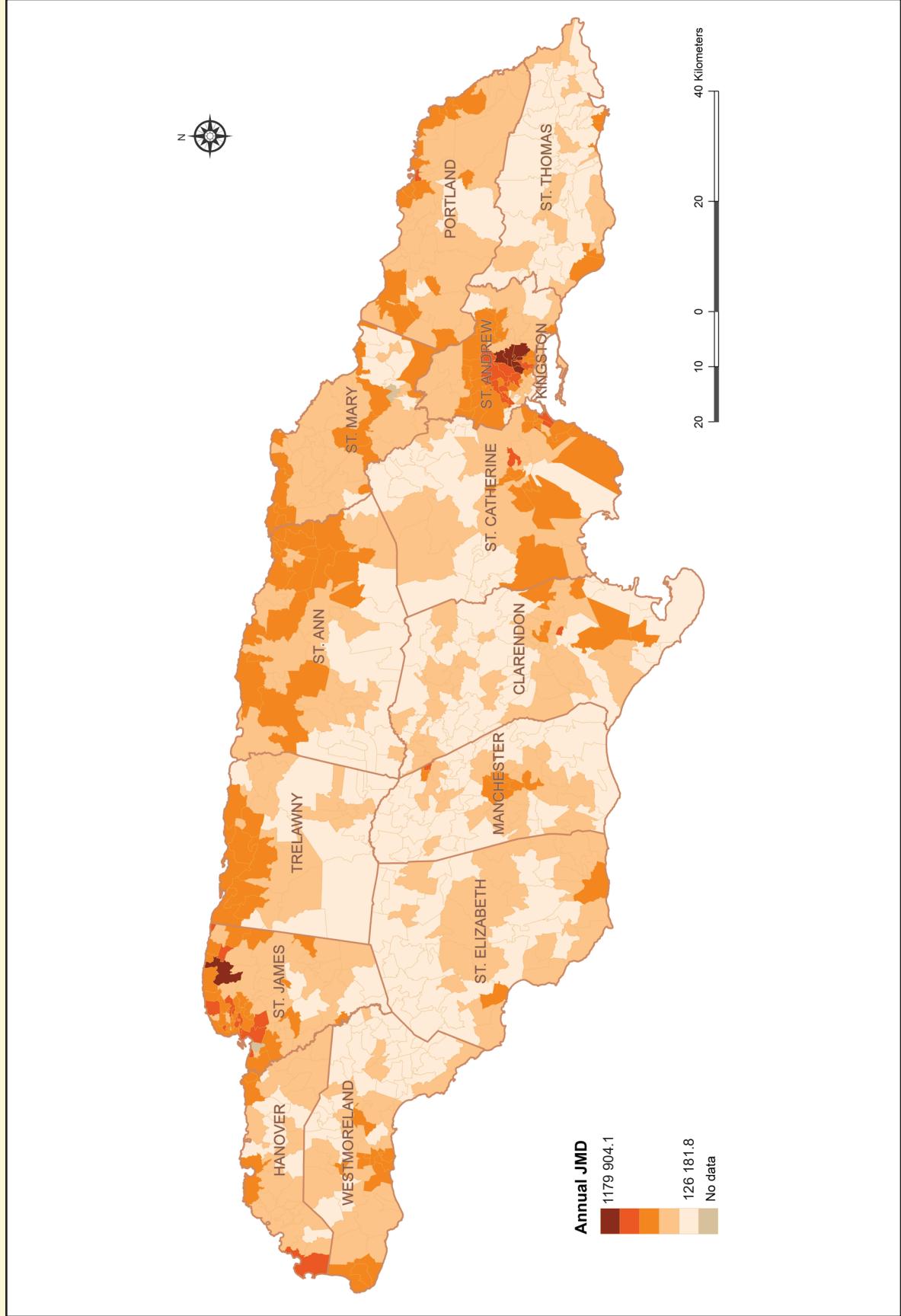
**Map 2A: Incidence of Poverty by Community, Jamaica 2012**  
Per cent of Population Living in Poverty by Community



**Map 2B: Incidence of Poverty by Community, Jamaica 2012**  
Total Population Living in Poverty by Community

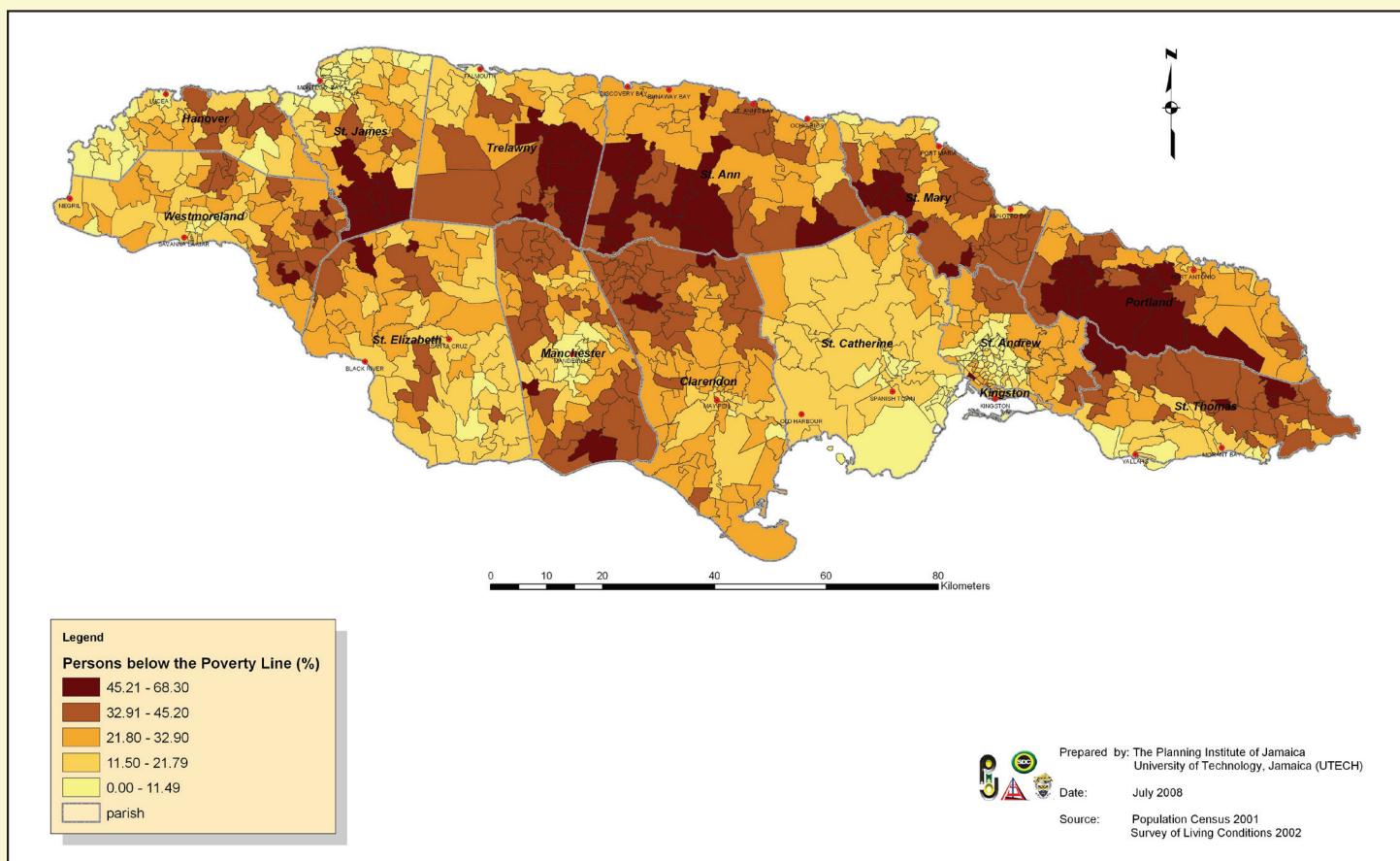
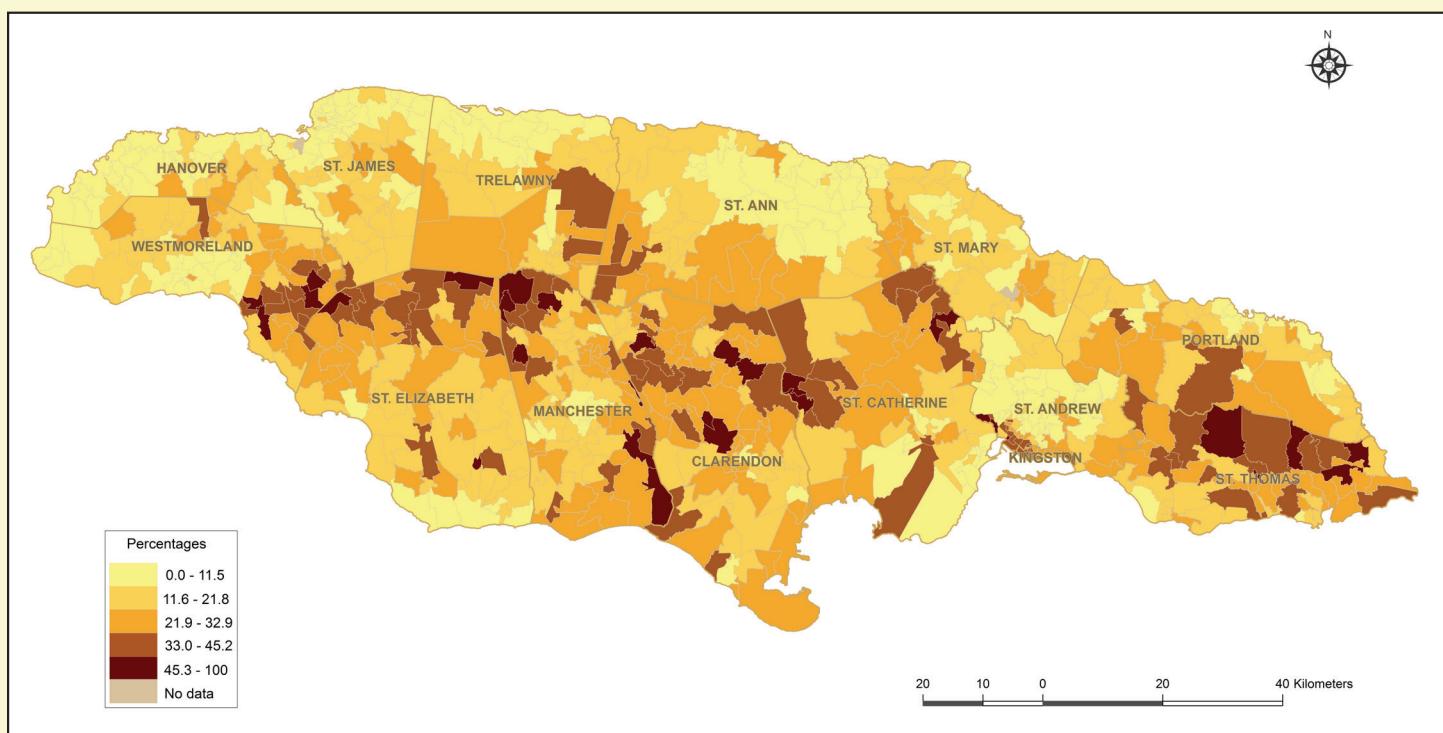


**Map 3: Average Household Consumption Per Adult Equivalent by Community, Jamaica 2012**  
Average Annual Jamaican Dollars by Community



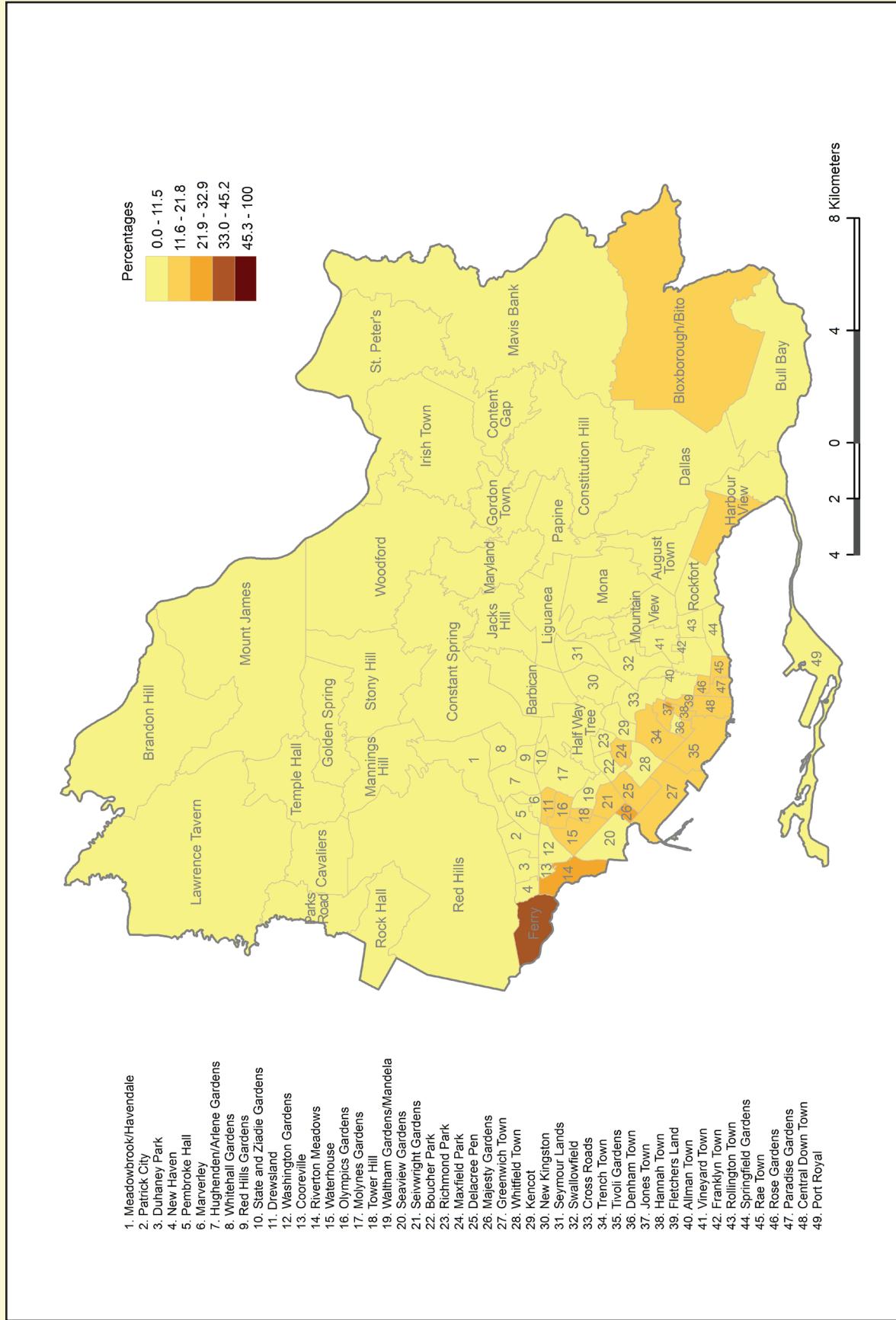
## Map 4: Incidence of Poverty by Community, Jamaica 2002–2012

Per cent of Population Living in Poverty by Community

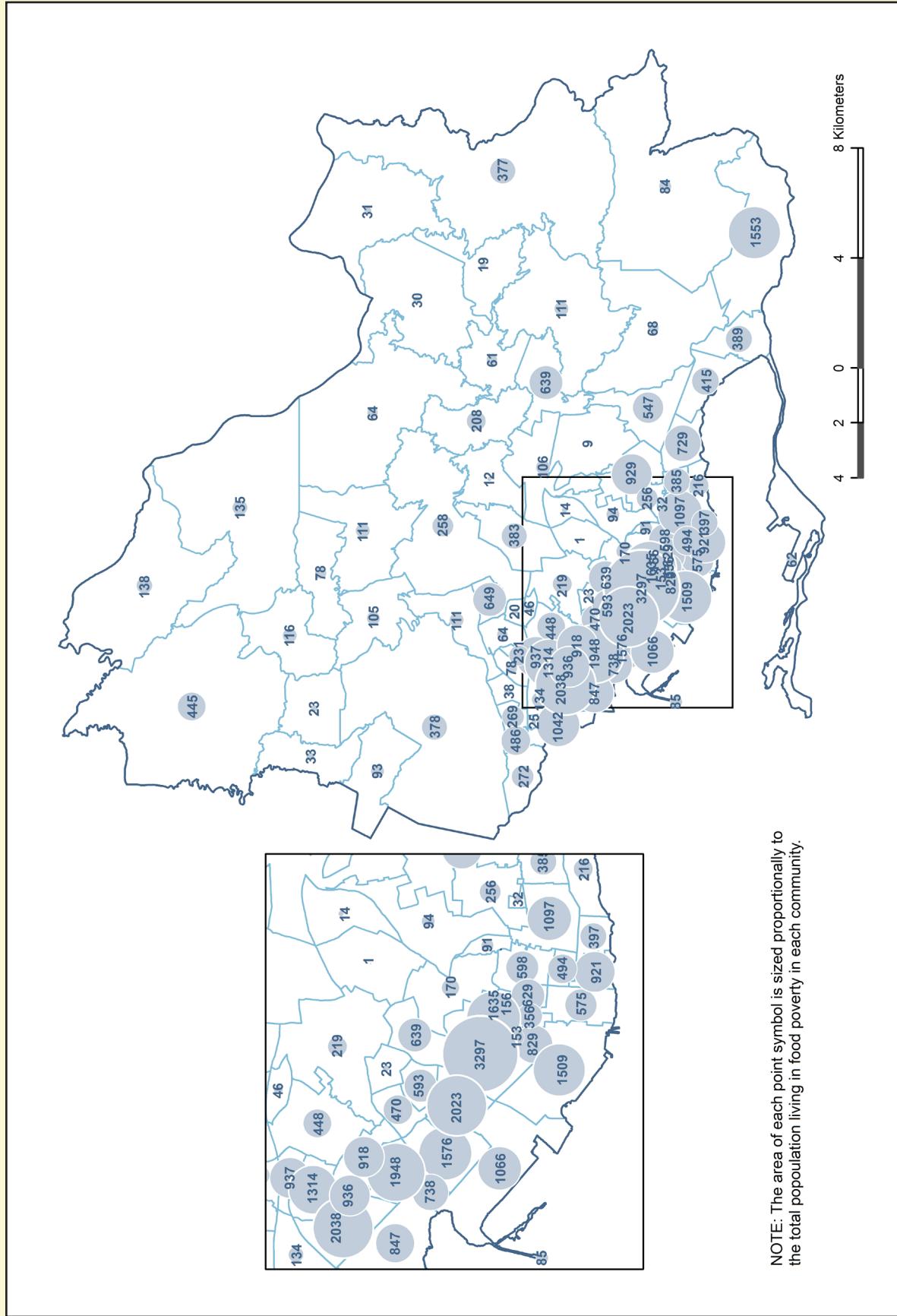


## Map 5: Incidence of Food Poverty by Community, Kingston & St. Andrew (2012)

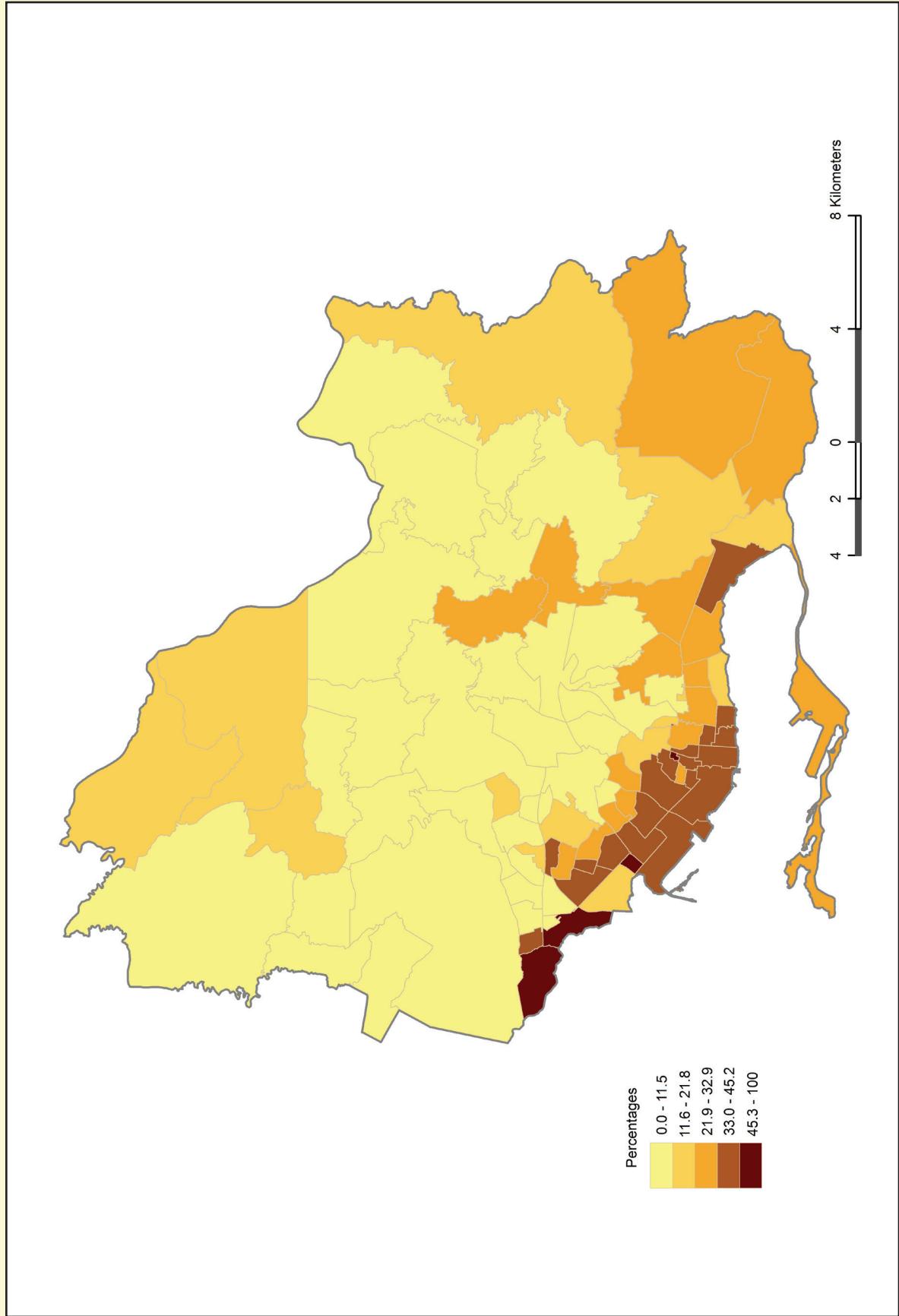
Per cent of Population Living in Food Poverty by Community



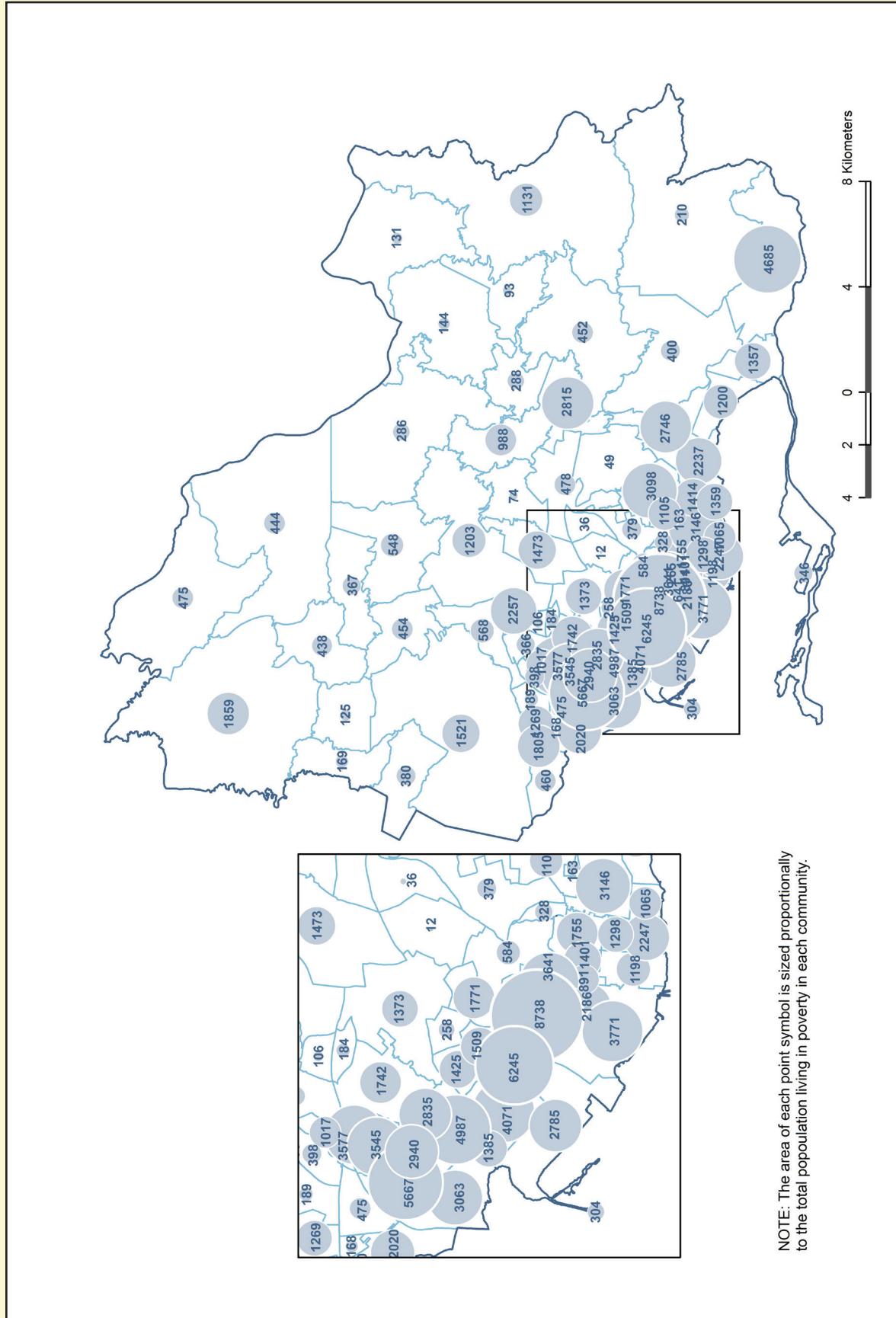
## Map 6: Incidence of Food Poverty by Community, Kingston & St. Andrew (2012) Total Population Living in Food Poverty by Community



**Map 7: Incidence of Poverty by Community, Kingston & St. Andrew (2012)**  
Per cent of Population Living in Poverty by Community

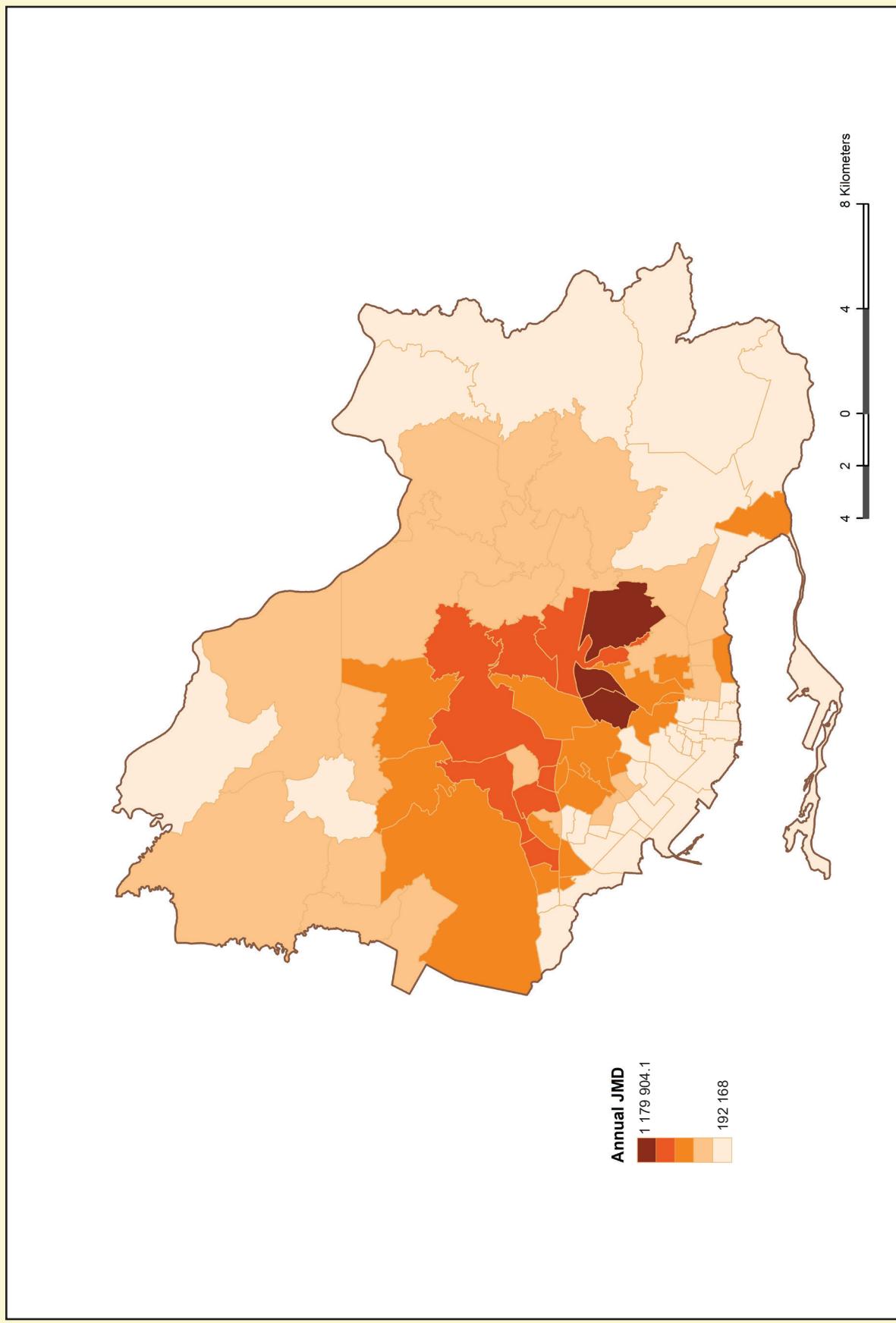


**Map 8: Incidence of Poverty by Community, Kingston & St. Andrew (2012)**  
 Total Population Living in Poverty by Community

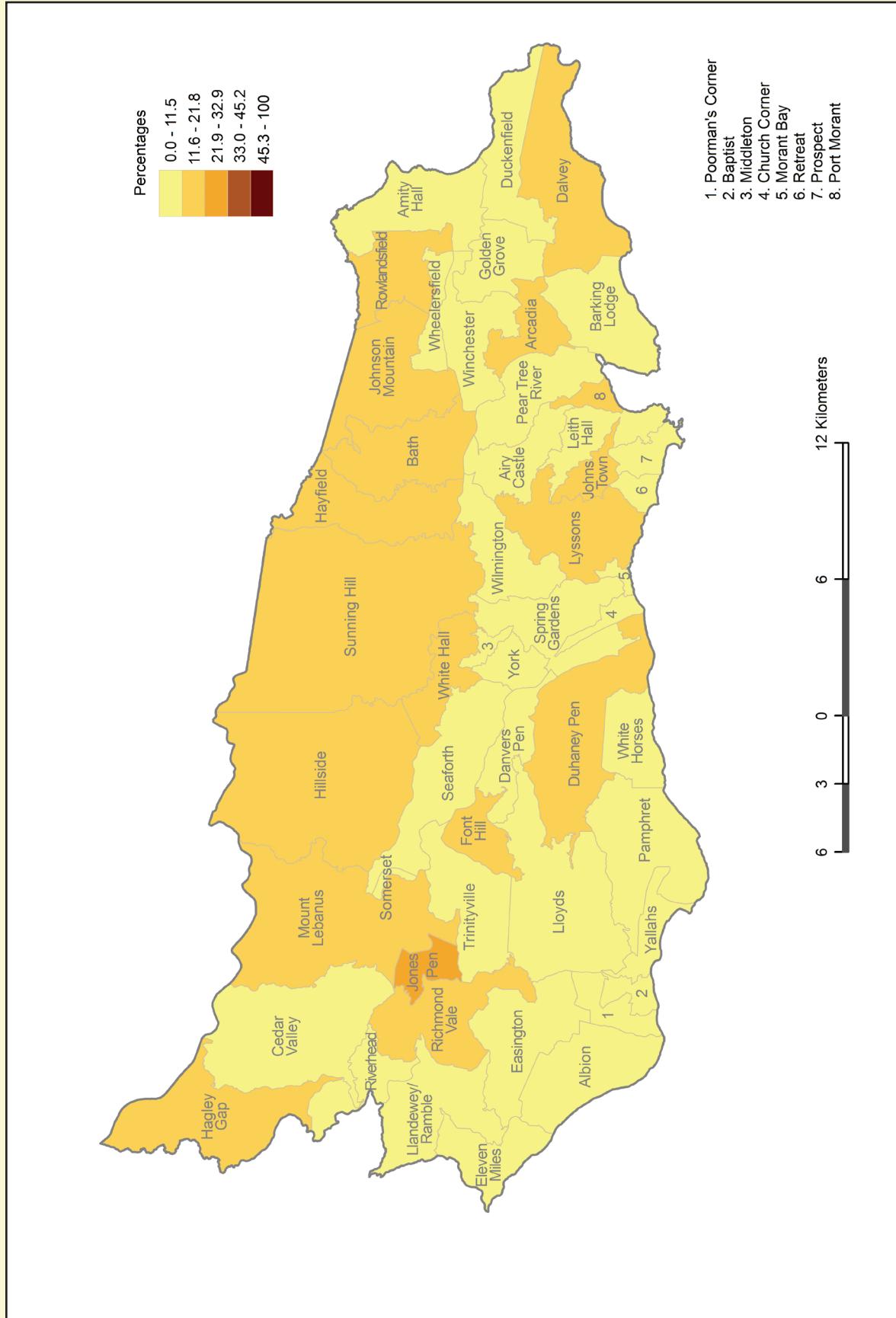


NOTE: The area of each point symbol is sized proportionally to the total population living in poverty in each community.

