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# SMALL AREA ESTIMATION OF VULNERABILITY IN BULGARIA AT MUNICIPALITY LEVEL - METHODS AND OPPORTUNITIES

**Program:**  
**Local Development, Poverty Reduction and  
Enhanced Inclusion of Vulnerable Groups 2014 – 2021**

**Project:**  
Novel Approaches to Generating Data on hard-to-reach populations  
at risk of violation of their rights





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**Sofia, 2022**

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## 1. Introduction

This report was drafted in the framework of the Project ‘Novel Approaches to Generating Data on Hard-to-reach Populations at Risk of Violation of Their Rights’, funded under the EEA/Norwegian Financial Mechanism Programme under call BGLD-3.001, Programme ‘Local Development, Poverty Reduction and Enhanced Inclusion of Vulnerable Groups’.

The main goal of the project is to provide data for key national, international and EU indicators on social inclusion and related fundamental rights, covering the Bulgarian population and specific vulnerable groups at risk of social exclusion and violation of fundamental rights<sup>1</sup>.

The term ‘vulnerable’ or ‘vulnerable groups’ is used to denote those individuals or groups for which the probability of the risks of: poverty and social exclusion, experiencing discrimination, and bias-motivated harassment and violence, is higher than for the general population. As a multi-dimensional phenomenon ‘vulnerability’ is usually measured using specific ‘vulnerability’ indicators based on survey questions (observed variables).

In order to provide real-world and up-to-date data on the ‘vulnerability’ phenomenon for the Bulgarian population and given sub-populations, a nation-wide representative survey has been executed by the National Statistical Institute of Bulgaria. The survey is based on a two-stage cluster sample stratified by districts (28) and the residence place size (urban/rural). The clusters at the first stage (enumeration areas) are sampled using the PPS approach and the clusters at the second stage (private households) are sampled using SRS. At the first stage 2 500 clusters are sampled and 15 000 clusters are sampled at the second stage. The survey questionnaire (45-page-long document) includes questions concerning the characteristics of the household, the household members and the dwelling, also questions on specific topics concerning the ‘vulnerability’ phenomenon such as: employment, education, health, housing, discrimination, harassment, hate crime, etc. At the end of the questionnaire there is a special section dedicated to the children and their specific topics. The field work of the survey was executed during the period 19 May - 17 September 2020, using face-to-face CAPI interviews, which resulted in 30303 successfully completed interviews (total response rate of 80,6%). The survey data were weighted using the sampling design weights calibrated to the data for the Bulgarian population as of 31 December 2019 by age groups, sex, and type of residence and districts, accounting for the survey non-response.

Using the methodology<sup>2</sup> on the construction of the ‘vulnerability’ indicators<sup>3</sup> and the data from the representative survey a set of 22 key indicators in 8 thematic areas has been provided. The key indicators have been estimated at a national level, at the NUTS3 level (28 districts) and by the main socio-economic or demographic characteristics<sup>4</sup>.

The main goal of this report is to provide more detailed information on the above mentioned key indicators ‘vulnerability’ at the highest possible disaggregation level in the territorial aspect. This information will provide a solid factual basis for adequate and well-targeted local policies on the issues concerning poverty, social exclusion, discrimination, bias-motivated harassment and violence.

<sup>1</sup>BNSI, FRA (2021), Key social inclusion and fundamental rights indicators in Bulgaria.

<sup>2</sup>Markov, D. and Kuneva, L. (2019). Overview of data and indicators for monitoring ‘vulnerability’ of groups at risk in Bulgaria.

<sup>3</sup>European Commission (2020). Communication from the Commission to the European Parliament and the Council ‘A Union of Equality: EU Roma strategic framework for equality, inclusion and participation’

<sup>4</sup>BNSI, FRA (2021), Key social inclusion and fundamental rights indicators in Bulgaria.

Due to the survey limitations (the small sample size by municipalities), it is not appropriate to calculate direct estimates (using only the weighted survey data) of the key ‘vulnerability’ indicators at a higher disaggregation level (e.g. LAU1 or Bulgarian municipalities). Therefore, in order to estimate the ‘vulnerability’ indicators at the lowest possible regional level an elaborate estimation approach is needed. In the statistical literature and practice, this approach is also known as small area estimation techniques<sup>5</sup>. The latter consist of a number of statistical methods that provide robust estimates on areas/municipalities in which the sample size is not large enough for a direct design-based estimation of sufficient precision. Usually, these methods require additional information in order to ‘gain’ enough ‘strength’ to produce reliable estimates for these small municipalities<sup>6</sup>.

## 2. Estimation methodology

Considering the specifics of the sampling survey (sampling design, sample size, etc.) and the available small area estimation methods, a composite estimator based on the weighted average of the design-based direct estimate and the model-assisted (synthetic) estimate at LAU1 level (municipalities) is adopted for the purposes of this report. The composite estimator holds the following strengths:

- Provides an estimate even in cases of a zero sample size for given municipalities;
- Combines information from the sample survey and the external information sources;
- Gives more weight to the direct estimates in areas where the sample size is relatively ‘large’.

The model-assisted synthetic estimates are based on the integration of data from the sampling survey and an exhaustive source of information i.e. population ‘survey’ data such as the Census or administrative sources (e.g. population registers).

The adopted small area estimation approach (the composite estimator) is fully applicable to the ‘vulnerability’ indicators, using as a starting point the following formula (2.1):

$$(2.1) \quad \hat{I}_{i,j,d} = \frac{\hat{V}_{i,j,d}}{\hat{T}_{i,j,d}} \cdot 100 ,$$

Where:

$\hat{I}_{i,j,d}$  – small area estimates of indicator  $j$  in thematic area  $i$  for municipality (municipality)  $d$  in percentages;

$d = 1, 2, \dots, m$  – municipality;

$m$  – number of a municipalities;

$i = 1, 2, \dots, p$  – thematic area;

$p$  – number of thematic areas;

$j = 1, 2, \dots, q$  – an indicator of given thematic area  $i$ ;

$q$  – number of indicators of a given thematic area  $i$ ;

<sup>5</sup>Rao, J. N. K. and Molina, I. (2015). Small area estimation.

<sup>6</sup>European Union (2019). Guidelines on small area estimation for city statistics and other functional geographies.



$\hat{V}_{i,j,d}$  – composite small area estimates of the number of persons concerning indicator  $j$  in a thematic area  $i$  for municipality  $d$  in absolute numbers;

$\hat{T}_{i,j,d}$  – composite small area estimates of the total number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$  in absolute numbers.

The composite estimate of the number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$  is calculated as follows:

$$(2.2) \quad \hat{V}_{i,j,d} = \gamma_d \cdot V_{i,j,d}^{dir} + (1 - \gamma_d) \cdot \hat{V}_{i,j,d}^{regr},$$

Where:

$\gamma_d$  – weight of the direct estimate  $V_{i,j,d}^{dir}$ , calculated using the proportion:

$$(2.3) \quad \gamma_d = \frac{n_d}{N_d},$$

$n_d$  – number of sampled units in municipality  $d$ ;

$N_d$  – number of population units in municipality  $d$ ;

$V_{i,j,d}^{dir}$  – direct small area estimate of the number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$  using the weighted data from the sampling survey;

$\hat{V}_{i,j,d}^{regr}$  – model-assisted small area estimate of the number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$ , combining data from the sampling survey and from the population as follows:

$$(2.4) \quad \hat{V}_{i,j,d} = \gamma_d \cdot V_{i,j,d}^{dir} + (1 - \gamma_d) \cdot \hat{V}_{i,j,d}^{regr},$$

$X_{1,d}^{pop}, X_{2,d}^{pop}, \dots, X_{k,d}^{pop}$  – values of the  $k$  independent variables (factors) based on the population data for municipality  $d$ ;

$k$  – number of independent variables (factors);

$a$  – constant;

$b_1, b_2, \dots, b_k$  – estimated regression coefficients using the data from the sampling survey in the regression:

$$(2.5) \quad V_{i,j,d}^{regr} = a + b_1 \cdot X_{1,d}^s + b_2 \cdot X_{2,d}^s + \dots + b_k \cdot X_{k,d}^s,$$

Where:

$X_{1,d}^s, X_{2,d}^s, \dots, X_{k,d}^s$  – independent variables (factors) estimated from the weighted data from the sampling survey, which is the estimated form of the full regression model:

$$(2.6) \quad V_{i,j,d}^{regr} = \alpha + \beta_1 \cdot X_{1,d}^s + \beta_2 \cdot X_{2,d}^s + \dots + \beta_k \cdot X_{k,d}^s + \varepsilon_d,$$

Where:

$\alpha$  — constant;

$\beta_1, \beta_2, \dots, \beta_k$  — regression coefficients;

$\varepsilon_d$  — residuals.

The composite estimate of the total number of persons concerning indicator  $j$  in thematic area  $i$  for a municipality  $d$  is calculated as follows:

$$(2.7) \quad \hat{T}_{i,j,d} = \gamma_d \cdot T_{i,j,d}^{dir} + (1 - \gamma_d) \cdot \hat{T}_{i,j,d}^{regr},$$

Where:

$T_{i,j,d}^{dir}$  — direct small area estimate of the total number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$  using the weighted data from the sampling survey;

$\hat{T}_{i,j,d}^{regr}$  — model-assisted small area estimate of the total number of persons concerning indicator  $j$  in thematic area  $i$  for municipality  $d$ , combining data from the sampling survey and from the population as follows:

$$(2.8) \quad \hat{T}_{i,j,d}^{regr} = d + c_1 \cdot X_{1,d}^{pop} + c_2 \cdot X_{2,d}^{pop} + \dots + c_k \cdot X_{k,d}^{pop},$$

$d$  — constant;

$c_1, c_2, \dots, c_k$  — regression coefficients estimated using the data from the sampling survey in the regression:

$$(2.9) \quad T_{i,j,d}^{regr} = d + c_1 \cdot X_{1,d}^s + c_2 \cdot X_{2,d}^s + \dots + c_k \cdot X_{k,d}^s,$$

$X_{1,d}^s, X_{2,d}^s, \dots, X_{k,d}^s$  — independent variables (factors) based on the data from the sampling survey, which is the estimated form of the full regression model:

$$(2.10) \quad T_{i,j,d}^{regr} = \delta + \gamma_1 \cdot X_{1,d}^s + \gamma_2 \cdot X_{2,d}^s + \dots + \gamma_k \cdot X_{k,d}^s + u_d,$$

Where:

$\delta$  — constant;

$\gamma_1, \gamma_2, \dots, \gamma_k$  — regression coefficients;

$u_d$  — residuals.

In order to estimate the best fitted regression model for each composite estimate a stepwise regression procedure is applied<sup>7</sup>. Stepwise regression is a method of fitting regression models in which the choice of predictive variables is carried out by an automatic procedure. In each step of the latter, an independent variable is considered for addition to or subtraction from the set of explanatory (factor, independent) variables based on some prespecified criterion. Usually, this takes the form of a forward, backward, or combined sequence of F-tests or t-tests. The result of the stepwise procedure is a model that is overall significant, highly fitted (the highest R-squared) with all significant coefficient at a given significance level (e.g. 5%).

<sup>7</sup> Draper, N. and Smith, H. (1981). Applied Regression Analysis.



The final model has additionally been tested for the fulfillment of the requirements of the Ordinary Least Squares (OLS) method (incl. the normal distribution of the residuals).

Before the regression estimation procedures are applied it should be considered that the obtaining of reliable estimates depends largely on the data that is used. Therefore, the design-based estimates used for the regression (model-assisted) estimation procedures should be based on municipalities which are relatively large and that are not considered as outliers (in comparison to the other municipalities).

### 3. Data sources and data preparation

The application of the small area estimation approach to the key ‘vulnerability’ indicators estimation requires the provision of data from two main sources: the *sampling survey* (see Section 1) and an *exhaustive population data source*. In this particulate case, the latter is the Bulgarian Census 2011<sup>8</sup> which is the only appropriate data available for small area estimation purposes at the time of the preparation of the present report.

In order to calculate the estimates of the ‘vulnerability’ indicators at, municipality (level the following steps are followed:

**Step 1.** The data for the number of persons and the total number of persons concerning the ‘vulnerability’ indicators from the sampling survey is aggregated at a municipality level. Practically, the values are totals which are calculated as design-based estimates using the weighted data from the survey (Table 3.1).

Table 3.1. Direct small area estimates of the number of persons and the total number of persons concerning the estimated indicators at municipality level using sampling survey data

Municipality (d)	$V^{dir}_{1.1,d}$	$T^{dir}_{1.1,d}$	$V^{dir}_{1.2,d}$	$T^{dir}_{1.2,d}$	...	$V^{dir}_{p,q,d}$	$T^{dir}_{p,q,d}$
1	$V^{dir}_{1.1,1}$	$T^{dir}_{1.1,1}$	$V^{dir}_{1.2,1}$	$T^{dir}_{1.2,1}$	...	$V^{dir}_{p,q,1}$	$T^{dir}_{p,q,1}$
2	$V^{dir}_{1.1,2}$	$T^{dir}_{1.1,2}$	$V^{dir}_{1.2,2}$	$T^{dir}_{1.2,2}$	...	$V^{dir}_{p,q,2}$	$T^{dir}_{p,q,2}$
...	...	...	...	...	...	...	...
m	$V^{dir}_{1.1,m}$	$T^{dir}_{1.1,m}$	$V^{dir}_{1.2,m}$	$T^{dir}_{1.2,m}$	...	$V^{dir}_{p,q,m}$	$T^{dir}_{p,q,m}$

Where:  $p, q \in [1.1, 1.2, \dots, 7.2]$ ,  $d \in [1, 2, \dots, 265]$

<sup>8</sup> Population and Housing Census in the Republic of Bulgaria 2011 - <https://www.nsi.bg/census2011/indexen.php>

**Step 2.** The data for the independent variables (factors) from the sampling survey are aggregated at a municipal level. The values are totals calculated as design-based estimates using the weighted data from the survey (Table 3.2).

Table 3.2. Direct small area estimates of the independent variables (factors) at a municipality level using sampling survey data

Municipality (d)	$X_{1,d}^s$	$X_{2,d}^s$	...	$X_{k,d}^s$
1	$X_{1,1}^s$	$X_{2,1}^s$	...	$X_{k,1}^s$
2	$X_{1,2}^s$	$X_{2,2}^s$	...	$X_{k,2}^s$
...	...	...	...	...
m	$X_{1,m}^s$	$X_{2,m}^s$	...	$X_{k,m}^s$

Where:  $k \in [1,2, \dots, 24]$ ,  $d \in [1,2, \dots, 265]$ .

The full list of the independent variables (factors) used for the small area estimation purposes is given in the following table (3.3):

Table 3.3. List of the independent variables (factors) and their abbreviations

Independent variable (factor)	Abbreviation
Number of males	$X_{1,d}$
Number of females	$X_{2,d}$
Number of persons aged 0 - 15	$X_{3,d}$
Number of persons aged 16 - 24	$X_{4,d}$
Number of persons aged 25 - 44	$X_{5,d}$
Number of persons aged 45 - 59	$X_{6,d}$
Number of persons aged 60+	$X_{7,d}$
Number of persons with self-declared ethnicity - Bulgarian	$X_{8,d}$
Number of persons with self-declared ethnicity - Roma	$X_{9,d}$
Number of persons with self-declared ethnicity - Turkish	$X_{10,d}$
Number of persons living in the rural areas	$X_{11,d}$
Number of persons living in the urban areas	$X_{12,d}$
Number of persons living in 1 person household	$X_{13,d}$
Number of persons living in 2-4 persons household	$X_{14,d}$



**Table 3.3. List of the independent variables (factors) and their abbreviations**

(Continued and end)

Number of persons living in 5 and more persons household	$X_{15,d}$
Number of persons living in household with no children	$X_{16,d}$
Number of persons living in household with 1 child	$X_{17,d}$
Number of persons living in household with 2 children	$X_{18,d}$
Number of persons living in a household with 3 and more children	$X_{19,d}$
Number of persons living in a household among HH members 24+ that have never been in formal education or never completed primary education	$X_{20,d}$
Number of persons living in a household among HH members 24+ with the highest completed education - primary	$X_{21,d}$
Number of persons living in a household among HH members 24+ with the highest completed education - lower secondary	$X_{22,d}$
Number of persons living in a household among HH members 24+ with the highest completed education - upper secondary, vocational, post-secondary or short cycle tertiary	$X_{23,d}$
Number of persons living in a household among HH members 24+ with the highest completed education - tertiary	$X_{24,d}$

**Step 3.** The data on the same independent variables (the same factors as those from the sampling survey) from the exhaustive data source (i.e. Census) are aggregated at the a municipality level (municipalities). The values are calculated as totals (Table 3.4).

**Table 3.4. Values of the independent variables (factors) at a municipality level based on the population data**

Municipality (d)	$X_{1,d}^{pop}$	$X_{2,d}^{pop}$	...	$X_{k,d}^{pop}$
1	$X_{1,1}^{pop}$	$X_{2,1}^{pop}$	...	$X_{k,1}^{pop}$
2	$X_{1,2}^{pop}$	$X_{2,2}^{pop}$	...	$X_{k,2}^{pop}$
...	...	...	...	...
m	$X_{1,m}^{pop}$	$X_{2,m}^{pop}$	...	$X_{k,m}^{pop}$

**Step 4.** Using the considered methodology (see Section 2) and the three datasets (Tables 3.1, 3.2 and 3.4), the composite estimate of the number of persons for each indicator  $j$  in thematic area  $i$  for a municipality  $d$  is calculated (Table 3.5):

**Table 3.5. Small area estimates of the number of persons and the total number of persons concerning the estimated indicators at a municipality level**

Municipality (d)	$\widehat{V}_{1.1,d}$	$\widehat{T}_{1.1,d}$	$\widehat{V}_{1.2,d}$	$\widehat{T}_{1.2,d}$	...	$\widehat{V}_{p.q,d}$	$\widehat{T}_{p.q,d}$
1	$\widehat{V}_{1.1,1}$	$\widehat{T}_{1.1,1}$	$\widehat{V}_{1.2,1}$	$\widehat{T}_{1.2,1}$	...	$\widehat{V}_{p.q,1}$	$\widehat{T}_{p.q,1}$
2	$\widehat{V}_{1.1,2}$	$\widehat{T}_{1.1,2}$	$\widehat{V}_{1.2,2}$	$\widehat{T}_{1.2,2}$	...	$\widehat{V}_{p.q,2}$	$\widehat{T}_{p.q,2}$
...	...	...	...	...	...	...	...
m	$\widehat{V}_{1.1,m}$	$\widehat{T}_{1.1,m}$	$\widehat{V}_{1.2,m}$	$\widehat{T}_{1.2,m}$	...	$\widehat{V}_{p.q,m}$	$\widehat{T}_{p.q,m}$

**Step 5.** Using the formula 2.1 and the data from Step 4 the final small area estimates of the 'vulnerability' indicators are calculated for each a municipality (Table 3.6):

**Table 3.6. Small area estimates of the 'vulnerability' indicators at a municipality level**

Municipality (d)	$\widehat{I}_{1.1,d}$	$\widehat{I}_{1.2,d}$	...	$\widehat{I}_{p.q,d}$
1	$\widehat{I}_{1.1,1}$	$\widehat{I}_{1.2,1}$	...	$\widehat{I}_{p.q,1}$
2	$\widehat{I}_{1.1,2}$	$\widehat{I}_{1.2,2}$	...	$\widehat{I}_{p.q,2}$
...	...	...	...	...
m	$\widehat{I}_{1.1,m}$	$\widehat{I}_{1.2,m}$	...	$\widehat{I}_{p.q,m}$

The full list of all 'vulnerability' indicators to be estimated at a municipality level is given in the following table (3.7):



Table 3.7. List of the estimated 'vulnerability' indicators and their abbreviations

Thematic area/Estimated indicator	Abbreviation $\hat{I}_{i,j,d}$
<b>1. Education</b>	
1.1. Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care	$\hat{I}_{1.1,d}$
1.2. Share of people aged 18-24 years that have completed at most lower secondary education and are not involved in further education or training	$\hat{I}_{1.2,d}$
1.3. Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student)	$\hat{I}_{1.3,d}$
<b>2. Employment</b>	
2.1. Share of people who self-declared their main activity status as 'paid work' (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks), 20 - 64 years	$\hat{I}_{2.1,d}$
2.2. Share of young persons, 15 - 29 years old with current main activity 'neither in employment, education or training' (NEET)	$\hat{I}_{2.2,d}$
2.3. Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job, 16+	$\hat{I}_{2.3,d}$
<b>3. Poverty and social exclusion</b>	
3.1. At-risk-of-poverty rate (below 60% of median equivalent income after social transfers)	$\hat{I}_{3.1,d}$
3.2. Share of persons living in a household where one person in the household gone to bed hungry in the past month because there was not enough money for food	$\hat{I}_{3.2,d}$
3.3. Share of people aged 16 years and more satisfied with their financial situation	$\hat{I}_{3.3,d}$
3.4. Share of people who felt excluded from society	$\hat{I}_{3.4,d}$
<b>4. Health</b>	
4.1. Share of persons with self-reported long-standing limitations in usual activities due to health problems, respondents	$\hat{I}_{4.1,d}$
4.2. Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel' (all three categories are cumulated)	$\hat{I}_{4.2,d}$