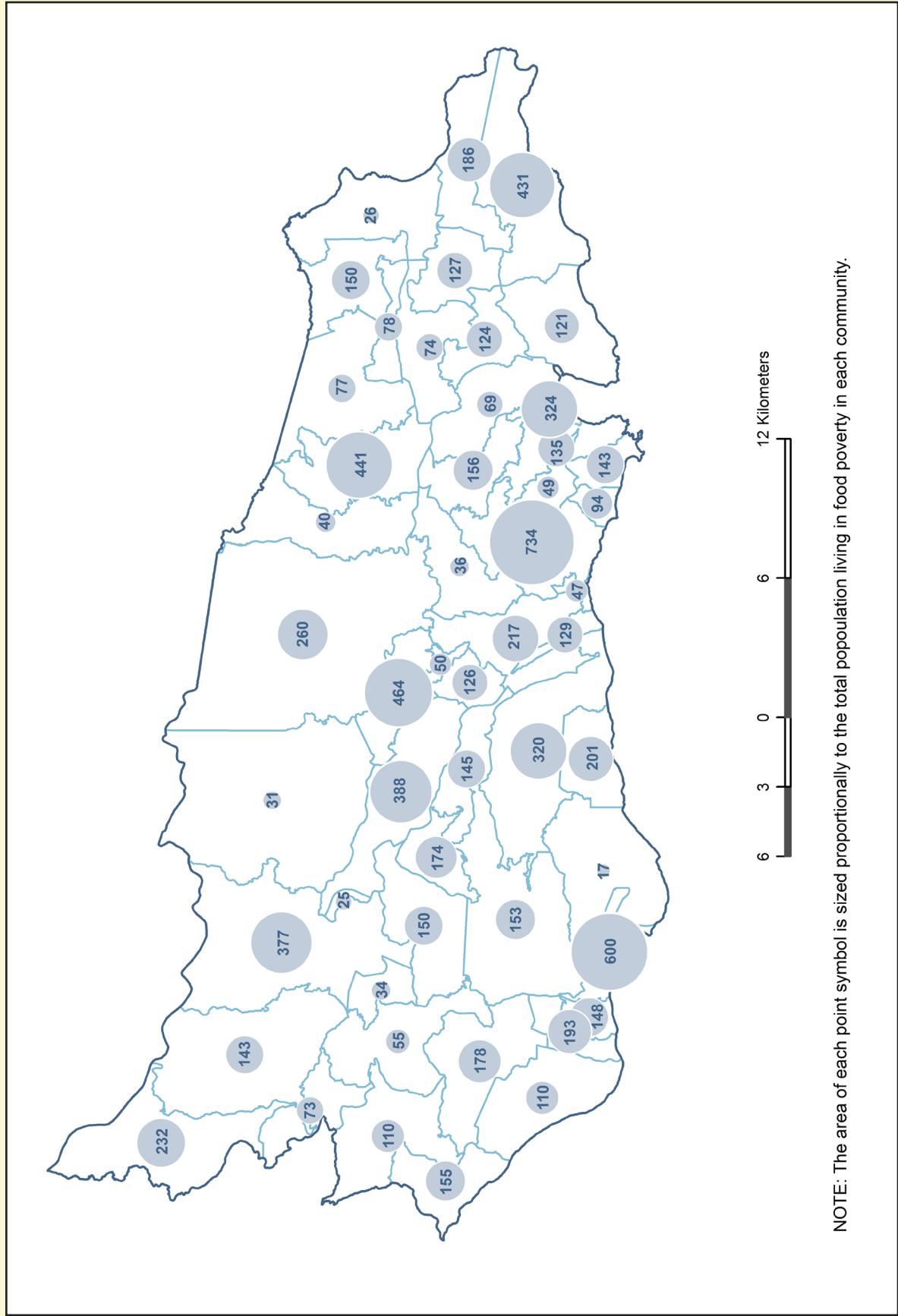
**Map 9: Mean Household Consumption per Adult Equivalent by Community, Kingston & St. Andrew (2012)**  
Average Annual Jamaican Dollars by Community



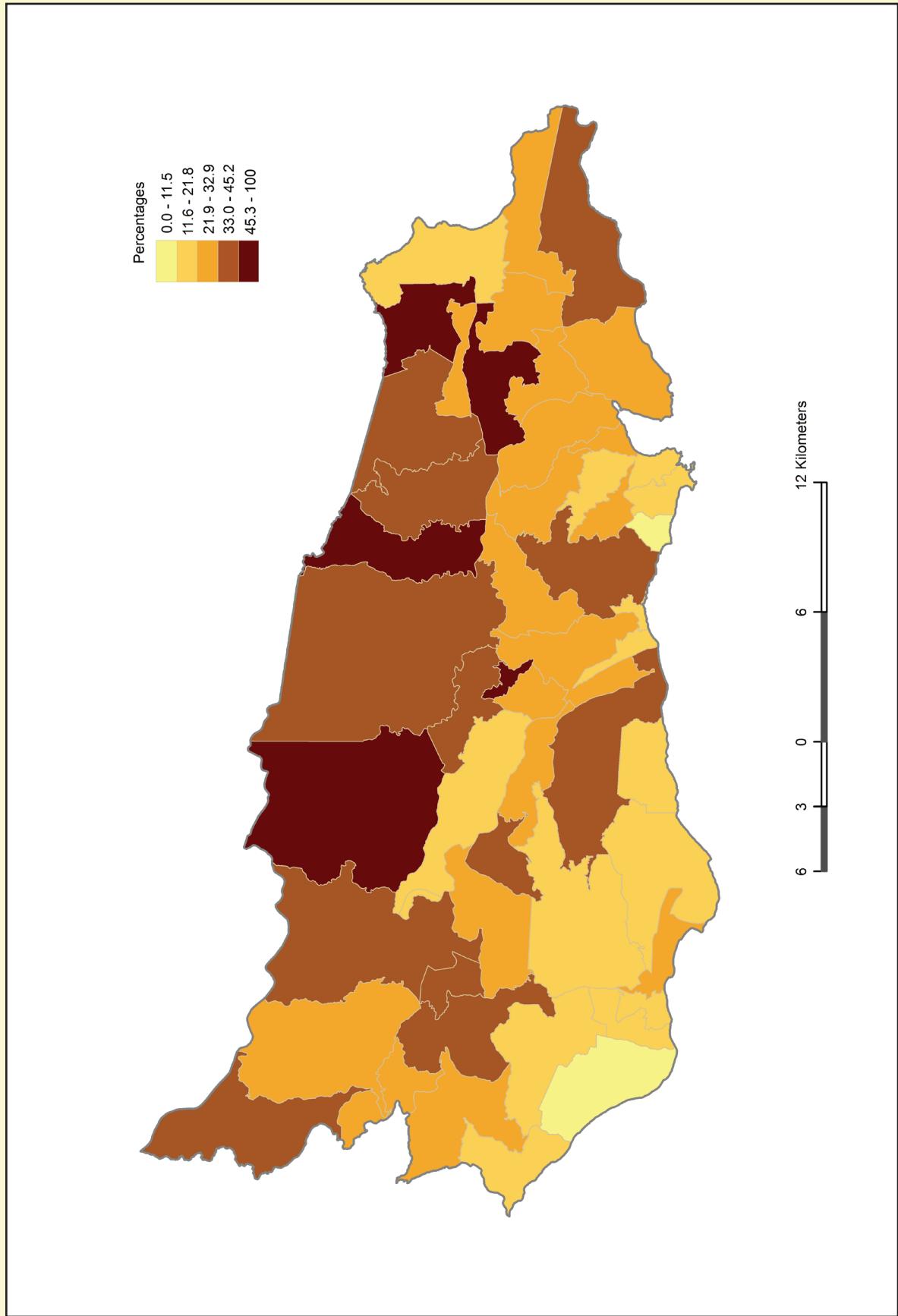
**Map 10: Incidence of Food Poverty by Community, St. Thomas (2012)**  
 Per cent of Population Living in Food Poverty by Community



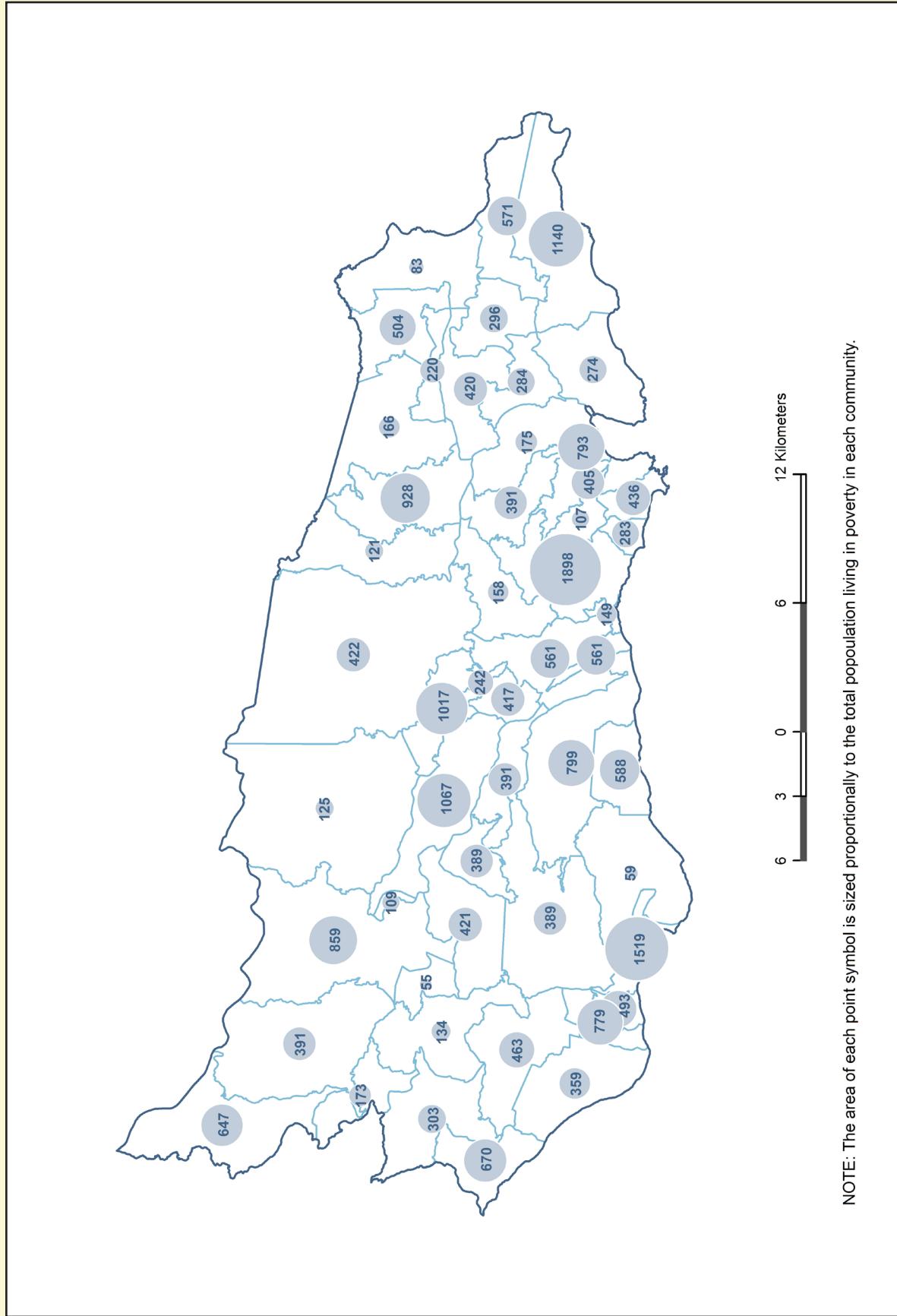
**Map 1: Incidence of Food Poverty by Community, St. Thomas (2012)**  
Total Population Living in Food Poverty by Community



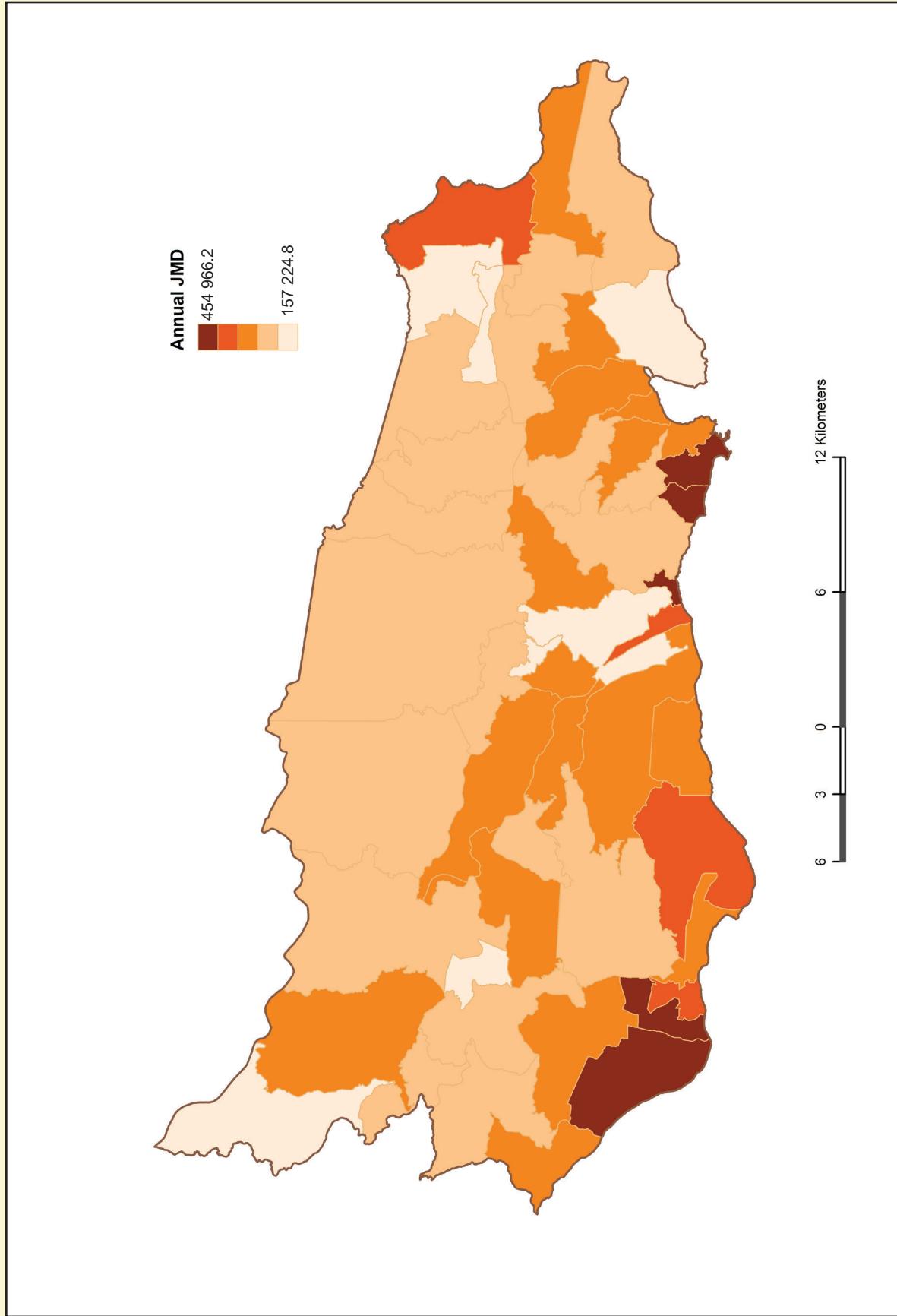
**Map 12: Incidence of Poverty by Community, St. Thomas (2012)**  
Per cent of Population Living in Poverty by Community



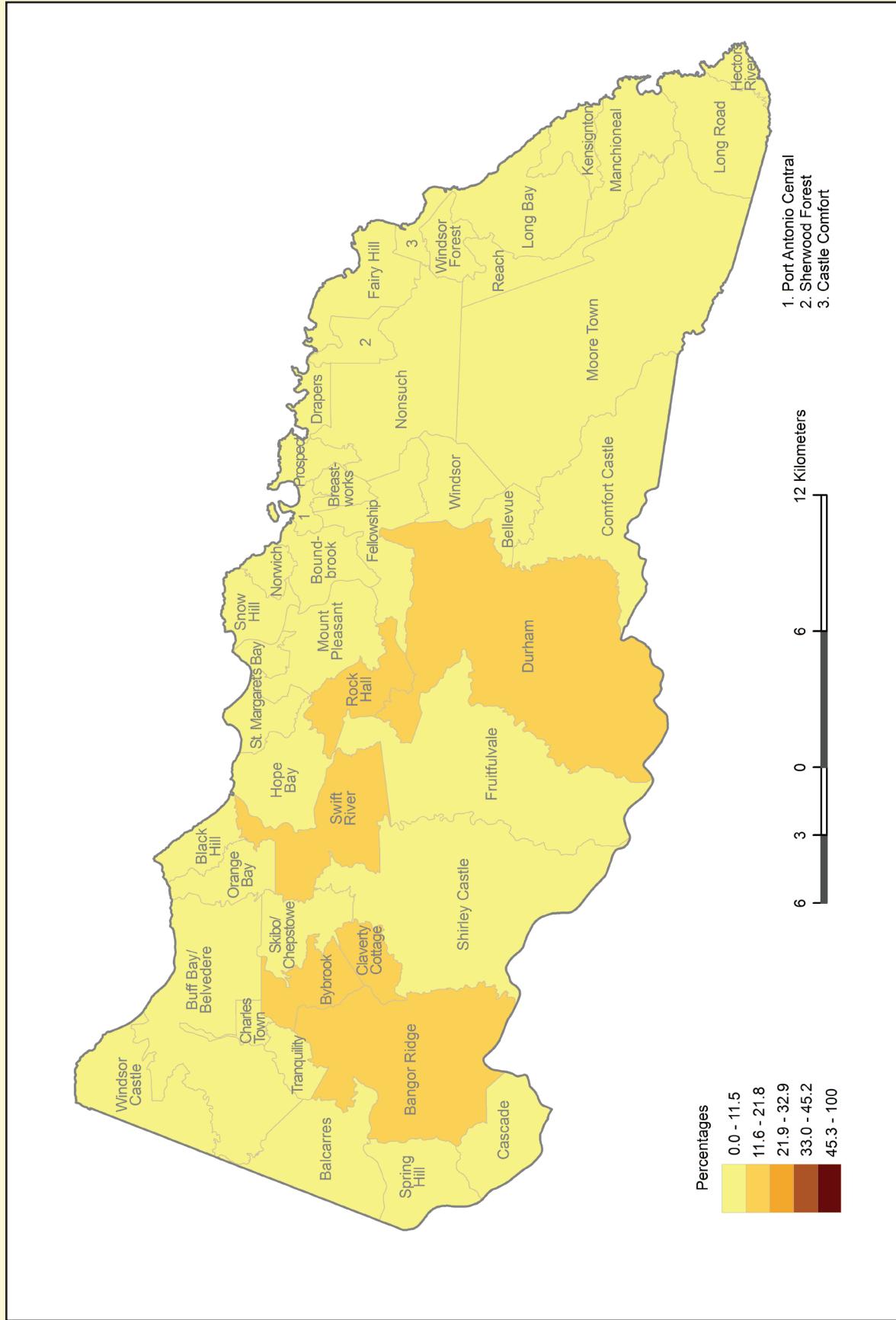
**Map 13: Incidence of Poverty by Community, St. Thomas (2012)**  
Total Population Living in Poverty by Community



**Map 14: Mean Household Consumption per Adult Equivalent by Community, St. Thomas (2012)**  
Average Annual Jamaican Dollars by Community

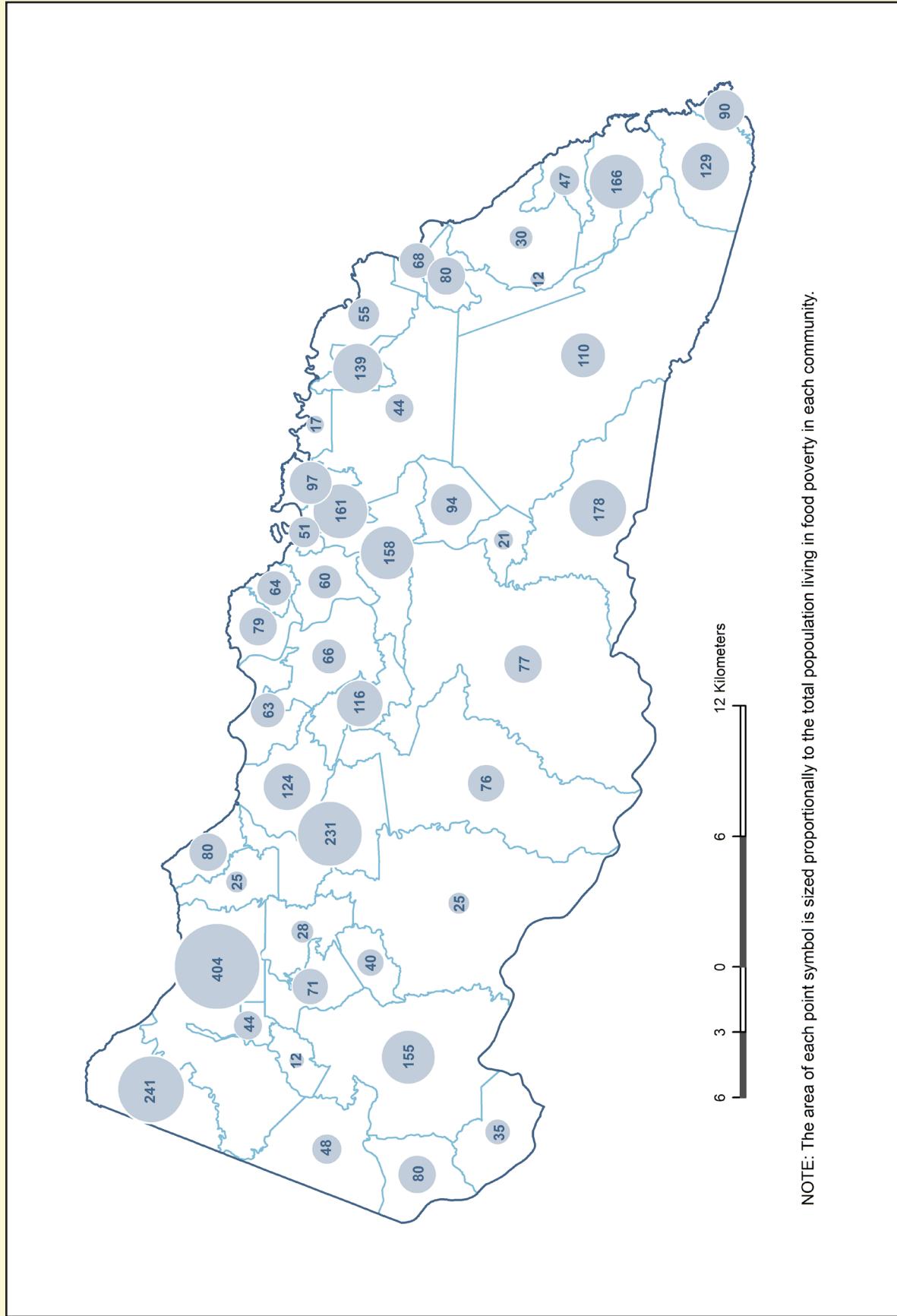


**Map 15: Incidence of Food Poverty by Community, Portland (2012)**  
 Per cent of Population Living in Food Poverty by Community