**Table 3.7. List of the estimated ‘vulnerability’ indicators and their abbreviations**  
(Continued and end)

4.3. Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services, 16+	$\hat{I}_{4.3,d}$
<b>5. Housing</b>	
5.1. Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet)	$\hat{I}_{5.1,d}$
5.2. Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling	$\hat{I}_{5.2,d}$
5.3. Share of people living in a household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding	$\hat{I}_{5.3,d}$
5.4. Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing, 16	$\hat{I}_{5.4,d}$
<b>6. Discrimination, harassment and hate crime</b>	
6.1. Share of people who have felt discriminated against because of any ground in any of the areas covered in the survey in the past 12 months	$\hat{I}_{6.1,d}$
6.2. Share of people experiencing harassment (overall – 5 acts) because of any ground in the 12 months before the survey	$\hat{I}_{6.2,d}$
6.3. Share of people aged 16 years and more who have experienced physical assault (e.g., hit, pushed or kicked) because of any ground in the past 12 months	$\hat{I}_{6.3,d}$
<b>7. Participation , building cooperation and trust</b>	
7.1. Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination	$\hat{I}_{7.1,d}$
7.2. Share of persons who did not report the most recent incident of hate-motivated violence (of those experiencing hate-motivated violence)	$\hat{I}_{7.2,d}$



## 4. Small area estimation results and mapping of the indicators

### ***Important considerations***

Using the methodology (presented in Section 2) and the datasets (presented in Section 3) small area estimates for the ‘vulnerability’ indicators by Bulgarian municipalities are obtained. Due to the specifics of the data sources and the estimation procedures that have been used the following should be considered:

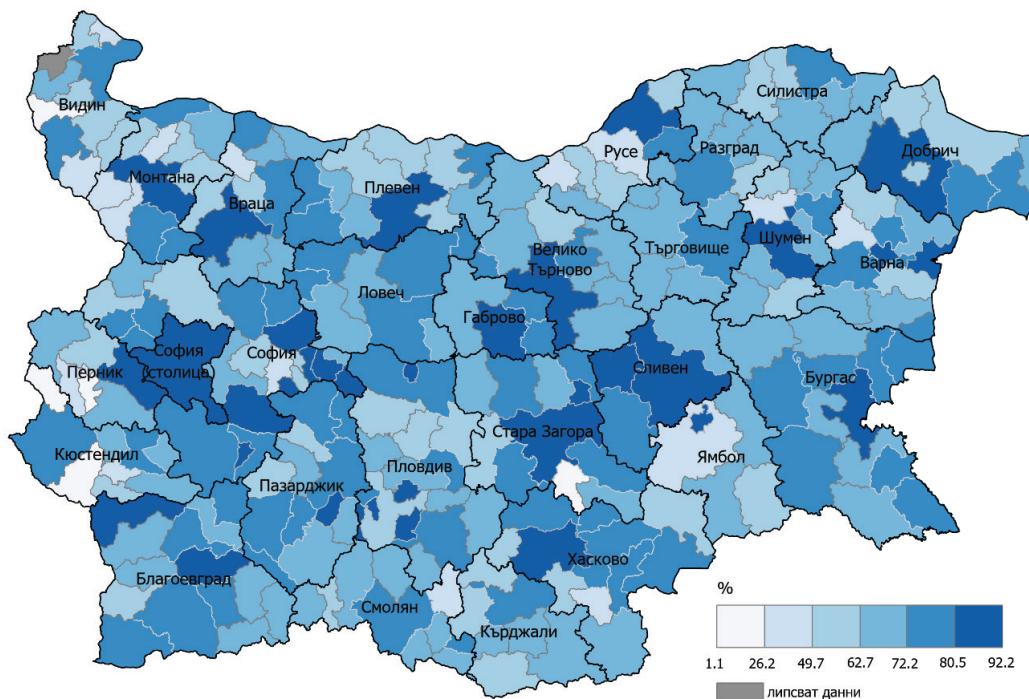
- The total number of municipalities in Bulgaria is 265.
- The sample survey can provide data for the design-based estimates for the total number of 257 Bulgarian municipalities. The municipalities: Suhindol, Boynitsa, Gramada, Treklyano, Kovachevtsi, Alfatar, Koprivshtitsa, Chavdar are not initially included in the sampling design stage.
- The population data for Sarnitsa municipality is not available from the Census 2011 because the municipality is separated as an independent one since January 1, 2015, by a decree of the President of the Republic of Bulgaria. Due to this fact, an imputation procedure based on the ‘linear trend at point’ method is used in order to ‘replace’ the missing data on the factor variables for this exact municipality. The imputation is executed at the Pazardzhik district level using the non-missing data from the other municipalities belonging to this district.
- The data used for the model-assisted regression estimates are based on municipalities in which the number of the sample units is equal to or greater than 70. At the regression estimation stage the Sofia-city municipality is excluded due to its outlier status.
- The regression coefficients for every model-assisted estimation are calculated using the stepwise regression function in IBM SPSS software and only the statistically significant at 5% coefficients are presented in ANNEX 1.
- The values of the small area estimates for the ‘vulnerability’ indicators by municipalities, their standard errors and descriptive statistics of these indicators are presented in the Annex of this report as follows: estimates - ANNEX 3, std. errors - ANNEX 4 and descriptive statistics - ANNEX 5.
- The small area estimation procedure could not provide adequate results about the ‘vulnerability’ indicators: 6.1. ‘Share of people who have felt discriminated against because of any ground in any of the areas covered in the survey in the past 12 months’ and 7.2. ‘Share of persons who did not report the most recent incident of hate-motivated violence (of those experiencing hate-motivated violence)’.
- The standard errors of the ‘vulnerability’ indicators are based on the formula of the standard error of a proportion.
- The small area estimates for the ‘vulnerability’ indicators by municipalities are visualized using choropleth maps in which the darker colours should be interpreted as higher values of a given indicator and the brighter colours as lower values of this indicator.

## Estimation results

### 4.1. Indicator 'Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care'

The indicator varies in the range from 1.08% to 92.25% with mean 68.09% and std. deviation 13.35%. The municipalities with the highest values (Figure4.1, dark blue areas) of the 'Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care' are Plovdiv (92.25%), Stolichna (91.67%), Varna (91.57%), Yambol (90.27%) and Burgas (89.63%). The municipalities with the lowest values (Figure4.1, light blue areas) of the indicator are Opan (26.20%), Treklyano (20.95%), Makresh (16.09%), Kovachevtsi (7.95%) and Nevestino (1.08%).

Figure 4.1. Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care by municipality (%)

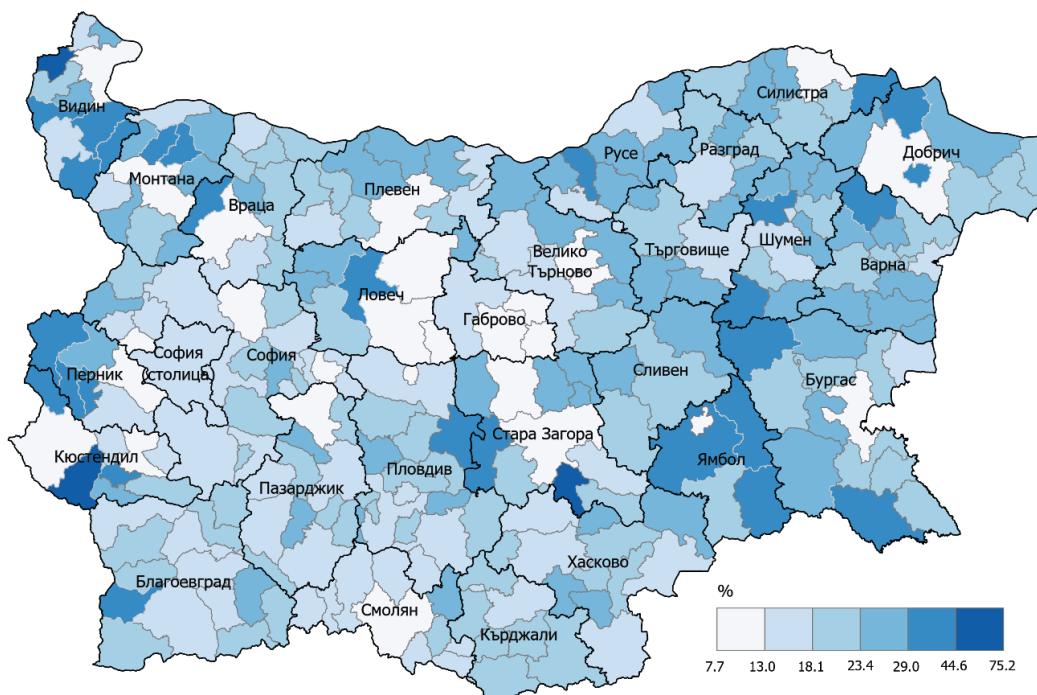




#### 4.2. Indicator 'Share of people aged 18 - 24 years that have completed at most lower secondary education and are not involved in further education or training'

The indicator varies in the range from 7.69% to 75.17% with mean 21.71% and std. deviation 7.75%. The municipalities with the highest values (Figure 4.2, dark blue areas) of the 'Share of people aged 18 - 24 years that have completed at most lower secondary education and are not involved in further education or training" are Boynitsa (75.17%), Nevestino (57.98%), Opan (53.74%), Makresh (44.65%) and Treklyano (39.08%). The municipalities with the lowest values (Figure 4.2, light blue areas) of the indicator are Vratsa (9.74%), Lovech (8.53%), Pernik (8.38%), Tryavna (7.71%) and Apriltsi (7.69%).

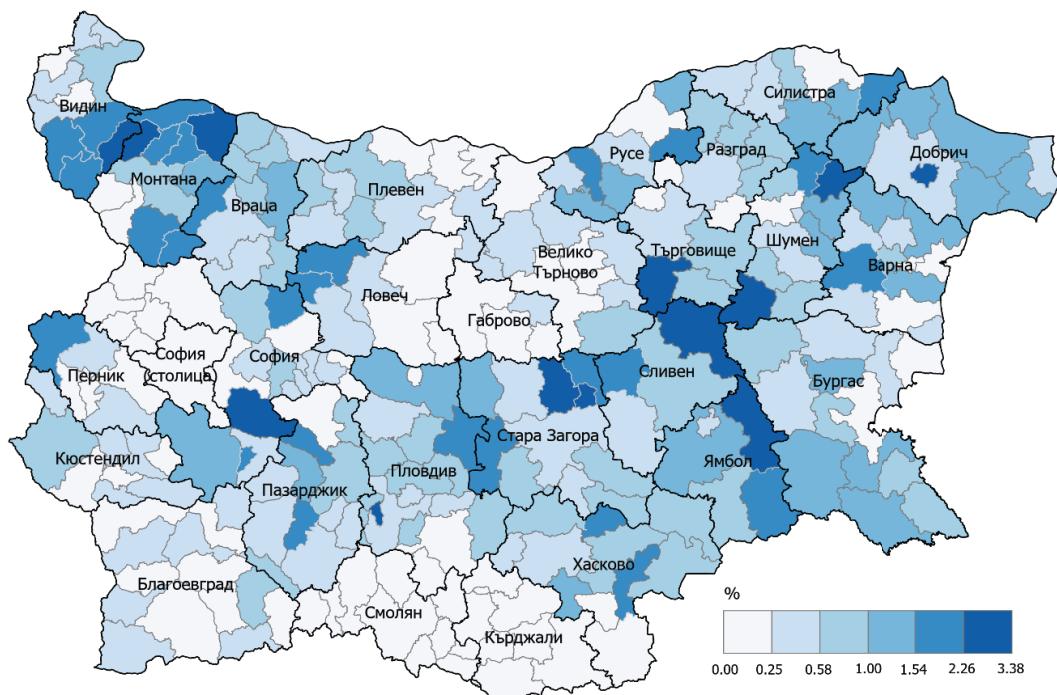
Figure 4.2. Share of people aged 18-24 years that have completed at most lower secondary education and are not involved in further education or training by municipality (%)



**4.3. Indicator 'Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student)'**

The indicator varies in the range from 0,00% to 3,38% with mean 0.75% and std. deviation 0.72%. The municipalities with the highest values (Figure 4.3, dark blue areas) of the 'Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student)' are Maglizh (3.38%), Perushtitsa (3.33%), Nikolaev (3.03%), Kotel (2.83%) and Varbitsa (2.79%). The municipalities with the lowest values equal 0.00% (Figure 4.3, light blue areas) of the indicator are Ardino, Banite, Boynitsa, Chernoochene and Kovachevtsi, Rudozem and Zlatograd.

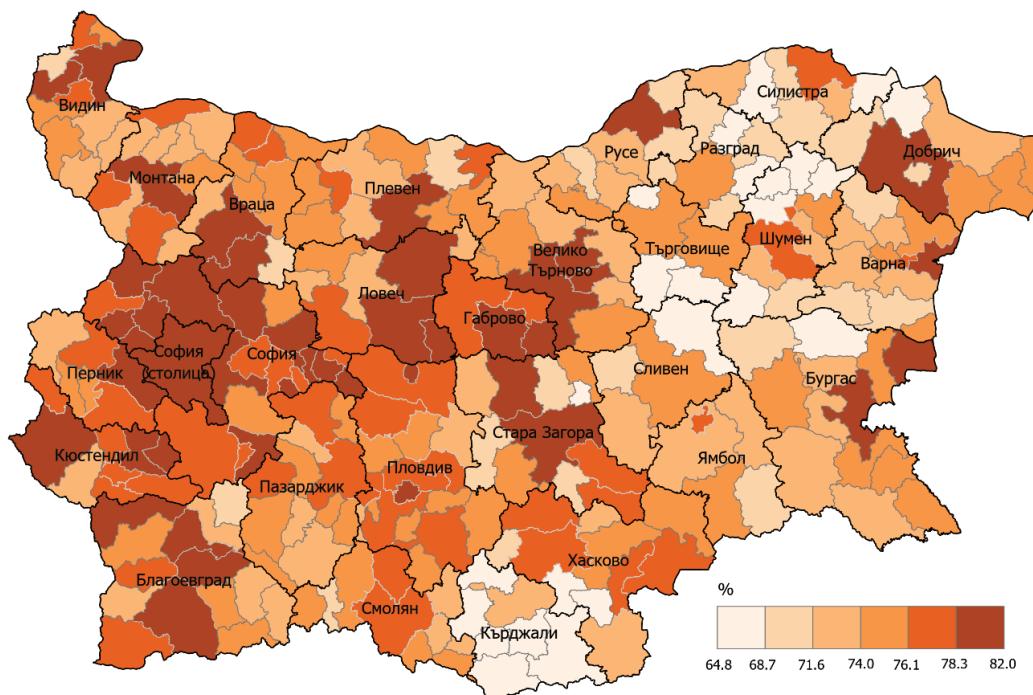
**Figure 4.3. Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student) by municipality (%)**



#### 4.4. Indicator 'Share of people who self-declared their main activity status as 'paid work' (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks), 20 - 64 years'

The indicator varies in the range from 64.81% to 81.98% with mean 74,57% and std. deviation 3,60%. The municipalities with the highest values (Figure 4.4, dark orange areas) of the 'Share of people who self-declared their main activity status as 'paid work' (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks)' are Bozhurishte (81.98%), Stolichna (81.43%), Varna (81.04%), Pernik (80.48%) and Burgas (80.36%). The municipalities with the lowest values (Figure 4.4, light orange areas) of the indicator are Hitrino (65.91%), Nikola Kozlevo (65.80%), Chernoochene (65.63%), Krushari (65.41%) and Venets (64.81%).

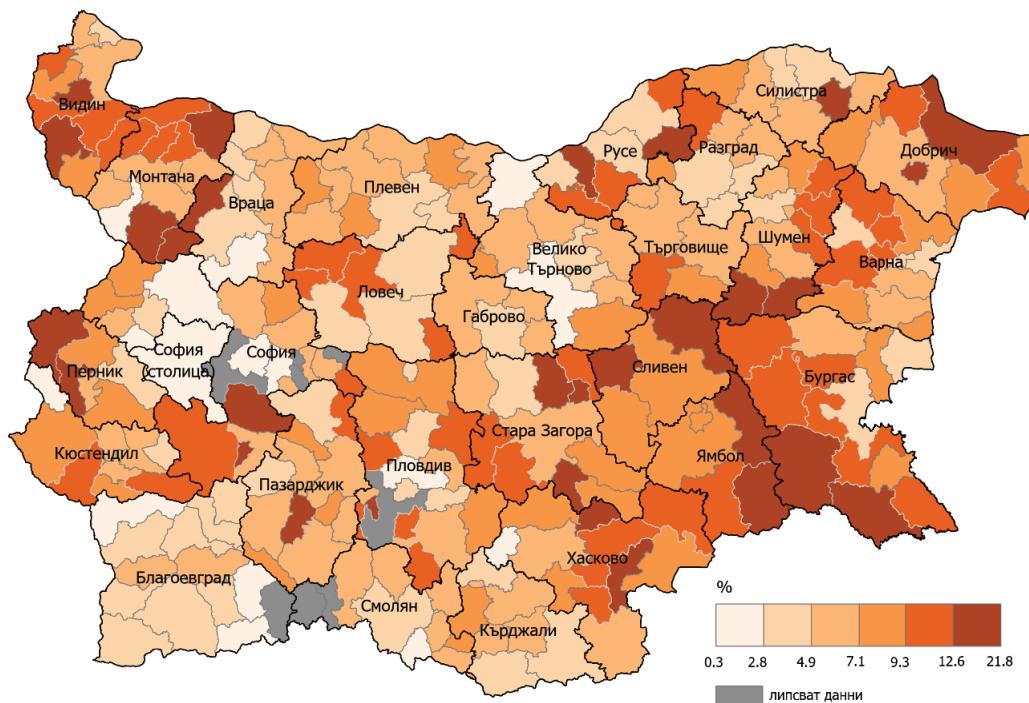
**Figure 4.4. Share of people who self-declared their main activity status as 'paid work' (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks), 20 - 64 years, by municipality (%)**



#### 4.5. Indicator 'Share of young persons, 15-29 years old with current main activity 'neither in employment, education or training' (NEET)'

The indicator varies in the range from 0.31% to 21.79% with mean 7.67% and std. deviation 3.75%. The municipalities with the highest values (Figure 4.5, dark orange areas) of the 'Share of young persons, 15 - 29 years old with current main activity 'neither in employment, education or training" are Perushtitsa (21.79%), Maglizh (18.88%), Nikolaev (18.54%), Varshtets (16.52%) and Boliarovo (16.21%). The municipalities with the lowest values (Figure 4.5, light orange areas) of the indicator are Mezdra (1.70%), Svoge (1.18%), Hadzhidimovo (1.05%), Maritsa (0.73%) and Gorna Malina (0.31%).

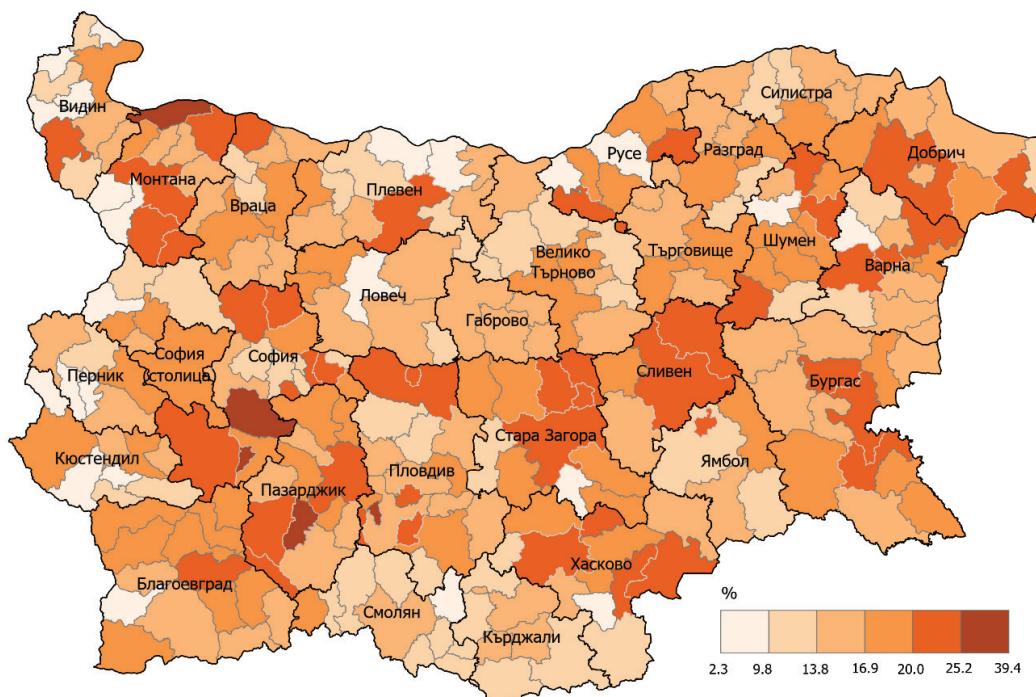
Figure 4.5. Share of young persons, 15 - 29 years old with current main activity 'neither in employment, education or training' (NEET) by municipality (%)



#### 4.6. Indicator 'Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job, 16+'

The indicator varies in the range from 2.28% to 39.41% with mean 16.22% and std. deviation 4.69%. The municipalities with the highest values (Figure 4.6, dark orange areas) of the 'Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job' are Perushtitsa (39.41%), Dolna Banya (29.89%), Rakitovo (28.92%), Ihtiman (27.60%) and Lom (26.41%). The municipalities with the lowest values (Figure 4.6, light orange areas) of the indicator are Makresh (4.99%), Kovachevtsi (4.79%), Treklyano (3.75%), Nevestino (3.54%) and Boynitsa (2.28%).

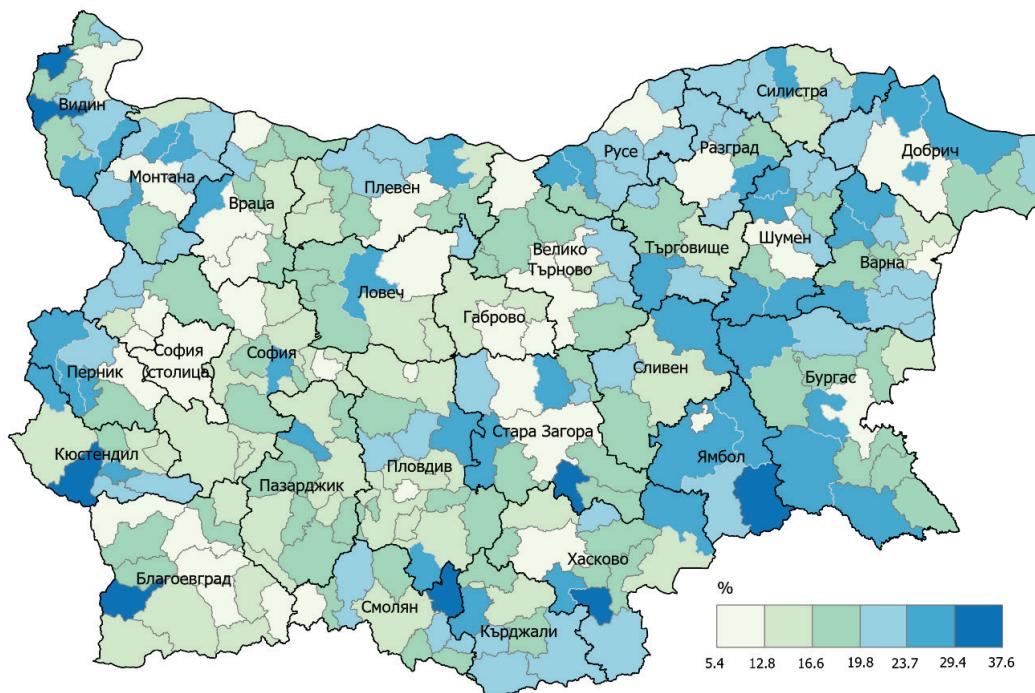
**Figure 4.6. Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job, 16+, by municipality (%)**



#### 4.7. Indicator 'At-risk-of-poverty rate (below 60% of median equivalent income after social transfers)'

The indicator varies in the range from 5.42% to 37.55% with mean 19,10% and std. deviation 5.46%. The municipalities with the highest values (Figure 4.7, dark blue) of the 'At-risk-of-poverty rate (below 60% of median equivalent income after social transfers)' are Boynitsa (37.55%), Nevestino (35.99%), Opan (34.93%), Banite (34.7%) and Boliarovo (31.93%). The municipalities with the lowest values (Figure 4.7, light green areas) of the indicator are Blagoevgrad (8.00%), Plovdiv (7.83%), Veliko Tarnovo (7.53%), Varna (7.21%) and Stolichna (5.42%).

Figure 4.7. At-risk-of-poverty rate (below 60% of median equivalent income after social transfers) by municipality (%)

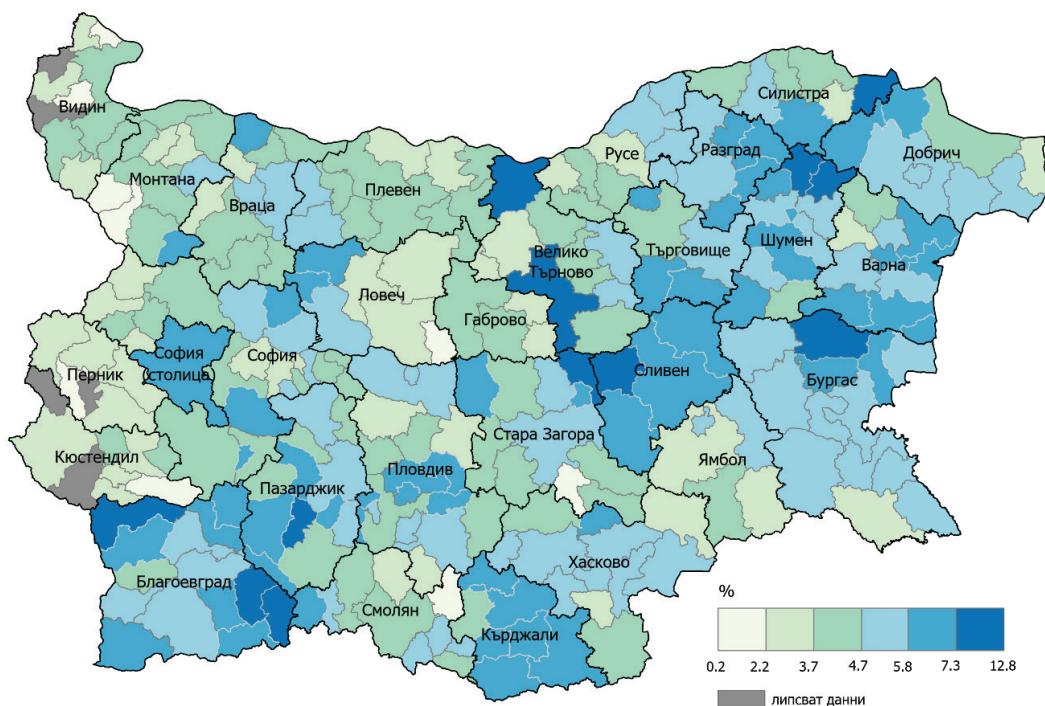




#### 4.8. Indicator 'Share of persons living in household where one person in the household gone to bed hungry in the past month because there was not enough money for food'

The indicator varies in the range from 0.24% to 12.83% with mean 4.89% and std. deviation 1,53%. The municipalities with the highest values (Figure 4.8, dark blue) of the 'Share of persons living in a household where one person in the household gone to bed hungry in the past month because there was not enough money for food' are Svishtov (12.83%), Kaynardzha (9.52%), Garmen (8.73%), Blagoevgrad (8.7%) and Veliko Tarnovo (8.09%). The municipalities with the lowest values (Figure 4.8, light green areas) of the indicator are Apriltsi (1.56%), Chiprovtsi (1.41%), Zemen (0.89%), Gramada (0.82%) and Opan (0.24%).

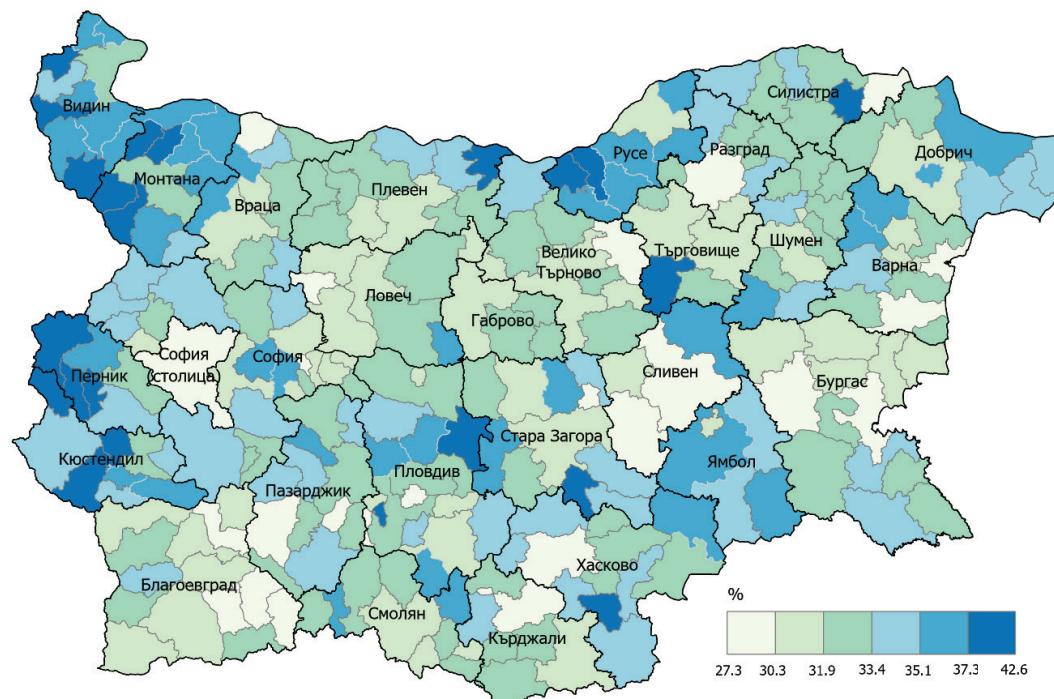
Figure 4.8. Share of persons living in a household where one person in the household gone to bed hungry in the past month because there was not enough money for food by municipality (%)



#### 4.9. Indicator 'Share of people aged 16 years and more satisfied with their financial situation'

The indicator varies in the range from 27.30% to 42.56% with mean 33.42% and std. deviation 2.60%. The municipalities with the highest values (Figure 4.9, dark blue) of the 'Share of people aged 16 years and more satisfied with their financial situation' are Treklyano (42.56%), Kovachevtsi (42.01%), Nevestino (41.98%), Georgi Damyanovo (40.09%) and Makresh (39.95%). The municipalities with the lowest values (Figure 4.9, light green areas) of the indicator are Varna (29.08%), Stolichna (28.95%), Nova Zagora (28.69%), Dolni Chiflik (28%) and Belitsa (27.30%).

Figure 4.9. Share of people aged 16 years and more satisfied with their financial situation by municipality (%)

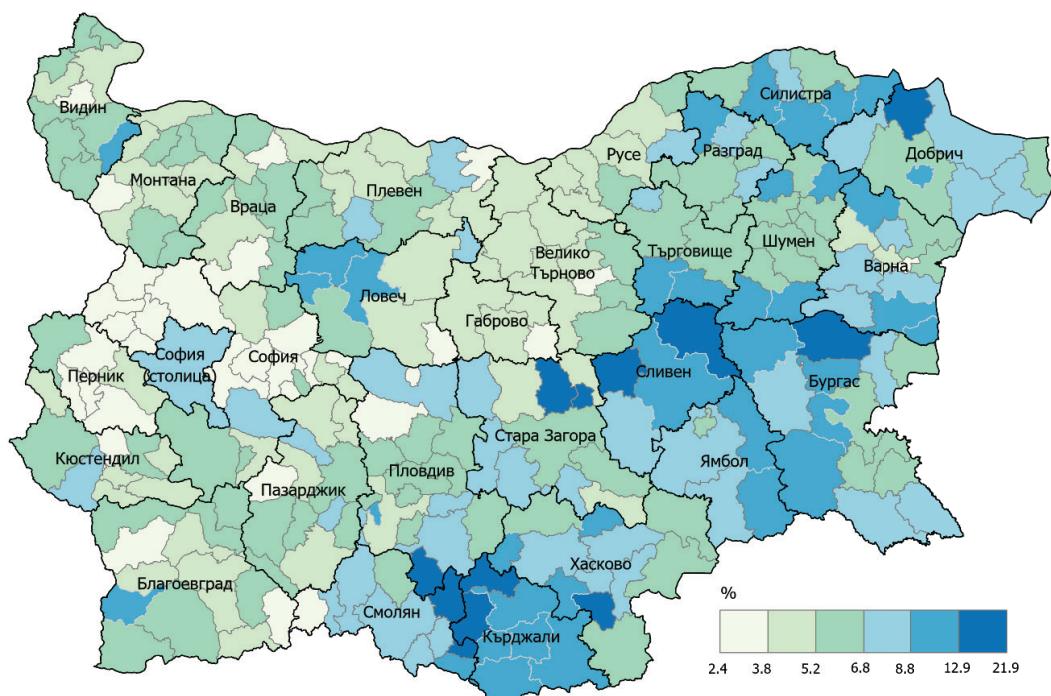




#### 4.10. Indicator 'Share of people who felt excluded from society'

The indicator varies in the range from 2.39% to 21.90% with mean 6.66% and std. deviation 3.08%. The municipalities with the highest values (Figure 4.10, dark blue) of the 'Share of people who felt excluded from society' are Nikolaevо (21.90%), Maglizh (20.45%), Tvarditsa (18.14%), Laki (16.69%) and Chernoochene (15.61%). The municipalities with the lowest values (Figure 4.10, light green areas) of the indicator are Chiprovtsi (2.71%), Chelopech (2.70%), Gorna Malina (2.66%), Kovachevtsi (2.60%) and Anton (2.39%).

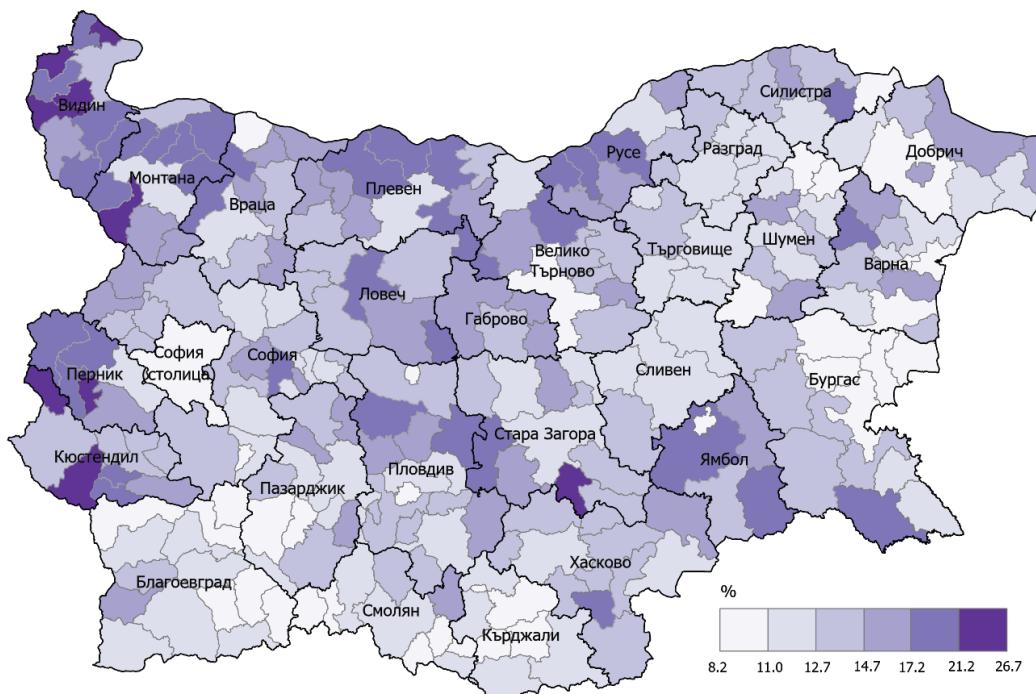
Figure 4.10. Share of people who felt excluded from society by municipality (%)



**4.11. Indicator 'Share of persons with self-reported long-standing limitations in usual activities due to health problems, respondents'**

The indicator varies in the range from 8.24% to 26.74% with mean 14.25% and std. deviation 3.33%. The municipalities with the highest values (Figure 4.11, dark violet) of the 'Share of persons with self-reported long-standing limitations in usual activities due to health problems' are Boynitsa (26.74%), Nevestino (25.3%), Trelyano (24.42%), Makresh (24.4%) and Opan (23.86%). The municipalities with the lowest values (Figure 4.10, light violet areas) of the indicator are Dospat (9.39%), Ruen (9.11%), Satovcha (8.98%), Blagoevgrad (8.81%) and Garmen (8.24%).

**Figure 4.11. Share of persons with self-reported long-standing limitations in usual activities due to health problems, respondents by municipality (%)**

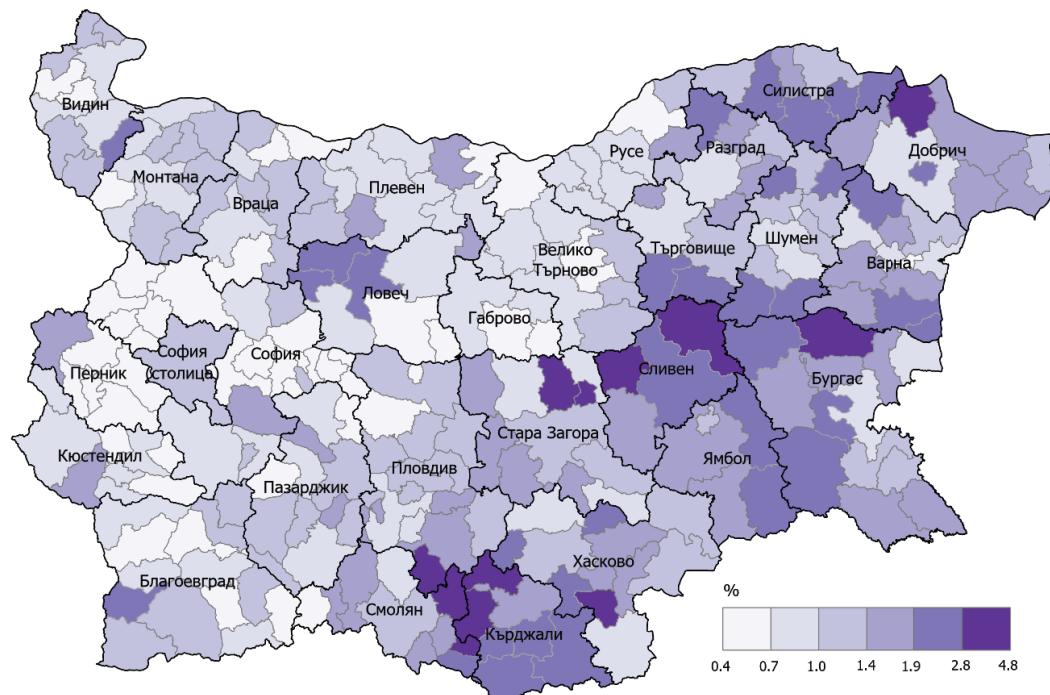




#### 4.12. Indicator 'Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel' (categories cumulated)'

The indicator varies in the range from 0.40% to 4.77% with mean 1.32% and std. deviation 0.70%. The municipalities with the highest values (Figure 4.12, dark violet) of the 'Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel" are Nikolaevо (4.77%), Maglizh (4.45%), Tvarditsa (3.83%), Laki (3.55%) and Chernoochene (3.38%). The municipalities with the lowest values (Figure 4.12, light violet areas) of the indicator are Gorna Malina (0.47%), Beloslav (0.47%), Apriltsi (0.43%), Chelopech (0.42%) and Anton (0.40%).

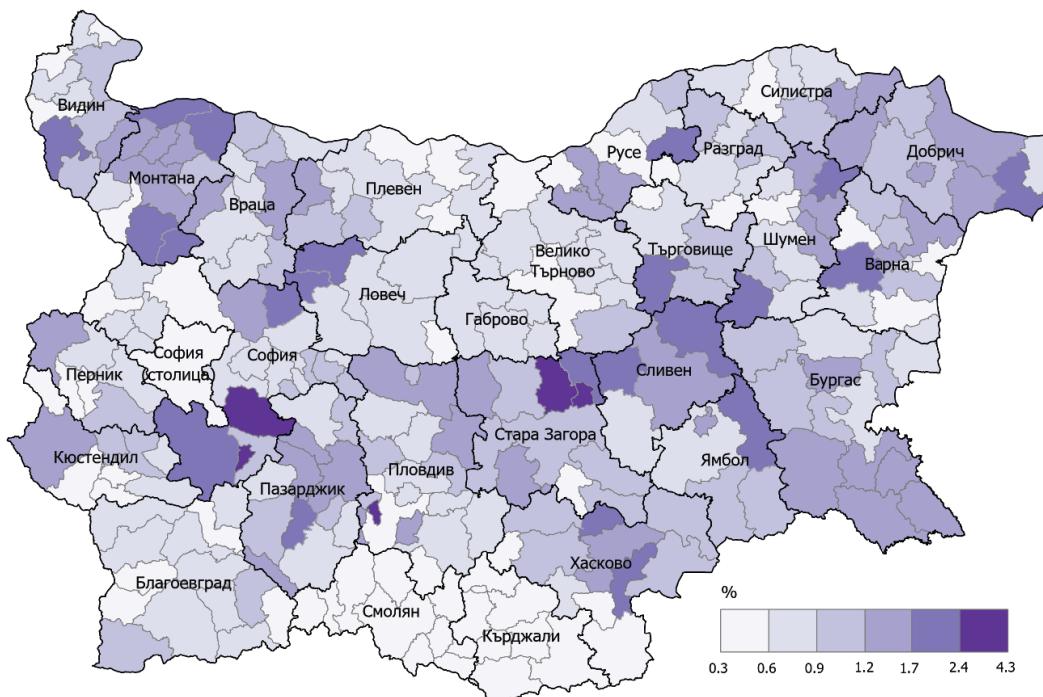
**Figure 4.12. Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel' (categories cumulated) by municipality (%)**



**4.13 Indicator 'Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services, 16+'**

The indicator varies in the range from 0.32% to 4.27% with mean 1.03% and std. deviation 0.53%. The municipalities with the highest values (Figure 4.13, dark violet) of the 'Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services' are Perushtitsa (4.27%), Nikolaev (3.13%), Ihtiman (2.89%), Dolna Banya (2.78%) and Maglizh (2.64%). The municipalities with the lowest values (Figure 4.13, light violet areas) of the indicator are Boynitsa (0.35%), Hitrino (0.34%), Banite (0.34%), Chernoochene (0.33%) and Kirkovo (0.32%).