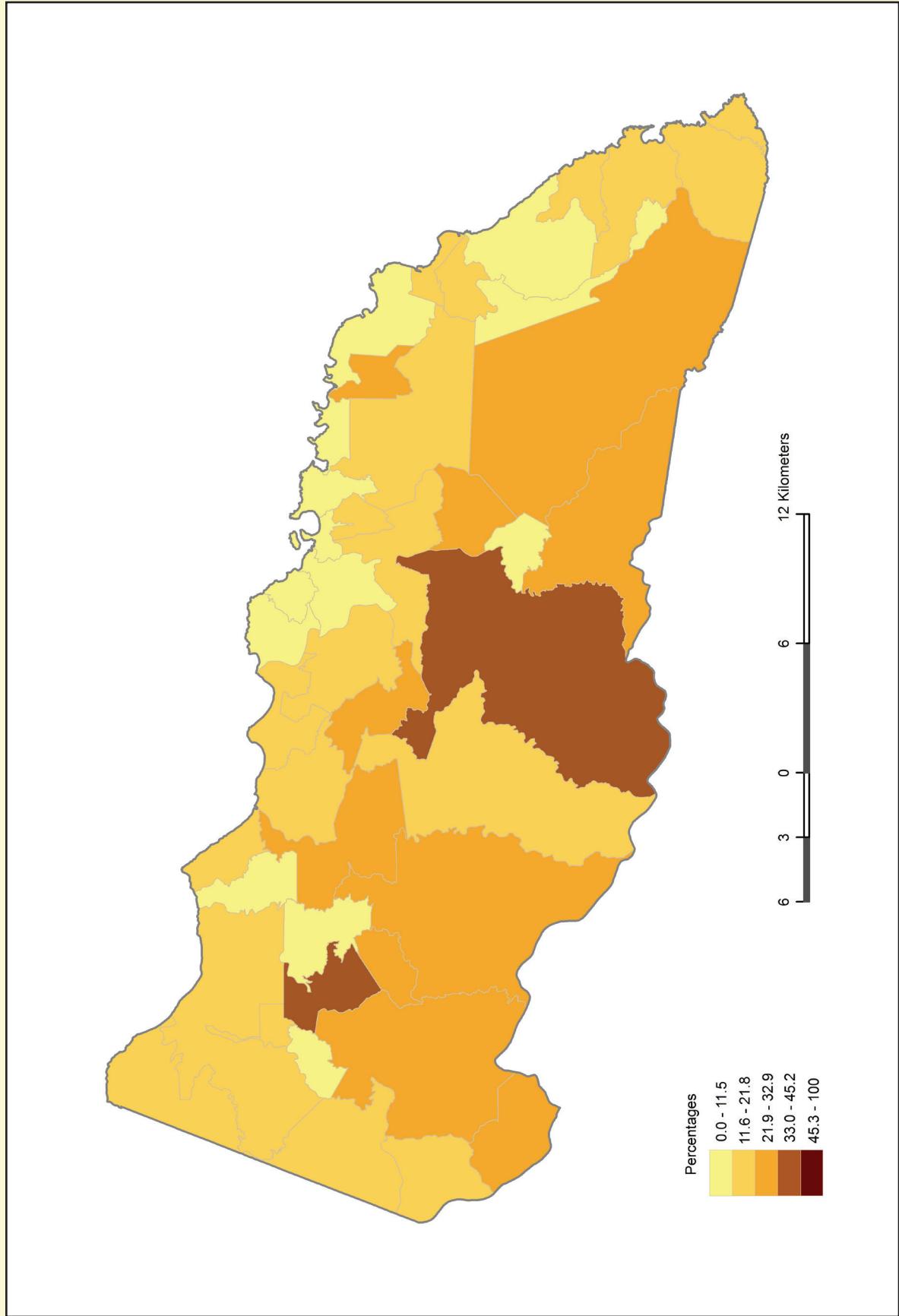


## Map 16: Incidence of Food Poverty by Community, Portland (2012)

Total Population Living in Food Poverty by Community

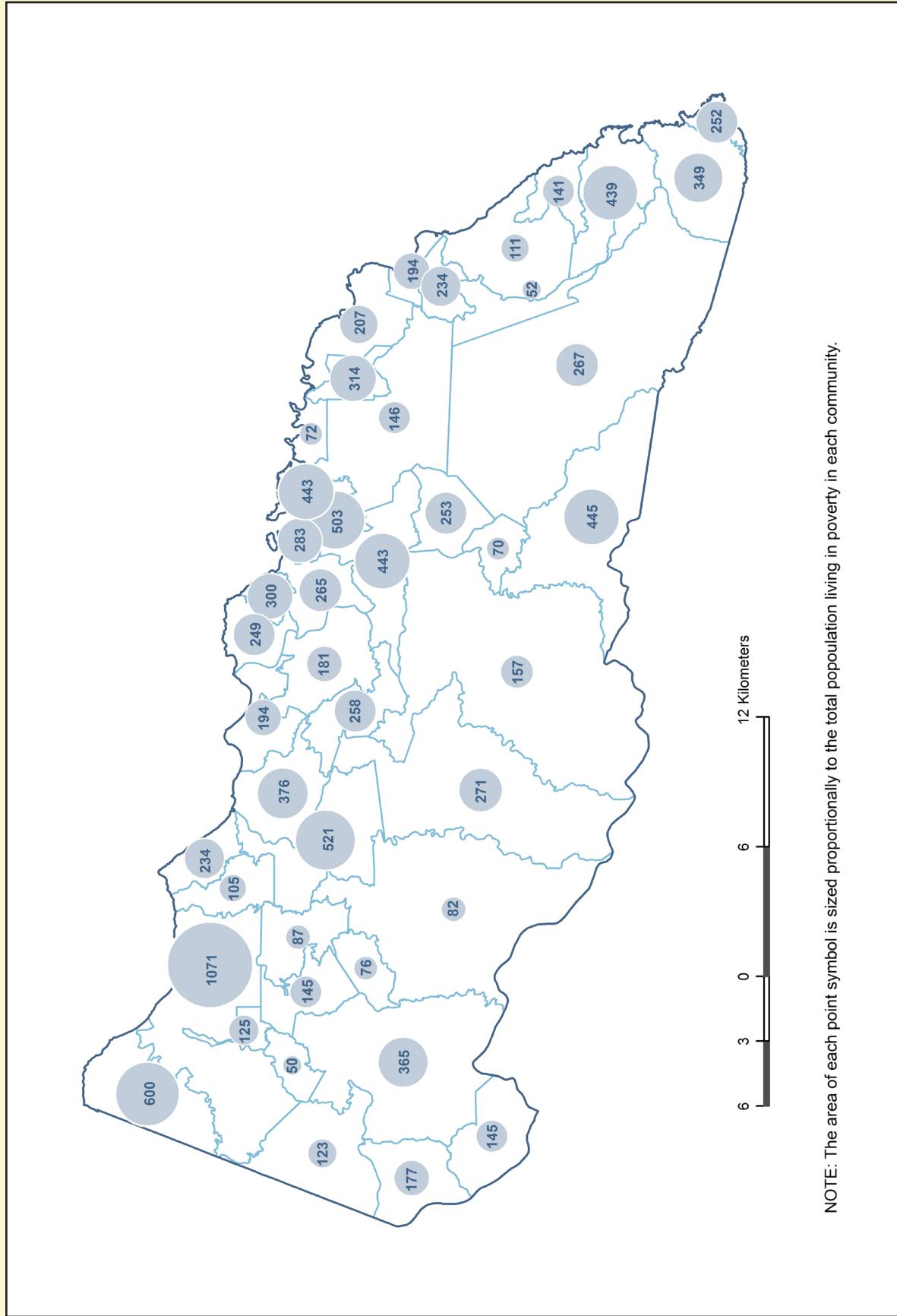


**Map 17: Incidence of Poverty by Community, Portland (2012)**  
Per cent of Population Living in Poverty by Community

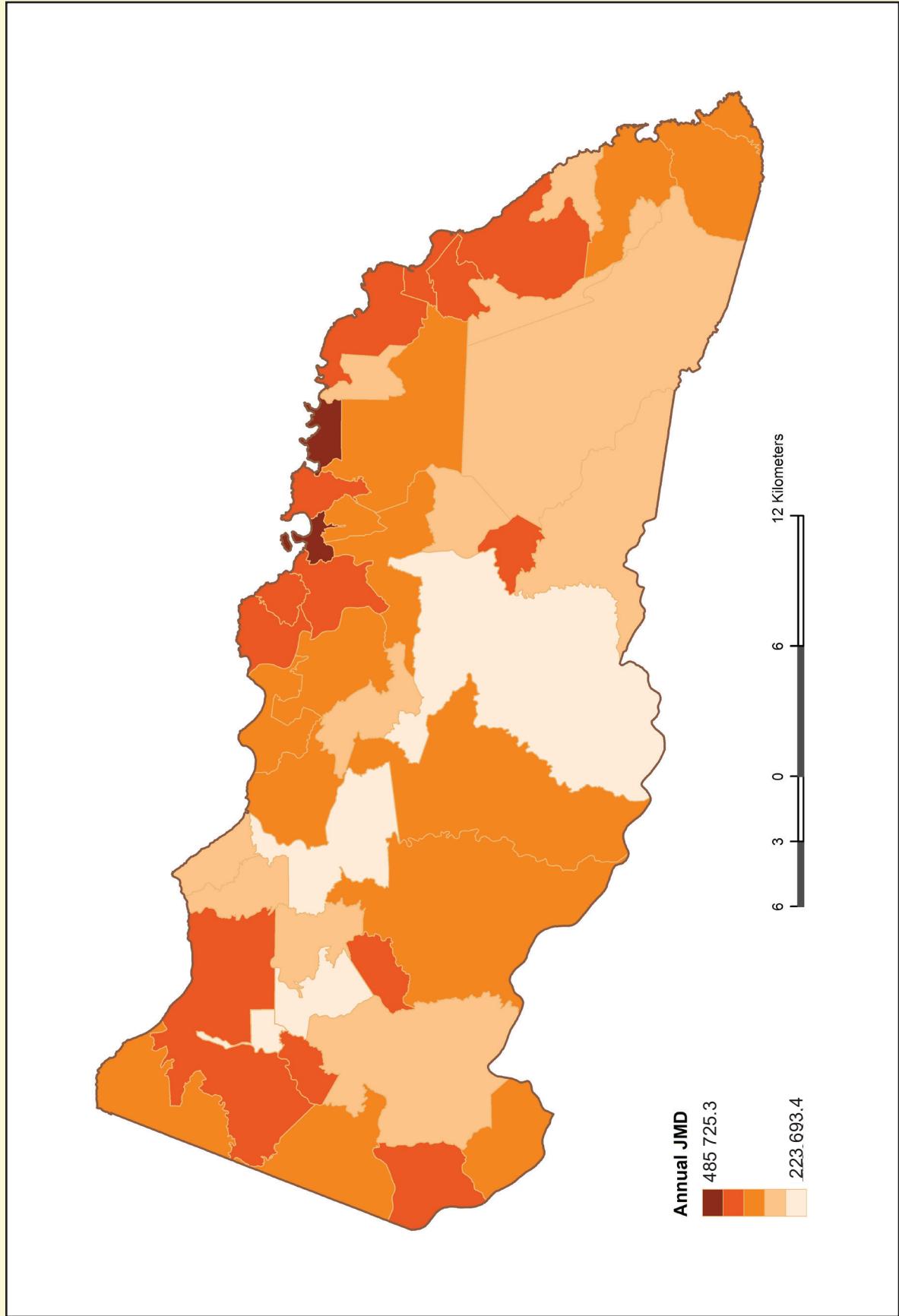


## Map 18: Incidence of Poverty by Community, Portland (2012)

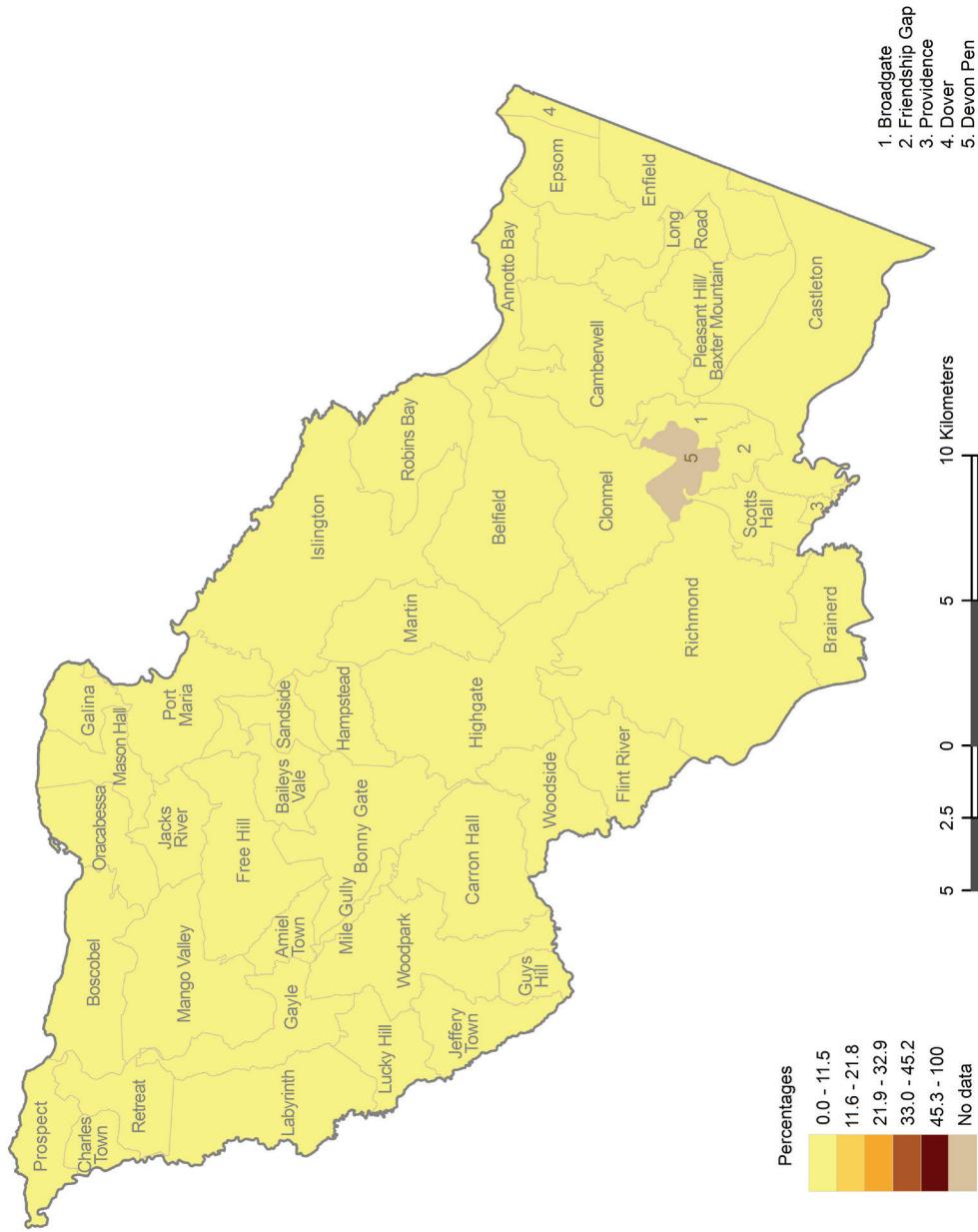
### Total Population Living in Poverty by Community



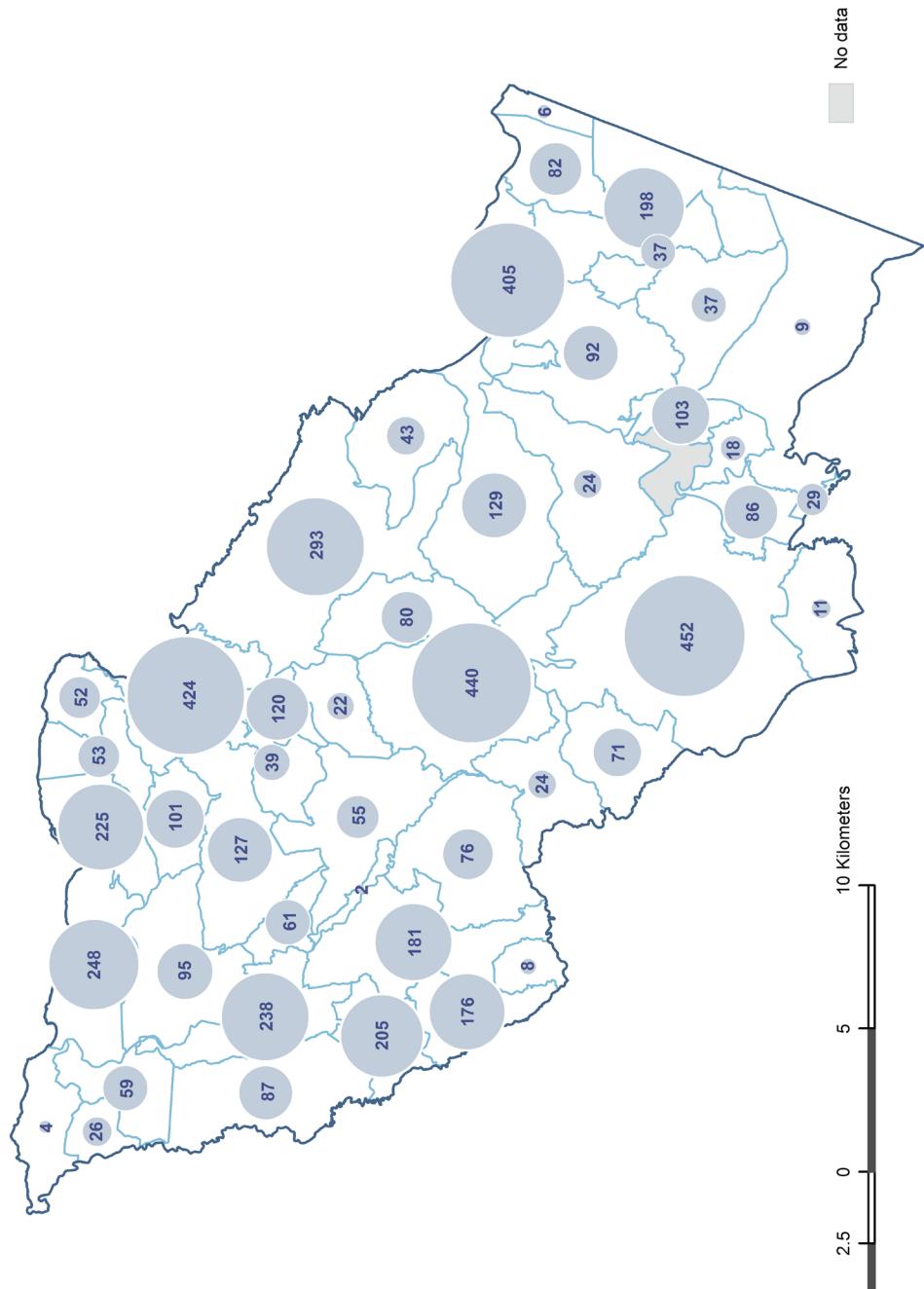
**Map 19: Mean Household Consumption per Adult Equivalent by Community, Portland (2012)**  
Average Annual Jamaican Dollars by Community



**Map 20: Incidence of Food Poverty by Community, St. Mary (2012)**  
 Per cent of Population Living in Food Poverty by Community

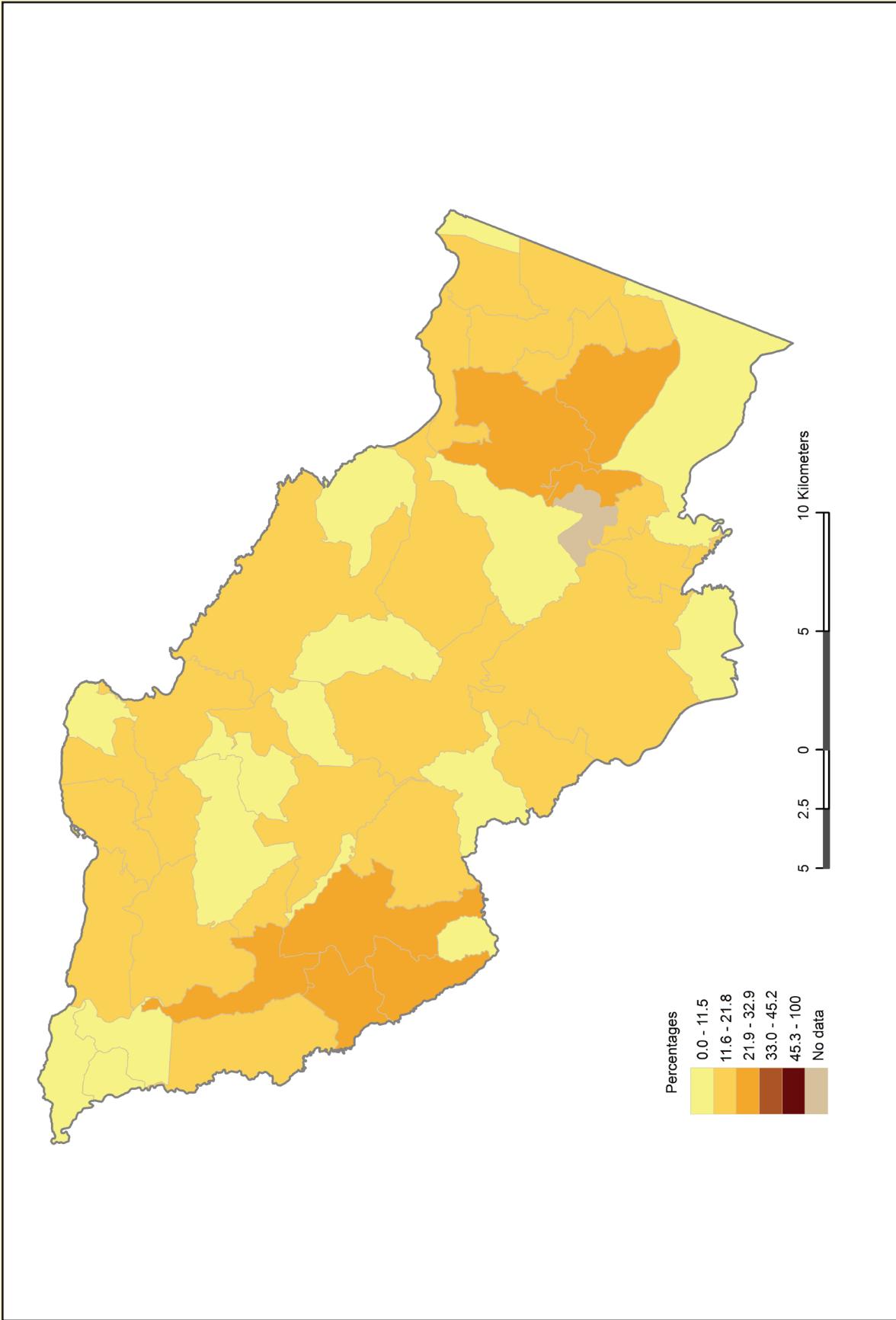


**Map 21: Incidence of Food Poverty by Community, St. Mary (2012)**  
Total Population Living in Food Poverty by Community

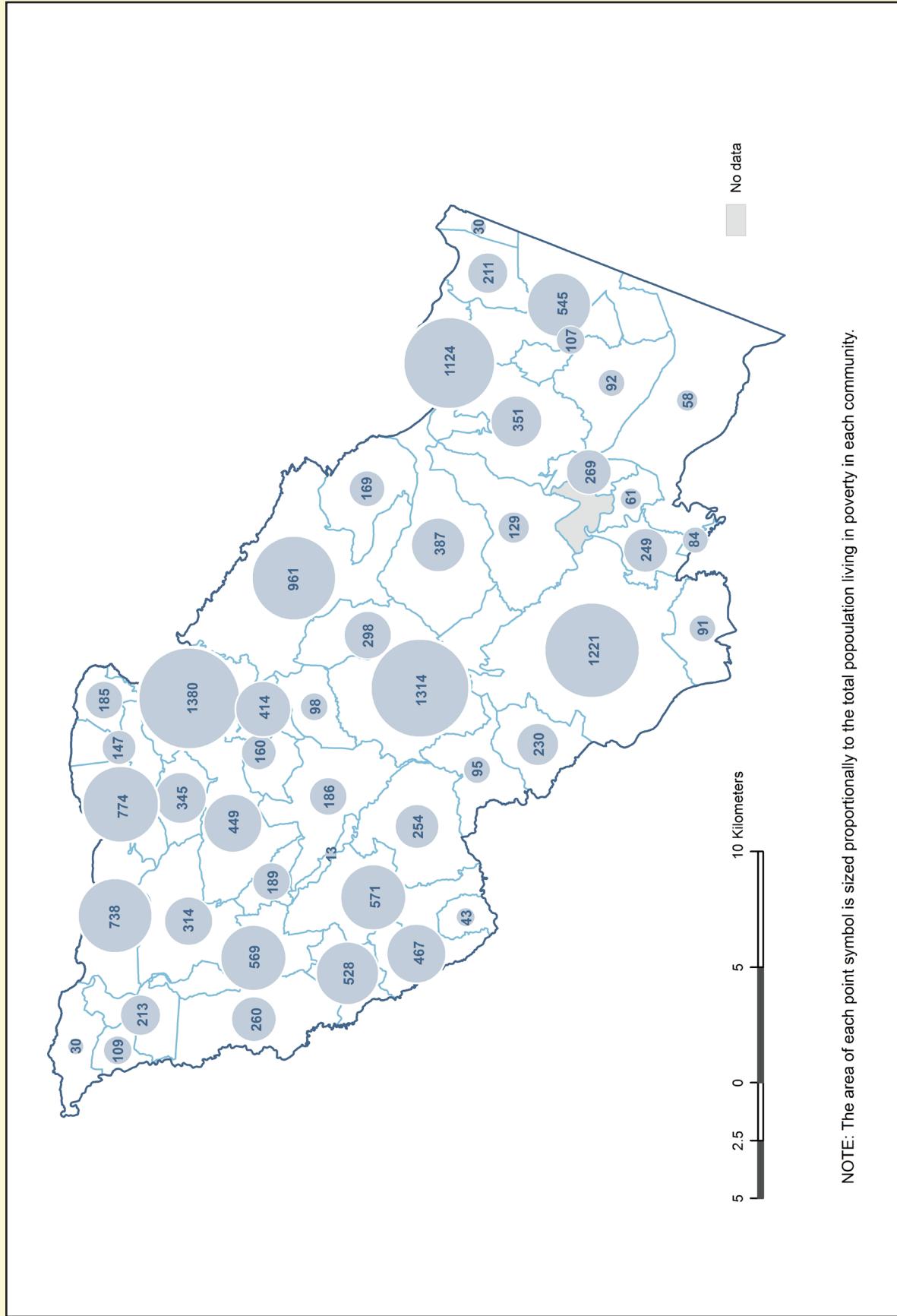


NOTE: The area of each point symbol is sized proportionally to the total population living in food poverty in each community.

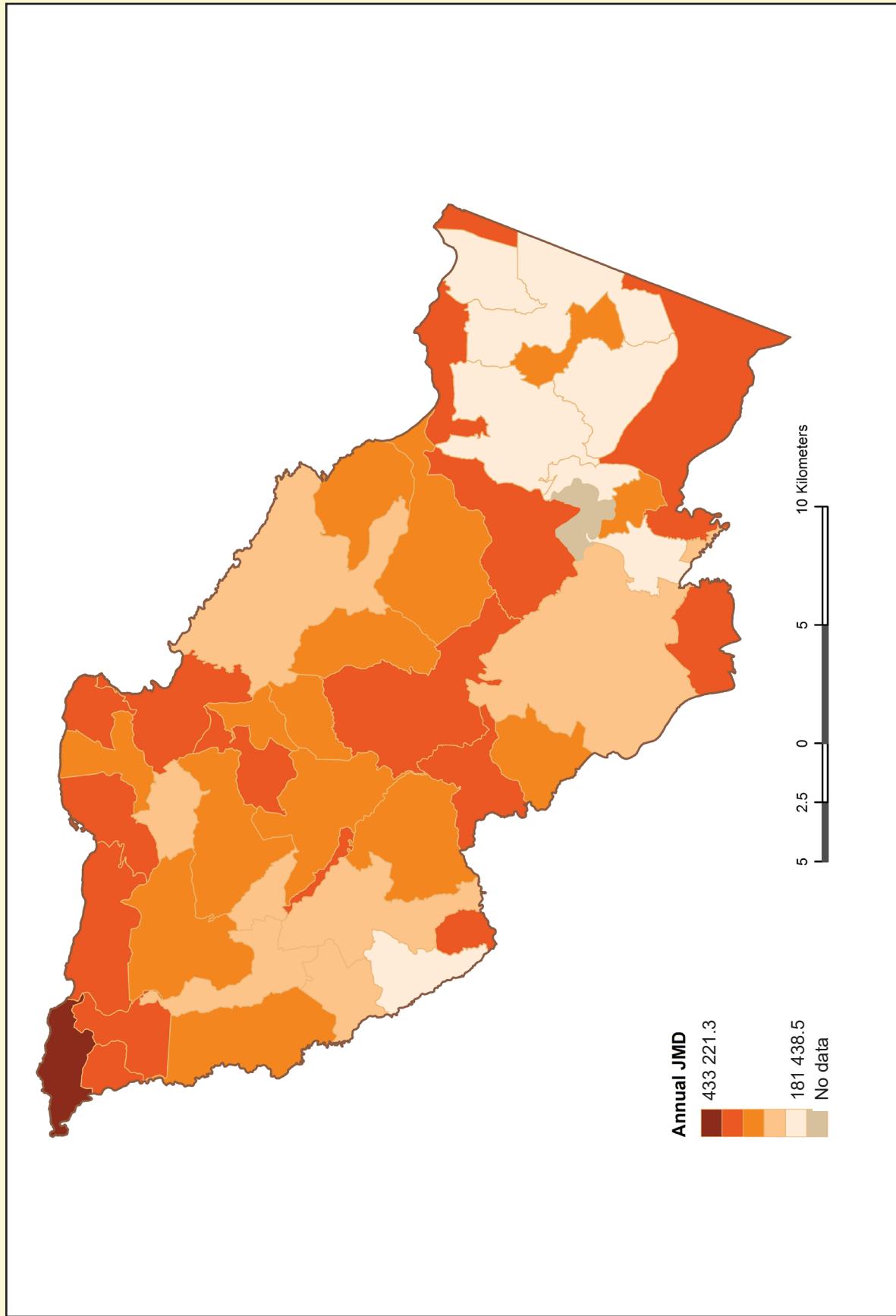
**Map 22: Incidence of Poverty by Community, St. Mary (2012)**  
Per cent of Population Living in Poverty by Community



**Map 23: Incidence of Poverty by Community, St. Mary (2012)**  
Total Population Living in Poverty by Community

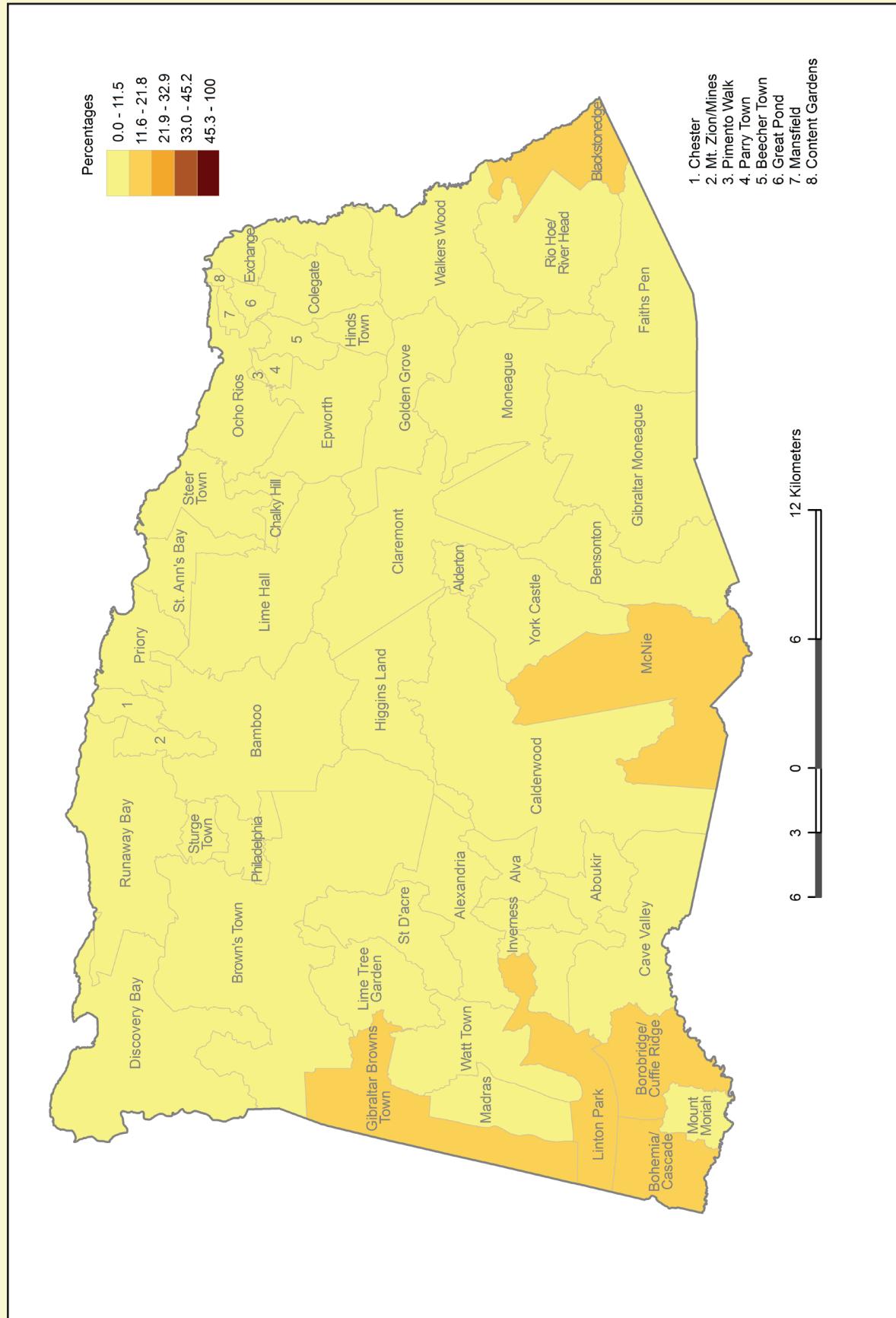


**Map 24: Mean Household Consumption per Adult Equivalent by Community, St. Mary (2012)**  
Average Annual Jamaican Dollars by Community

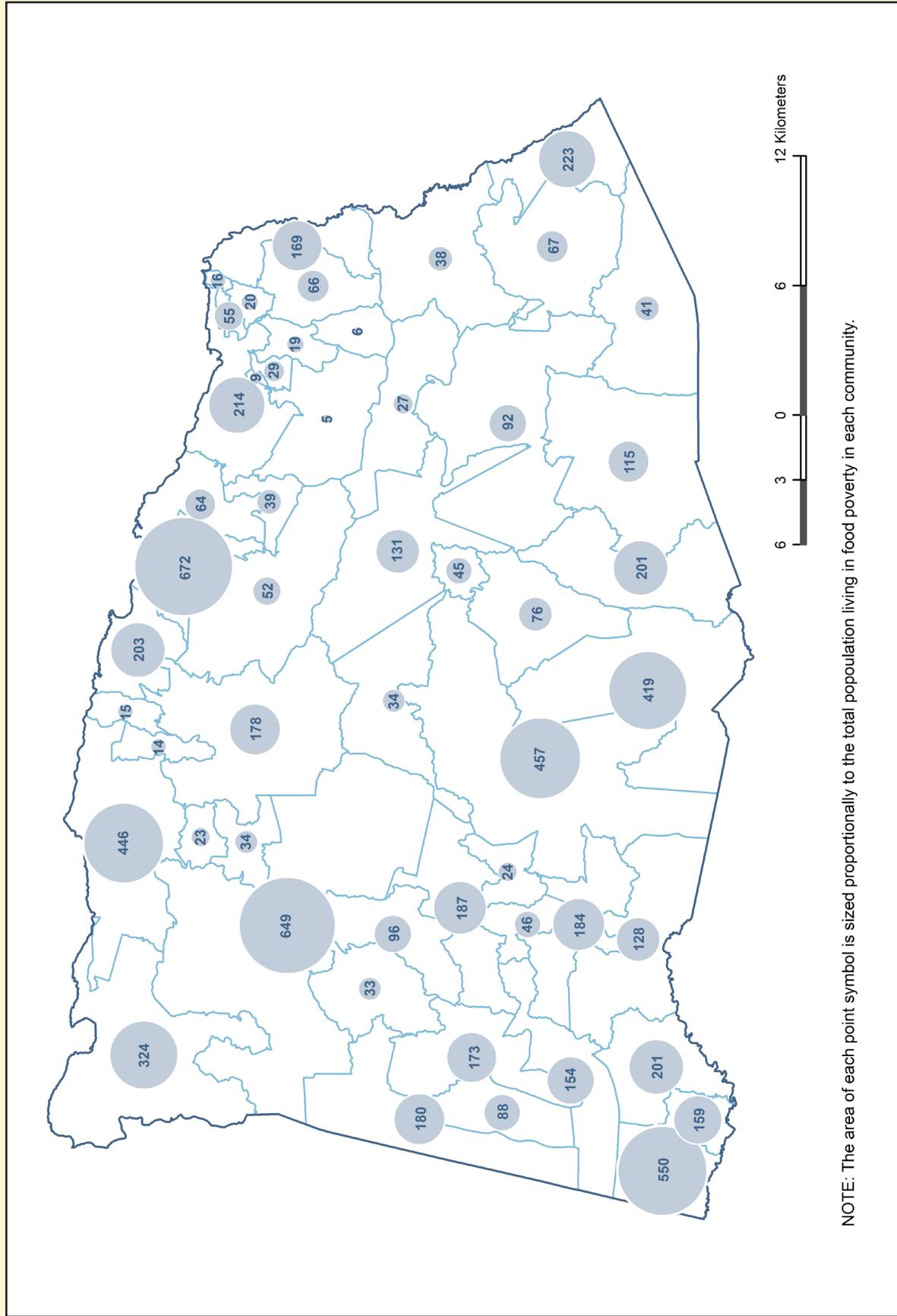


## Map 25: Incidence of Food Poverty by Community, St. Ann (2012)

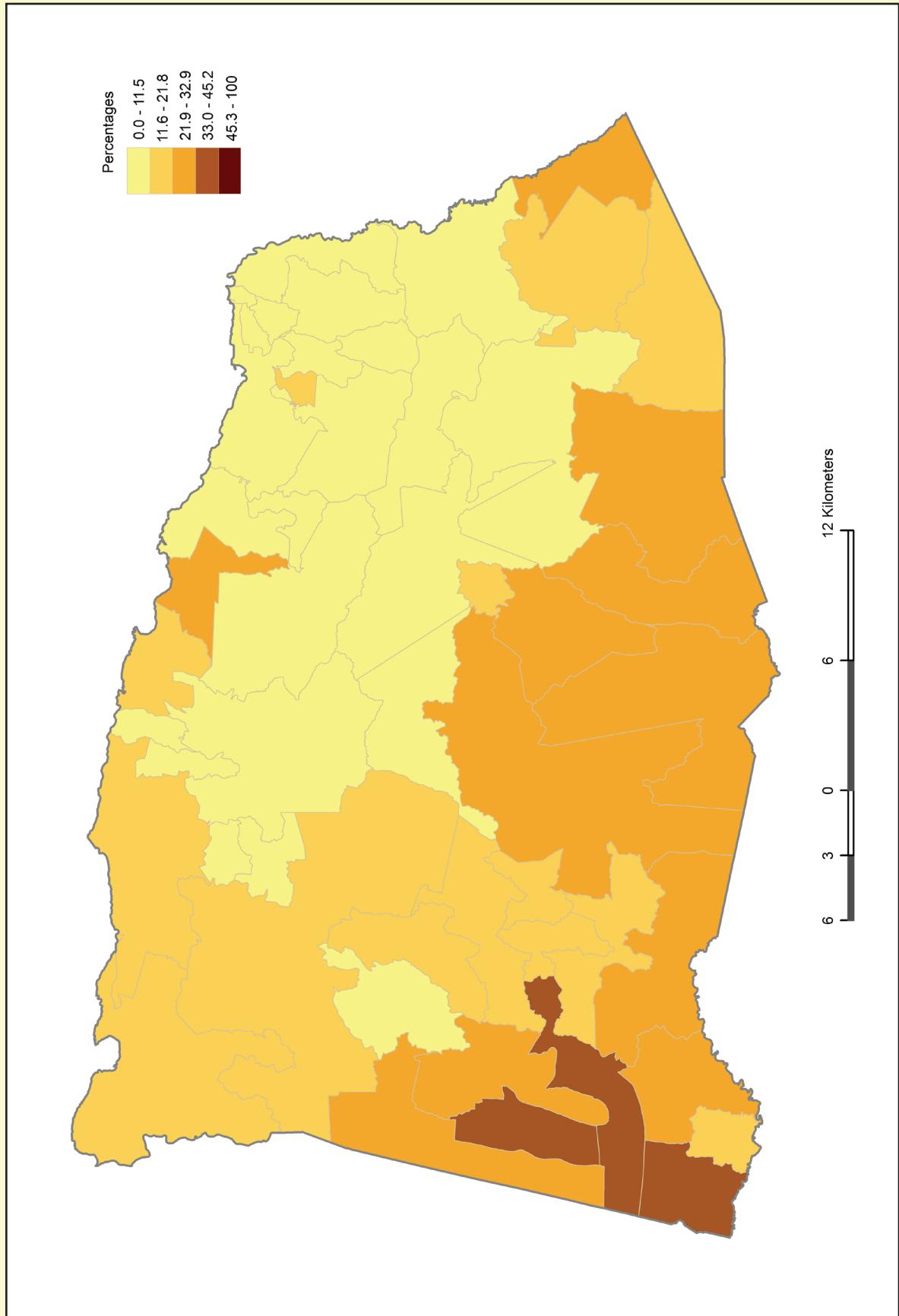
Per cent of Population Living in Food Poverty by Community