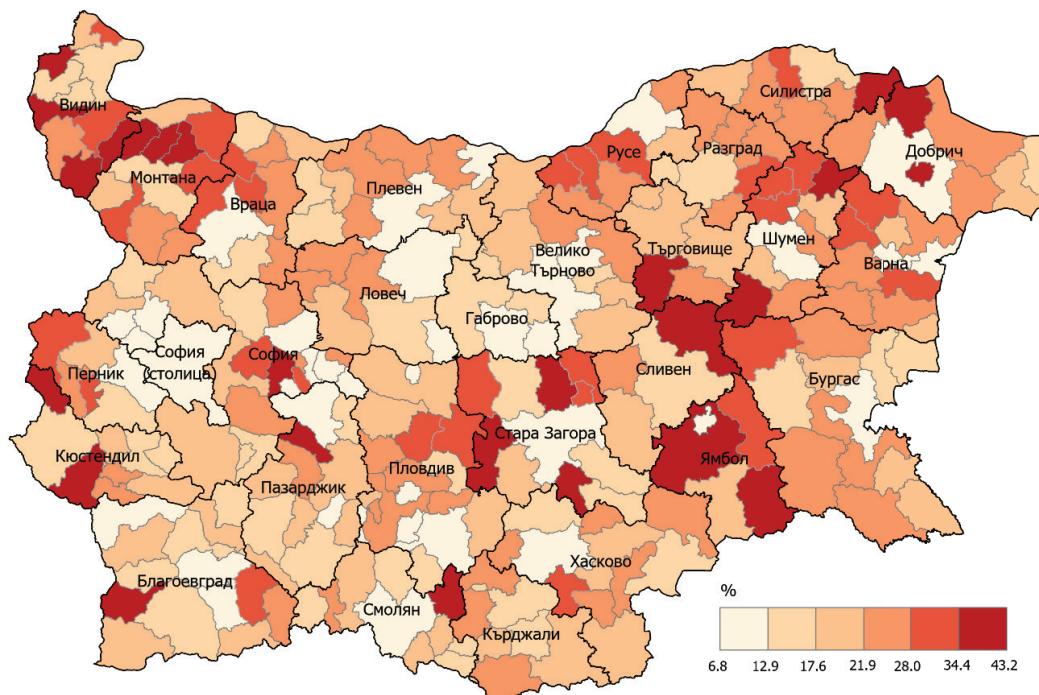
**Figure 4.13. Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services, 16+, by municipality (%)**



#### 4.14 Indicator 'Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet)'

The indicator varies in the range from 6.85% to 43.17% with mean 21.90% and std. deviation 8.17%. The municipalities with the highest values (Figure 4.14, dark orange areas) of the 'Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet)' are Chuprene (43.17%), Ruzhintsi (41.32%), Maglizh (40.49%), Boynitsa (40.28%) and Dobrich-selska (39.44%). The municipalities with the lowest values (Figure 4.14, light orange areas) of the indicator are Tryavna (7.87%), Burgas (7.71%), Plovdiv (7.49%), Varna (7.10%) and Dobrich (6.85%).

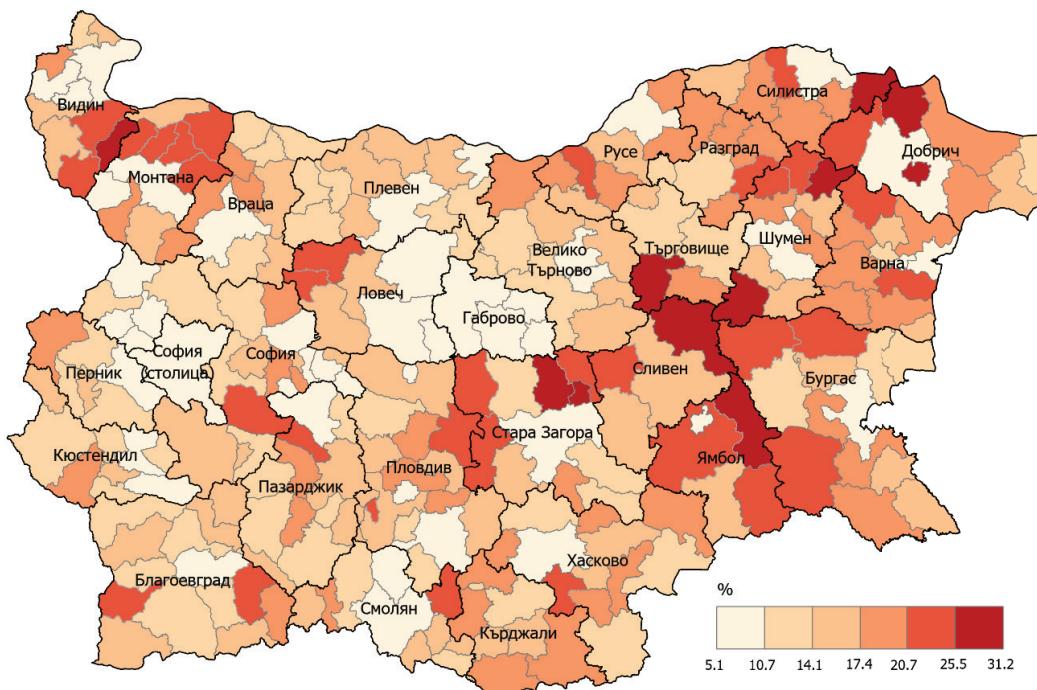
**Figure 4.14. Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet) by municipality (%)**



**4.15. Indicator 'Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling'**

The indicator varies in the range from 5.07% to 31.20% with mean 16.03% and std. deviation 5.18%. The municipalities with the highest values (Figure 4.15, dark orange areas) of the 'Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling' are Maglizh (31.20%), Kaynardzha (31.13%), Nikola Kozlevo (29.79%), Kotel (29.63%) and Varbitsa (29.14%). The municipalities with the lowest values (Figure 4.15, light orange areas) of the indicator are Pernik (7.13%), Koprivshtitsa (7.02%), Gabrovo (6.55%), Apriltsi (5.36%) and Tryavna (5.07%).

**Figure 4.15. Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling by municipality (%)**

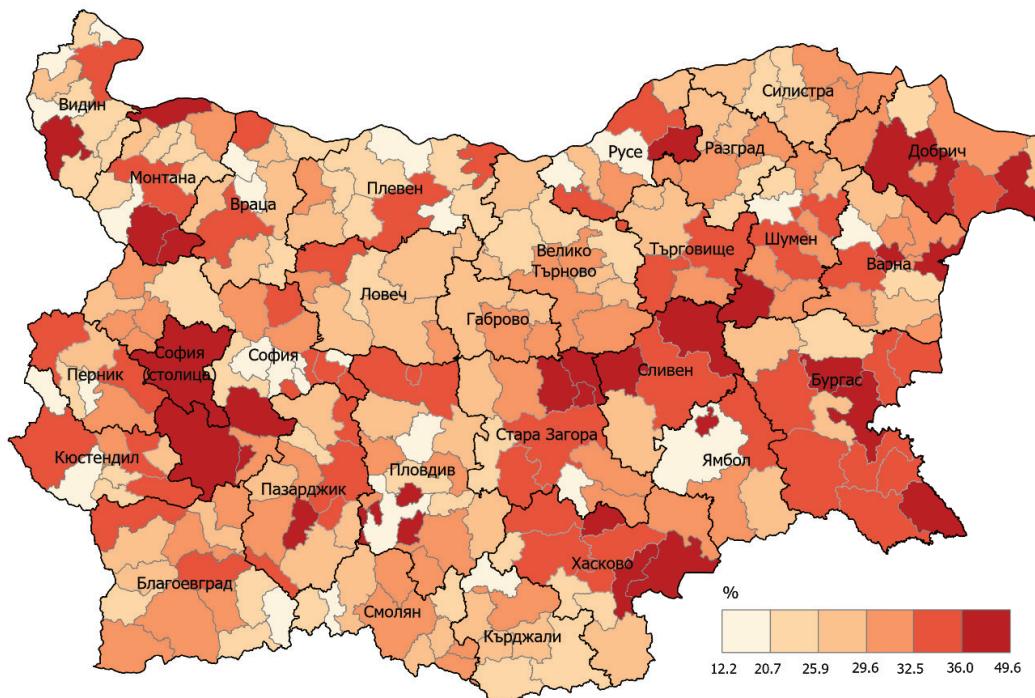




#### 4.16. Indicator 'Share of people living in a household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding'

The indicator varies in the range from 12.15% to 49.57% with mean 29.29% and std. deviation 6.10%. The municipalities with the highest values (Figure 4.16, dark orange areas) of the 'Share of people living in household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding" are Perushtitsa (49.57%), Dolna Banya (43.84%), Ihtiman (42.98%), Krichim (40.94%) and Rakitovo (40.54%). The municipalities with the lowest values (Figure 4.16, light orange areas) of the indicator are Makresh (14.45%), Boynitsa (14.15%), Novo Selo (13.72%), Kovachevtsi (13.02%) and Georgi Damyanovo (12.15%).

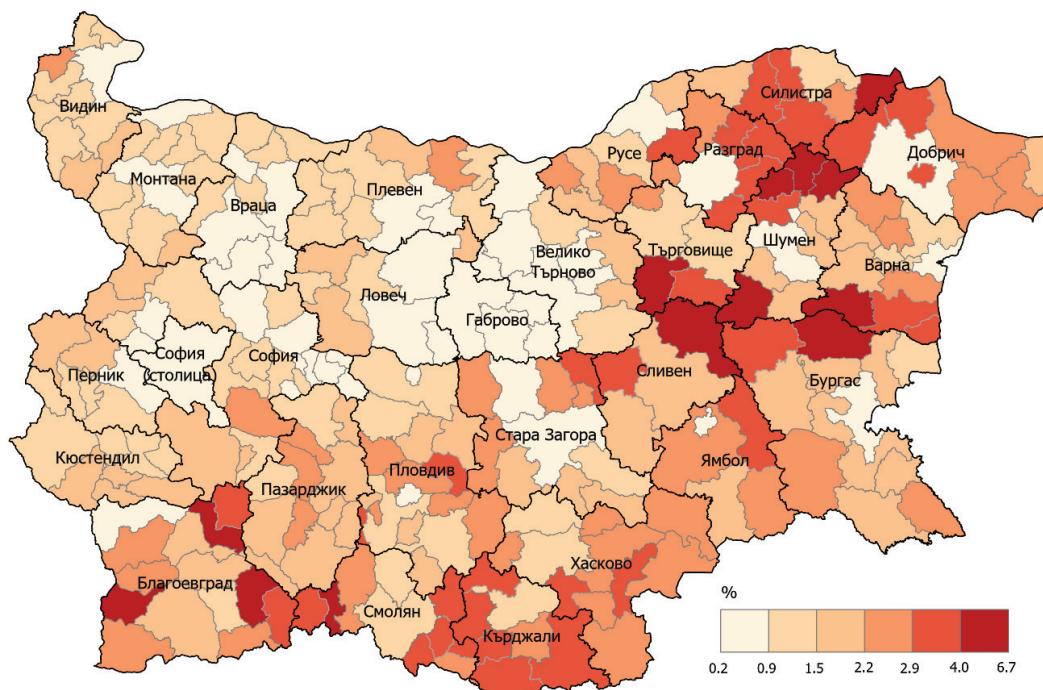
Figure 4.16. Share of people living in a household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding by municipality (%)



**4.17. Indicator 'Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing, 16+'**

The indicator varies in the range from 0.15% to 6.68% with mean 1.93% and std. deviation 1.09%. The municipalities with the highest values (Figure 4.17, dark orange areas) of the 'Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing' are Kaynardzha (6.68%), Varbitsa (5.61%), Belitsa (4.99%), Venets (4.98%) and Kaolinovo (4.87%). The municipalities with the lowest values (Figure 4.17, light orange areas) of the indicator are Svishtov (0.31%), Ruse (0.31%), Varna (0.28%), Stolichna (0.25%) and Veliko Tarnovo (0.15%).

**Figure 4.17. Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing, 16+ by municipality (%)**

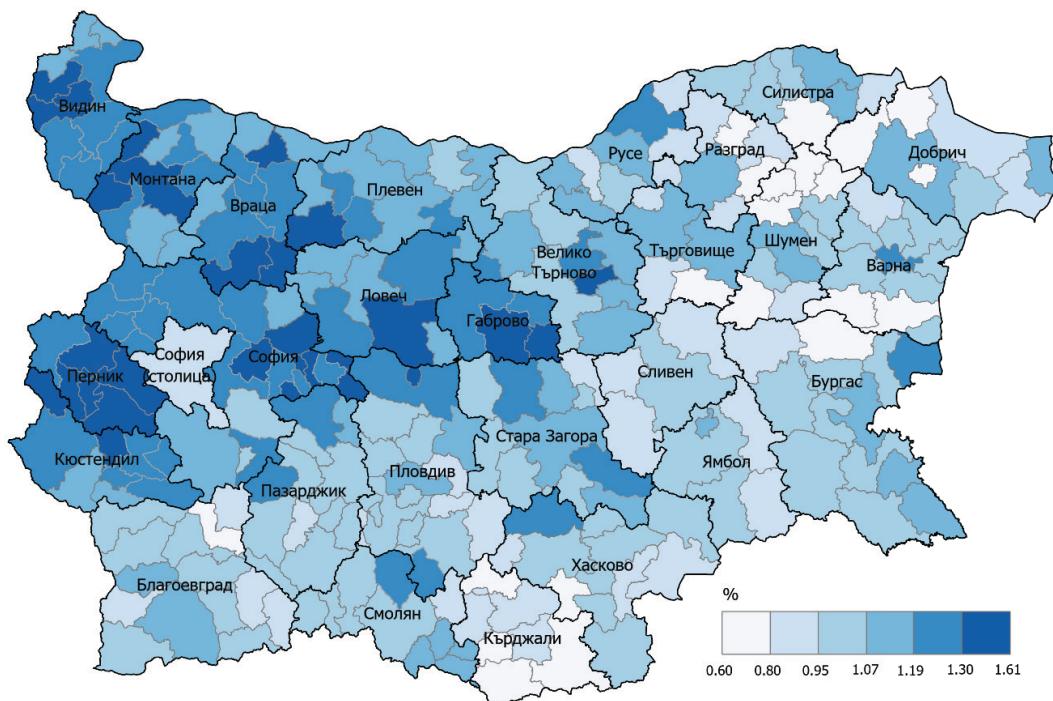




#### 4.18. Indicator 'Share of people experiencing harassment (overall - 5 acts) because of any ground in the 12 months before the survey'

The indicator varies in the range from 0.60% to 1.61% with mean 1.08% and std. deviation 0.18%. The municipalities with the highest values (Figure 4.18, dark blue areas) of the 'Share of people experiencing harassment (overall - 5 acts) because of any ground in the 12 months before the survey' are Chelopech (1.61%), Treklyano (1.60%), Anton (1.45%), Kovachevtsi (1.43%) and Sopot (1.41%). The municipalities with the lowest values (Figure 4.18, light blue areas) of the indicator are Varbitsa (0.70%), Krushari (0.67%), Venets (0.63%), Nikola Kozlevo (0.61%) and Kaolinovo (0.60%).

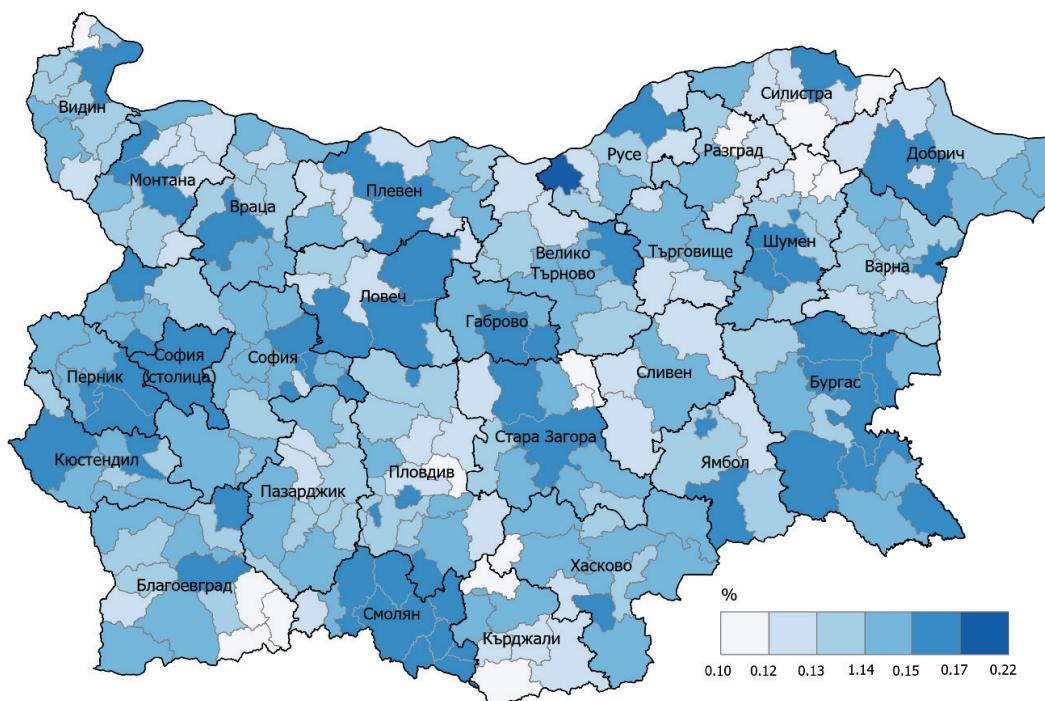
Figure 4.18. Share of people experiencing harassment (overall - 5 acts) because of any ground in the 12 months before the survey by municipality (%)



**4.19. Indicator 'Share of people aged 16 years and more who have experienced physical assault (e.g., hit, pushed or kicked) because of any ground in the past 12 months'**

The indicator varies in the range from 0.10% to 0,22% with mean 0.14% and std. deviation 0.01%. The municipalities with the highest values (Figure 4.19, dark blue areas) of the 'Share of people aged 16 years and more who have experienced physical assault (e.g., hit, pushed or kicked) because of any ground in the past 12 months' are Tsenovo (0.22%), Banite (0.17%), Nedelino (0.17%), Rudozem (0.17%) and Brusartsyi (0.17%). The municipalities with the lowest values (Figure 4.19, light blue areas) of the indicator are Kaynardzha (0.11%), Gurkovo (0.11%), Satovcha (0.10%), Chernoochene (0.10%) and Dulovo (0.10%).

**Figure 4.19. Share of people aged 16 years and more who have experienced physical assault (e.g., hit, pushed or kicked) because of any ground in the past 12 months by municipality)**

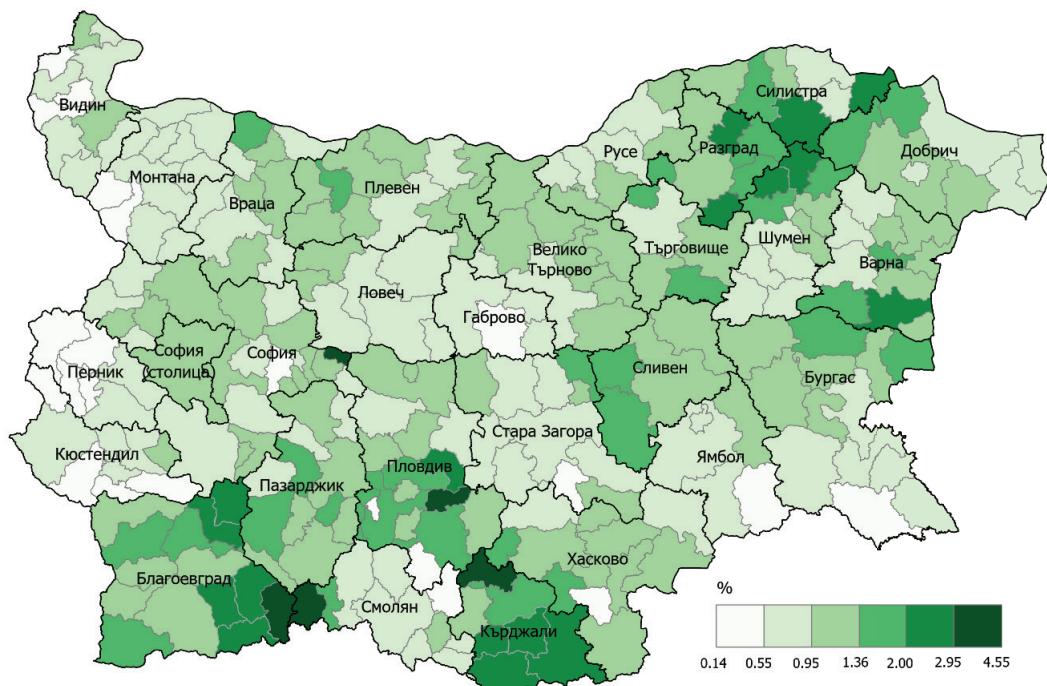




#### 4.20. Indicator 'Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination'

The indicator varies in the range from 0.14% to 4.55% with mean 1.14% and std. deviation 0.63%. The municipalities with the highest values (Figure 4.20, dark green areas) of the 'Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination' are Satovcha (4.55%), Sadovo (4.31%), Chernoochene (3.65%), Dospat (3.25%) and Anton (3.19%). The municipalities with the lowest values (Figure 4.20, light green areas) of the indicator are Kovachevtsi (0.24%), Nevestino (0.23%), Treklyano (0.19%), Banite (0.18%) and Boynitsa (0.14%).

Figure 4.20. Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination by municipality (%)



## 5. Conclusion

Fulfilling the main goal of this report, to provide estimates for the key ‘vulnerability’ indicators at the highest possible disaggregation level, we provided a solid basis for adequate and well-targeted local policies on the issues concerning the poverty, social exclusion, discrimination, bias-motivated harassment, and violence in the Republic of Bulgaria.

Due to the representative survey limitations the estimation of the indicators at the lowest regional level (municipality) was possible through the specific features of the small area estimation methodology. The latter was adopted in the form of a composite estimator based on the weighted average of the design-based direct estimate and the model-assisted synthetic estimate at the LAU1 level. This approach provided estimates even for the zero sample sized small area municipalities such as Suhindol, Boynitsa, Gramada, Treklyano, Kovachevtsi, Alfatar, Koprivshtitsa and Chavdar. For a better understanding of the small area estimation results, the ‘vulnerability’ indicators were visualized using colorful choropleth maps indicating clearly the highest and the lowest values of these indicators and defining the exact ‘targets’ for the prospective local policies.

## 6. References

- Asian Development Bank (2020).** Introduction to small area estimation techniques (a practical guide for national statistics offices). ADB.
- Draper, N. and Smith, H. (1981).** Applied Regression Analysis, 2d Edition, New York: John Wiley & Sons, Inc.
- EURAREA Consortium (2015).** Enhancing small area estimation techniques to meet European needs.
- European Union (2019).** Guidelines on small area estimation for city statistics and other functional geographies. Publications Office of the European Union.
- Markov, D. and Kuneva, L. (2019).** Overview of data and indicators for monitoring ‘vulnerability’ of groups at risk in Bulgaria, National Statistical Institute (report developed under BGID-3.001-0001 Project ‘Novel Approaches to Generating Data on hard-to-reach populations at risk of violation of their rights’).
- Naydenov, A. (2009).** Small area estimation of unemployment rates in Bulgaria (PhD Thesis). UNWE Publishing complex.
- Rao, J. N. K. and Molina, I. (2015).** Small area estimation. John Wiley & Sons.

## **ANNEXES**

## ANNEX 1

### Regression coefficients<sup>1</sup> by dependent variables (rows) and factors (columns)

	(const.)	$\chi_{\_1(d)}$	$\chi_{\_2(d)}$	$\chi_{\_3(d)}$	$\chi_{\_4(d)}$	$\chi_{\_5(d)}$	$\chi_{\_6(d)}$	$\chi_{\_7(d)}$	$\chi_{\_8(d)}$	$\chi_{\_9(d)}$	$\chi_{\_10(d)}$	$\chi_{\_11(d)}$	$\chi_{\_12(d)}$	$\chi_{\_13(d)}$	$\chi_{\_14(d)}$	$\chi_{\_15(d)}$	$\chi_{\_16(d)}$	$\chi_{\_17(d)}$	$\chi_{\_18(d)}$	$\chi_{\_19(d)}$	$\chi_{\_20(d)}$	$\chi_{\_21(d)}$	$\chi_{\_22(d)}$	$\chi_{\_23(d)}$	$\chi_{\_24(d)}$
$\widehat{V}_{1,1,d}$				0,219																					-0,042
$\widehat{T}_{1,1,d}$				0,226																					
$\widehat{V}_{1,2,d}$					0,239																				-0,024
$\widehat{T}_{1,2,d}$					0,800																				0,153
$\widehat{V}_{1,3,d}$						0,375																			0,060
$\widehat{T}_{1,3,d}$							0,343																		0,085
$\widehat{V}_{2,1,d}$							0,932																		-0,186
$\widehat{T}_{2,1,d}$							0,665																		-0,096
$\widehat{V}_{2,2,d}$								0,805																	0,346
$\widehat{T}_{2,2,d}$									0,156																0,111
$\widehat{V}_{2,3,d}$										0,932															
$\widehat{T}_{2,3,d}$											0,193														-0,049
$\widehat{V}_{3,1,d}$											0,821														
$\widehat{T}_{3,1,d}$												0,075													
$\widehat{V}_{3,2,d}$													0,050												
$\widehat{T}_{3,2,d}$														0,454											
$\widehat{V}_{3,3,d}$															0,061										
$\widehat{T}_{3,3,d}$																0,067									
$\widehat{V}_{3,4,d}$																	0,026								0,336
$\widehat{T}_{3,4,d}$																		0,021							0,113
$\widehat{V}_{4,1,d}$																			0,344						
$\widehat{T}_{4,1,d}$																				0,167					
$\widehat{V}_{4,2,d}$																					0,013				
$\widehat{T}_{4,2,d}$																						0,490			
$\widehat{V}_{4,3,d}$																							0,235		
$\widehat{T}_{4,3,d}$																									
$\widehat{V}_{5,1,d}$																									
$\widehat{T}_{5,1,d}$																									
$\widehat{V}_{5,2,d}$																									
$\widehat{T}_{5,2,d}$																									



Regression coefficients<sup>1</sup> by dependent variables (rows) and factors (columns)

(Continuation and ending)

$\widehat{V}_{5,3,d}$	1,000	1,000	0,631	0,450	0,161	1,040
$\widehat{T}_{5,3,d}$						0,023
$\widehat{V}_{5,4,d}$						0,051
$\widehat{T}_{5,4,d}$						
$\widehat{V}_{6,2,d}$	1,000	1,000	-1,000			
$\widehat{T}_{6,2,d}$	1,000	1,000	-1,000	0,305		
$\widehat{V}_{6,3,d}$						
$\widehat{T}_{6,3,d}$	1,000	1,000	-1,000			
$\widehat{V}_{7,1,d}$					0,005	
$\widehat{T}_{7,1,d}$						0,013
$\widehat{V}_{7,1,d}$						-0,065
$\widehat{T}_{7,1,d}$						

<sup>1</sup> Statistically significant at 0,05 and rounded to the 3rd decimal place.



## ANNEX 2

### 'Vulnerability' indicators abbreviations used in ANNEX 3 and 4

<b>Indicator 1.1</b>	Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care
<b>Indicator 1.2</b>	Share of people aged 18-24 years that have completed at most lower secondary education and are not involved in further education or training
<b>Indicator 1.3</b>	Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student)
<b>Indicator 2.1</b>	Share of people who self-declared their main activity status as 'paid work' (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks), 20-64 years
<b>Indicator 2.2</b>	Share of young persons, 15-29 years old with current main activity 'neither in employment, education or training' (NEET)
<b>Indicator 2.3</b>	Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job, 16+
<b>Indicator 3.1</b>	At-risk-of-poverty rate (below 60% of median equalized income after social transfers)
<b>Indicator 3.2</b>	Share of persons living in household where one person in the household gone to bed hungry in the past month because there was not enough money for food
<b>Indicator 3.3</b>	Share of people aged 16 years and more satisfied with their financial situation
<b>Indicator 3.4</b>	Share of people feeling of being excluded from society
<b>Indicator 4.1</b>	Share of persons with self-reported long-standing limitations in usual activities due to health problems, respondents
<b>Indicator 4.2</b>	Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel' (all three categories are cumulated)
<b>Indicator 4.3</b>	Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services, 16+
<b>Indicator 5.1</b>	Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet)
<b>Indicator 5.2</b>	Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling
<b>Indicator 5.3</b>	Share of people living in household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding



(Continuation and ending)

<b>Indicator 5.4</b>	Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing, 16+
<b>Indicator 6.2</b>	Share of people experiencing harassment (overall – 5 acts) because of any ground in the 12 months before the survey
<b>Indicator 6.3</b>	Share of people aged 16 years and more who were physically attacked (e.g., hit, pushed or kicked) because of any ground in the past 12 months
<b>Indicator 7.1</b>	Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination

## ANNEX 3

### Small area estimates of the ‘vulnerability’ indicators by municipality (LAU1)

District	Municipality	Indicator 1.1	Indicator 1.2	Indicator 1.3	Indicator 2.1	Indicator 2.2	Indicator 2.3	Indicator 3.1	Indicator 3.2	Indicator 3.3	Indicator 4.1	Indicator 4.2	Indicator 4.3	Indicator 5.1	Indicator 5.2	Indicator 5.3	Indicator 5.4	Indicator 6.2	Indicator 6.3	Indicator 7.1	
Blagoevo grad	Bansko	83.88%	16.18%	0.17%	79.07%	5.85%	21.17%	12.61%	5.65%	31.37%	4.46%	11.77%	0.77%	8.66%	9.63%	35.50%	1.67%	0.98%	0.16%	1.25%	
Blagoevo grad	Belitsa	72.14%	23.42%	0.20%	72.47%	3.44%	16.98%	17.62%	7.26%	27.30%	6.30%	9.67%	1.27%	0.58%	19.18%	17.21%	27.88%	4.99%	0.79%	0.14%	2.77%
Blagoevo grad	Blagoevo grad	88.13%	17.90%	0.22%	78.77%	2.83%	19.47%	8.00%	8.70%	30.67%	5.23%	8.81%	0.83%	0.68%	10.09%	12.27%	35.24%	0.35%	0.98%	0.15%	1.24%
Blagoevo grad	Gosse Delchev	77.99%	0.02%	0.10%	76.11%	30.9%	19.38%	12.21%	6.39%	29.12%	3.88%	9.64%	0.65%	0.66%	12.33%	11.63%	30.21%	1.43%	1.01%	0.14%	2.43%
Blagoevo grad	Garmen	69.08%	23.57%	0.96%	72.60%	2.12%	19.00%	16.30%	8.73%	29.3%	5.90%	8.24%	1.21%	1.10%	28.87%	24.00%	25.47%	4.54%	0.84%	0.11%	2.95%
Blagoevo grad	Kresna	69.51%	19.65%	0.04%	77.49%	5.86%	14.21%	19.11%	4.47%	34.40%	4.60%	14.40%	0.91%	0.63%	15.25%	12.30%	29.46%	2.61%	0.88%	0.14%	1.34%
Blagoevo grad	Petrich	74.78%	19.01%	0.51%	78.19%	4.33%	18.83%	15.16%	5.93%	31.86%	5.87%	11.30%	1.13%	1.00%	18.15%	15.43%	31.91%	2.48%	1.05%	0.14%	1.38%
Blagoevo grad	Razlog	75.80%	14.42%	0.40%	79.28%	3.14%	19.98%	12.47%	5.24%	31.72%	4.11%	1.72%	0.70%	0.90%	15.49%	12.65%	30.63%	1.66%	1.06%	0.14%	1.41%
Blagoevo grad	Sandanski	76.92%	16.47%	0.14%	78.36%	3.65%	16.79%	15.00%	5.37%	31.27%	5.80%	11.52%	1.09%	0.72%	14.34%	12.37%	31.31%	1.95%	1.13%	0.15%	1.27%
Blagoevo grad	Satovcha	65.58%	18.61%	0.16%	73.42%	-	16.31%	12.70%	7.99%	30.27%	3.16%	8.98%	0.59%	0.53%	23.31%	19.04%	20.46%	2.99%	0.88%	0.10%	4.55%
Blagoevo grad	Simitlaci	69.75%	20.82%	0.36%	75.27%	3.95%	17.46%	17.26%	6.51%	32.80%	3.42%	11.49%	0.66%	0.85%	19.01%	16.00%	28.60%	2.27%	1.07%	0.14%	1.60%
Blagoevo grad	Stromalni	62.35%	31.15%	0.27%	73.10%	3.12%	8.70%	31.61%	3.21%	32.31%	12.02%	17.10%	2.58%	0.45%	36.24%	25.12%	36.36%	4.63%	0.86%	0.13%	1.11%
Blagoevo grad	Hadzhidimovo	68.38%	18.96%	0.28%	75.88%	1.05%	16.04%	14.57%	6.06%	32.30%	4.07%	12.14%	0.76%	0.70%	20.55%	16.14%	25.12%	2.68%	0.97%	0.12%	2.61%
Blagoevo grad	Yakoruda	75.26%	20.34%	0.43%	71.57%	4.82%	19.17%	16.28%	7.17%	30.90%	6.37%	10.17%	1.23%	0.89%	16.96%	16.24%	31.32%	3.66%	0.92%	0.15%	2.08%
Burgas	Aitos	78.76%	20.66%	1.16%	73.05%	10.23%	22.50%	17.06%	6.40%	31.51%	9.29%	10.48%	1.90%	1.61%	18.03%	16.83%	36.59%	0.96%	1.04%	0.16%	1.12%
Burgas	Burgas	89.63%	12.09%	0.17%	80.36%	4.22%	20.82%	8.92%	5.01%	29.56%	6.04%	10.34%	0.99%	0.78%	7.7%	7.38%	36.84%	0.48%	1.11%	0.16%	0.86%
Burgas	Kameno	66.57%	26.05%	0.70%	72.32%	10.93%	13.97%	23.92%	5.07%	32.61%	11.15%	14.35%	2.38%	0.94%	23.70%	18.26%	27.84%	1.93%	1.01%	0.14%	1.03%
Burgas	Kamobat	77.00%	22.64%	0.52%	74.86%	9.59%	16.66%	19.10%	5.38%	30.24%	8.35%	13.24%	1.66%	0.95%	16.27%	13.95%	33.99%	1.80%	1.01%	0.15%	1.00%
Burgas	Malko Tarnovo	65.44%	30.60%	1.41%	76.87%	15.64%	14.59%	26.32%	3.42%	33.77%	7.32%	18.04%	1.24%	1.24%	26.80%	28.04%	32.83%	1.94%	1.06%	0.15%	0.41%
Burgas	Nesebar	79.33%	15.83%	0.24%	79.32%	4.10%	16.47%	13.74%	4.81%	30.52%	5.64%	9.90%	1.02%	0.87%	14.76%	10.79%	34.30%	1.04%	1.23%	0.15%	1.43%
Burgas	Pomorie	77.75%	20.41%	0.49%	75.06%	7.75%	19.47%	16.89%	5.93%	30.72%	8.24%	10.63%	1.64%	1.02%	14.94%	14.03%	34.27%	2.15%	0.99%	0.15%	1.19%
Burgas	Primorsko	74.69%	20.49%	0.33%	75.69%	8.37%	18.39%	15.64%	4.99%	33.00%	6.02%	11.89%	1.20%	1.32%	20.73%	15.71%	33.38%	1.83%	1.11%	0.15%	0.74%
Burgas	Ruen	63.07%	27.07%	0.56%	66.20%	5.50%	15.23%	23.13%	7.50%	30.42%	13.55%	9.11%	2.93%	0.67%	27.23%	22.99%	24.96%	4.35%	0.72%	0.15%	1.78%
Burgas	Szopopol	70.22%	22.12%	1.42%	75.13%	9.90%	21.20%	18.27%	5.26%	34.32%	5.68%	12.86%	1.08%	1.53%	24.59%	18.31%	33.80%	1.70%	1.03%	0.15%	0.72%
Burgas	Sredets	73.50%	27.06%	1.53%	72.99%	13.42%	17.48%	24.50%	5.19%	33.01%	11.45%	14.22%	2.38%	1.60%	26.84%	21.07%	35.73%	2.50%	1.05%	0.15%	0.63%
Burgas	Sungurlare	63.23%	30.63%	0.33%	75.06%	7.75%	13.88%	25.96%	5.73%	31.81%	10.34%	4.34%	2.24%	0.93%	28.86%	21.80%	27.67%	2.96%	1.03%	0.14%	1.07%
Burgas	Tsarevo	79.32%	21.16%	0.78%	75.48%	9.99%	18.52%	19.70%	5.35%	32.40%	7.77%	1.28%	1.54%	1.32%	18.1%	15.22%	37.78%	2.21%	1.11%	0.16%	0.79%
Varna	Aren	61.95%	27.35%	1.31%	72.32%	5.32%	13.99%	21.99%	5.33%	32.86%	7.20%	15.01%	1.46%	1.03%	34.45%	23.06%	32.20%	2.17%	0.99%	0.13%	1.22%
Varna	Aksakovo	70.71%	21.57%	1.29%	75.61%	7.29%	20.62%	15.97%	5.82%	32.05%	5.42%	12.22%	1.06%	1.42%	23.88%	17.99%	30.65%	1.44%	1.02%	0.13%	1.24%
Varna	Belosilav	76.88%	19.40%	0.65%	77.45%	4.93%	19.12%	14.69%	6.20%	31.32%	2.72%	10.95%	0.47%	0.81%	11.10%	10.25%	31.70%	1.12%	1.26%	0.15%	1.48%
Varna	Byala	73.47%	25.15%	0.34%	74.15%	7.73%	13.96%	22.74%	5.89%	33.04%	9.23%	13.29%	1.97%	0.79%	19.79%	16.80%	32.44%	3.28%	0.97%	0.14%	1.36%
Varna	Varna	91.57%	14.85%	0.10%	81.04%	3.32%	19.82%	7.21%	5.81%	29.08%	6.51%	9.89%	1.04%	0.63%	7.10%	5.71%	37.66%	0.28%	1.01%	0.16%	0.96%
Varna	Vetino	46.86%	28.06%	0.35%	72.00%	3.30%	9.48%	25.04%	4.22%	18.20%	1.04%	8.07%	0.55%	0.55%	31.85%	19.00%	18.13%	2.04%	1.07%	0.14%	0.84%
Varna	Vachti Dol	60.56%	30.20%	1.39%	69.34%	12.22%	13.74%	27.74%	4.21%	35.50%	9.54%	16.25%	2.00%	1.12%	21.92%	28.85%	32.86%	0.89%	0.14%	0.14%	0.75%
Varna	Devnya	81.77%	23.02%	0.64%	75.17%	11.07%	20.56%	18.67%	6.48%	31.36%	4.32%	11.17%	0.89%	1.44%	12.42%	12.59%	37.48%	1.51%	1.20%	0.14%	1.50%
Varna	Dolni Chiflik	71.21%	27.51%	0.23%	71.59%	5.99%	13.87%	22.56%	7.28%	28.00%	9.17%	10.64%	1.94%	0.57%	22.57%	19.54%	27.97%	3.68%	0.80%	0.14%	2.50%

(Continued)