**Map 26: Incidence of Food Poverty by Community, St. Ann (2012)**  
Total Population Living in Food Poverty by Community

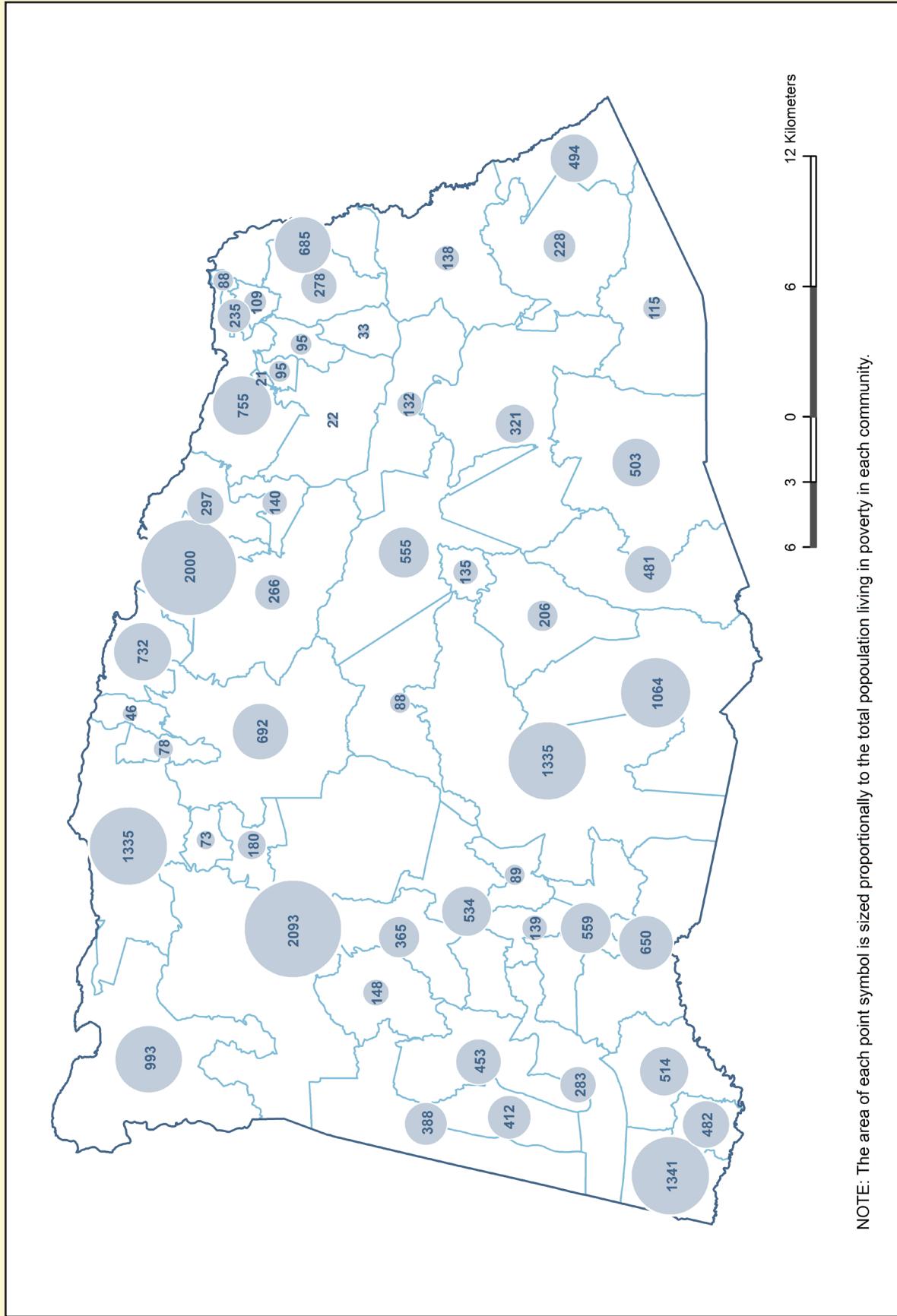


**Map 27: Incidence of Poverty by Community, St. Ann (2012)**  
Per cent of Population Living in Poverty by Community

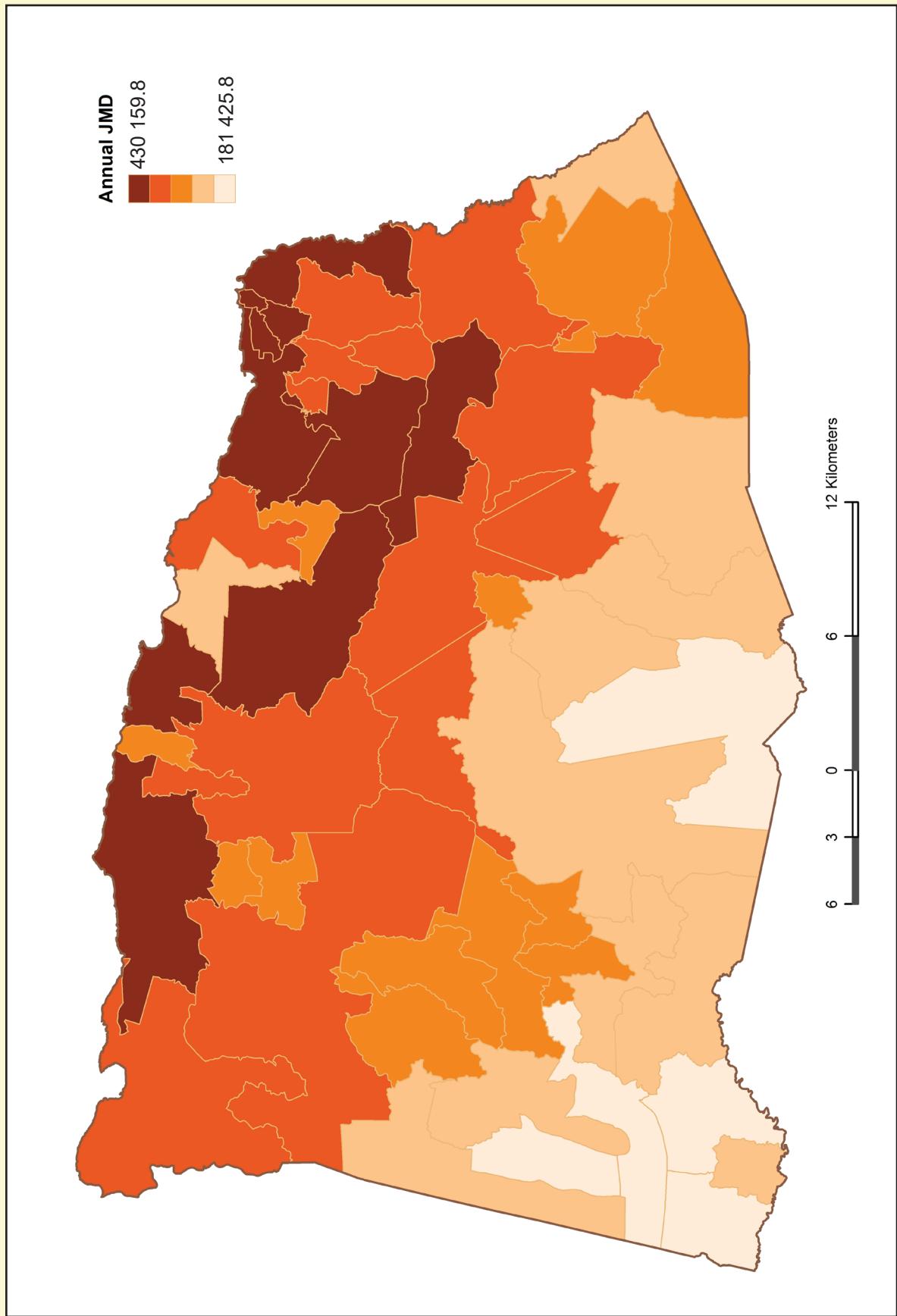


## Map 28: Incidence of Poverty by Community, St. Ann (2012)

### Total Population Living in Poverty by Community

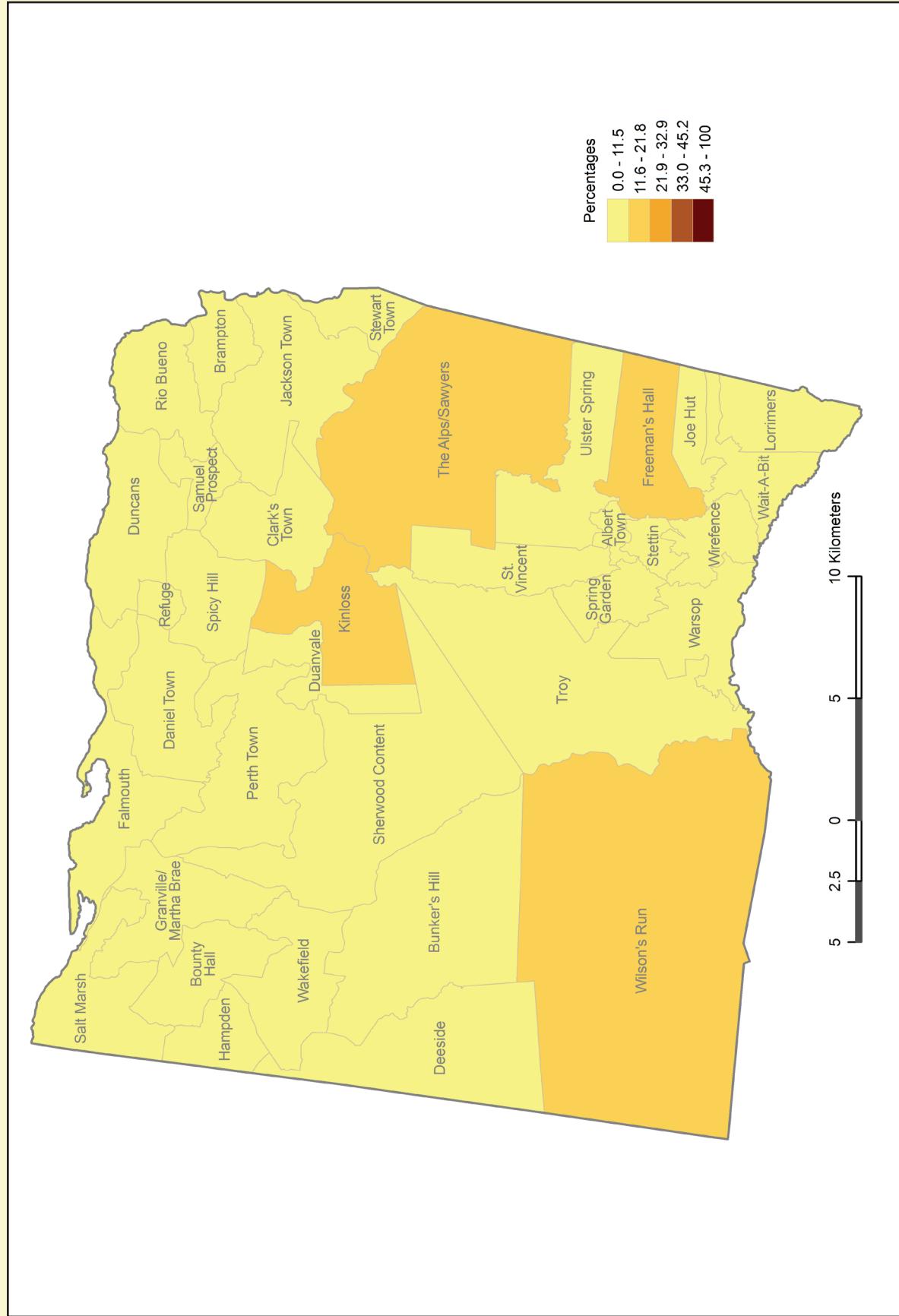


**Map 29: Mean Household Consumption per Adult Equivalent by Community, St. Ann (2012)**  
Average Annual Jamaican Dollars by Community



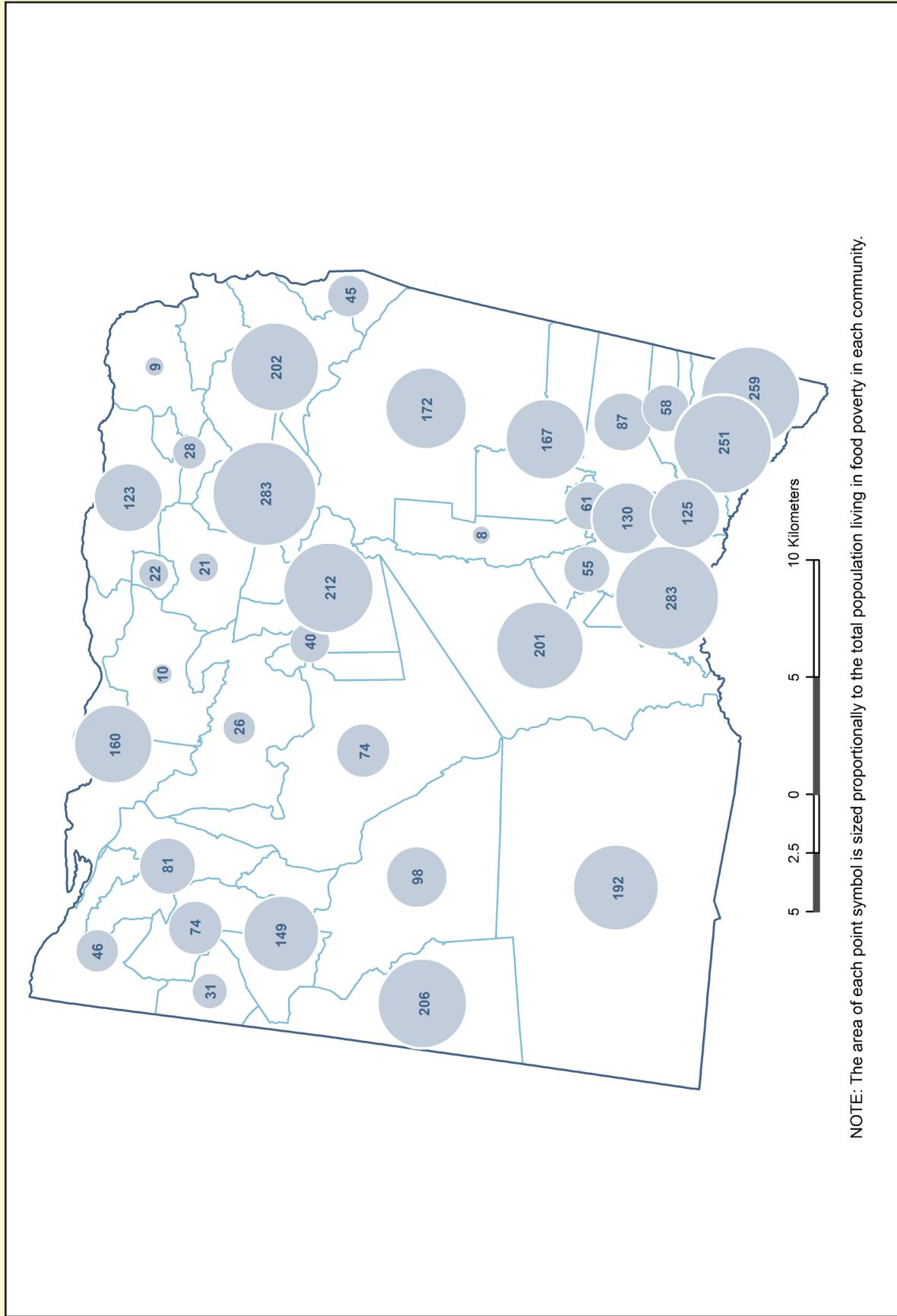
### **Map 30: Incidence of Food Poverty by Community, Trelawny (2012)**

Per cent of Population Living in Food Poverty by Community

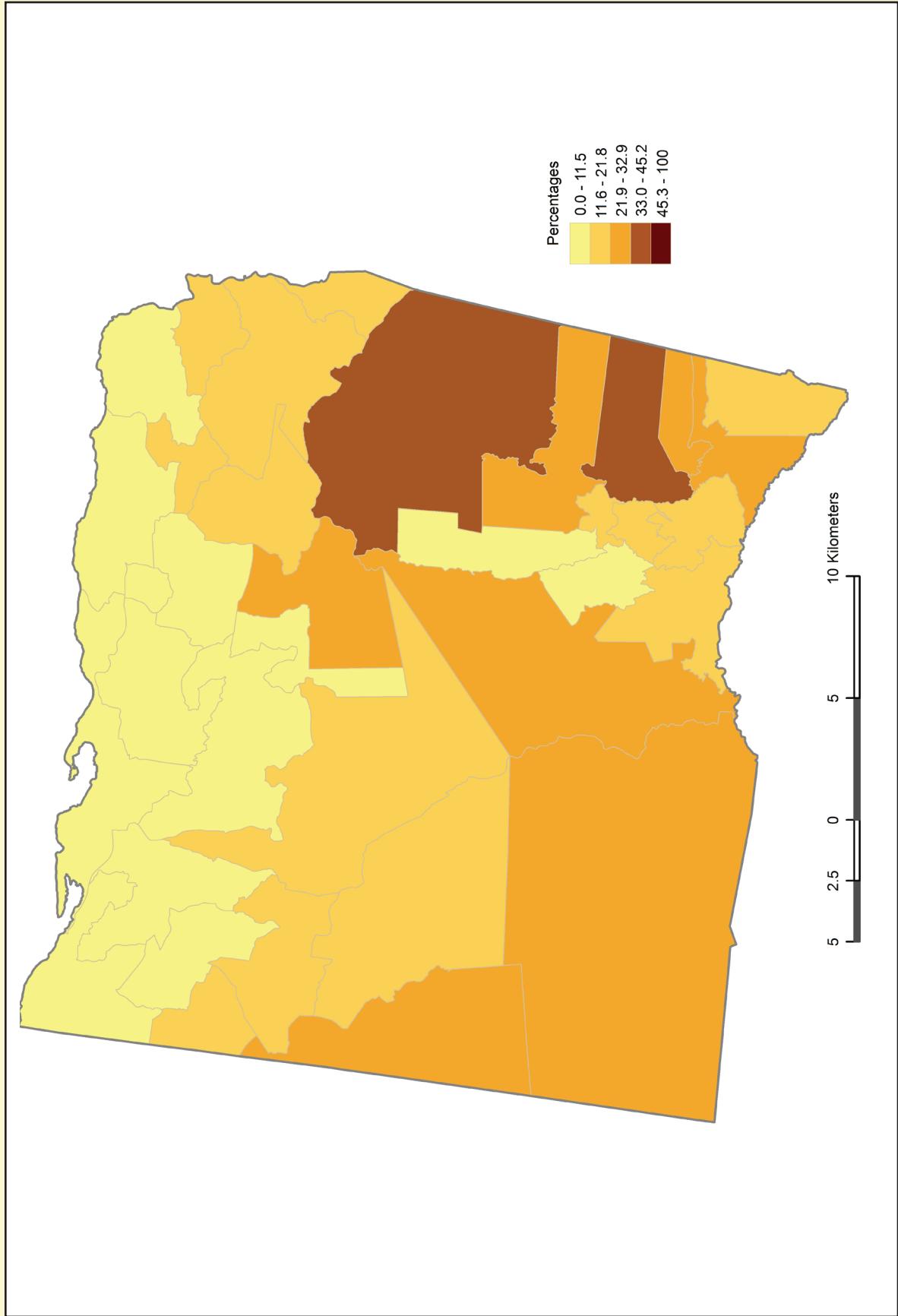


### **Map 31: Incidence of Food Poverty by Community, Trelawny (2012)**

Total Population Living in Food Poverty by Community

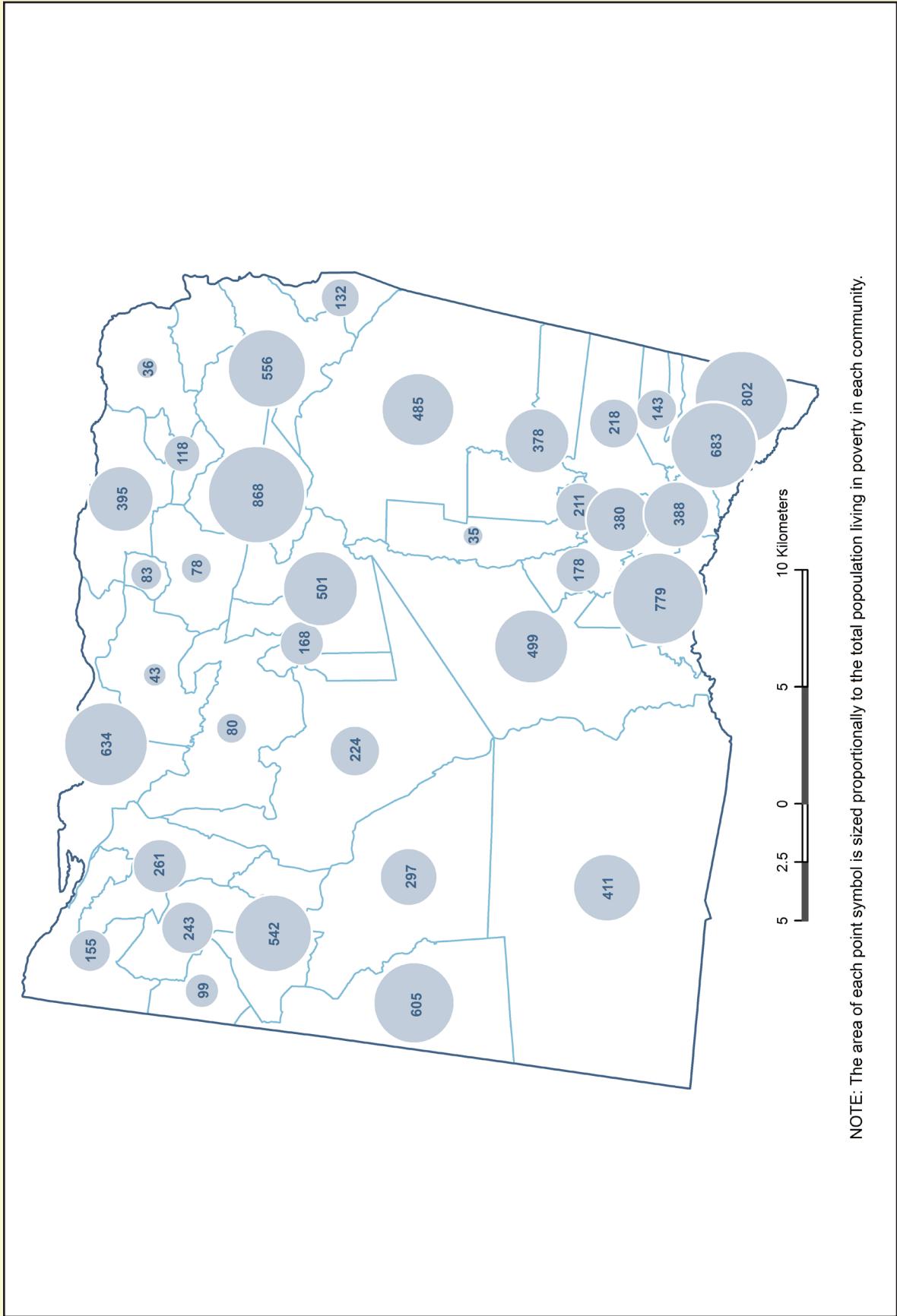


**Map 32: Incidence of Poverty by Community, Trelawny (2012)**  
Per cent Population Living in Poverty by Community

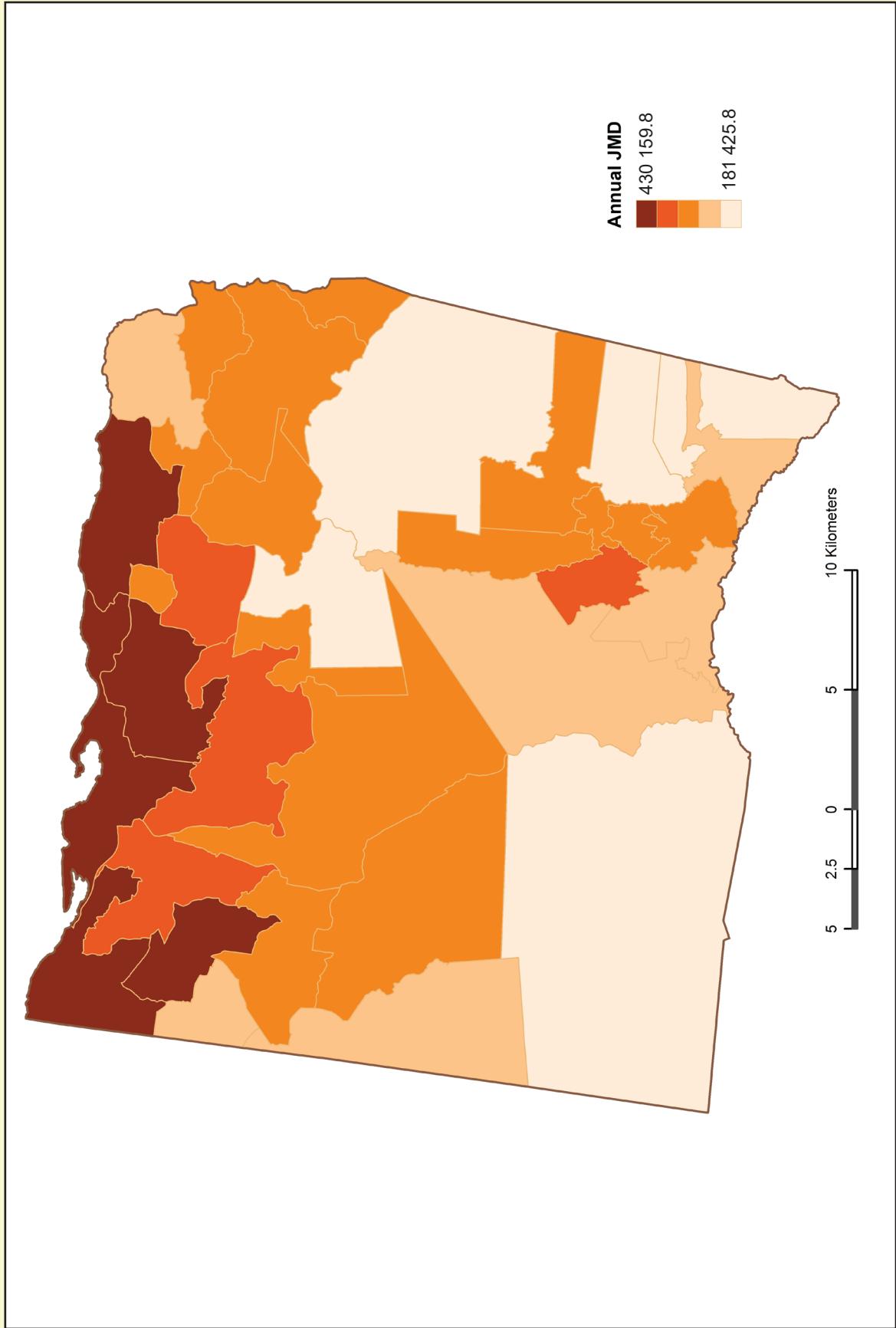


### Map 33: Incidence of Poverty by Community, Trelawny (2012)

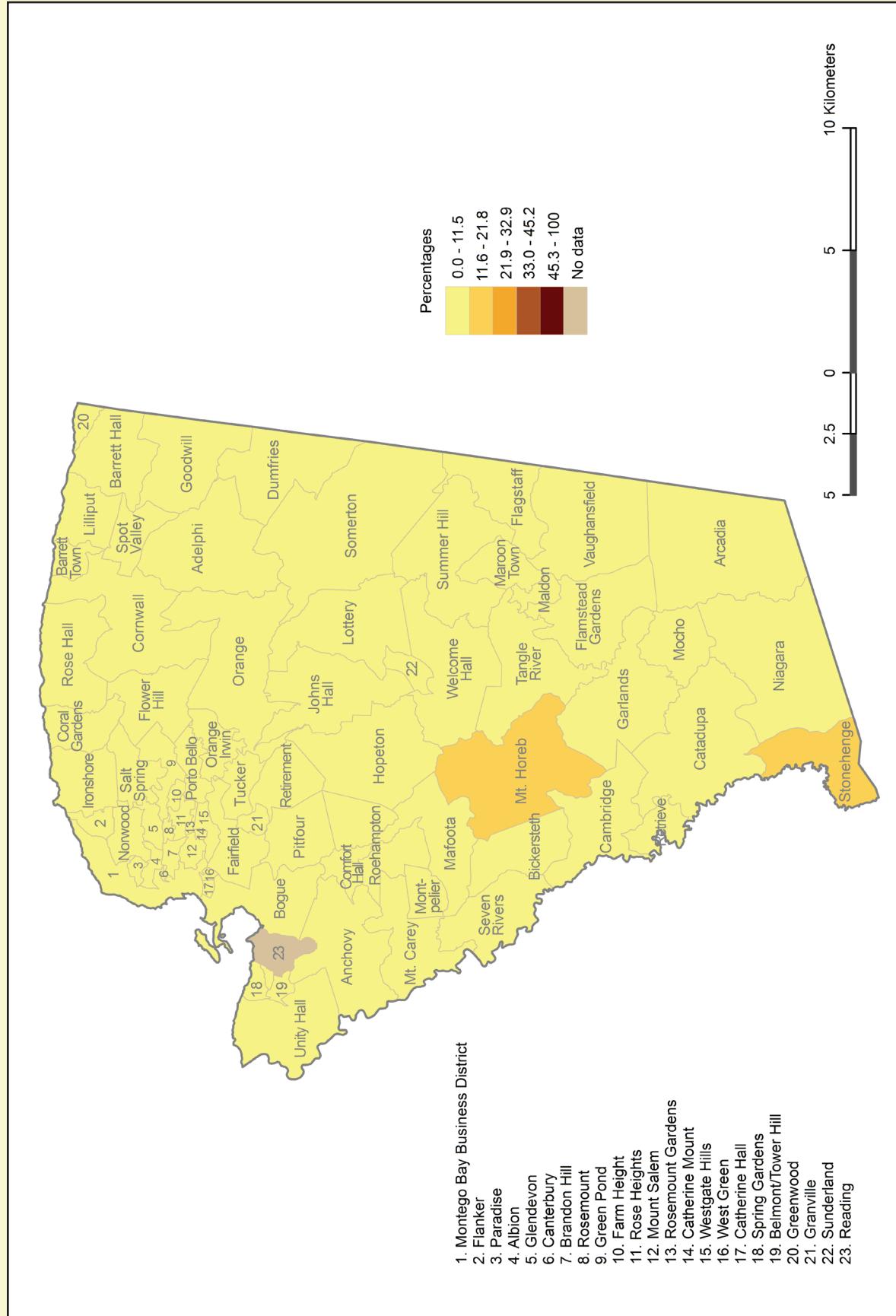
#### Total Population Living in Poverty by Community