District	Municipality	Indicator 1.1	Indicator 1.2	Indicator 1.3	Indicator 2.1	Indicator 2.2	Indicator 2.3	Indicator 3.1	Indicator 3.2	Indicator 3.3	Indicator 3.4	Indicator 4.1	Indicator 4.2	Indicator 4.3	Indicator 5.1	Indicator 5.2	Indicator 5.3	Indicator 5.4	Indicator 6.2	Indicator 6.3	Indicator 7.1
Varna	Dagopol	67.00%	28.70%	0.57%	70.33%	7.21%	13.71%	24.77%	5.88%	31.92%	7.99%	12.47%	1.71%	0.76%	25.76%	20.05%	30.02%	4.33%	0.77%	0.13%	1.71%
Varna	Provadia	74.85%	21.82%	1.65%	73.04%	10.57%	21.70%	18.54%	5.61%	34.12%	7.04%	13.26%	1.41%	1.81%	24.45%	19.31%	34.78%	2.08%	1.07%	0.14%	0.93%
Varna	Suvorovo	74.40%	25.73%	0.52%	71.92%	9.78%	14.88%	21.85%	5.09%	30.95%	8.64%	14.04%	1.79%	0.96%	18.67%	15.77%	31.83%	2.35%	1.06%	0.14%	1.21%
Veliko Tarnovo	Veliko Tarnovo	84.20%	17.92%	0.07%	78.53%	1.70%	7.25%	7.53%	8.09%	30.96%	5.05%	0.75%	0.76%	0.52%	11.08%	11.33%	31.85%	0.15%	1.02%	0.14%	0.33%
Veliko Tarnovo	Gorna Orahovitsa	78.91%	10.76%	0.15%	78.82%	3.83%	17.77%	11.07%	4.40%	31.32%	4.41%	12.88%	0.72%	0.73%	11.17%	8.45%	30.54%	0.51%	2.0%	0.15%	1.30%
Veliko Tarnovo	Elena	71.95%	19.12%	0.67%	74.80%	7.64%	16.04%	18.83%	4.72%	32.23%	6.08%	14.06%	1.17%	1.02%	19.79%	14.40%	29.95%	1.38%	1.16%	0.14%	1.05%
Veliko Tarnovo	Zlatarsitsa	69.93%	24.05%	0.30%	73.36%	6.83%	13.24%	21.08%	4.85%	31.82%	5.72%	15.27%	1.15%	0.76%	19.79%	14.83%	27.80%	1.99%	1.15%	0.14%	1.23%
Veliko Tarnovo	Laskovets	71.88%	12.92%	0.21%	79.30%	3.50%	15.77%	13.62%	3.98%	32.23%	3.30%	14.30%	0.55%	0.80%	14.86%	9.96%	27.90%	0.64%	1.35%	0.15%	0.96%
Veliko Tarnovo	Pavlicheni	66.73%	17.07%	0.25%	75.78%	6.12%	12.94%	16.90%	3.66%	32.12%	4.99%	16.30%	0.92%	0.66%	17.81%	11.44%	24.59%	0.86%	1.17%	0.14%	1.18%
Veliko Tarnovo	Polski Trambest	60.60%	23.53%	0.46%	73.71%	6.00%	12.74%	19.29%	4.14%	32.65%	4.12%	17.48%	0.77%	0.71%	23.45%	14.80%	21.59%	1.09%	1.07%	0.13%	1.09%
Veliko Tarnovo	Svetlyakov	70.73%	24.49%	0.06%	73.20%	2.01%	18.38%	11.87%	12.83%	33.77%	4.30%	11.37%	0.74%	0.41%	18.17%	19.62%	26.36%	0.31%	0.97%	0.12%	0.98%
Veliko Tarnovo	Strazhitsa	68.83%	26.83%	0.43%	73.17%	6.59%	13.03%	22.30%	5.62%	29.53%	6.03%	13.72%	1.26%	0.73%	24.46%	17.31%	29.90%	2.09%	1.16%	0.16%	1.35%
Veliko Tarnovo	Suhindol	72.80%	19.57%	0.52%	74.75%	8.93%	13.78%	17.92%	3.72%	31.21%	4.76%	17.91%	0.91%	0.85%	15.90%	10.79%	27.05%	0.83%	1.30%	0.14%	0.83%
Vidin	Belogradchik	78.62%	16.38%	1.98%	75.68%	14.06%	23.88%	16.91%	3.75%	36.26%	5.74%	15.03%	1.05%	2.10%	23.44%	16.96%	37.80%	1.25%	1.25%	0.14%	0.60%
Vidin	Boinitsa	-	75.17%	0.00%	71.02%	10.91%	2.28%	37.55%	-	38.57%	6.35%	26.74%	1.32%	0.55%	40.28%	18.49%	14.15%	2.20%	1.12%	0.14%	1.4%
Vidin	Bregovo	58.75%	16.67%	0.34%	77.67%	5.59%	11.42%	16.71%	2.76%	36.94%	5.76%	19.24%	1.10%	0.74%	19.92%	12.26%	33.14%	0.94%	1.12%	0.12%	1.23%
Vidin	Vidin	8012.1%	12.33%	0.61%	79.20%	6.96%	19.76%	12.56%	3.89%	32.53%	4.81%	13.75%	0.82%	1.14%	13.83%	9.77%	33.41%	0.58%	1.28%	0.15%	0.86%
Vidin	Gramada	55.48%	26.48%	0.21%	76.55%	22.42%	8.07%	22.42%	0.82%	36.66%	3.14%	23.71%	0.58%	0.70%	17.28%	8.43%	23.59%	0.98%	1.36%	0.14%	0.55%
Vidin	Dimovo	58.60%	29.55%	1.72%	73.25%	9.90%	14.72%	23.39%	4.25%	35.23%	5.23%	18.41%	1.02%	1.21%	33.64%	21.40%	40.32%	1.45%	1.21%	0.13%	1.01%
Vidin	Kula	63.32%	21.74%	0.27%	78.45%	8.81%	11.26%	19.32%	2.36%	34.71%	3.96%	19.62%	0.72%	0.74%	17.27%	9.96%	27.17%	1.01%	1.31%	0.14%	0.68%
Vidin	Makresh	16.09%	44.65%	0.56%	74.22%	11.36%	4.99%	30.04%	-	39.95%	5.23%	24.40%	0.97%	0.58%	36.41%	16.26%	44.56%	1.04%	1.38%	0.14%	0.26%
Vidin	Novo Selo	39.49%	28.74%	0.38%	75.76%	4.07%	7.87%	23.01%	1.56%	35.74%	5.45%	22.73%	1.07%	0.51%	30.58%	16.42%	13.72%	1.39%	1.09%	0.14%	0.63%
Vidin	Ruzhentsi	55.94%	29.23%	2.43%	72.49%	10.50%	15.08%	25.49%	4.05%	37.04%	9.94%	18.46%	2.09%	1.48%	41.32%	26.79%	24.24%	1.69%	1.22%	0.13%	0.61%
Vidin	Chuprene	49.74%	33.32%	1.97%	72.41%	8.77%	11.37%	28.83%	2.49%	37.57%	5.97%	20.40%	1.19%	1.16%	43.17%	25.27%	22.75%	2.14%	1.22%	0.13%	0.60%
Vratsa	Borovat	62.74%	25.03%	0.33%	74.09%	3.11%	12.55%	19.65%	4.88%	31.44%	5.84%	16.97%	1.20%	0.86%	30.69%	19.58%	17.78%	1.10%	1.28%	0.14%	1.27%
Vratsa	Biala Slatina	72.23%	18.44%	1.16%	75.28%	6.90%	19.04%	15.43%	5.04%	32.53%	5.68%	14.24%	1.11%	1.36%	22.92%	16.50%	26.64%	0.87%	2.4%	0.14%	1.00%
Vratsa	Vratsa	84.69%	9.74%	0.28%	79.82%	3.93%	19.49%	10.15%	4.42%	31.28%	5.01%	11.62%	0.82%	0.91%	11.01%	8.35%	33.62%	0.44%	2.27%	0.16%	0.79%
Vratsa	Kozlodui	79.97%	13.82%	0.62%	77.76%	4.35%	21.12%	11.44%	5.79%	30.31%	6.10%	9.70%	1.10%	1.14%	16.34%	13.29%	33.11%	0.98%	1.10%	0.15%	1.39%
Vratsa	Krivotoli	55.51%	32.19%	1.90%	72.44%	13.94%	14.68%	25.31%	3.13%	36.68%	5.48%	20.18%	1.18%	1.29%	31.48%	19.64%	26.26%	1.52%	1.15%	0.14%	0.61%
Vratsa	Mezdra	71.11%	13.73%	0.30%	78.86%	1.70%	15.92%	12.76%	4.60%	32.94%	3.72%	14.21%	0.67%	0.84%	17.40%	11.92%	26.44%	0.69%	1.33%	0.14%	1.04%
Vratsa	Mizia	64.56%	18.88%	0.73%	77.27%	6.48%	15.46%	17.76%	4.05%	34.24%	2.87%	15.70%	0.52%	1.04%	22.56%	14.06%	26.21%	0.96%	1.35%	0.13%	1.08%
Vratsa	Oryahovo	64.43%	21.37%	0.54%	74.73%	6.98%	14.07%	18.70%	3.80%	33.32%	3.98%	16.87%	0.72%	0.84%	21.20%	13.52%	24.89%	1.14%	1.16%	0.14%	0.90%
Vratsa	Roman	68.24%	18.44%	0.69%	70.67%	5.19%	14.93%	17.01%	4.61%	34.27%	5.54%	15.86%	1.07%	1.02%	22.38%	15.22%	25.38%	0.77%	1.40%	0.14%	0.71%
Vratsa	Hainedin	49.51%	22.94%	0.85%	74.10%	3.39%	12.02%	20.31%	3.46%	35.81%	4.47%	18.81%	0.84%	0.81%	31.44%	18.20%	16.89%	0.92%	1.26%	0.14%	0.61%
Gabrovo	Gabrovo	83.70%	11.07%	0.06%	80.31%	3.94%	16.54%	10.38%	3.85%	31.93%	4.53%	14.51%	0.70%	0.70%	9.24%	6.55%	31.67%	0.31%	1.32%	0.16%	0.52%
Gabrovo	Drianovo	75.02%	11.78%	0.30%	78.26%	5.95%	13.21%	32.83%	4.93%	16.26%	0.85%	0.81%	13.63%	9.04%	29.38%	0.69%	1.27%	0.15%	0.64%		
Gabrovo	Senlievo	72.17%	16.68%	0.20%	77.00%	5.10%	14.39%	15.17%	3.90%	31.50%	4.47%	15.23%	0.79%	0.72%	15.48%	10.16%	28.04%	0.82%	1.23%	0.15%	0.91%
Gabrovo	Triavna	80.50%	7.71%	0.05%	80.01%	6.86%	16.74%	12.60%	2.82%	32.82%	3.32%	15.70%	0.52%	0.77%	7.8%	5.07%	31.43%	0.41%	1.36%	0.15%	0.61%
Dobrich	Balchik	73.76%	21.01%	1.12%	74.23%	8.91%	19.75%	18.51%	5.63%	33.84%	7.8%	17.0%	1.57%	1.40%	22.37%	18.01%	34.90%	2.36%	0.97%	0.15%	1.05%
Dobrich	General Toshevo	62.24%	27.33%	1.39%	72.77%	12.81%	16.25%	24.99%	4.35%	36.45%	8.49%	15.60%	1.79%	1.31%	26.03%	20.42%	32.24%	2.76%	0.91%	0.14%	0.80%



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District	Municipality	Indicator		Indicator																				
		1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1			
Böhrischöfchen	Döbbrick	58,46%	31,29%	2,33%	69,63%	12,90%	16,91%	26,95%	4,93%	37,34%	10,00%	15,42%	2,11%	1,56%	39,44%	27,45%	29,79%	30,22%	0,75%	0,12%	0,16%	0,91%		
Böhrischöfchen	Döbbrick	89,13%	12,20%	0,26%	78,71%	6,63%	23,20%	10,77%	5,22%	30,57%	5,71%	10,66%	0,99%	0,94%	6,85%	7,87%	37,10%	0,77%	1,09%	0,12%	0,16%	1,02%		
Kawarna	Kawarna	78,27%	21,29%	1,38%	75,59%	11,94%	23,17%	18,58%	5,31%	33,82%	7,53%	12,33%	1,50%	1,78%	20,77%	17,44%	39,22%	2,85%	0,95%	0,14%	0,16%	0,90%		
Kushari	Kushari	61,73%	31,74%	1,18%	65,51%	9,56%	13,91%	28,19%	6,54%	32,43%	13,46%	11,56%	0,92%	0,93%	35,42%	26,74%	25,51%	3,39%	0,67%	0,12%	0,16%	1,42%		
Tenfel	Krumovgrad	69,60%	24,87%	1,31%	69,84%	9,00%	18,86%	20,92%	6,55%	32,79%	8,82%	11,44%	1,87%	1,35%	25,86%	21,53%	36,01%	0,75%	1,09%	0,12%	0,16%	1,70%		
Shabla	Kardzhali	66,61%	20,47%	0,31%	76,04%	9,24%	13,10%	20,57%	3,53%	35,02%	6,23%	16,19%	1,21%	0,74%	17,75%	12,14%	29,50%	1,56%	1,08%	0,14%	0,16%	0,83%		
Ardino	Kardzhali	56,22%	21,38%	0,00%	67,16%	7,51%	10,32%	26,42%	4,49%	34,53%	14,78%	12,59%	3,14%	0,39%	23,51%	18,34%	26,45%	3,30%	0,86%	0,15%	0,16%	1,16%		
Dzhebel	Kardzhali	66,07%	22,48%	0,00%	68,25%	6,30%	14,06%	20,87%	6,79%	32,14%	12,87%	10,15%	2,71%	0,40%	17,68%	17,06%	28,29%	3,17%	0,74%	0,13%	0,16%	2,56%		
Kirkovo	Kardzhali	55,69%	21,80%	0,02%	68,58%	3,37%	11,01%	21,57%	5,91%	33,37%	12,88%	12,09%	2,76%	0,32%	25,60%	19,98%	21,01%	3,59%	0,71%	0,12%	0,16%	2,85%		
Krumovgrad	Kardzhali	67,26%	23,24%	0,02%	68,71%	4,52%	13,28%	20,24%	6,45%	30,72%	10,59%	11,56%	2,21%	0,39%	20,36%	17,51%	25,79%	3,38%	0,74%	0,13%	0,16%	2,67%		
Karchizi	Kardzhali	77,54%	17,14%	0,16%	72,45%	16,39%	14,63%	5,76%	29,31%	9,46%	10,49%	1,85%	0,63%	13,25%	12,53%	14,81%	1,48%	0,92%	0,13%	0,16%	1,84%			
Montilgrad	Kardzhali	69,17%	19,56%	0,15%	68,89%	6,70%	15,20%	18,57%	6,48%	33,06%	11,83%	10,60%	2,73%	0,57%	16,02%	15,93%	26,62%	3,82%	0,82%	0,13%	0,16%	2,47%		
Chernodene	Kardzhali	55,23%	19,64%	0,00%	65,63%	3,42%	11,34%	19,68%	6,57%	33,26%	15,61%	12,12%	3,38%	0,33%	23,77%	20,47%	19,70%	3,20%	0,71%	0,10%	0,16%	3,65%		
Bobov Dol	Kardzhali	64,45%	18,11%	0,32%	76,71%	6,54%	14,87%	19,20%	4,21%	38,48%	13,64%	13,64%	0,58%	0,92%	17,88%	12,42%	30,55%	1,23%	1,32%	0,14%	0,16%	0,61%		
Boboshevo	Kardzhali	44,00%	29,76%	0,00%	76,19%	5,93%	7,91%	28,19%	2,80%	36,21%	4,43%	19,30%	0,92%	0,51%	26,99%	15,62%	24,04%	1,99%	1,30%	0,13%	0,16%	0,58%		
Dunitsa	Kardzhali	75,47%	10,14%	0,53%	79,40%	6,23%	19,04%	13,01%	3,65%	31,98%	5,68%	12,85%	0,99%	1,06%	14,59%	10,30%	23,22%	0,94%	1,20%	0,15%	0,16%	0,88%		
Kodenitovo	Kardzhali	53,06%	26,66%	0,26%	77,31%	7,88%	23,57%	23,31%	2,57%	34,33%	4,62%	18,70%	0,93%	0,65%	22,76%	13,45%	25,90%	1,65%	1,71%	0,15%	0,16%	0,50%		
Kustendil	Kardzhali	70,98%	10,66%	0,87%	79,14%	7,93%	19,99%	14,07%	3,29%	34,00%	5,50%	13,77%	0,98%	1,30%	17,34%	11,70%	34,26%	1,01%	1,29%	0,16%	0,16%	0,62%		
Newshtino	Kardzhali	1,08%	57,88%	0,07%	72,25%	11,95%	3,54%	35,99%	-	41,98%	7,78%	25,30%	1,64%	0,39%	37,85%	18,19%	14,58%	1,78%	1,17%	0,15%	0,16%	0,23%		
Rila	Kardzhali	69,12%	19,89%	0,27%	78,09%	9,77%	11,17%	21,88%	2,12%	35,79%	3,94%	16,82%	0,70%	0,77%	17,74%	10,52%	33,19%	1,85%	1,20%	0,15%	0,16%	0,48%		
Sapareva Banya	Kardzhali	68,10%	14,87%	0,22%	78,83%	3,43%	15,41%	15,16%	4,22%	34,27%	4,01%	14,12%	0,73%	0,76%	17,04%	12,10%	27,21%	1,55%	1,19%	0,14%	0,16%	1,32%		
Trekiyan	Kardzhali	20,95%	39,08%	0,30%	76,96%	1,77%	3,75%	29,22%	-	42,56%	5,02%	24,42%	0,98%	0,58%	38,77%	17,00%	15,51%	1,36%	1,60%	0,14%	0,16%	0,19%		
Apititsi	Kardzhali	70,79%	7,69%	0,03%	79,60%	9,75%	12,38%	9,75%	20,41%	4,25%	30,53%	7,06%	17,98%	1,41%	0,79%	17,37%	13,15%	28,30%	1,68%	1,10%	0,13%	0,16%	1,18%	
Leteitchi	Kardzhali	75,81%	25,29%	0,41%	72,98%	3,25%	15,10%	11,57%	3,28%	32,09%	5,16%	14,53%	0,85%	0,70%	12,81%	8,12%	29,39%	0,55%	1,26%	0,16%	0,16%	0,65%		
Lovedj	Kardzhali	78,17%	8,53%	0,14%	79,38%	3,25%	17,93%	10,35%	19,95%	19,01%	5,89%	31,57%	9,81%	14,03%	2,01%	1,76%	22,01%	21,44%	33,95%	1,86%	1,10%	0,13%	0,16%	0,97%
Lukovit	Kardzhali	76,48%	24,00%	1,78%	74,13%	10,35%	19,95%	19,01%	5,89%	31,57%	9,81%	14,03%	2,01%	1,76%	22,01%	21,43%	37,43%	1,69%	1,20%	0,16%	0,16%	0,90%		
Teteven	Kardzhali	70,93%	19,37%	0,33%	76,89%	4,08%	15,43%	17,48%	5,66%	31,15%	5,27%	12,92%	1,00%	0,81%	19,60%	14,30%	27,43%	1,65%	1,20%	0,16%	0,16%	0,90%		
Trojan	Kardzhali	72,42%	10,19%	0,11%	79,36%	3,59%	13,91%	13,35%	2,85%	32,33%	4,07%	15,02%	0,66%	0,70%	14,17%	8,08%	28,40%	0,60%	1,31%	0,16%	0,16%	0,68%		
Ugichtin	Kardzhali	65,01%	30,15%	0,48%	73,35%	9,88%	24,87%	3,41%	30,36%	9,86%	18,99%	2,05%	0,70%	26,00%	16,51%	23,55%	1,45%	1,18%	0,13%	0,16%	0,82%			
Yablanitsa	Kardzhali	77,13%	24,79%	1,77%	73,87%	9,84%	19,94%	17,88%	6,64%	30,22%	9,88%	13,92%	2,01%	1,73%	26,48%	21,35%	31,61%	1,52%	1,15%	0,13%	0,16%	1,57%		
Zemantza	Kardzhali	74,72%	19,88%	1,78%	73,25%	13,20%	17,81%	18,76%	4,39%	35,68%	5,45%	14,96%	1,24%	1,88%	23,18%	17,21%	36,56%	1,17%	1,54%	0,14%	0,16%	0,67%		
Boichinovtsi	Kardzhali	58,85%	27,95%	1,54%	74,15%	7,07%	14,63%	22,21%	4,93%	35,63%	5,18%	18,05%	1,06%	1,19%	32,62%	21,43%	32,77%	1,42%	1,24%	0,13%	0,16%	0,84%		
Briantsi	Kardzhali	55,86%	24,93%	2,46%	73,10%	12,61%	18,13%	21,91%	13,76%	39,64%	4,48%	18,49%	0,98%	1,66%	34,88%	22,34%	26,63%	1,16%	1,32%	0,17%	0,16%	0,65%		
Valechedum	Kardzhali	64,96%	27,39%	2,64%	73,98%	15,02%	20,62%	21,07%	4,41%	35,75%	6,32%	17,71%	1,30%	1,89%	31,61%	21,88%	30,78%	1,36%	1,08%	0,13%	0,16%	0,90%		
Varshtes	Kardzhali	77,30%	27,45%	1,95%	72,71%	16,52%	21,33%	21,61%	6,13%	34,80%	6,50%	15,53%	1,28%	1,91%	25,44%	19,88%	37,82%	1,72%	1,09%	0,13%	0,16%	0,75%		
Georg Damjanovo	Kardzhali	30,66%	26,35%	0,22%	73,80%	1,82%	8,10%	24,32%	2,33%	40,09%	4,62%	22,17%	0,89%	0,51%	33,77%	17,57%	12,15%	1,14%	1,29%	0,14%	0,16%	0,25%		
Lom	Kardzhali	73,35%	15,93%	1,80%	77,08%	12,17%	26,41%	21,79%	10,76%	33,40%	4,53%	14,13%	0,82%	2,09%	24,66%	15,59%	37,44%	1,27%	1,41%	0,13%	0,16%	0,63%		
Medkovets	Kardzhali	49,00%	31,49%	2,17%	72,91%	10,76%	13,22%	25,31%	2,90%	38,34%	3,50%	20,12%	1,17%	1,24%	30,39%	21,79%	30,78%	1,41%	1,09%	0,13%	0,16%	0,60%		
Montana	Kardzhali	82,61%	10,33%	0,67%	79,38%	6,18%	22,08%	11,78%	4,40%	33,13%	4,60%	11,92%	0,78%	1,32%	33,71%	20,48%	35,13%	0,73%	1,32%	0,15%	0,16%	0,89%		
Chiprovtsi	Kardzhali	41,00%	17,16%	0,08%	76,87%	6,96%	8,80%	21,65%	1,41%	38,66%	2,71%	20,02%	0,50%	0,67%	26,54%	10,69%	22,43%	1,12%	1,35%	0,14%	0,16%	0,52%		
Ontana	Kardzhali	70,73%	15,33%	1,80%	77,08%	12,17%	26,41%	21,79%	10,76%	33,40%	4,53%	20,12%	1,17%	1,24%	30,39%	21,79%	30,78%	1,41%	1,09%	0,13%	0,16%	0,60%		