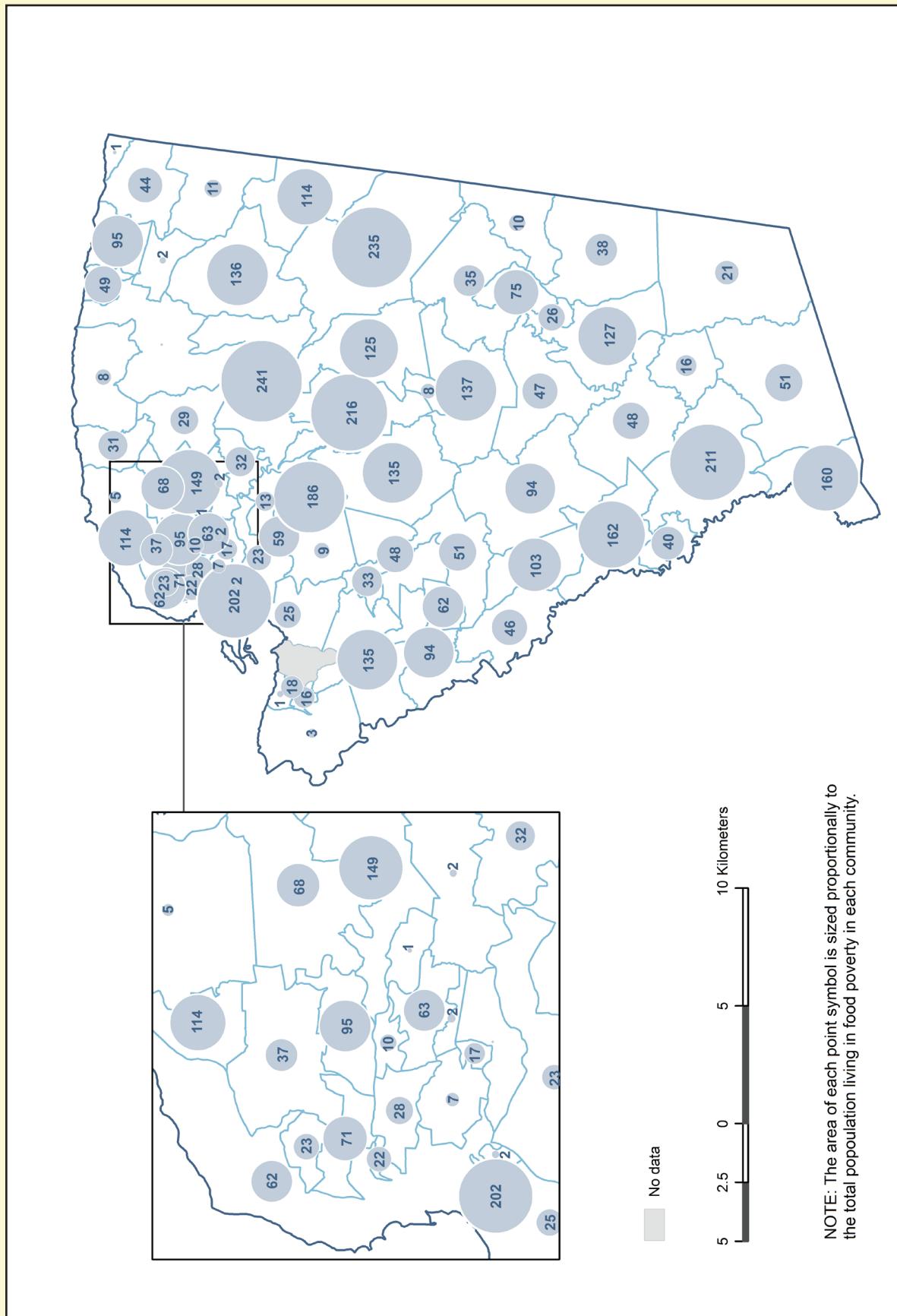
**Map 34: Mean Household Consumption per Adult Equivalent by Community**  
Average Annual Jamaican Dollars by Community



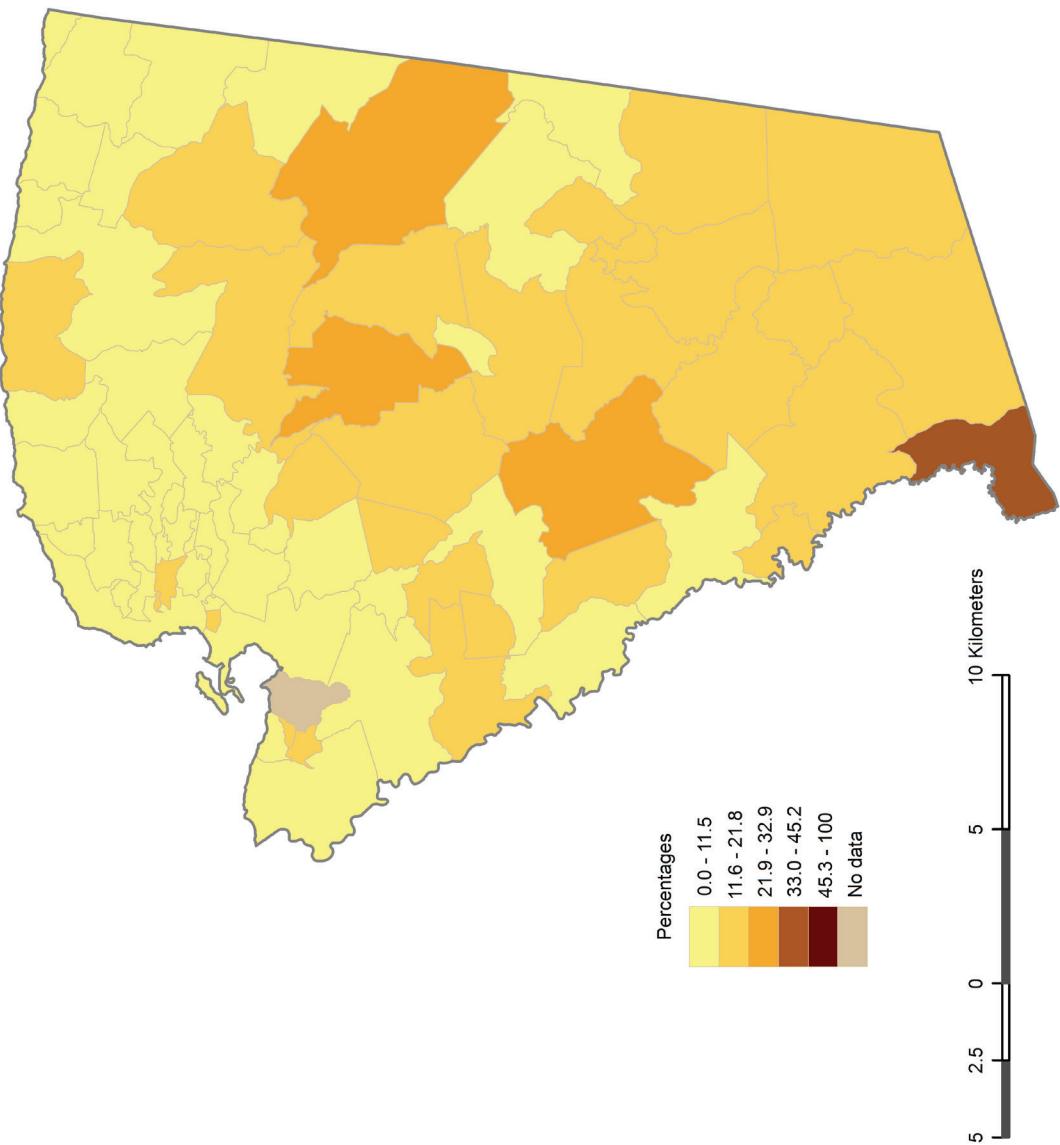
**Map 35: Incidence of Food Poverty by Community, St. James (2012)**  
 Per cent of Population Living in Food Poverty by Community



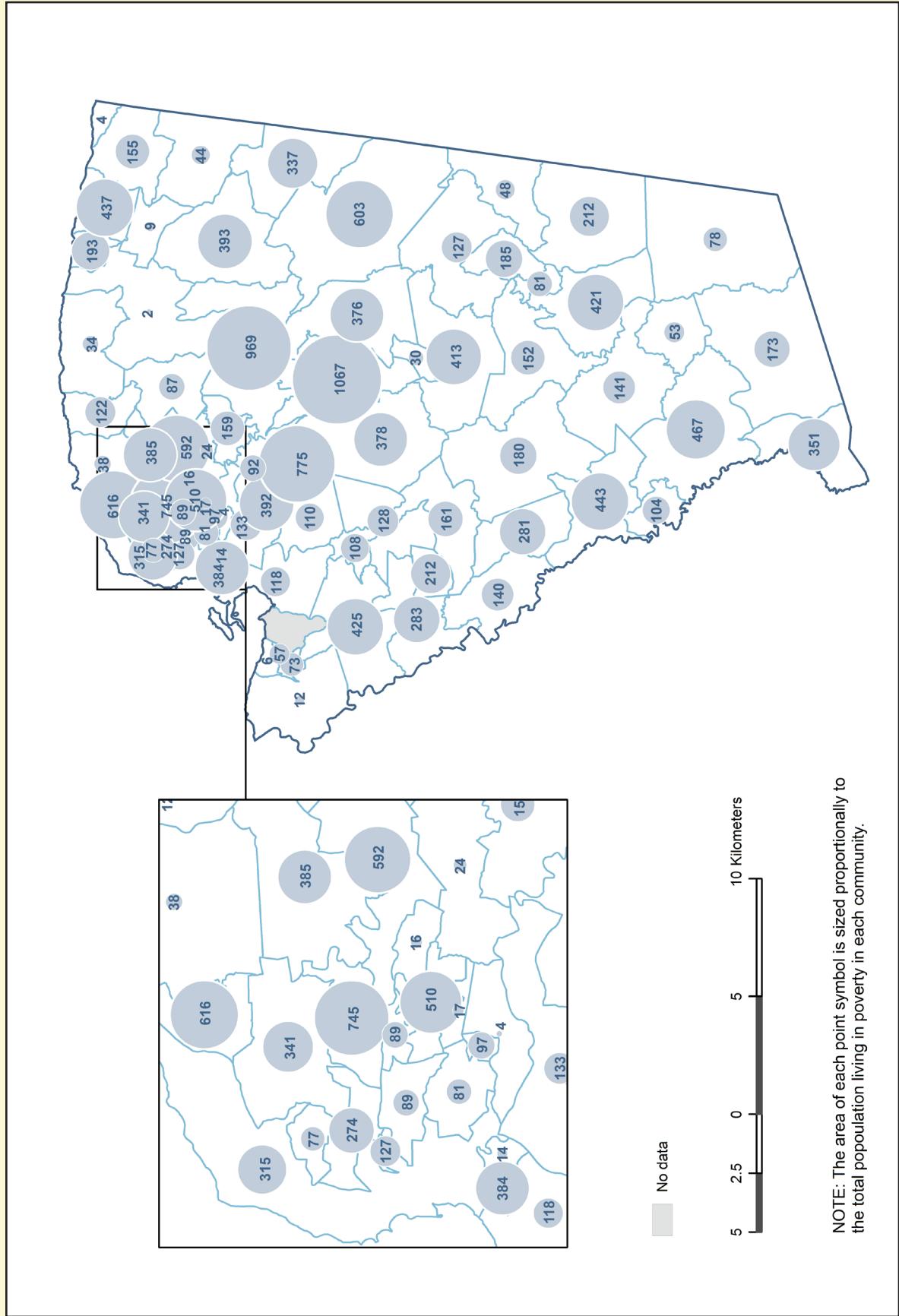
**Map 36: Incidence of Food Poverty by Community, St. James (2012)**  
Total Population Living in Food Poverty by Community



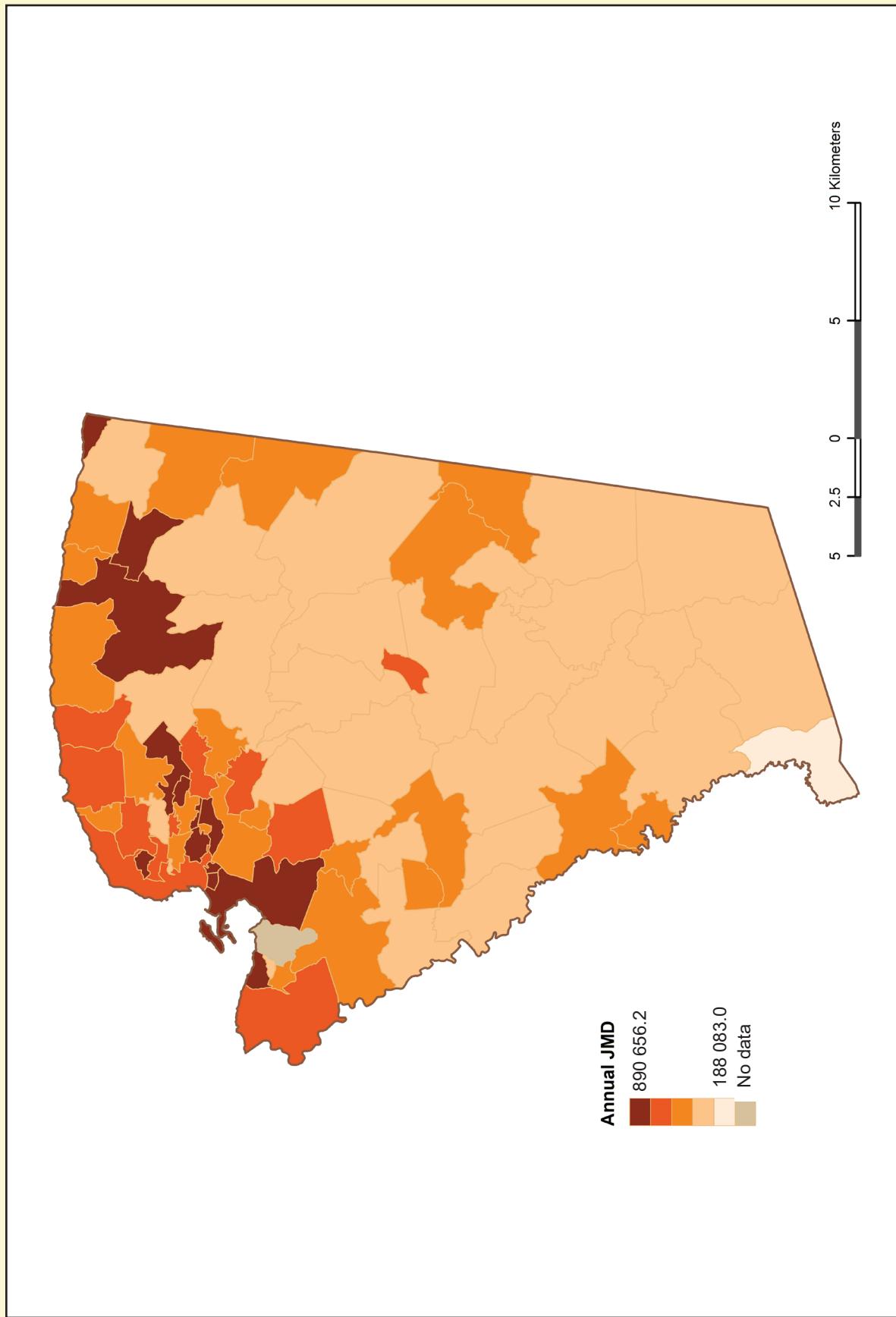
**Map 37: Incidence of Poverty by Community, St. James (2012)**  
Per cent of Population Living in Poverty by Community



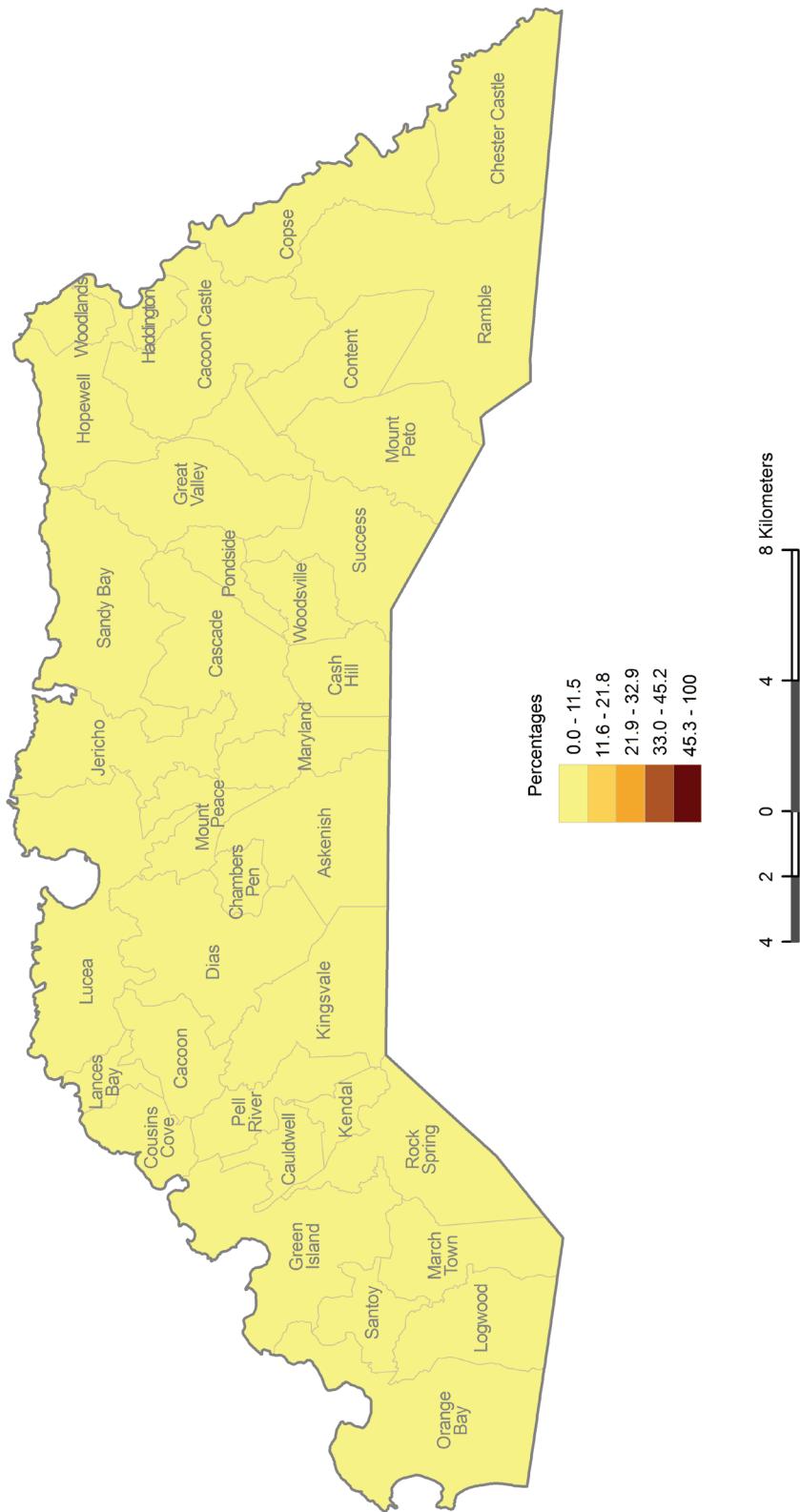
**Map 38: Incidence of Poverty by Community, St. James (2012)**  
 Total Population Living in Poverty by Community



**Map 39: Mean Household Consumption per Adult Equivalent by Community, St. James (2012)**  
Average Annual Jamaican Dollars by Community

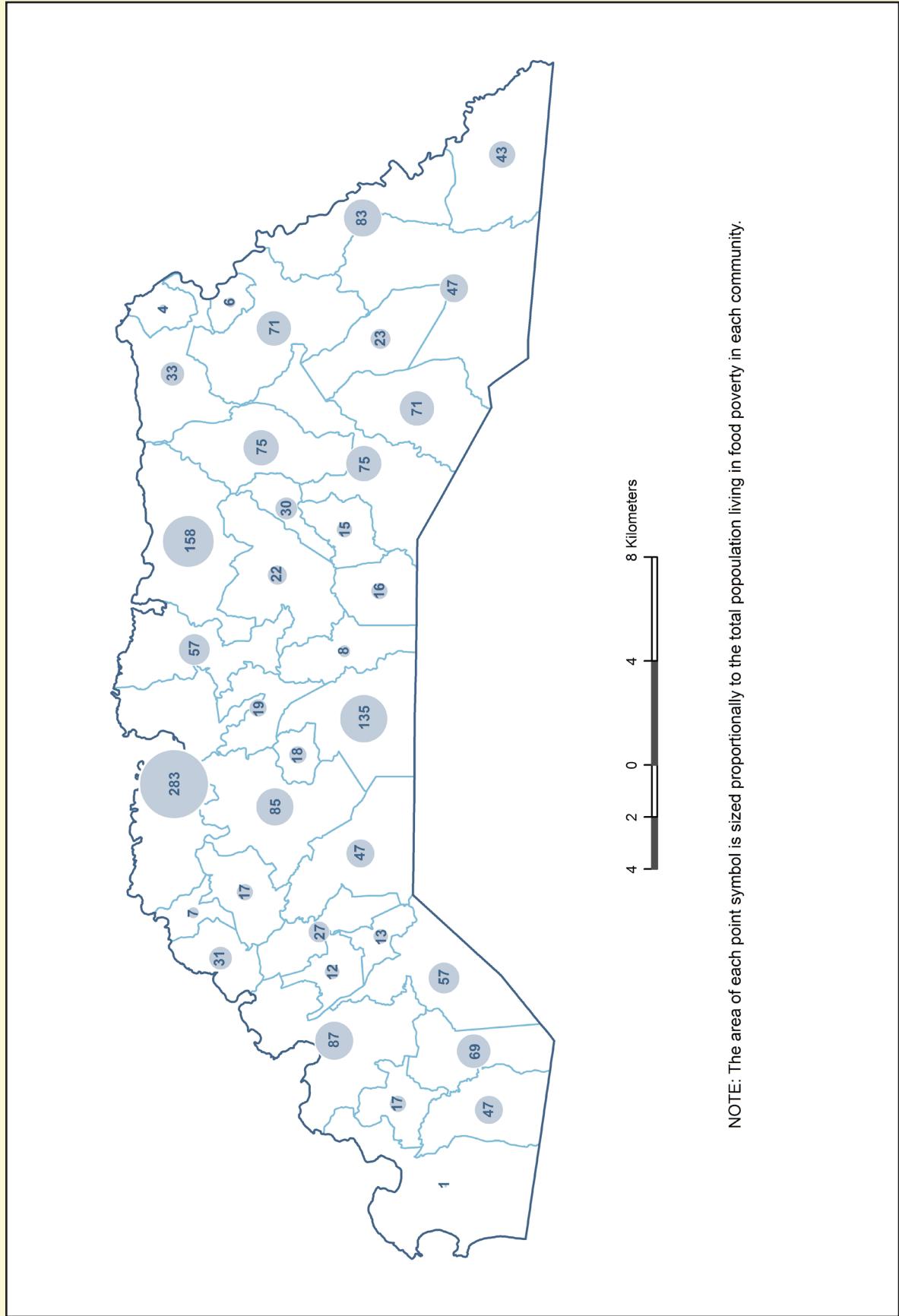


**Map 40: Incidence of Food Poverty by Community, Hanover (2012)**  
Per cent of Population Living in Food Poverty by Community

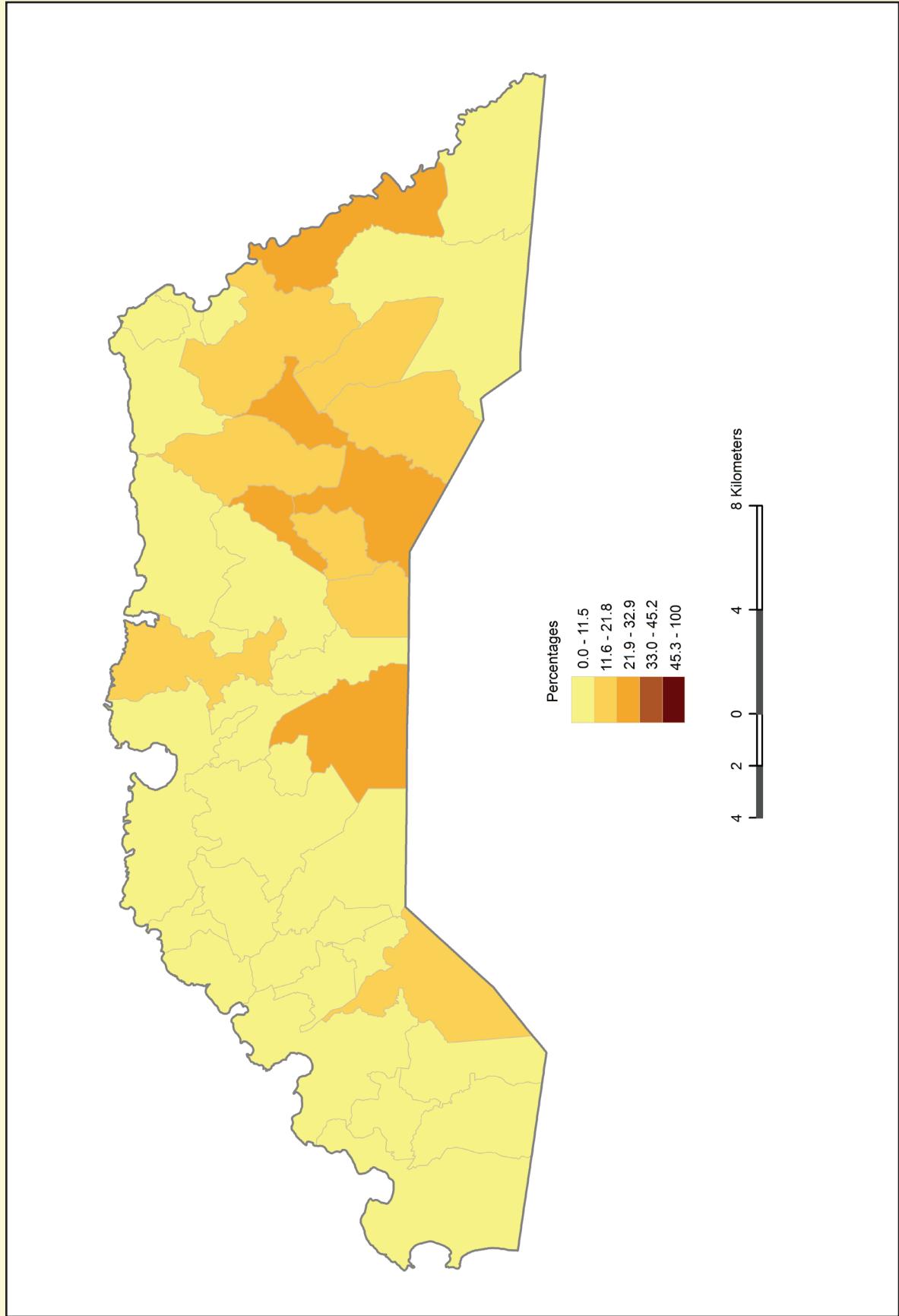


## **Map 41: Incidence of Food Poverty by Community, Hanover (2012)**

### Total Population Living in Food Poverty by Community

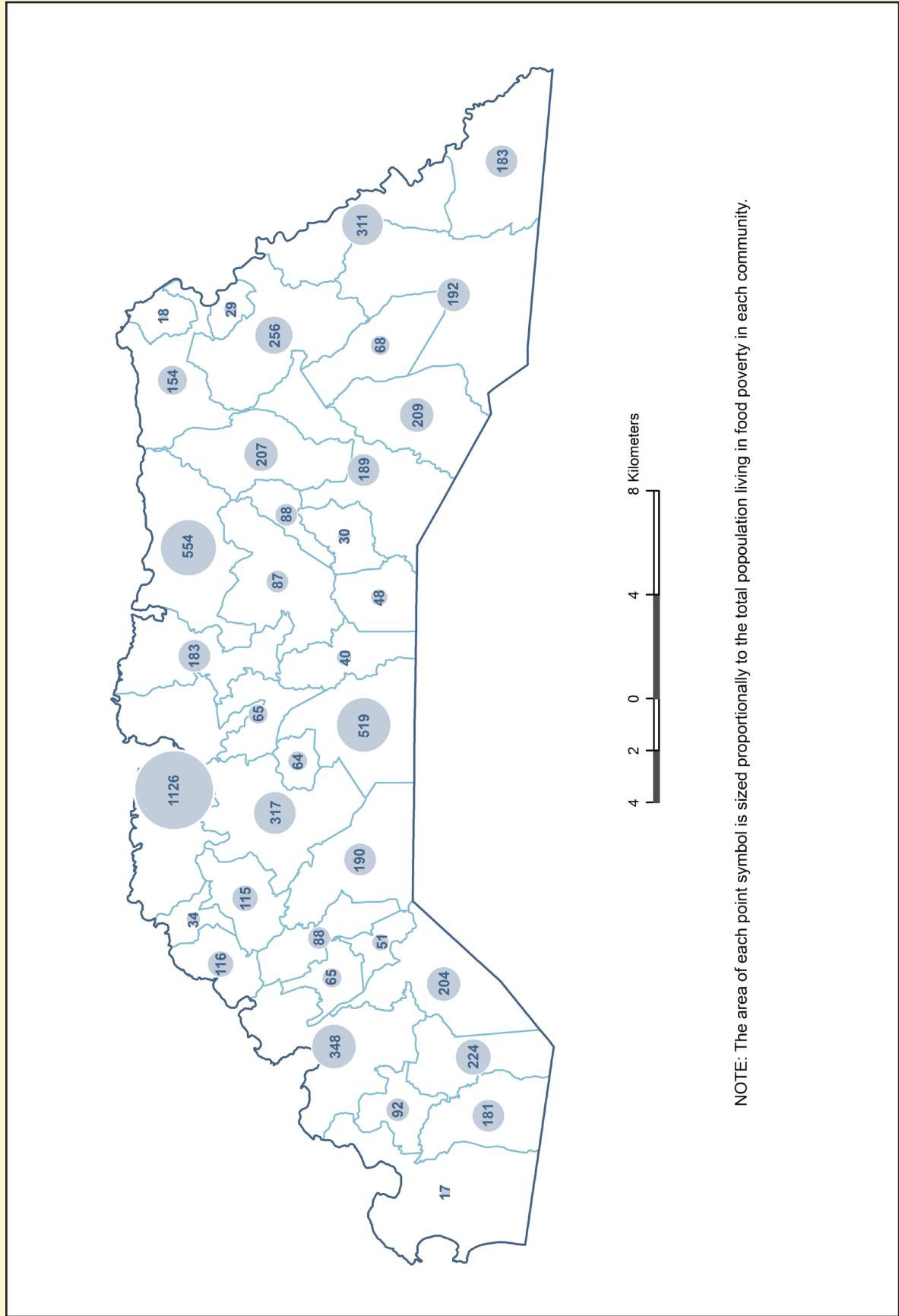


**Map 42: Incidence of Poverty by Community, Hanover (2012)**  
Per cent of Population Living in Poverty by Community

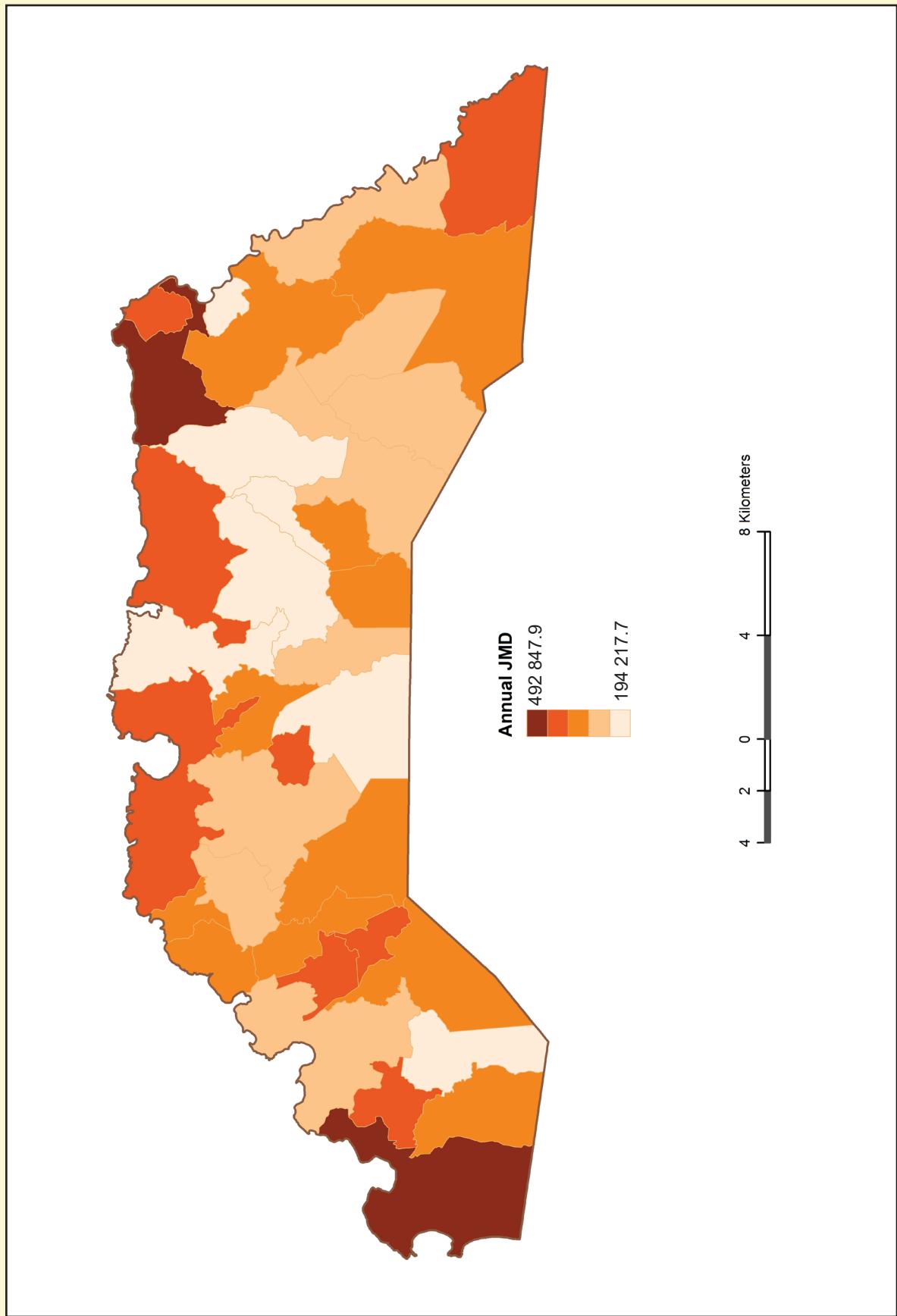


### **Map 43: Incidence of Poverty by Community, Hanover (2012)**

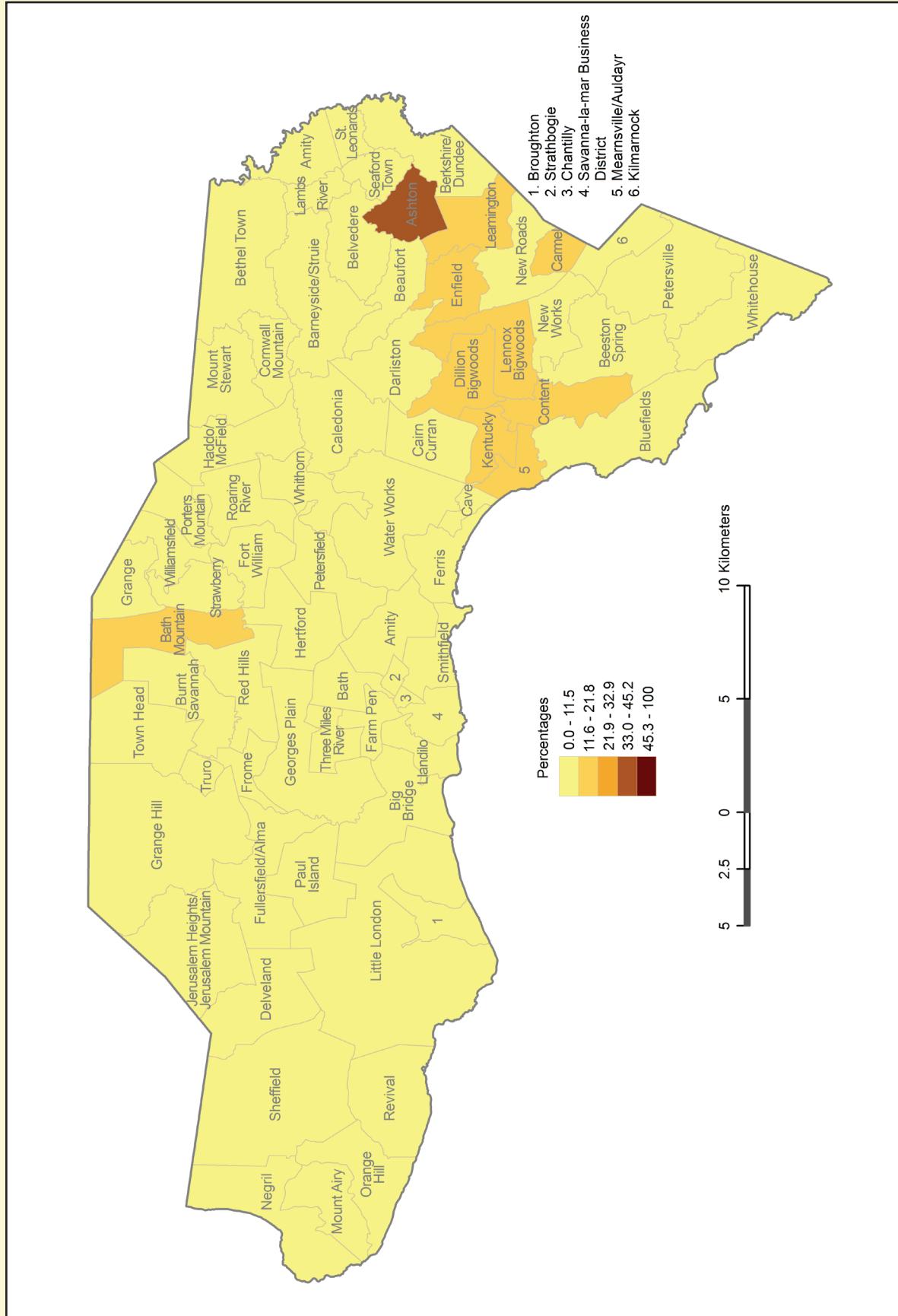
#### Total Population Living in Poverty by Community



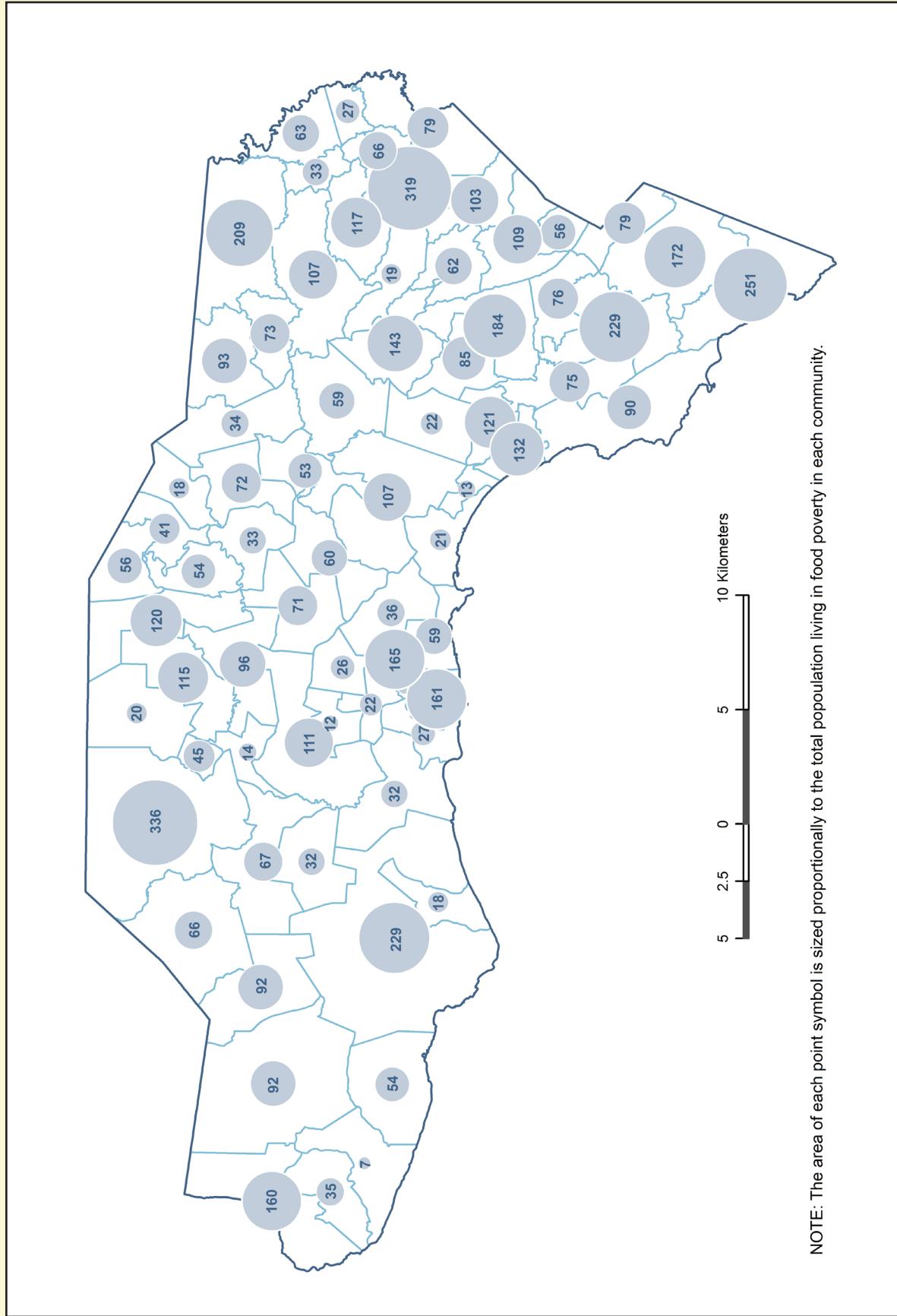
**Map 44: Mean Household Consumption per Adult Equivalent by Community, Hanover (2012)**  
Average Annual Jamaican Dollars by Community



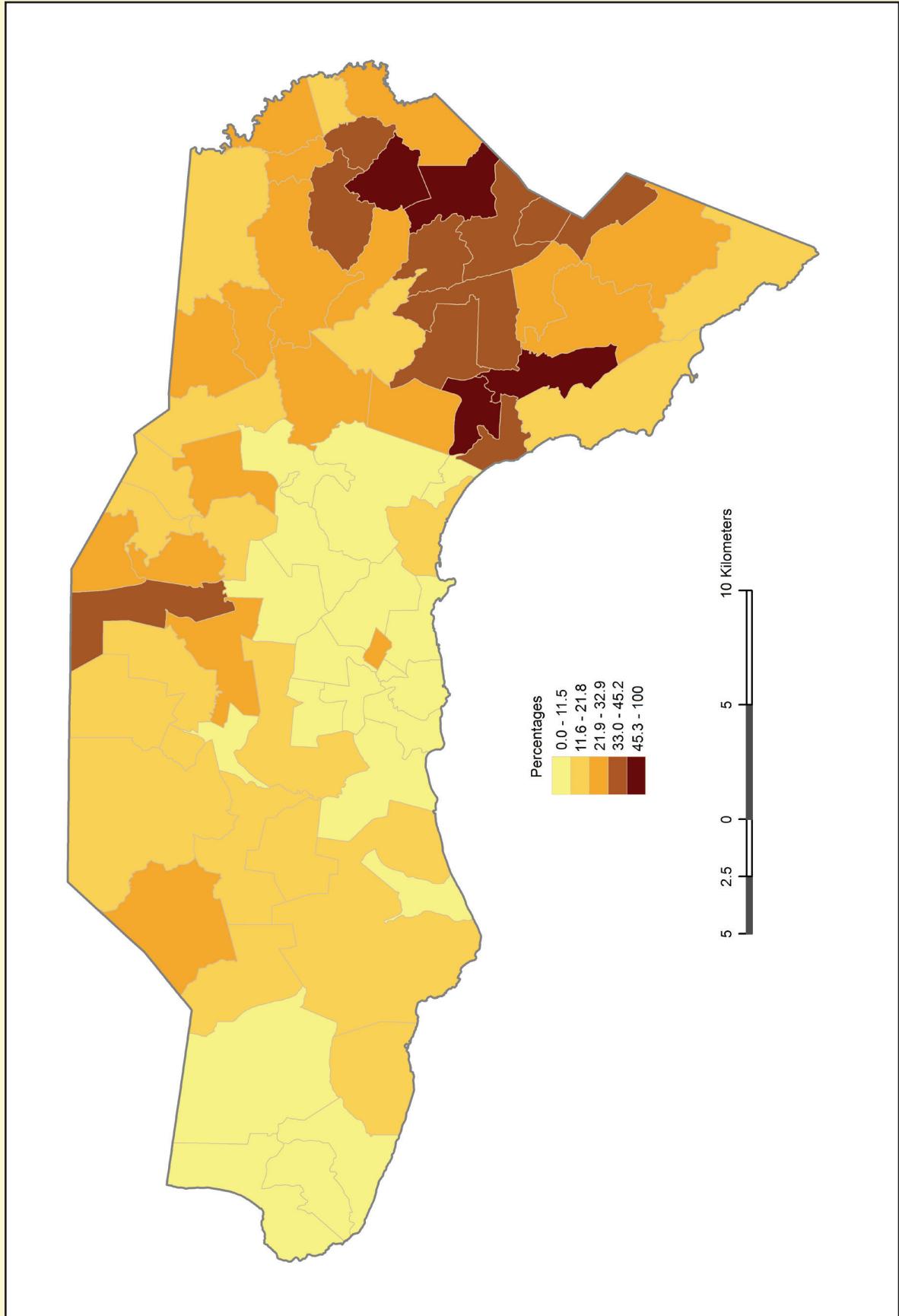
**Map 45: Incidence of Food Poverty by Community, Westmoreland (2012)**  
 Per cent of Population Living in Food Poverty by Community



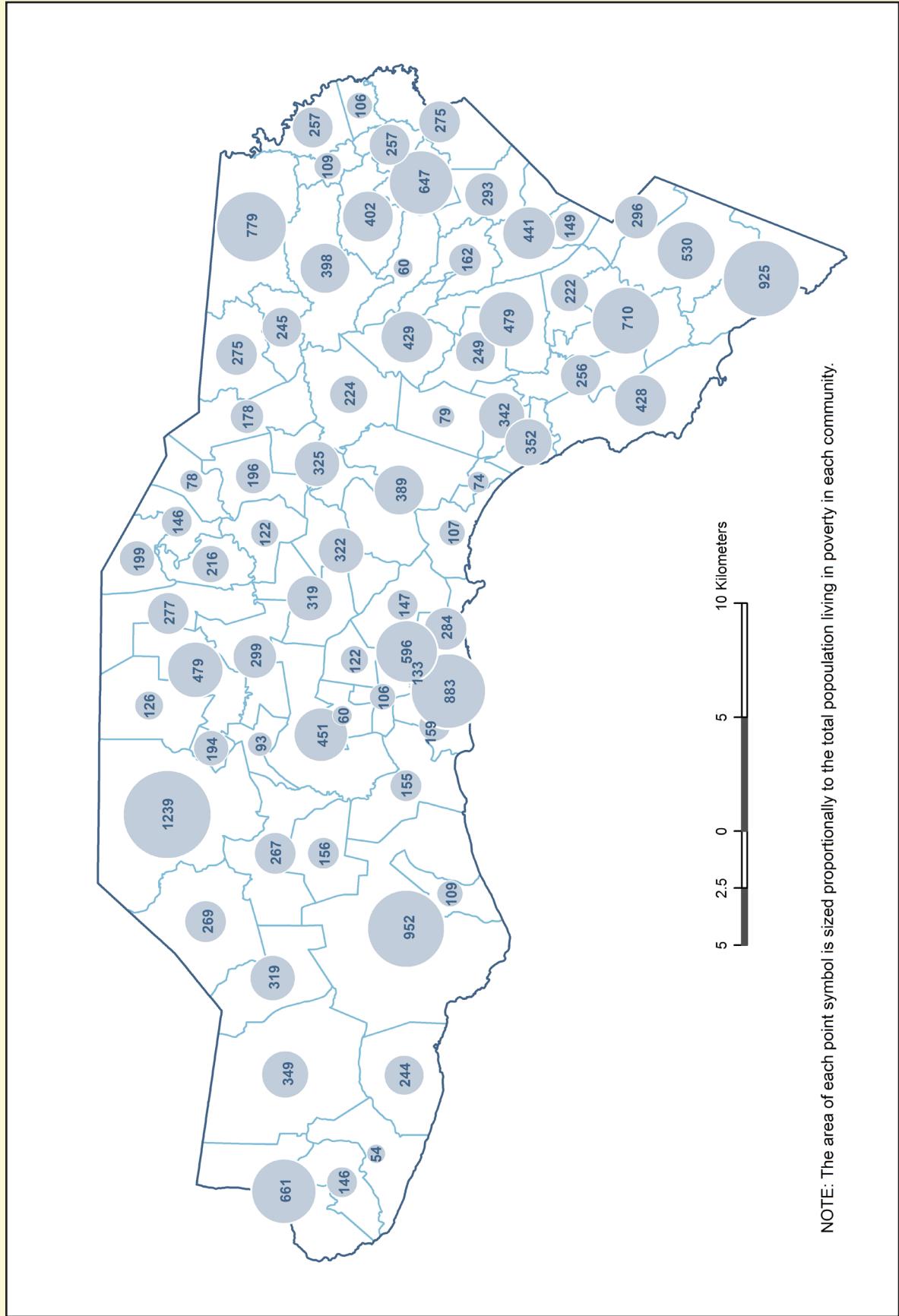
**Map 46: Incidence of Food Poverty by Community, Westmoreland (2012)**  
Total Population Living in Food Poverty by Community



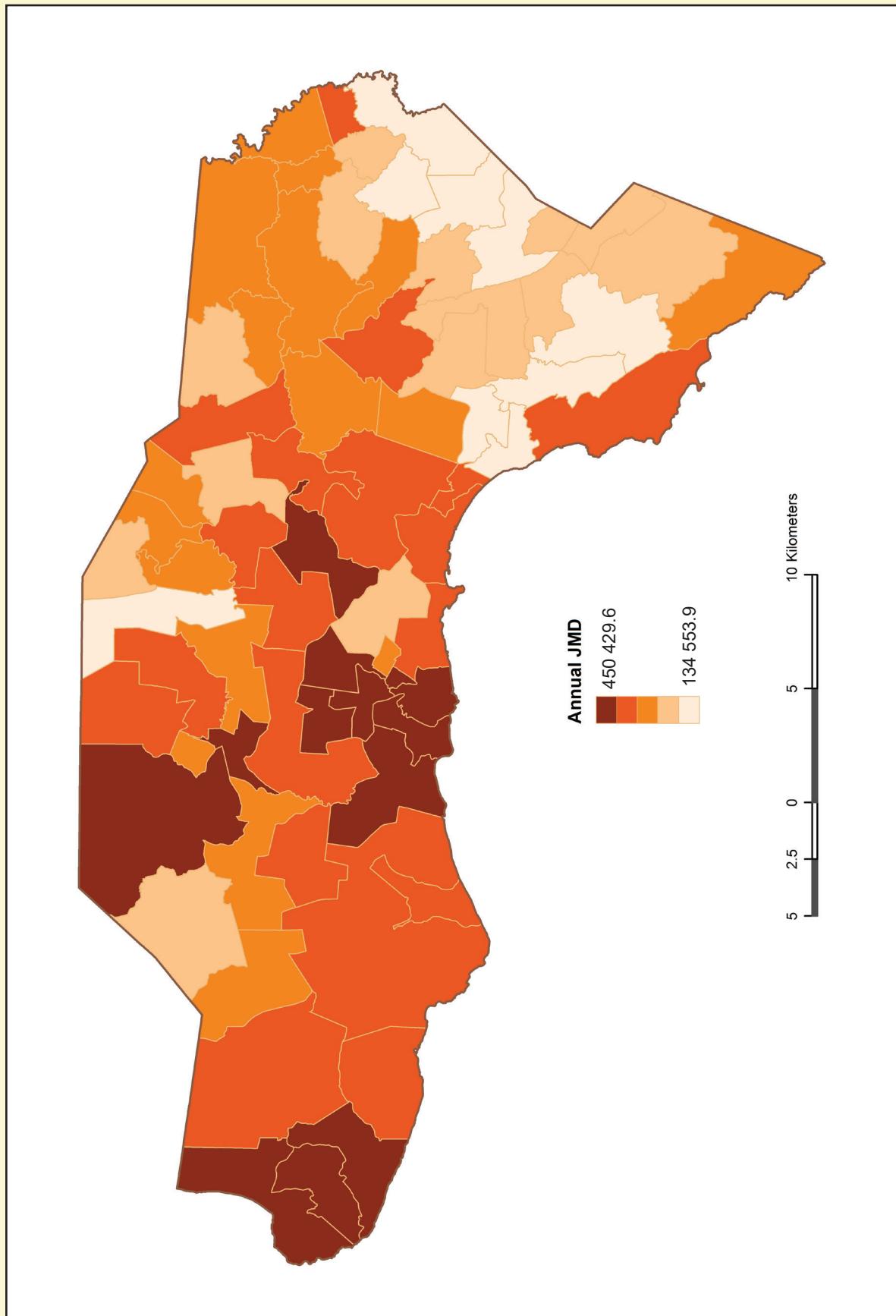
**Map 47: Incidence of Poverty by Community, Westmoreland (2012)**  
Per cent of Population Living in Poverty by Community



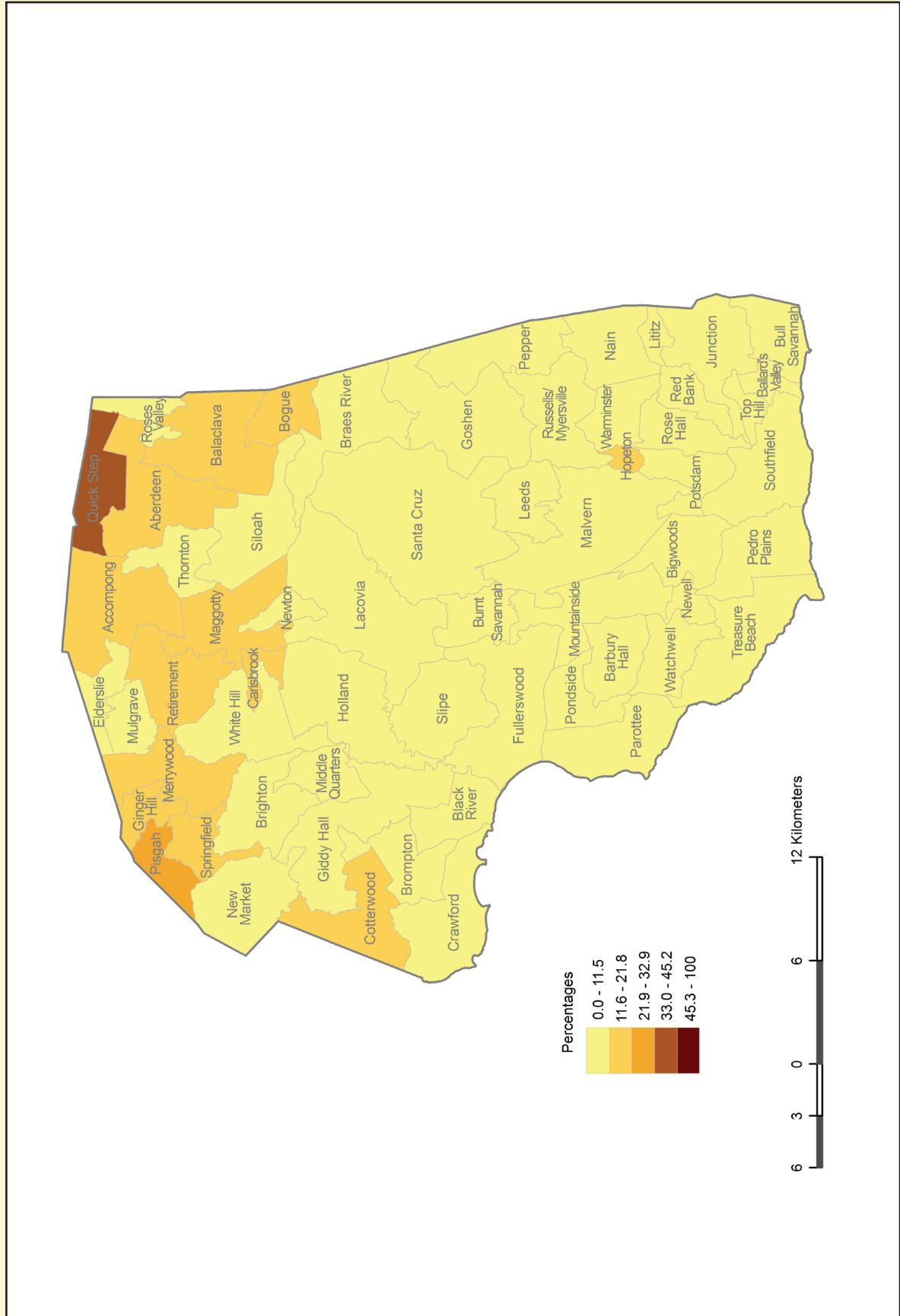
**Map 48: Incidence of Poverty by Community, Westmoreland (2012)**  
Total Population Living in Poverty by Community



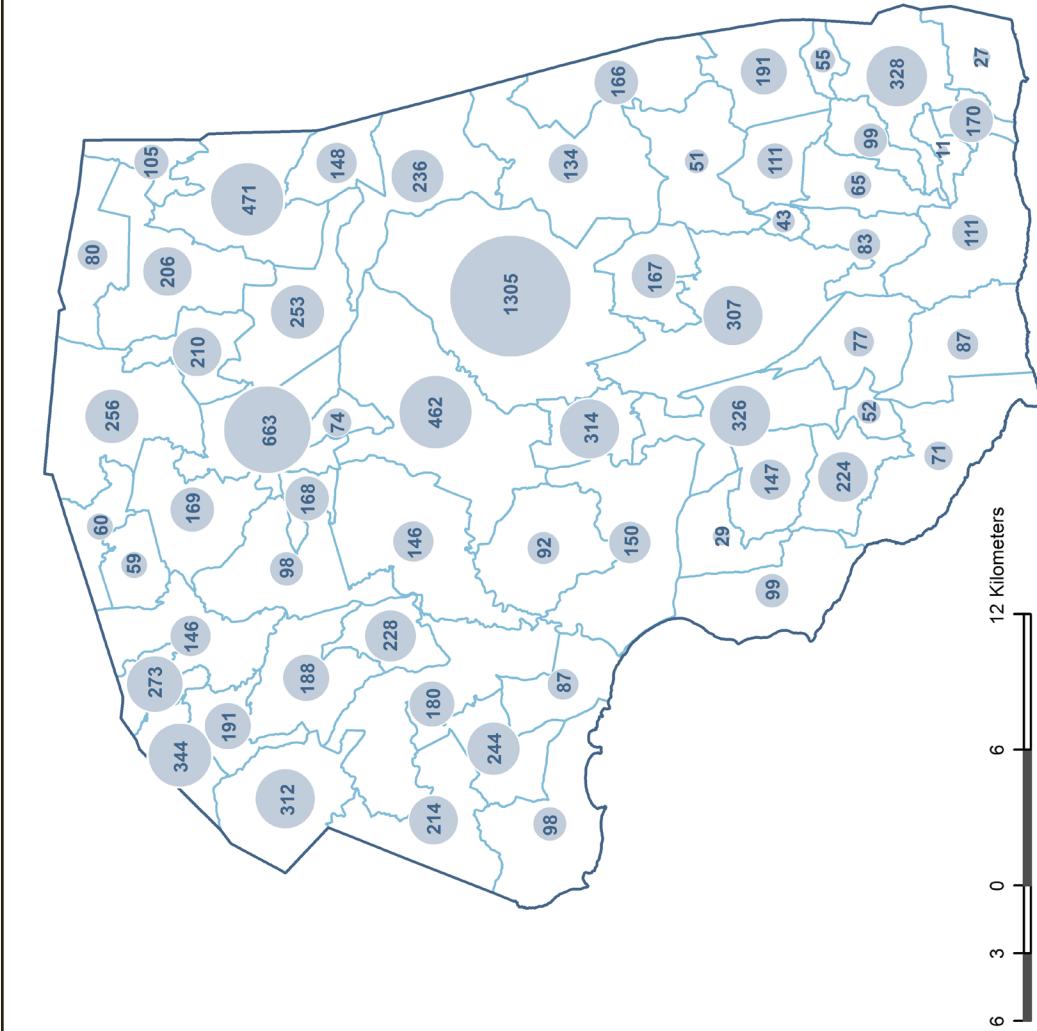
**Map 49: Mean Household Consumption per Adult Equivalent by Community, Westmoreland (2012)**  
Average Annual Jamaican Dollars by Community



**Map 50: Incidence of Food Poverty by Community, St. Elizabeth (2012)**  
 Per cent of Population Living in Food Poverty by Community

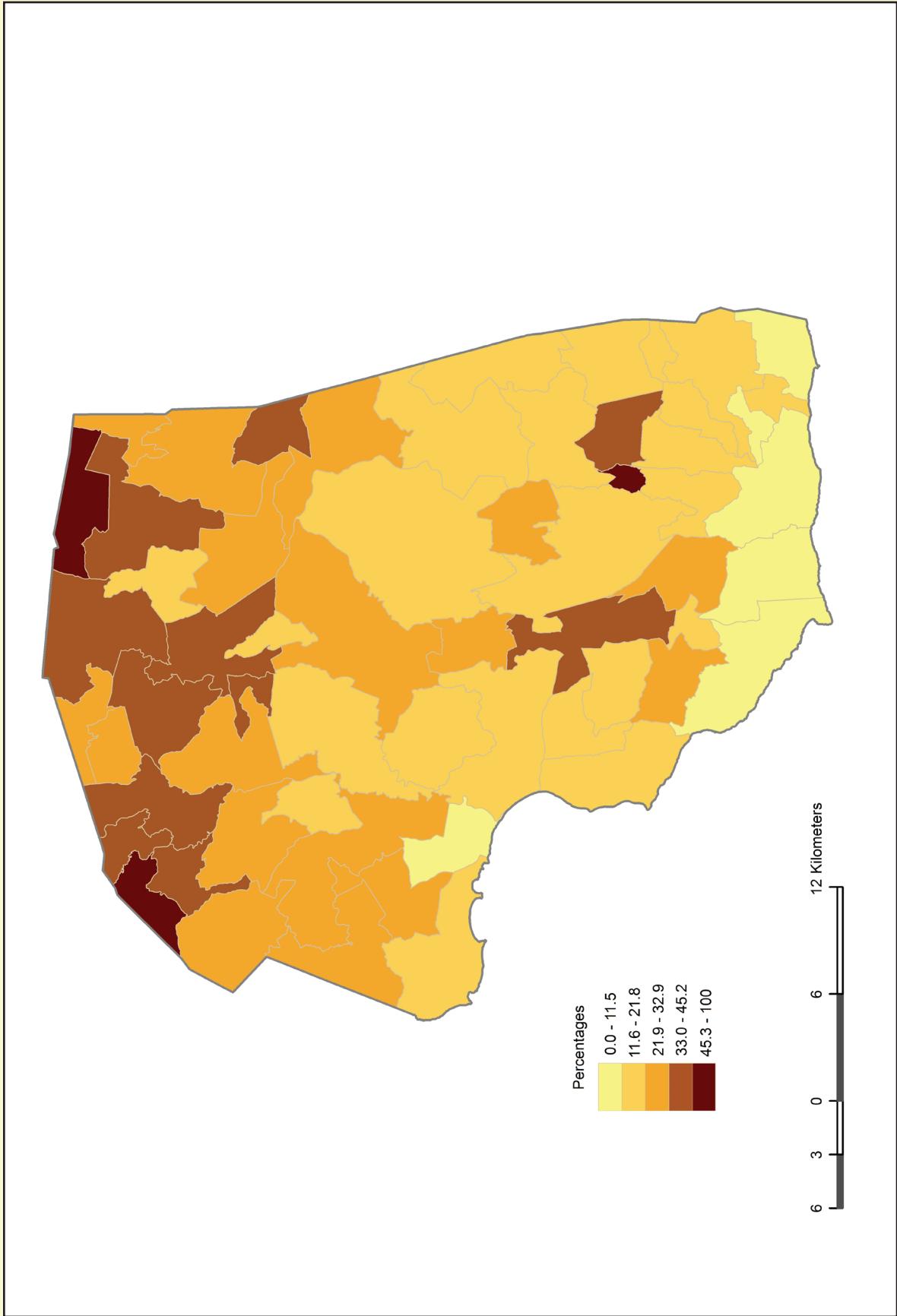


**Map 51: Incidence of Food Poverty by Community, St. Elizabeth (2012)**  
Total Population Living in Food Poverty by Community

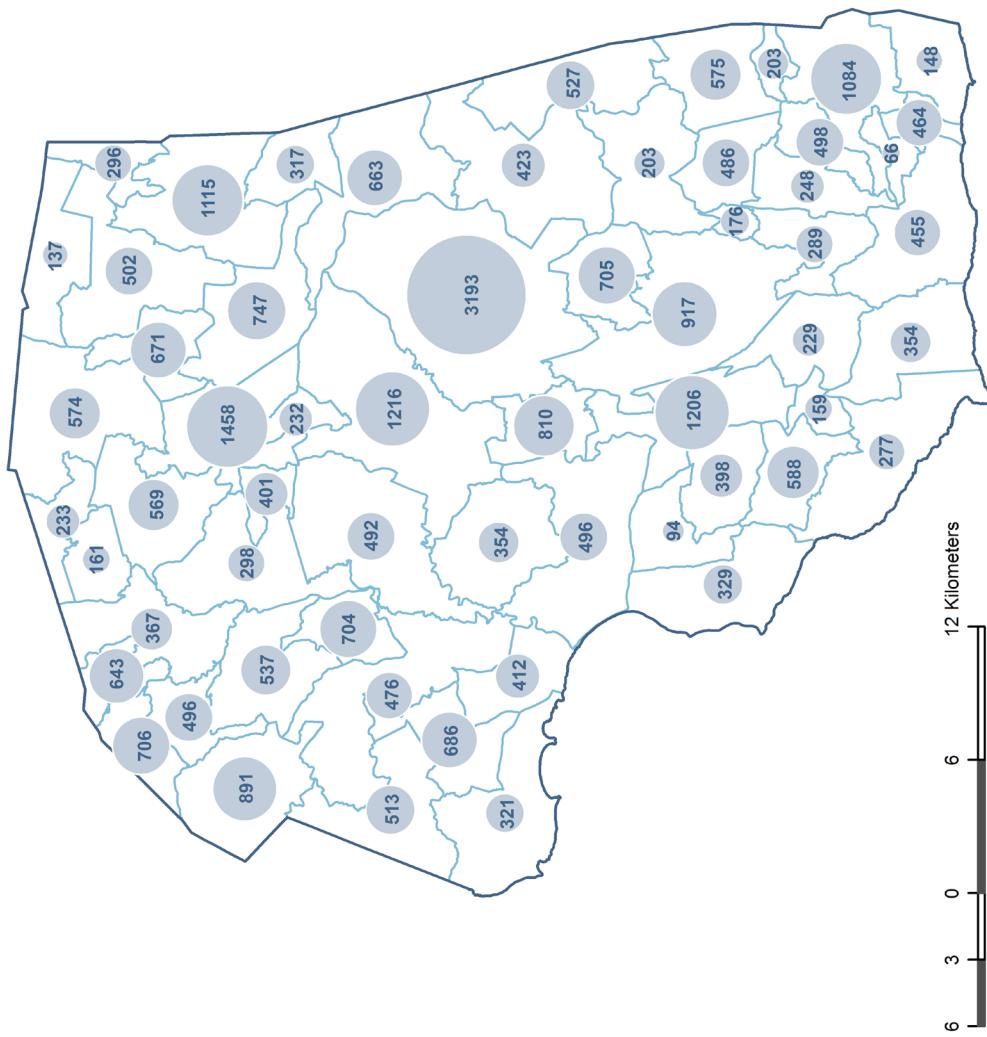


NOTE: The area of each point symbol is sized proportionally to the total population living in food poverty in each community.