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District	Municipality	Indicator																	
Montana	Yakimovo	53.20%	30.94%	22.1%	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4
Pazardzhik	Batak	68.44%	15.32%	0.38%	73.95%	5.21%	16.78%	24.15%	14.37%	24.15%	6.30%	19.29%	1.31%	1.32%	38.20%	22.90%	21.90%	1.04%	1.19%
Pazardzhik	Belovo	61.50%	13.57%	0.42%	77.57%	3.91%	14.93%	17.51%	3.94%	34.87%	3.16%	3.49%	0.56%	0.86%	21.21%	13.13%	20.60%	1.93%	10.7%
Pazardzhik	Bratsigovo	66.33%	22.57%	0.47%	74.69%	5.67%	14.45%	19.54%	5.31%	32.83%	6.14%	14.86%	1.22%	0.78%	21.92%	16.52%	26.31%	1.94%	12.4%
Pazardzhik	Velingrad	78.30%	17.97%	0.52%	75.11%	6.40%	20.89%	14.51%	6.30%	29.59%	6.41%	0.45%	1.29%	1.06%	14.90%	13.99%	32.34%	0.99%	1.04%
Pazardzhik	Lesichovo	56.71%	29.05%	1.80%	73.52%	8.24%	14.94%	24.73%	4.48%	35.42%	6.96%	16.01%	1.45%	1.28%	38.80%	25.32%	25.40%	2.21%	1.03%
Pazardzhik	Panazik	77.55%	16.75%	0.87%	77.42%	6.51%	20.96%	14.63%	5.56%	32.35%	5.66%	1.24%	1.23%	1.27%	18.51%	15.10%	34.27%	1.63%	1.01%
Pazardzhik	Panadijsurtshe	74.79%	13.05%	0.09%	78.15%	4.20%	17.41%	13.91%	4.80%	32.81%	3.93%	13.00%	0.76%	0.73%	12.27%	10.10%	29.29%	1.08%	1.22%
Pazardzhik	Peshtera	84.18%	19.30%	0.41%	76.18%	9.11%	19.14%	16.18%	5.96%	29.71%	7.91%	11.39%	1.60%	1.04%	11.54%	12.05%	35.81%	1.00%	1.15%
Pazardzhik	Raktitovo	80.08%	24.00%	1.61%	72.46%	12.92%	28.92%	7.53%	7.94%	32.94%	5.33%	9.47%	1.10%	2.44%	18.05%	18.70%	40.54%	2.35%	0.85%
Pazardzhik	Septemvri	70.95%	20.77%	1.06%	75.24%	6.44%	20.00%	16.89%	6.66%	33.52%	5.17%	11.62%	1.03%	1.35%	23.44%	19.07%	30.82%	2.21%	0.98%
Pazardzhik	Strelcha	74.65%	19.77%	0.65%	75.79%	10.26%	17.60%	18.47%	4.07%	34.87%	3.88%	15.55%	0.71%	1.12%	15.55%	12.07%	33.75%	1.74%	1.14%
Pazardzhik	Sarnitsa	77.25%	19.31%	0.91%	76.02%	7.86%	21.70%	15.53%	6.15%	32.51%	5.86%	11.46%	1.13%	1.36%	17.97%	15.66%	34.74%	1.82%	1.00%
Pernik	Breznik	57.75%	24.02%	0.33%	77.67%	7.79%	11.92%	22.23%	2.79%	36.08%	3.55%	17.69%	0.66%	0.78%	20.46%	12.51%	28.49%	1.64%	1.31%
Pernik	Zemen	39.95%	30.77%	0.20%	75.18%	13.22%	7.26%	28.29%	0.89%	38.49%	3.41%	21.18%	0.63%	0.64%	23.93%	11.63%	25.27%	1.36%	1.35%
Pernik	Kovachevtsi	7.95%	0.04%	74.62%	6.19%	4.79%	29.40%	-	74.64%	2.60%	13.64%	0.48%	0.48%	33.67%	14.53%	13.02%	1.09%	1.50%	
Pernik	Pernik	82.27%	8.38%	0.18%	80.48%	4.85%	18.88%	11.78%	3.65%	32.04%	3.95%	12.33%	0.63%	0.87%	9.92%	7.13%	33.85%	0.69%	1.31%
Pernik	Radomir	69.79%	16.09%	0.46%	77.83%	7.39%	15.65%	17.84%	3.41%	34.97%	3.75%	15.03%	0.68%	1.00%	16.93%	11.31%	30.90%	1.17%	1.36%
Pernik	Tran	63.85%	30.39%	2.05%	73.69%	14.69%	16.53%	25.25%	3.25%	39.41%	6.70%	18.77%	1.39%	1.66%	30.17%	19.97%	34.65%	2.01%	1.23%
Pleven	Belene	75.21%	13.84%	0.09%	76.73%	5.98%	16.05%	14.76%	3.97%	37.93%	3.57%	13.27%	0.63%	0.77%	11.14%	8.34%	33.53%	1.05%	1.18%
Pleven	Guliantsi	51.72%	26.33%	0.24%	74.28%	5.84%	9.43%	22.83%	4.21%	35.12%	4.44%	20.08%	0.95%	0.60%	25.15%	15.05%	19.73%	1.84%	1.12%
Pleven	Dolna Mitropolija	62.20%	25.33%	0.71%	73.93%	7.11%	13.28%	20.38%	4.07%	33.42%	4.29%	18.44%	0.89%	0.89%	23.93%	15.67%	23.42%	1.41%	1.18%
Pleven	Dolni Dabnik	69.33%	21.32%	0.99%	73.31%	7.72%	14.53%	19.05%	4.46%	31.51%	6.86%	16.76%	1.44%	1.09%	25.15%	17.16%	21.76%	1.23%	1.10%
Pleven	Iksar	66.86%	20.59%	0.26%	76.31%	6.15%	12.73%	18.20%	4.23%	32.67%	3.93%	16.87%	0.76%	0.73%	19.08%	12.81%	23.19%	0.98%	1.22%
Pleven	Knezha	78.94%	18.60%	0.28%	75.75%	8.94%	19.34%	15.66%	5.33%	33.04%	6.50%	14.97%	1.30%	1.26%	15.37%	13.34%	31.73%	1.17%	1.17%
Pleven	Levski	66.48%	17.35%	0.39%	74.94%	5.08%	14.11%	17.50%	3.96%	33.23%	5.05%	15.92%	0.98%	0.78%	19.32%	13.25%	25.51%	1.29%	1.44%
Pleven	Nikopol	54.77%	28.63%	0.22%	70.96%	8.37%	8.95%	25.80%	2.72%	34.48%	7.11%	19.44%	1.47%	0.54%	25.36%	15.83%	22.46%	2.17%	0.5%
Pleven	Pleven	86.11%	10.08%	0.34%	79.88%	3.90%	20.45%	8.91%	4.73%	30.56%	5.80%	12.05%	0.91%	0.91%	21.69%	8.63%	33.65%	0.40%	1.18%
Pleven	Pordim	60.14%	23.03%	0.15%	74.92%	4.38%	11.26%	18.37%	4.07%	32.15%	4.15%	8.94%	0.80%	0.57%	23.19%	19.98%	25.75%	0.75%	1.12%
Pleven	Chepar Blag	74.71%	15.88%	0.41%	74.94%	5.18%	10.24%	15.76%	5.02%	32.35%	6.29%	13.97%	1.21%	0.55%	17.21%	13.16%	27.74%	0.95%	1.32%
Plovdiv	Azenograd	80.45%	15.63%	0.10%	76.61%	6.27%	18.03%	13.87%	5.19%	30.57%	7.35%	12.31%	1.43%	0.72%	10.02%	10.02%	33.51%	1.28%	1.07%
Plovdiv	Brezovo	54.18%	30.53%	2.12%	73.82%	11.84%	15.77%	23.92%	3.49%	37.63%	5.71%	19.48%	1.15%	1.36%	33.66%	21.82%	27.02%	1.76%	1.08%
Plovdiv	Kaloianovo	52.46%	22.79%	0.77%	75.55%	3.66%	12.30%	20.57%	3.98%	35.31%	6.13%	7.19%	1.25%	0.78%	30.71%	19.83%	19.30%	1.87%	1.01%
Plovdiv	Karlovo	75.25%	16.82%	1.18%	76.65%	8.09%	21.27%	15.40%	5.08%	33.05%	6.82%	12.96%	1.34%	1.48%	20.58%	16.19%	33.25%	1.50%	1.21%
Plovdiv	Krichim	87.60%	24.17%	0.75%	73.66%	11.24%	21.04%	19.68%	6.40%	29.95%	7.00%	11.33%	1.41%	1.49%	12.86%	14.44%	40.94%	3.73%	0.95%
Plovdiv	Kuklen	81.21%	19.06%	0.94%	74.40%	10.91%	25.23%	15.28%	5.35%	33.63%	5.38%	13.38%	1.05%	1.53%	12.36%	12.87%	37.59%	2.02%	1.05%
Plovdiv	Laki	64.69%	16.31%	0.00%	74.32%	11.83%	10.61%	24.86%	3.59%	38.82%	16.69%	13.13%	3.55%	0.60%	15.88%	13.65%	32.04%	1.57%	1.23%
Plovdiv	Maritsa	63.54%	19.92%	0.66%	76.59%	15.34%	16.09%	15.15%	5.96%	32.64%	6.51%	12.68%	1.28%	0.83%	27.51%	19.75%	22.10%	0.88%	1.24%
Plovdiv	Penititsa	85.23%	22.66%	3.33%	74.37%	21.79%	39.41%	18.43%	5.56%	38.46%	9.20%	12.87%	1.89%	4.27%	24.09%	22.51%	49.57%	2.48%	0.98%
Plovdiv	Plovdiv	92.25%	14.06%	0.27%	73.83%	5.83%	20.20%	4.75%	21.27%	29.12%	6.76%	10.39%	1.12%	0.78%	7.49%	8.30%	37.93%	0.42%	0.98%

(Continued)

District	Municipality	Indicator																					
Plovdiv	Pavomai	66.23%	23.15%	0.69%	76.05%	8.02%	16.02%	18.99%	7.18%	57.98%	12.00%	1.17%	1.14%	17.48%	16.80%	20.57%	15.68%	29.54%	23.35%	0.87%	0.13%		
Plovdiv	Rakovski	74.38%	21.84%	0.67%	76.52%	6.50%	19.02%	13.89%	4.60%	33.05%	4.45%	1.06%	0.82%	0.58%	25.42%	16.37%	19.24%	14.33%	3.04%	0.92%	0.11%	2.40%	
Plovdiv	Rodopi	57.30%	15.98%	0.30%	76.47%	-	14.02%	14.35%	4.24%	15.11%	18.74%	6.38%	31.70%	8.42%	13.91%	1.77%	0.85%	25.32%	19.23%	24.34%	2.83%	0.95%	
Plovdiv	Sadovo	65.87%	24.36%	0.58%	74.35%	4.24%	11.15%	4.88%	31.12%	3.41%	0.92%	0.54%	0.97%	9.02%	7.89%	34.05%	0.65%	1.41%	1.16%	0.15%	0.15%	4.31%	
Plovdiv	Sopot	85.82%	9.95%	0.18%	79.30%	4.02%	20.24%	11.15%	6.40%	31.70%	6.11%	16.20%	5.79%	12.49%	1.13%	1.23%	19.21%	16.23%	31.91%	1.99%	1.02%	0.14%	0.96%
Plovdiv	Stamboliiski	74.26%	21.07%	0.88%	77.13%	6.79%	20.00%	16.20%	6.11%	31.70%	5.79%	12.49%	1.13%	1.23%	19.21%	16.23%	31.91%	1.99%	1.02%	0.14%	1.52%		
Plovdiv	Sădăchenie	63.78%	26.66%	0.92%	75.98%	10.10%	15.05%	22.16%	4.21%	35.99%	5.61%	17.01%	1.13%	1.04%	23.21%	16.99%	30.78%	2.64%	1.04%	0.15%	1.27%		
Plovdiv	Hisaria	58.35%	22.13%	0.45%	77.43%	8.75%	12.86%	19.82%	2.93%	34.68%	3.75%	17.69%	0.66%	0.72%	19.95%	12.37%	27.66%	1.45%	1.02%	0.14%	0.85%		
Razgrad	Zavet	65.54%	24.65%	0.68%	68.18%	6.40%	15.82%	20.48%	6.42%	32.01%	6.97%	18.82%	1.47%	0.82%	25.25%	18.81%	27.80%	3.35%	1.78%	0.12%	2.31%		
Razgrad	Ispetov	70.20%	22.66%	1.00%	70.32%	6.77%	18.42%	18.46%	6.42%	32.47%	6.46%	15.53%	1.32%	1.10%	23.37%	17.66%	31.70%	2.95%	0.84%	0.12%	1.83%		
Razgrad	Kubrat	63.43%	22.43%	0.86%	68.87%	9.95%	15.01%	22.52%	4.88%	33.80%	10.20%	13.77%	2.15%	0.33%	24.30%	18.56%	28.96%	2.55%	0.82%	0.14%	1.22%		
Razgrad	Lozница	64.97%	23.51%	0.07%	70.22%	3.34%	13.03%	20.97%	6.33%	30.94%	6.74%	10.04%	1.42%	0.49%	22.75%	17.79%	25.62%	3.17%	0.93%	0.13%	2.38%		
Razgrad	Razgrad	77.68%	13.65%	0.31%	75.99%	4.09%	17.75%	12.24%	5.08%	30.13%	5.88%	11.57%	1.04%	0.78%	14.27%	11.06%	31.05%	0.82%	1.09%	0.15%	1.19%		
Razgrad	Samuil	56.78%	27.47%	0.66%	67.14%	4.37%	13.17%	24.33%	6.25%	33.80%	7.58%	12.28%	1.62%	0.65%	31.23%	22.66%	24.37%	3.81%	0.75%	0.12%	1.74%		
Razgrad	Tsar Kalbani	66.23%	24.60%	0.01%	69.99%	8.84%	14.33%	21.31%	5.07%	32.22%	5.73%	13.73%	1.13%	0.48%	15.46%	12.55%	30.42%	2.45%	0.87%	0.14%	1.47%		
Ruse	Borovo	52.88%	22.25%	2.21%	70.64%	14.92%	18.19%	25.69%	3.96%	25.27%	6.64%	17.39%	0.95%	1.21%	21.33%	15.21%	27.07%	0.70%	0.90%	0.13%	0.77%		
Ruse	Biala	71.84%	18.01%	1.40%	75.46%	10.71%	21.00%	17.68%	4.29%	35.72%	5.16%	14.85%	0.97%	1.55%	22.25%	16.12%	33.15%	1.76%	1.09%	0.14%	1.02%		
Ruse	Vetovo	72.77%	24.51%	1.70%	69.07%	15.33%	22.44%	22.20%	5.16%	35.31%	7.43%	13.27%	1.54%	1.88%	21.27%	17.99%	38.88%	3.03%	0.86%	0.13%	1.15%		
Ruse	Dve Mogili	61.86%	23.79%	1.33%	71.84%	10.34%	17.20%	21.37%	4.48%	36.20%	5.27%	15.82%	1.03%	1.24%	25.79%	18.44%	29.87%	2.22%	1.00%	0.15%	1.03%		
Ruse	Ivanovo	39.73%	24.20%	0.31%	73.53%	3.65%	8.86%	22.43%	4.24%	36.78%	4.96%	9.72%	0.99%	0.55%	20.41%	16.59%	15.86%	1.42%	1.08%	0.14%	0.84%		
Ruse	Ruse	86.07%	13.51%	0.12%	79.30%	3.90%	19.11%	9.53%	5.35%	30.80%	4.77%	18.83%	0.74%	0.73%	8.30%	7.70%	34.06%	0.31%	2.21%	0.16%	0.88%		
Ruse	Silovo Pole	57.25%	26.68%	1.28%	69.95%	10.79%	16.64%	21.70%	4.92%	35.55%	5.55%	14.94%	1.06%	1.19%	27.43%	19.35%	27.42%	1.87%	0.33%	0.12%	1.24%		
Ruse	Tsenovo	41.33%	26.02%	0.39%	72.57%	4.29%	24.51%	3.39%	7.05%	3.99%	12.06%	0.87%	1.60%	31.11%	18.07%	17.40%	2.22%	1.16%	0.22%	0.94%			
Silistra	Alfatar	64.56%	22.81%	1.35%	72.92%	13.61%	14.93%	23.63%	2.92%	38.92%	9.86%	18.14%	2.08%	1.39%	25.36%	17.98%	30.86%	2.46%	1.08%	0.13%	0.85%		
Silistra	Gavantsa	61.30%	24.82%	0.26%	68.06%	5.94%	11.10%	23.64%	5.27%	32.03%	11.60%	14.16%	2.55%	0.51%	26.53%	19.98%	23.25%	3.71%	1.01%	0.12%	1.92%		
Silistra	Dulovo	69.19%	20.28%	1.06%	69.37%	5.80%	18.07%	16.38%	6.58%	32.19%	9.28%	1.68%	1.11%	24.23%	19.94%	27.69%	3.54%	0.77%	0.10%	2.66%			
Silistra	Kainardzhia	71.52%	33.20%	2.17%	67.17%	6.46%	16.85%	26.10%	9.54%	29.69%	10.92%	10.53%	2.48%	1.51%	38.26%	31.13%	30.23%	6.68%	0.84%	0.11%	2.28%		
Silistra	Silistra	75.11%	11.85%	0.18%	77.30%	3.87%	16.15%	13.34%	4.37%	32.84%	6.10%	13.11%	1.09%	0.70%	13.82%	10.42%	29.88%	0.98%	1.16%	0.16%	0.80%		
Silistra	Sitovo	56.60%	26.89%	0.37%	70.57%	4.85%	11.89%	24.08%	4.41%	34.72%	8.41%	15.74%	1.82%	0.82%	17.98%	13.69%	21.70%	22.65%	2.91%	0.40%	1.31%		
Silistra	Tutrakan	66.638%	21.09%	0.56%	73.21%	8.48%	20.24%	4.39%	34.58%	6.24%	14.75%	1.23%	0.88%	19.71%	14.69%	29.61%	1.97%	1.05%	0.14%	0.99%			
Siliven	Kotel	69.45%	27.37%	2.83%	68.62%	15.17%	22.22%	24.73%	6.74%	35.19%	14.55%	1.127%	3.15%	2.41%	36.54%	29.63%	37.95%	4.26%	0.84%	0.13%	1.00%		
Siliven	Nova Zagora	75.90%	21.54%	0.41%	73.53%	7.53%	15.62%	18.16%	6.00%	28.59%	8.51%	12.83%	1.77%	0.80%	17.70%	15.12%	28.93%	1.89%	0.93%	0.13%	1.85%		
Siliven	Siliven	82.53%	18.35%	0.98%	75.46%	9.32%	21.32%	15.29%	5.93%	29.92%	9.77%	1.39%	1.93%	1.45%	17.70%	15.50%	35.80%	1.69%	1.02%	0.15%	1.09%		
Siliven	Tvarditsa	83.26%	24.89%	1.63%	71.49%	13.92%	19.89%	21.68%	7.69%	30.48%	18.14%	18.66%	3.83%	2.10%	23.53%	23.03%	37.59%	3.32%	0.91%	0.12%	1.39%		
Smolyan	Banite	36.92%	27.94%	0.09%	72.35%	5.23%	6.47%	34.70%	2.12%	35.75%	14.67%	15.96%	3.12%	0.34%	36.22%	23.05%	21.71%	3.90%	0.95%	0.17%	0.18%		
Smolyan	Boinio	56.24%	14.31%	0.01%	70.46%	-	13.30%	17.68%	5.77%	35.23%	7.19%	10.90%	1.49%	0.44%	25.15%	18.84%	20.49%	4.14%	1.03%	0.15%	1.75%		
Smolyan	Devin	65.15%	17.15%	0.08%	74.18%	5.87%	13.25%	20.65%	3.26%	32.96%	7.91%	12.12%	1.59%	0.56%	18.39%	13.79%	29.49%	2.30%	1.05%	0.16%	0.75%		
Smolyan	Dospat	67.78%	13.39%	0.33%	74.42%	17.69%	12.17%	6.54%	32.22%	3.14%	9.39%	1.57%	0.55%	17.45%	24.35%	31.77%	1.01%	0.13%	0.13%	3.25%			
Smolyan	Zlatograd	70.29%	13.63%	0.00%	75.29%	5.31%	13.38%	19.72%	4.44%	32.25%	10.50%	11.03%	2.18%	0.57%	16.06%	13.54%	30.13%	2.78%	1.13%	0.16%	0.87%		
Smolyan	Maldan	65.73%	18.72%	0.06%	73.04%	5.23%	13.12%	22.09%	5.05%	32.45%	8.66%	10.33%	1.81%	0.54%	18.91%	15.11%	29.44%	2.91%	1.11%	0.16%	1.28%		

(Continued)