**Map 52: Incidence of Poverty by Community, St. Elizabeth (2012)**  
Per cent of Population Living in Poverty by Community

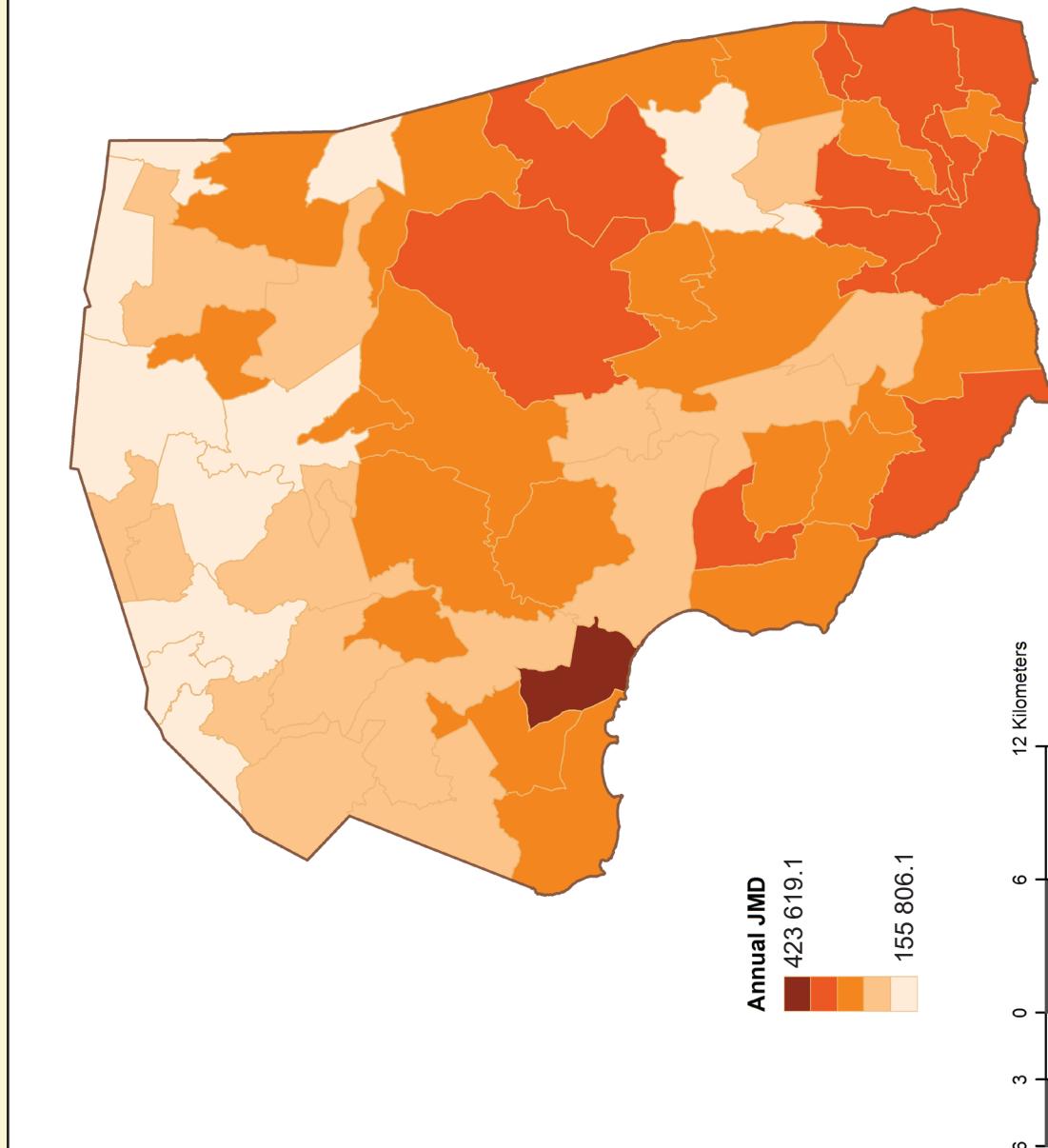


**Map 53: Incidence of Poverty by Community, St. Elizabeth (2012)**  
Total Population Living in Poverty by Community

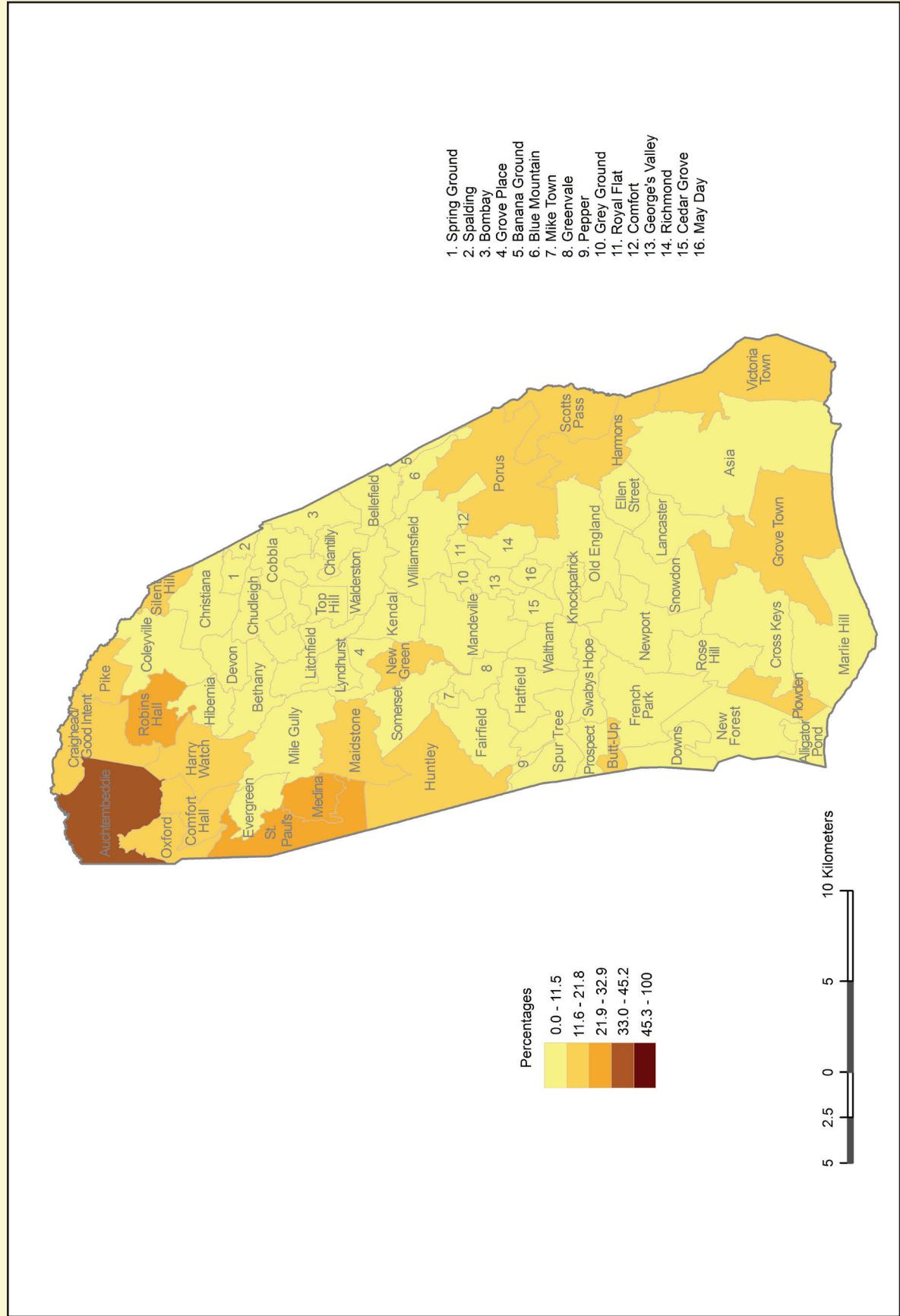


NOTE: The area of each point symbol is sized proportionally to the total population living in poverty in each community.

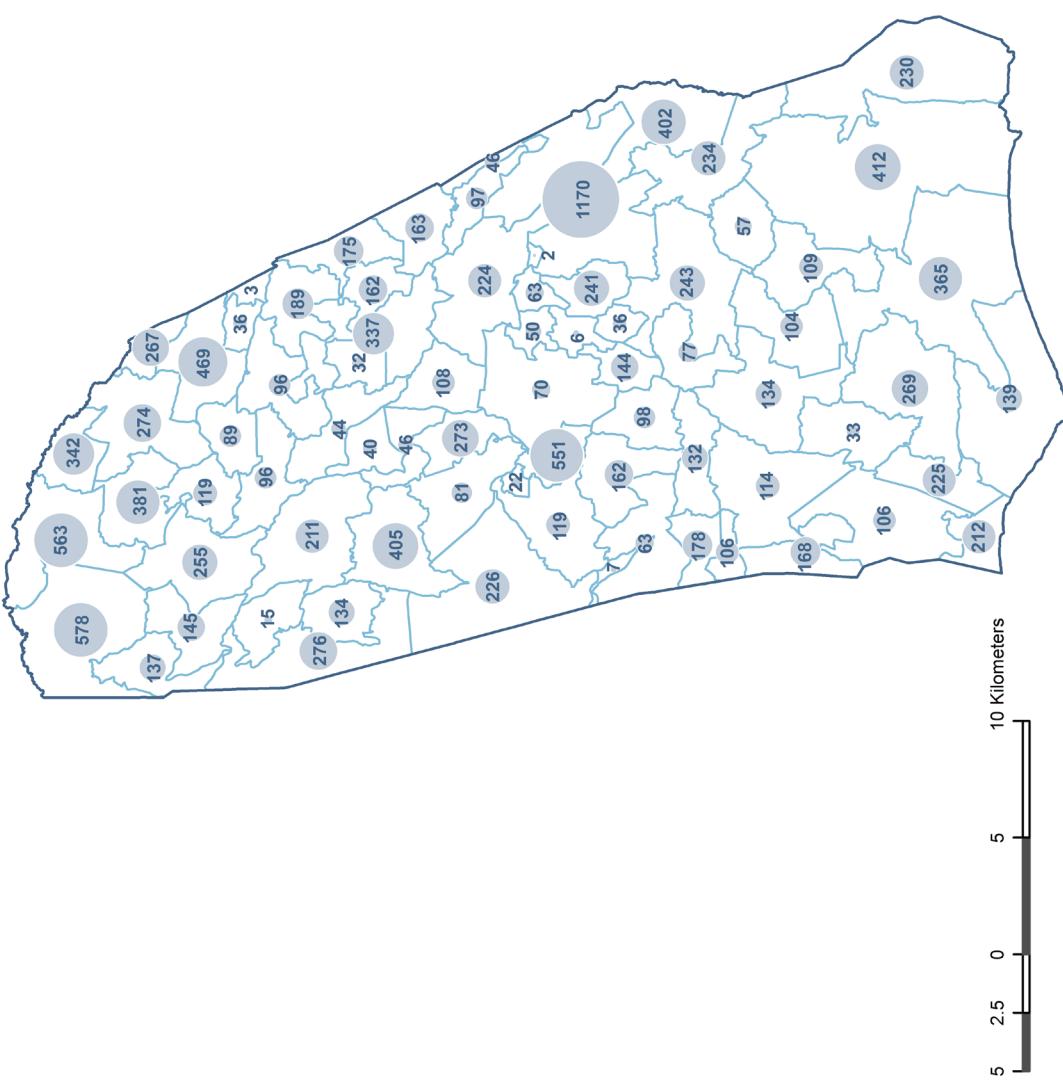
**Map 54: Mean Household Consumption per Adult Equivalent by Community, St. Elizabeth (2012)**  
Average Annual Jamaican Dollars by Community



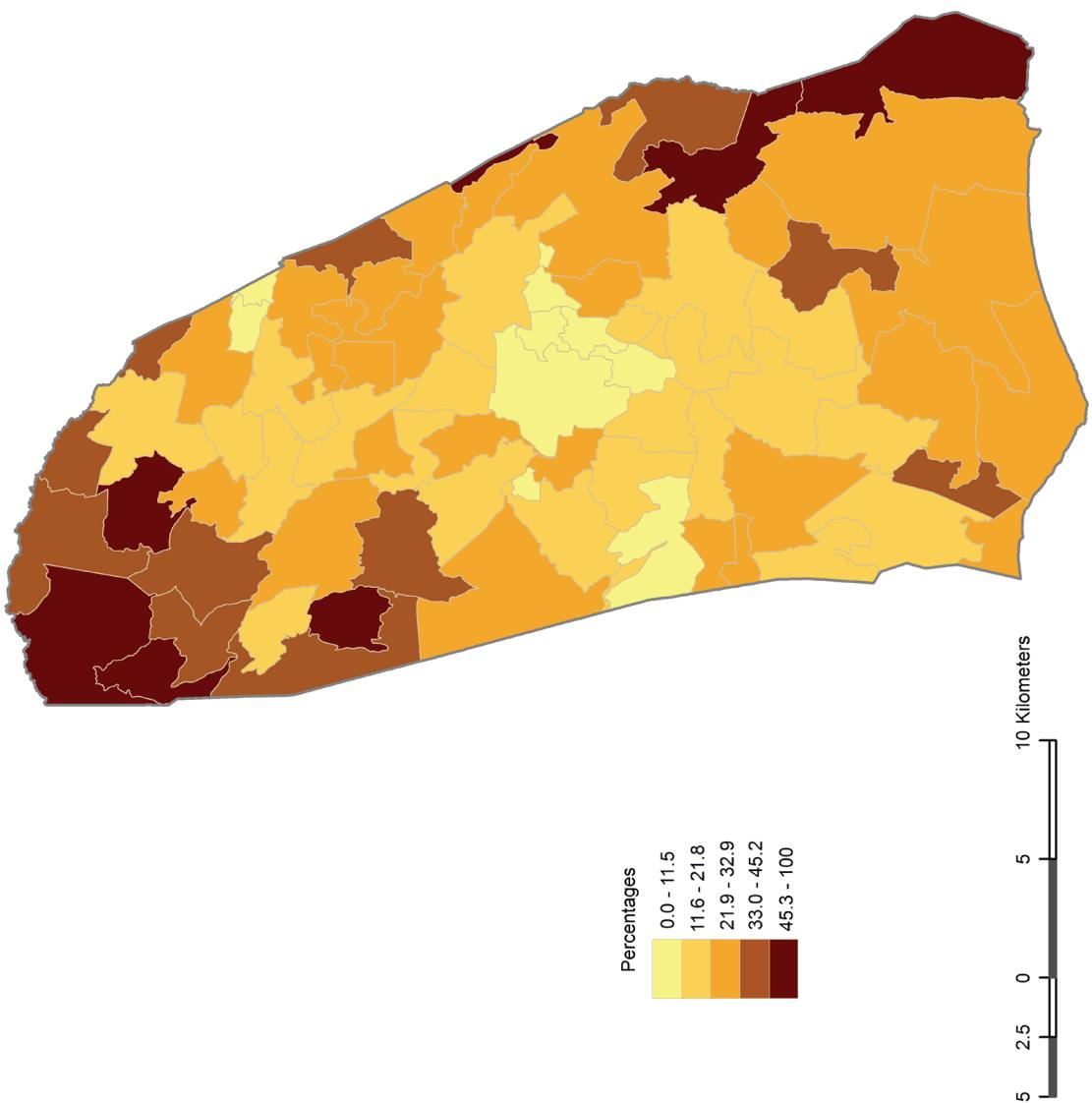
**Map 55: Incidence of Food Poverty by Community, Manchester (2012)**  
 Per cent of Population Living in Food Poverty by Community



**Map 56: Incidence of Food Poverty by Community, Manchester (2012)**  
Total Population Living in Food Poverty by Community

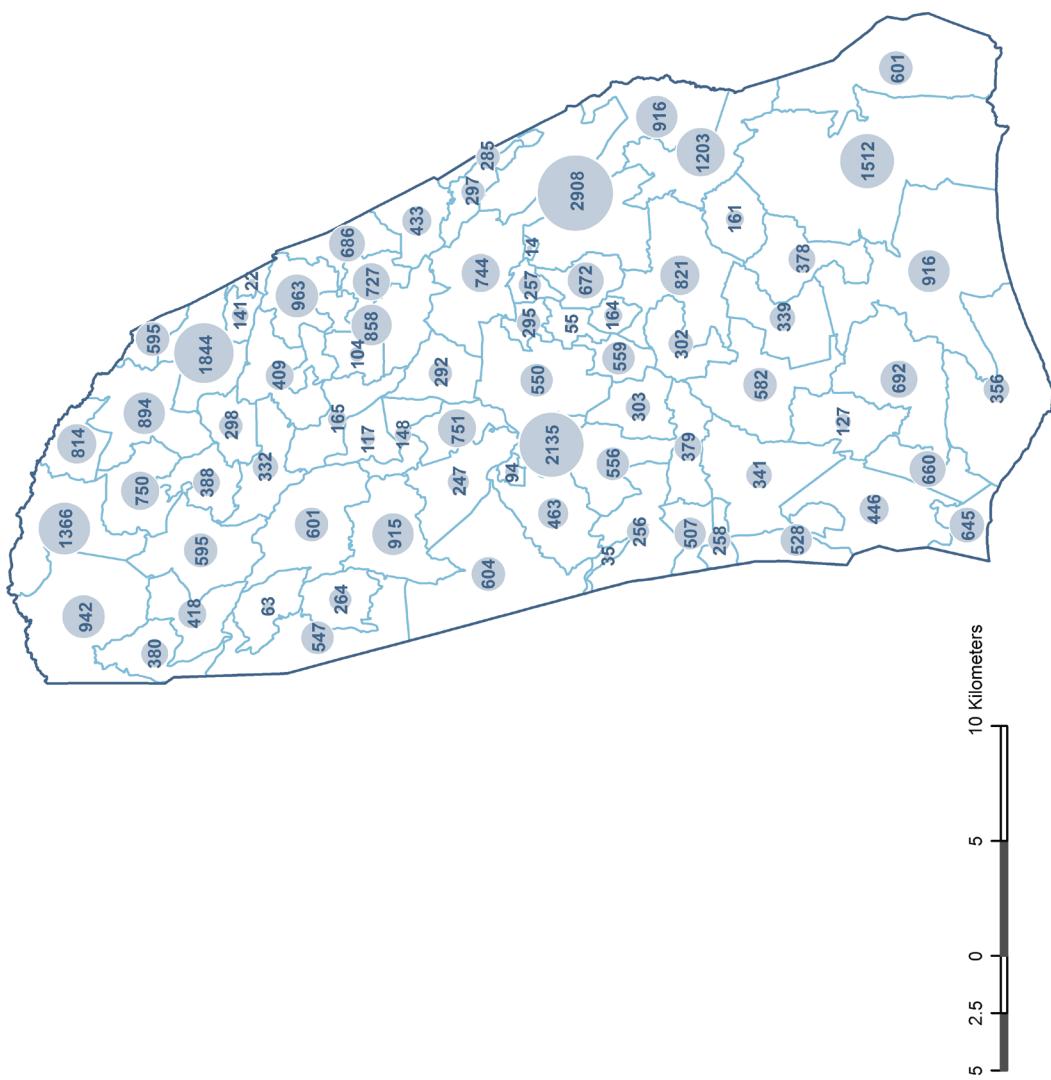


**Map 57: Incidence of Poverty by Community, Manchester (2012)**  
Per cent of Population Living in by Community



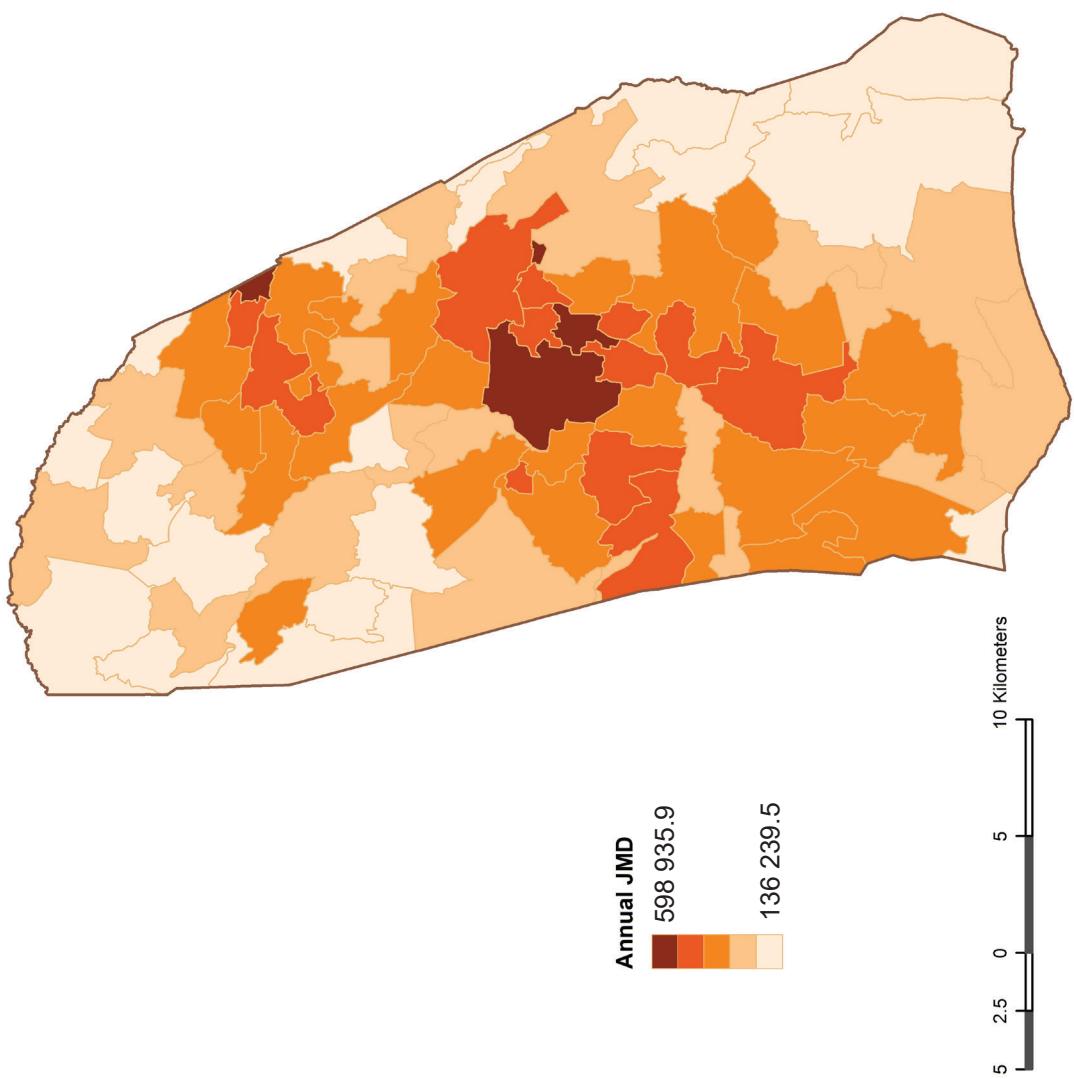
## Map 58: Incidence of Poverty by Community, Manchester (2012)

### Total Population Living in Poverty by Community



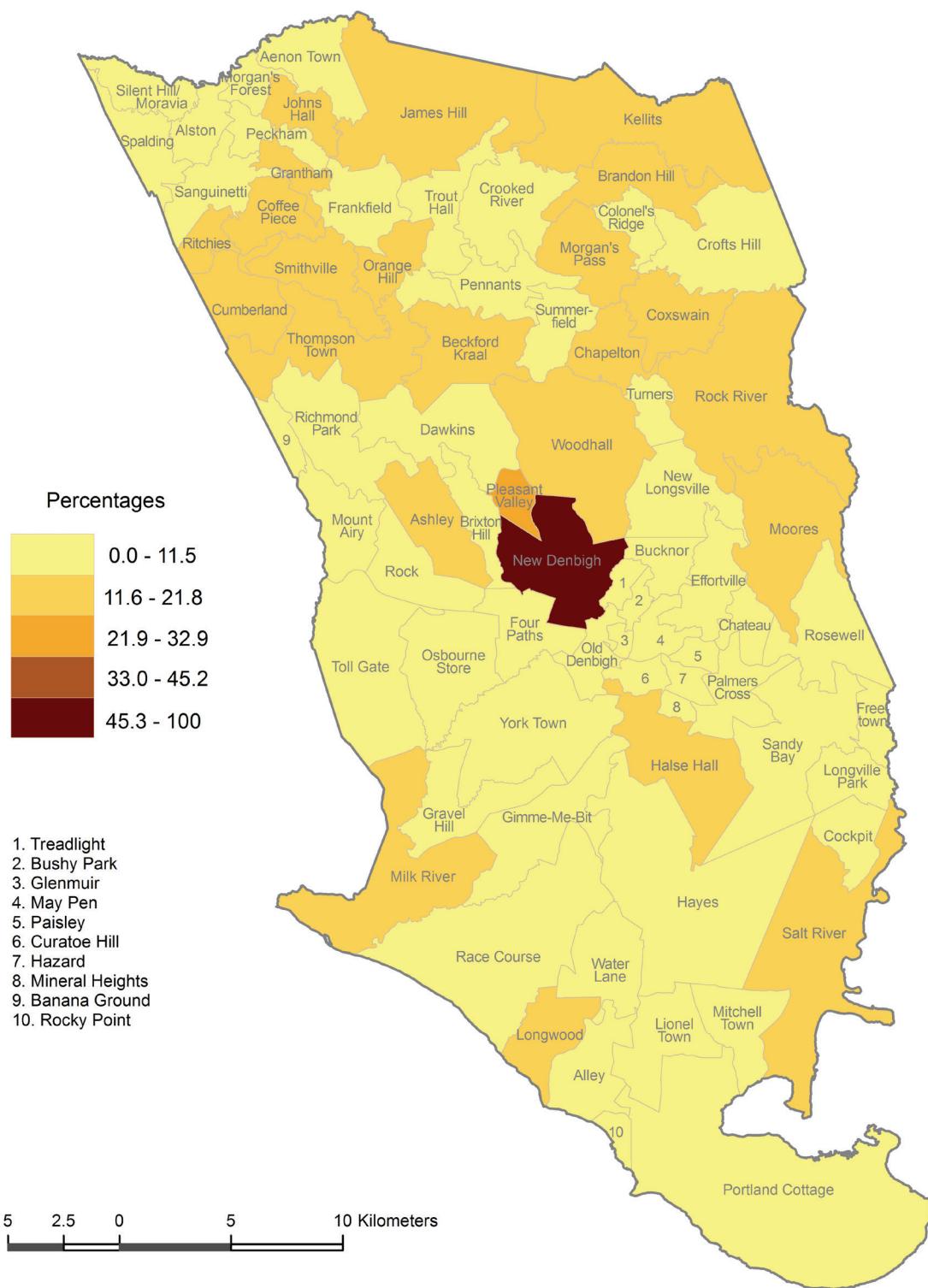
NOTE: The area of each point symbol is sized proportionally to the total population living in poverty in each community.

**Map 59: Mean Household Consumption per Adult Equivalent by Community, Manchester (2012)**  
Average Annual Jamaican Dollars by Community



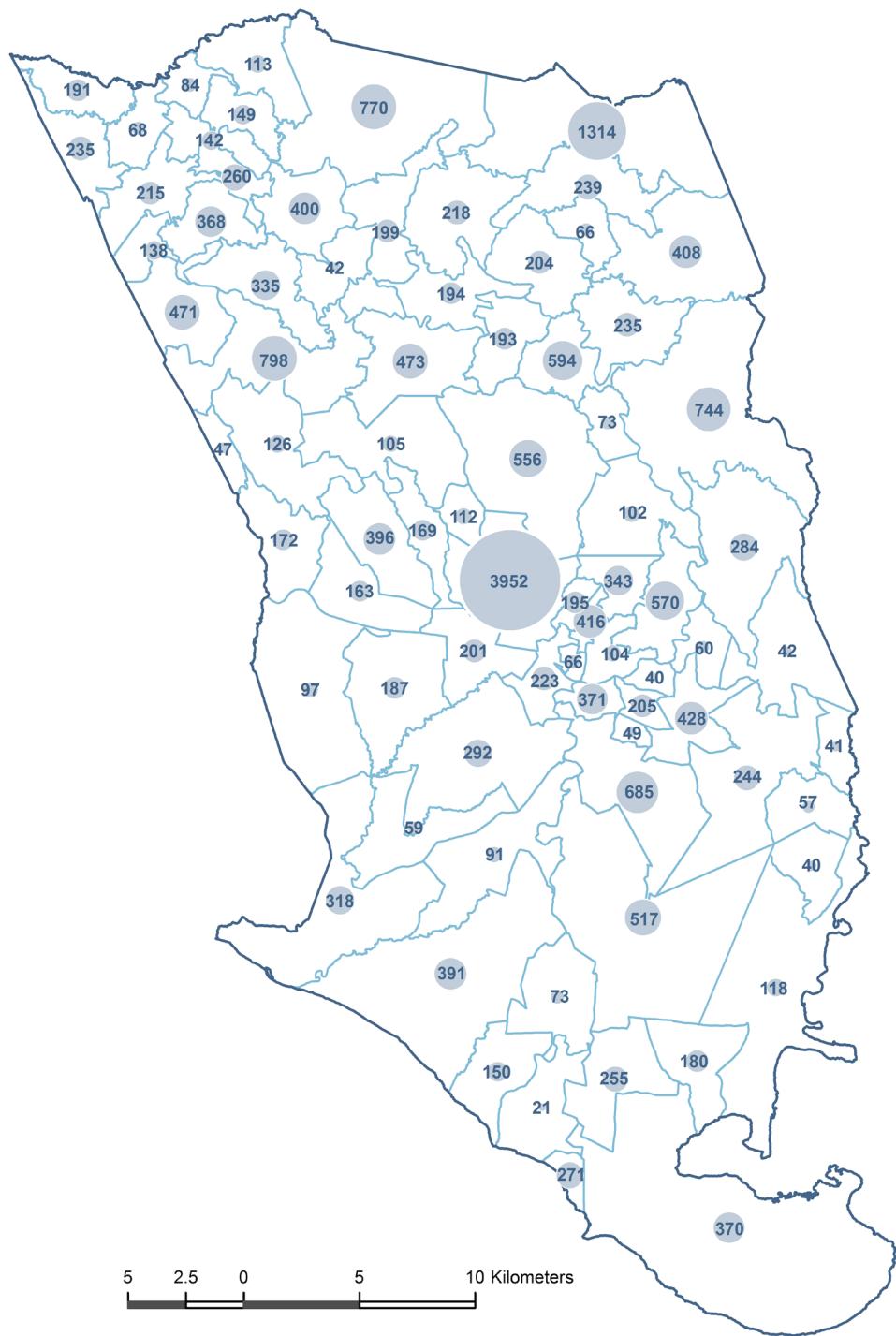
## Map 60: Incidence of Food Poverty by Community, Clarendon (2012)

Per cent of Population Living in Food Poverty by Community



## Map 61: Incidence of Food Poverty by Community, Clarendon (2012)

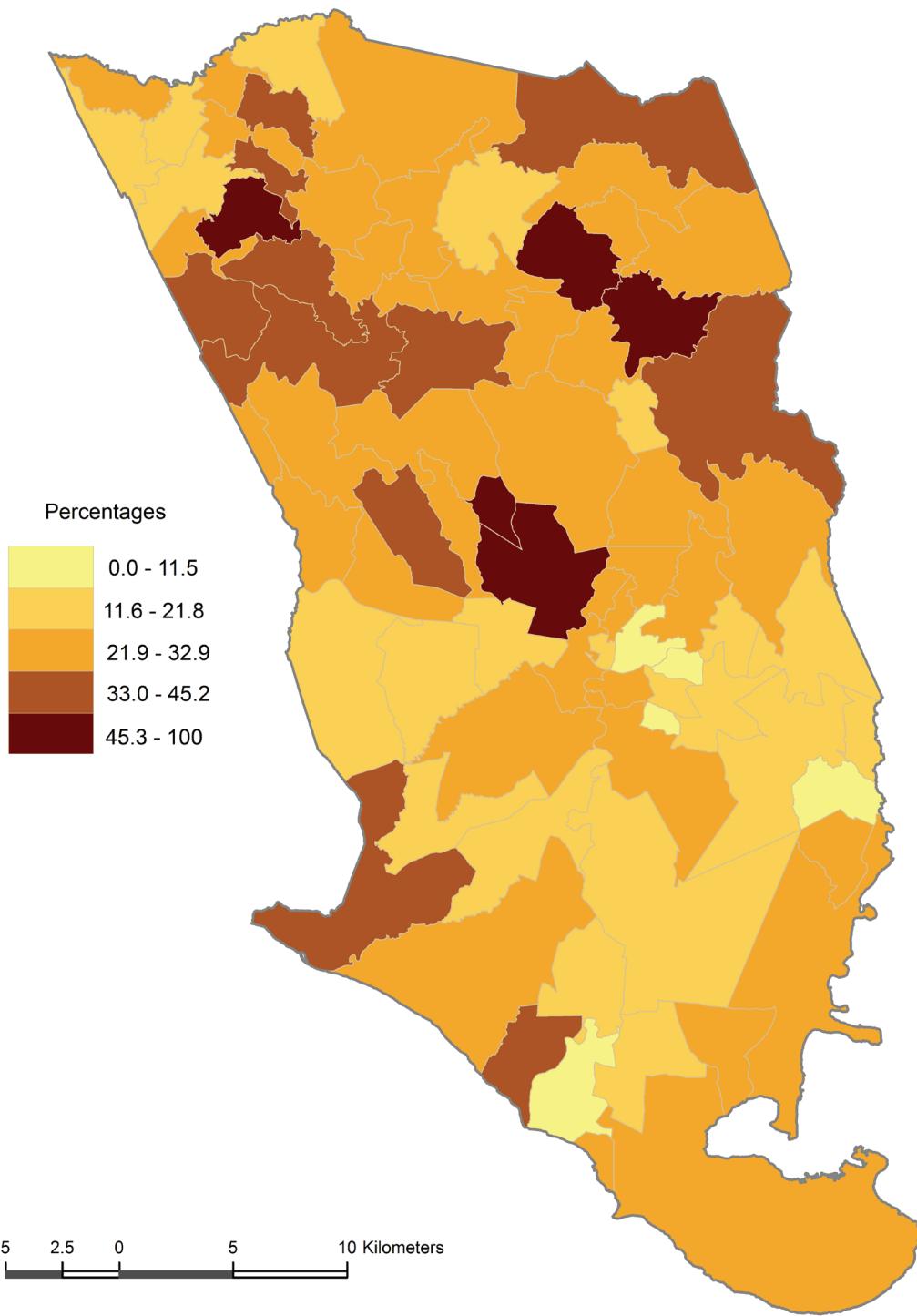
Total Population Living in Food Poverty by Community



NOTE: The area of each point symbol is sized proportionally to the total population living in food poverty in each community.

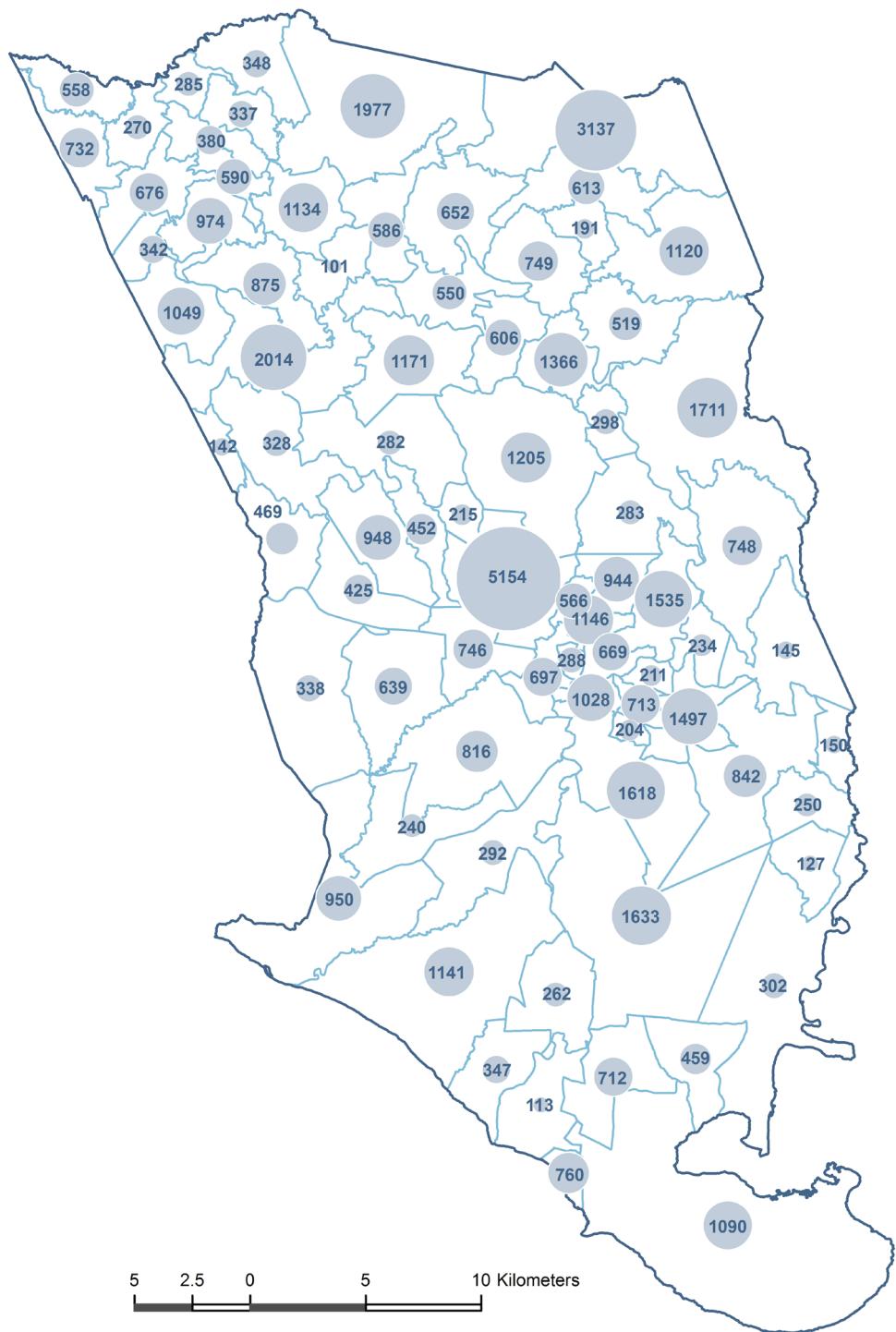
## Map 62: Incidence of Poverty by Community, Clarendon (2012)

Per cent of Population Living in Poverty by Community



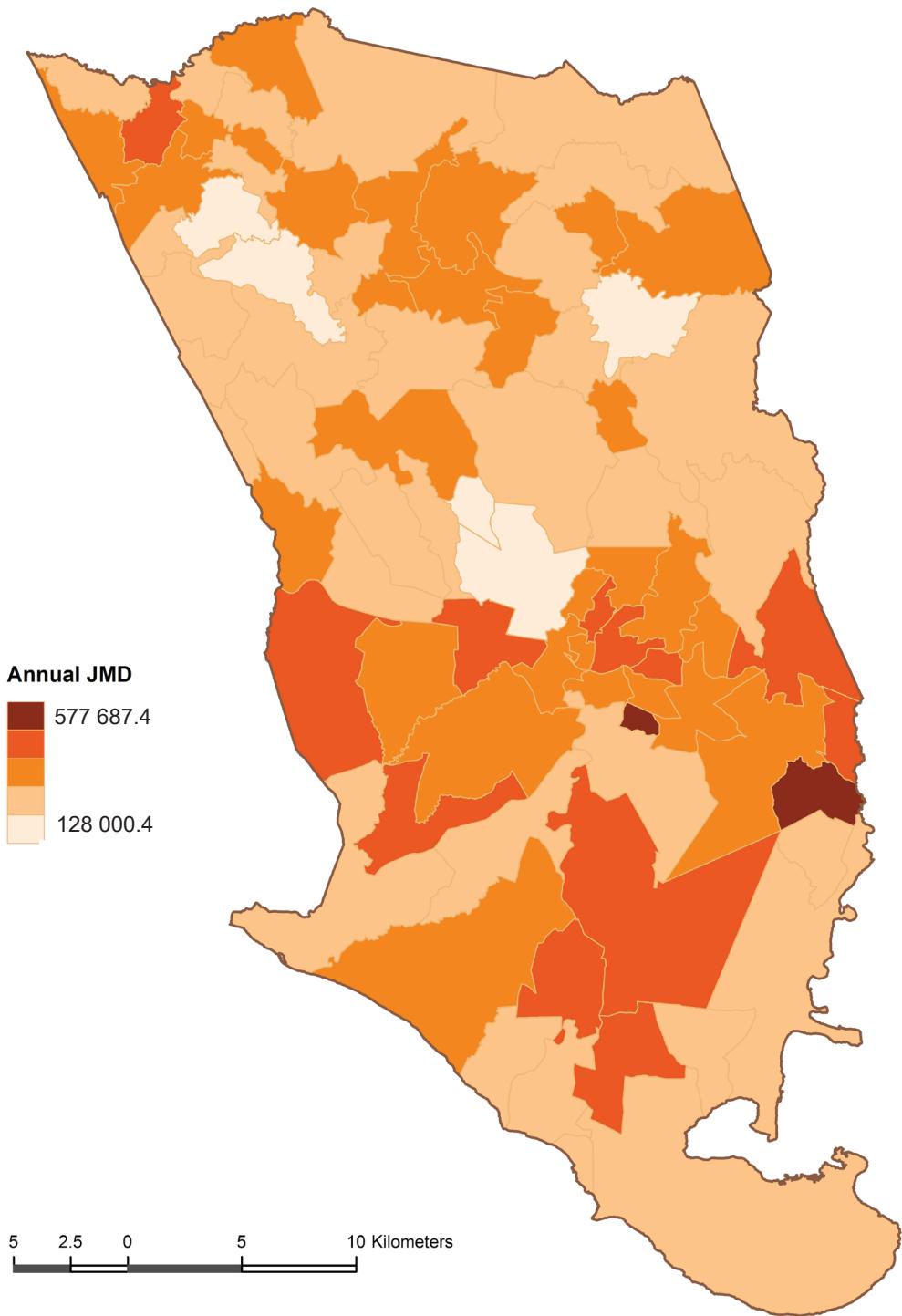
## Map 63: Incidence of Poverty by Community, Clarendon (2012)

Total Population Living in Poverty by Community



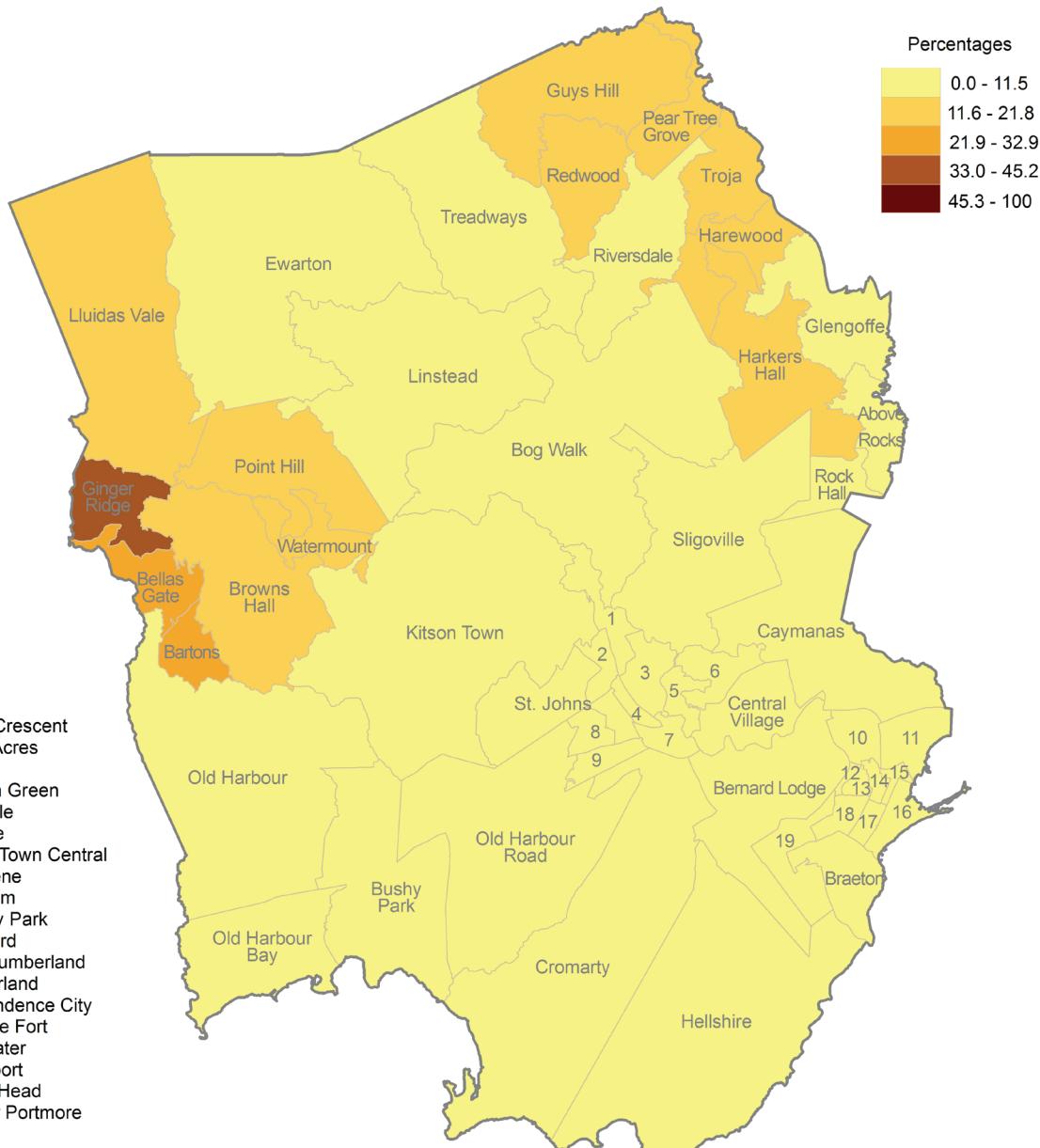
NOTE: The area of each point symbol is sized proportionally to the total population living in poverty in each community.

**Map 64: Mean Household Consumption per Adult Equivalent by Community, Clarendon (2012)**  
Average Annual Jamaican Dollars by Community



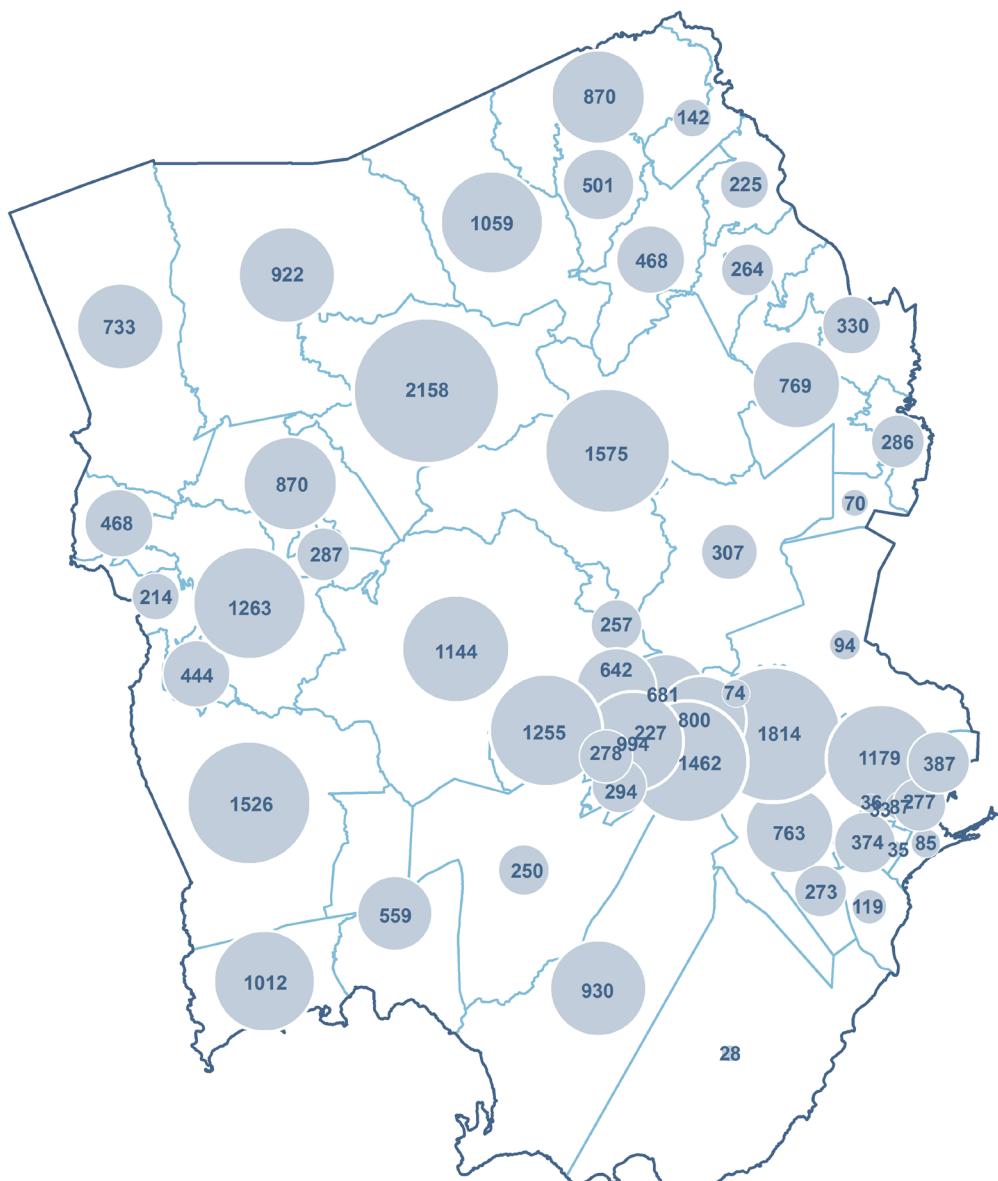
## Map 65: Incidence of Food Poverty by Community, St. Catherine (2012)

Per cent of Population Living in Food Poverty by Community



## Map 66: Incidence of Food Poverty by Community, St. Catherine (2012)

Total Population Living in Food Poverty by Community

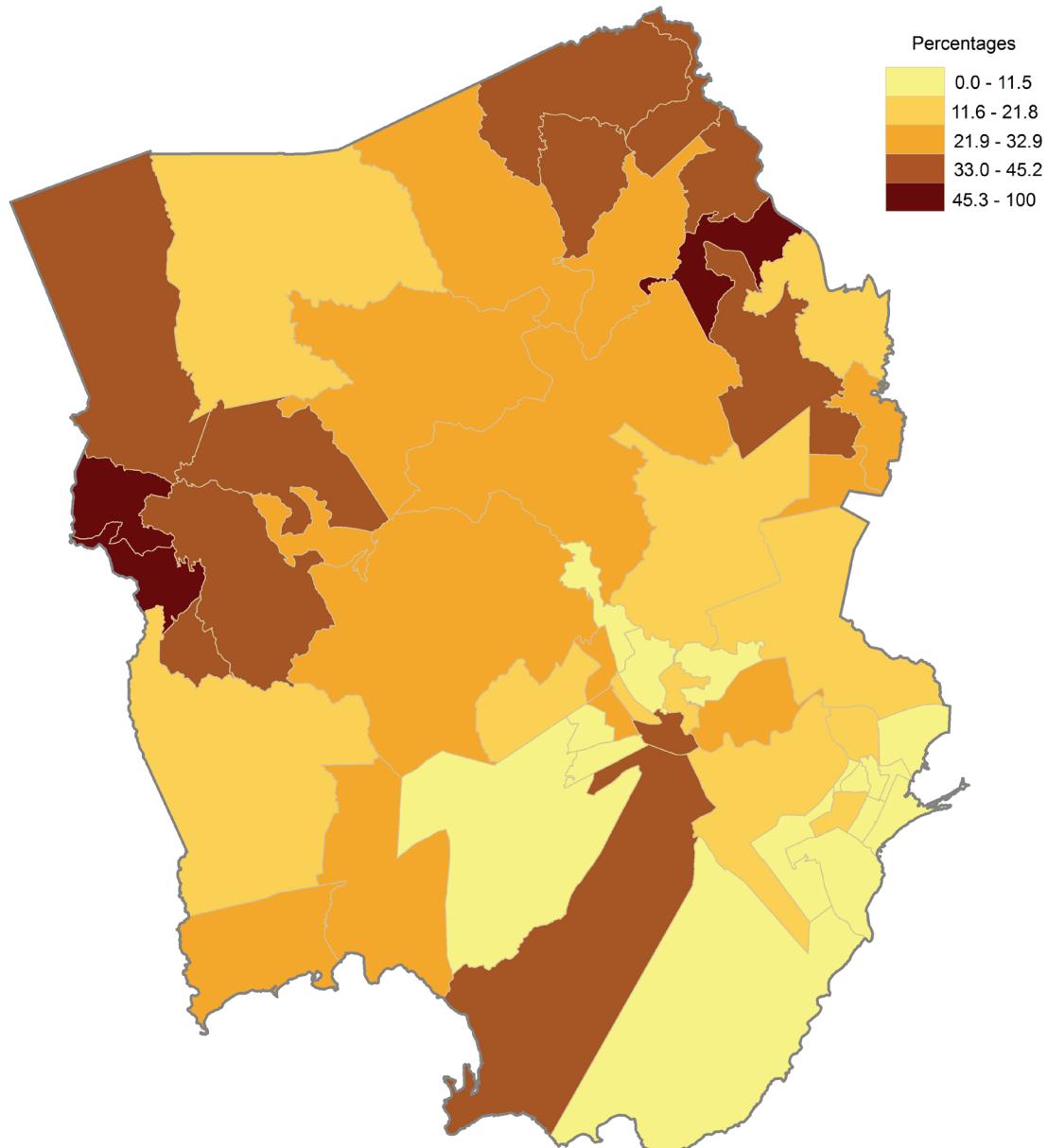


6      3      0      6      12 Kilometers

NOTE: The area of each point symbol is sized proportionally to the total population living in food poverty in each community.

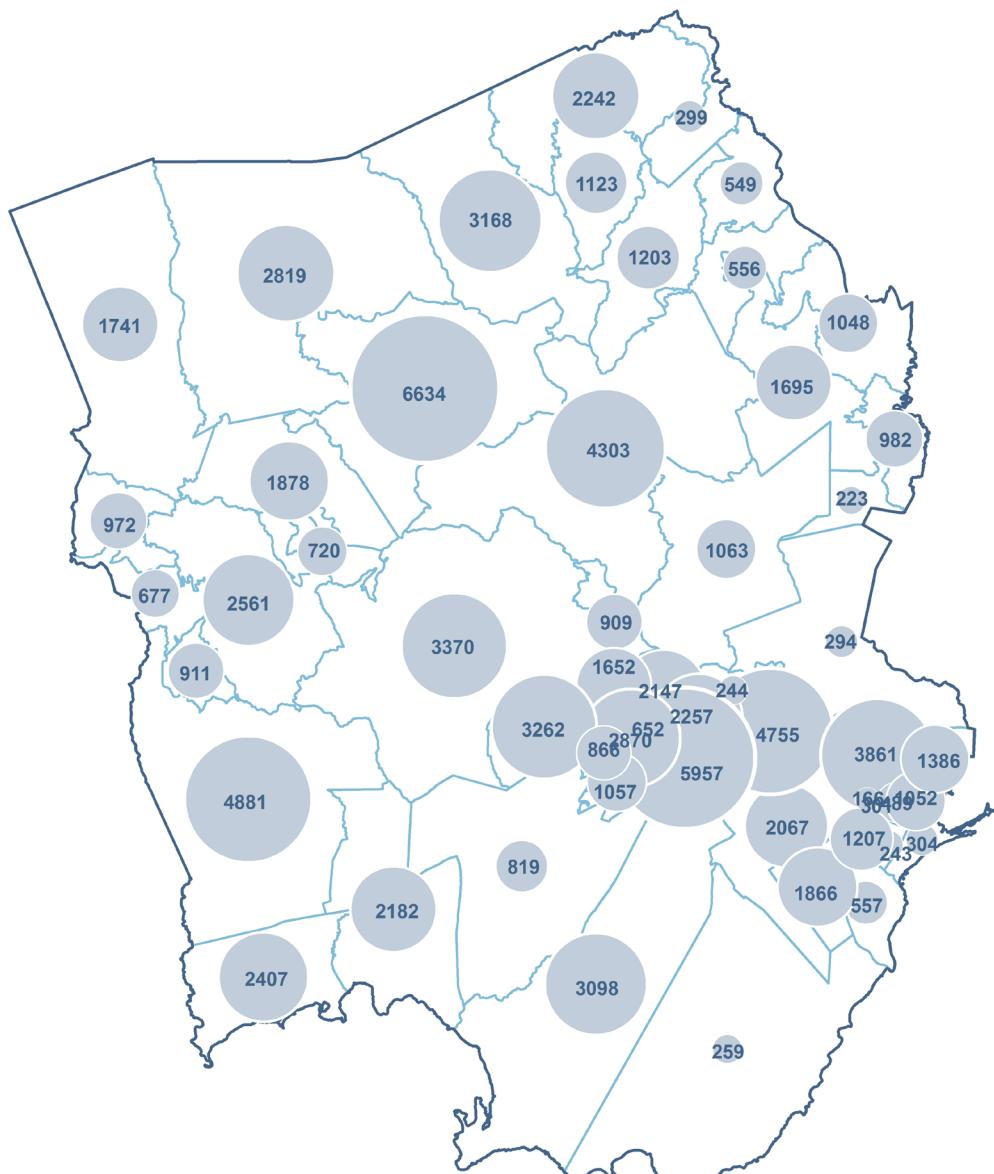
## Map 67: Incidence of Poverty by Community, St. Catherine (2012)

Per cent of Population Living in Food Poverty by Community



## Map 68: Incidence of Poverty by Community, St. Catherine (2012)

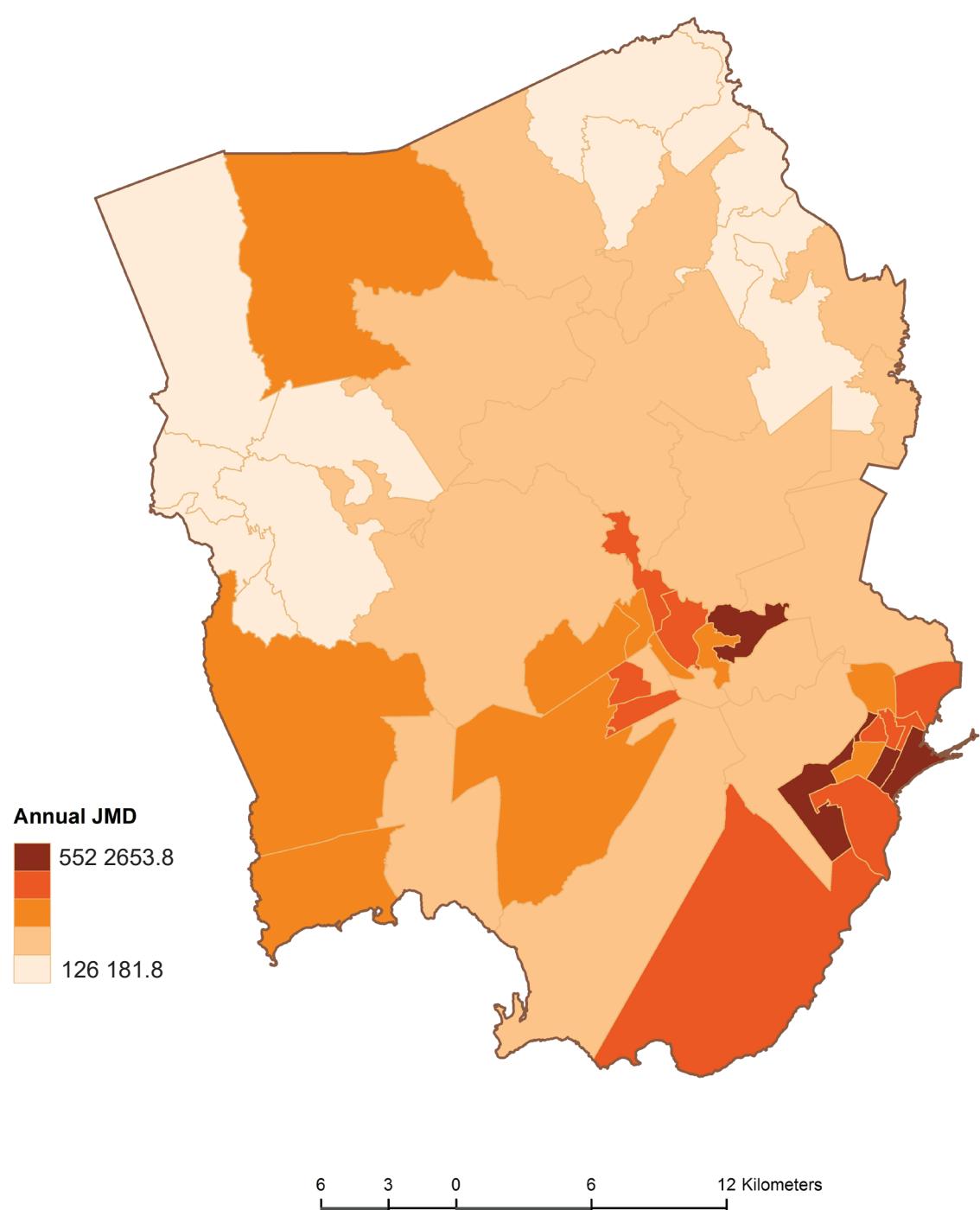
Total Population Living in Poverty by Community



6      3      0      6      12 Kilometers

NOTE: The area of each point symbol is sized proportionally to the total population living in poverty in each community.

**Map 69: Mean Household Consumption per Adult Equivalent by Community, St. Catherine (2012)**  
Average Annual Jamaican Dollars by Community



# Definition of Geographical Areas

## **Kingston Metropolitan Area (KMA)**

A geographic area covering Kingston, urban St. Andrew, Portmore and Spanish Town

## **Other Towns**

Major (urban) centres that have social amenities, such as piped water and electricity, and government institutions, such as post office and police station

## **Rural Areas**

All other areas not covered by KMA and Other Towns. Rural Areas are predominantly agricultural areas that do not have government institutions, such as post office and police station.

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- Tarozzi, A., and A. Deaton. 2008. "Using Census and survey data to estimate poverty and inequality for small areas". *The Review of Economics and Statistics* 91(4): 773–92.