District	Municipality	Indicator																				
Smolyan	Nedelino	72.75%	15.63%	0.00%	2.1	1.3	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1	
Smolyan	Rudozem	68.17%	17.50%	3.78%	7.47%	13.52%	19.54%	5.06%	30.94%	8.14%	10.66%	2.93%	0.59%	15.68%	19.70%	15.44%	19.09%	30.65%	3.02%	1.11%	0.17%	0.88%
Smolyan	Smolian	78.20%	12.96%	0.07%	77.70%	4.01%	15.90%	13.37%	4.71%	30.97%	7.52%	14.63%	1.38%	0.55%	12.70%	10.39%	32.01%	1.36%	0.99%	0.16%	0.87%	
Smolyan	Chepelare	70.21%	14.86%	0.00%	77.52%	5.14%	12.56%	17.59%	3.56%	32.57%	5.40%	13.83%	0.99%	0.57%	15.33%	10.26%	30.66%	1.33%	1.22%	0.16%	0.59%	
Sofia	Anton	63.44%	14.48%	0.24%	77.81%	-	12.40%	15.30%	4.16%	30.45%	2.39%	13.31%	0.40%	0.67%	26.38%	15.58%	17.69%	0.89%	1.45%	0.15%	3.19%	
Sofia	Bogushitsite	77.59%	11.51%	0.06%	81.98%	1.96%	15.64%	11.47%	3.35%	30.86%	3.45%	13.47%	0.50%	0.70%	12.64%	7.69%	30.50%	0.63%	1.29%	0.15%	0.94%	
Sofia	Boevgrad	77.80%	12.66%	0.84%	78.60%	5.18%	21.99%	11.50%	5.03%	32.04%	5.02%	11.62%	0.88%	1.31%	17.44%	13.28%	32.38%	0.63%	1.21%	0.15%	0.99%	
Sofia	Godech	70.65%	21.75%	0.04%	78.36%	9.19%	12.61%	20.25%	3.00%	31.98%	3.39%	16.46%	0.61%	0.70%	13.67%	8.86%	31.60%	1.57%	1.30%	0.16%	0.60%	
Sofia	Gorna Malina	54.43%	19.92%	0.52%	77.35%	0.31%	11.91%	19.16%	3.58%	35.42%	2.66%	15.59%	0.47%	0.76%	10.55%	17.36%	19.57%	1.18%	1.35%	0.14%	0.82%	
Sofia	Dolna Bania	81.77%	22.09%	1.73%	76.33%	13.94%	29.89%	16.23%	6.84%	32.81%	6.27%	10.97%	2.78%	16.06%	16.84%	43.84%	1.94%	1.07%	0.14%	1.01%		
Sofia	Dragoman	59.98%	23.53%	0.02%	76.83%	7.68%	9.76%	22.71%	2.55%	35.14%	3.04%	17.01%	0.55%	0.58%	19.23%	11.05%	28.67%	1.71%	1.27%	0.14%	0.66%	
Sofia	Elin Pelin	67.79%	14.70%	0.25%	78.66%	-	13.98%	14.13%	4.10%	31.66%	3.70%	12.93%	0.66%	0.72%	21.28%	13.25%	25.26%	1.02%	1.27%	0.15%	1.08%	
Sofia	Etropole	81.86%	14.55%	0.17%	79.00%	5.49%	17.88%	13.72%	4.77%	31.51%	3.42%	12.82%	0.56%	0.88%	10.72%	8.79%	31.43%	0.85%	1.35%	0.16%	1.07%	
Sofia	Zlatitsa	83.43%	15.16%	0.30%	78.69%	6.20%	21.12%	13.06%	5.29%	30.50%	3.29%	12.33%	0.55%	1.07%	9.83%	9.22%	33.03%	0.75%	1.31%	0.15%	0.96%	
Sofia	Ihtiman	81.82%	22.71%	2.40%	74.66%	14.97%	27.60%	18.40%	6.25%	33.93%	8.32%	11.10%	1.69%	2.89%	26.30%	22.20%	42.98%	2.23%	1.06%	0.14%	0.87%	
Sofia	Koprivshtitsa	83.30%	14.54%	0.19%	78.42%	9.41%	17.85%	15.32%	4.07%	32.96%	4.19%	13.97%	0.75%	0.95%	8.44%	7.02%	33.59%	0.63%	1.34%	0.15%	0.65%	
Sofia	Kostenets	73.98%	13.38%	0.36%	78.74%	5.22%	17.35%	14.73%	4.42%	33.13%	4.95%	12.37%	0.89%	0.92%	15.15%	11.40%	31.58%	1.13%	1.24%	0.15%	0.97%	
Sofia	Kostinbrod	76.40%	14.28%	0.23%	80.30%	4.02%	18.37%	12.70%	4.25%	32.06%	3.04%	13.06%	0.48%	0.86%	12.89%	9.43%	31.37%	0.84%	1.25%	0.15%	1.25%	
Sofia	Mirkovo	47.58%	27.33%	0.73%	76.24%	2.68%	10.40%	23.99%	2.88%	36.29%	3.05%	17.72%	0.56%	0.76%	34.89%	19.25%	20.01%	1.52%	1.27%	0.14%	0.46%	
Sofia	Priop	85.63%	12.07%	0.31%	79.58%	5.73%	21.85%	11.14%	4.73%	31.42%	3.94%	12.60%	0.65%	1.03%	8.99%	8.15%	34.03%	0.62%	1.28%	0.15%	1.00%	
Sofia	Pravets	75.87%	19.18%	1.70%	75.31%	8.34%	21.50%	16.23%	4.07%	32.96%	4.19%	13.97%	0.75%	0.95%	8.44%	7.02%	33.59%	0.63%	1.34%	0.15%	0.65%	
Sofia	Samokov	77.62%	19.73%	1.40%	77.63%	10.59%	23.85%	15.95%	4.53%	35.42%	5.30%	13.05%	0.98%	1.76%	20.59%	15.45%	36.57%	1.73%	1.10%	0.14%	0.88%	
Sofia	Svoge	61.59%	16.64%	0.04%	79.36%	1.18%	12.29%	16.81%	3.93%	33.98%	3.12%	14.12%	0.54%	0.59%	20.10%	12.52%	25.07%	1.27%	1.02%	0.14%	1.02%	
Sofia	Silivnitsa	76.79%	13.89%	0.16%	79.36%	5.48%	17.41%	14.58%	4.11%	34.10%	3.34%	13.44%	0.56%	0.85%	11.65%	8.81%	32.23%	1.13%	1.30%	0.15%	0.97%	
Sofia	Chavdar	61.90%	19.52%	0.38%	78.23%	-	11.58%	16.76%	4.63%	33.08%	5.83%	14.92%	1.16%	0.70%	28.84%	18.16%	19.55%	1.34%	1.28%	0.13%	1.34%	
Sofia	Chelopec	61.26%	14.35%	0.33%	78.51%	-	12.22%	14.81%	3.70%	30.25%	2.70%	12.59%	0.42%	0.69%	27.65%	15.47%	20.53%	0.81%	1.17%	0.14%	0.76%	
Sofia - (stolitsa)	Stolichna	91.67%	16.37%	0.14%	81.43%	2.12%	18.72%	5.42%	6.71%	28.95%	6.84%	10.15%	1.05%	0.54%	13.05%	1.76%	20.59%	0.98%	36.92%	0.25%	0.92%	
Sofia	Braita Daskalovi	54.57%	33.21%	1.85%	71.31%	9.51%	13.34%	26.47%	4.26%	36.76%	8.65%	18.62%	1.81%	1.16%	38.27%	24.88%	23.28%	2.22%	1.00%	0.13%	0.74%	
Sofia	Gurkovo	77.33%	26.15%	2.26%	74.46%	10.47%	24.18%	19.44%	7.51%	34.12%	4.46%	1.90%	0.90%	2.41%	29.21%	24.36%	38.57%	3.80%	0.89%	0.11%	1.46%	
Sofia	Galabovo	70.93%	18.62%	0.33%	77.57%	7.35%	18.06%	17.73%	4.48%	34.46%	4.42%	14.93%	0.85%	1.18%	17.31%	13.08%	30.78%	1.72%	1.15%	0.13%	1.24%	
Sofia	Kazanlak	78.55%	11.66%	0.52%	78.55%	4.19%	19.35%	12.15%	4.50%	31.53%	5.18%	12.56%	0.91%	1.06%	15.24%	11.24%	31.71%	0.78%	1.30%	0.16%	0.80%	
Sofia	Maglizh	71.76%	27.23%	3.38%	70.15%	18.88%	20.37%	25.88%	5.24%	36.59%	20.45%	15.40%	4.45%	2.64%	40.49%	31.20%	37.22%	2.52%	1.15%	0.15%	0.66%	
Sofia	Nikoleovo	83.34%	27.25%	3.03%	68.62%	18.54%	21.78%	23.46%	6.99%	30.20%	21.90%	13.82%	4.77%	3.13%	30.85%	27.84%	39.16%	2.83%	1.04%	0.12%	1.17%	
Sofia	Open	26.20%	53.74%	0.41%	69.25%	14.35%	5.09%	34.93%	0.24%	37.53%	6.88%	23.86%	1.47%	0.46%	36.38%	18.36%	18.36%	2.04%	0.97%	0.15%	0.41%	
Sofia	Pavel Bania	66.74%	24.78%	1.50%	72.18%	6.65%	17.10%	20.72%	5.98%	31.91%	7.88%	13.66%	1.63%	1.30%	30.71%	22.70%	28.28%	2.63%	10.5%	0.13%	1.20%	
Sofia	Radnevo	72.79%	16.64%	0.61%	77.09%	7.92%	17.89%	11.11%	4.52%	33.70%	5.66%	11.29%	1.12%	1.14%	17.31%	13.00%	31.74%	1.18%	1.26%	0.15%	0.90%	
Sofia	Stara Zagora	85.22%	12.00%	0.51%	74.47%	5.64%	21.50%	4.88%	10.27%	4.88%	11.23%	6.21%	11.32%	1.06%	1.04%	11.61%	9.86%	30.05%	1.11%	1.11%	0.16%	1.09%
Sofia	Stara Zagora	75.54%	22.38%	0.97%	75.39%	11.15%	18.08%	18.76%	4.46%	32.56%	6.96%	15.61%	1.40%	1.26%	18.46%	14.40%	31.93%	1.66%	1.07%	0.14%	0.89%	
Targovishte	Antonovo	65.16%	27.81%	2.35%	67.67%	11.38%	18.89%	25.55%	6.64%	37.64%	11.94%	24.60%	2.55%	1.83%	35.98%	28.29%	34.85%	4.09%	0.82%	0.13%	1.03%	
Targovishte	Onurtag	67.30%	24.43%	0.93%	67.75%	8.42%	16.46%	21.90%	6.28%	32.43%	10.42%	11.65%	2.21%	1.02%	24.66%	30.51%	30.24%	3.45%	0.79%	0.13%	1.64%	

(Continued and end)

District	Municipality	Indicator																						
Targovishte	Opaka	63.76%	24.26%	1.2	1.3	2.1	2.2	3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1		
Targovishte	Popovo	68.99%	18.94%	0.01%	68.29%	6.16%	14.07%	21.55%	6.22%	14.65%	17.84%	4.35%	31.82%	32.77%	7.00%	12.36%	1.48%	18.52%	15.83%	27.1%	27.70%	0.86%	0.13%	2.00%
Targovishte	Targovishte	77.21%	18.12%	0.73%	74.68%	6.22%	14.65%	17.84%	5.38%	15.39%	18.78%	3.113%	6.57%	11.79%	1.22%	1.11%	17.80%	14.09%	33.40%	14.09%	1.34%	1.09%	0.15%	
Haskovo	Dimitrovgrad	74.83%	13.75%	0.63%	77.39%	8.18%	18.67%	15.76%	4.14%	34.33%	5.33%	13.55%	1.01%	1.13%	15.79%	11.90%	33.02%	1.17%	1.17%	1.21%	0.15%	0.15%	0.81%	
Haskovo	Halolgrad	66.38%	17.78%	0.09%	73.96%	5.41%	13.27%	20.33%	4.53%	33.93%	5.36%	13.98%	1.03%	0.58%	18.14%	13.81%	27.6%	2.52%	2.05%	0.15%	0.15%	1.06%		
Haskovo	Iubimets	78.77%	23.01%	1.74%	76.23%	14.24%	23.61%	19.15%	4.75%	34.45%	7.56%	14.49%	1.49%	2.01%	22.23%	18.03%	38.78%	2.99%	0.88%	0.13%	1.05%			
Haskovo	Madzhairovo	44.72%	28.66%	0.16%	67.43%	11.51%	9.04%	30.14%	5.56%	37.60%	15.61%	17.50%	3.37%	0.48%	26.17%	18.94%	24.15%	2.20%	0.96%	0.15%	0.49%			
Haskovo	Mineralni Bani	55.57%	21.15%	0.40%	70.75%	2.64%	12.86%	19.39%	5.66%	34.72%	9.49%	1.341%	1.98%	0.58%	27.41%	20.73%	20.82%	2.23%	0.86%	0.12%	1.98%			
Haskovo	Svilengrad	79.34%	18.12%	0.74%	77.92%	8.08%	20.82%	15.90%	4.99%	33.43%	5.92%	12.55%	1.08%	1.19%	16.03%	13.64%	35.82%	2.49%	0.94%	0.15%	1.03%			
Haskovo	Simeonovgrad	80.07%	26.30%	1.92%	72.93%	15.22%	22.12%	22.24%	6.19%	32.77%	9.81%	13.66%	2.06%	2.22%	23.80%	20.66%	39.15%	2.77%	1.02%	0.14%	1.01%			
Haskovo	Stambolovo	55.24%	28.53%	1.09%	67.30%	7.79%	14.09%	24.79%	5.56%	34.53%	10.98%	13.74%	2.37%	0.84%	31.58%	23.30%	24.54%	3.29%	0.72%	0.13%	1.38%			
Haskovo	Topolovgrad	59.66%	26.55%	0.96%	74.45%	10.26%	14.11%	25.52%	3.52%	36.82%	5.59%	16.65%	1.09%	1.05%	27.50%	18.44%	30.00%	2.79%	1.00%	0.15%	0.70%			
Haskovo	Harmanli	77.80%	20.74%	0.93%	75.74%	9.82%	20.02%	18.02%	5.26%	33.17%	6.95%	13.06%	1.39%	1.36%	17.71%	15.05%	35.64%	2.25%	1.04%	0.14%	1.04%			
Haskovo	Haskovo	82.96%	14.37%	0.42%	77.21%	6.69%	20.43%	12.59%	5.02%	30.11%	7.01%	11.39%	1.34%	0.98%	11.65%	10.54%	35.08%	1.26%	1.02%	1.02%	1.01%			
Shumen	Velyki Preslav	70.32%	22.69%	0.83%	73.56%	7.88%	17.45%	19.20%	5.25%	33.25%	5.93%	13.90%	1.14%	1.06%	20.69%	16.16%	31.54%	2.13%	1.02%	1.02%	1.01%			
Shumen	Venets	59.23%	29.02%	0.97%	64.81%	6.81%	14.63%	25.88%	7.04%	32.59%	10.49%	11.40%	1.20%	0.78%	31.59%	29.30%	31.54%	2.13%	1.02%	1.02%	1.01%			
Shumen	Varbitsa	68.97%	30.16%	2.79%	66.90%	14.23%	22.56%	26.50%	6.59%	35.53%	9.83%	10.29%	2.09%	2.35%	36.66%	29.14%	40.05%	5.61%	0.70%	0.14%	0.95%			
Shumen	Kadilovo	65.31%	27.25%	1.84%	67.00%	7.88%	20.29%	21.01%	7.96%	33.22%	6.28%	9.98%	1.34%	1.44%	30.89%	24.92%	30.33%	4.87%	0.60%	0.12%	2.14%			
Shumen	Kaspijan	70.03%	24.57%	1.34%	72.53%	10.33%	18.75%	21.03%	5.58%	33.35%	6.16%	13.48%	1.23%	1.45%	24.85%	19.00%	32.20%	2.04%	1.06%	1.04%	0.38%			
Shumen	Nikola Kozirovo	66.63%	28.34%	2.39%	65.81%	10.00%	19.63%	23.73%	7.88%	32.50%	11.29%	10.72%	2.41%	1.74%	37.78%	29.79%	29.21%	4.46%	0.61%	0.12%	1.67%			
Shumen	Novi Pazar	78.00%	21.32%	1.16%	74.27%	9.63%	21.01%	17.55%	5.64%	32.28%	6.45%	12.61%	1.26%	1.50%	19.08%	16.05%	35.81%	1.98%	1.07%	0.14%	1.23%			
Shumen	Sinistrovo	61.87%	27.71%	0.12%	70.30%	13.46%	13.40%	26.00%	4.40%	34.04%	9.12%	15.96%	1.98%	0.92%	22.13%	16.75%	30.52%	2.13%	0.94%	0.14%	0.90%			
Shumen	Hitino	49.10%	30.88%	0.06%	65.91%	4.09%	9.71%	27.70%	4.79%	35.00%	6.03%	15.74%	1.33%	0.34%	30.78%	20.73%	20.55%	3.74%	0.76%	0.13%	1.44%			
Shumen	Shumen	84.00%	16.23%	0.43%	77.98%	5.14%	19.47%	11.10%	5.81%	30.83%	5.62%	11.25%	0.94%	0.90%	12.21%	10.68%	35.54%	0.64%	1.10%	0.15%	0.81%			
Yambol	Bolariovo	52.07%	34.01%	1.62%	70.61%	16.21%	12.67%	31.33%	3.36%	36.37%	10.61%	8.04%	2.26%	1.20%	36.49%	24.29%	28.86%	2.48%	0.94%	0.14%	0.48%			
Yambol	Ehovo	68.45%	19.92%	0.77%	74.50%	11.26%	16.36%	21.65%	4.09%	34.51%	7.29%	13.99%	1.45%	1.12%	20.66%	15.24%	32.06%	1.88%	1.07%	0.16%	0.62%			
Yambol	Straldzha	70.38%	32.35%	2.73%	72.04%	15.69%	18.05%	27.64%	5.00%	34.50%	10.55%	16.10%	2.26%	2.16%	34.34%	25.80%	35.43%	3.55%	0.87%	0.13%	1.01%			
Yambol	Tundzha	49.15%	31.68%	1.24%	72.67%	7.27%	11.18%	27.39%	3.17%	36.64%	6.93%	9.30%	1.45%	0.88%	36.07%	22.46%	20.30%	2.65%	1.00%	0.14%	0.75%			
Yambol	Yambol	90.27%	11.99%	0.58%	78.00%	7.88%	23.52%	11.32%	5.40%	30.62%	6.70%	10.60%	1.20%	1.31%	9.31%	9.65%	37.80%	0.72%	1.18%	0.16%	0.92%			

## ANNEX 4

### Standard errors of the small area estimates of the ‘vulnerability’ indicators by municipality (LAU1)

District	Municipality	Indicator																
Blagoevgrad	Bansko	1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4
Blagoevgrad	Bellitsa	3.73%	3.74%	0.42%	4.13%	2.38%	4.15%	3.37%	2.34%	4.71%	2.10%	3.27%	0.89%	0.89%	2.86%	3.00%	4.84%	1.30%
Blagoevgrad	Blagoevgrad	4.55%	4.30%	0.46%	4.54%	1.85%	3.81%	3.87%	2.63%	4.52%	2.47%	3.00%	1.14%	0.77%	4.00%	3.83%	4.54%	1.00%
Blagoevgrad	Gotsé Delchev	3.28%	3.89%	0.47%	4.15%	1.68%	4.02%	2.75%	2.86%	4.68%	2.26%	2.88%	0.92%	0.84%	3.06%	4.85%	6.00%	1.00%
Blagoevgrad	Garmen	4.21%	3.77%	0.33%	4.33%	1.76%	4.01%	3.22%	2.48%	4.61%	1.96%	3.00%	0.81%	0.82%	3.34%	3.26%	4.66%	1.21%
Blagoevgrad	Garmen	4.69%	4.31%	0.99%	4.53%	1.46%	3.98%	3.75%	2.87%	4.63%	2.39%	2.79%	1.11%	1.06%	4.60%	4.34%	4.42%	2.11%
Blagoevgrad	Kresna	4.67%	4.03%	0.21%	4.24%	2.38%	3.55%	3.99%	2.10%	4.82%	2.13%	3.56%	0.96%	0.81%	3.65%	3.33%	4.63%	1.62%
Blagoevgrad	Petrich	4.41%	3.98%	0.73%	4.19%	2.04%	3.97%	3.66%	2.40%	4.73%	2.39%	3.21%	1.07%	1.01%	3.91%	4.73%	1.58%	1.03%
Blagoevgrad	Razlog	4.35%	3.57%	0.64%	4.12%	1.77%	4.06%	3.35%	2.26%	4.73%	2.02%	3.27%	0.85%	0.96%	3.67%	3.38%	4.68%	1.30%
Blagoevgrad	Sandanski	4.28%	3.77%	0.38%	4.18%	1.90%	3.80%	3.63%	2.29%	4.71%	2.37%	3.24%	1.05%	0.86%	3.56%	3.34%	4.71%	1.40%
Blagoevgrad	Satovcha	4.81%	3.95%	0.41%	4.48%	-	3.75%	3.38%	2.75%	4.66%	2.90%	0.78%	0.73%	4.29%	3.99%	4.10%	1.73%	0.95%
Blagoevgrad	Simitli	4.66%	4.12%	0.61%	4.38%	1.98%	3.85%	3.84%	2.50%	4.77%	1.84%	3.24%	0.83%	0.93%	3.98%	3.72%	4.59%	1.51%
Blagoevgrad	Strumiani	5.04%	4.91%	0.52%	4.50%	1.85%	2.86%	4.72%	2.20%	4.75%	3.30%	3.82%	1.61%	0.68%	4.88%	4.43%	4.31%	0.94%
Blagoevgrad	Hadzhidimovo	4.71%	3.98%	0.53%	4.34%	1.03%	3.73%	3.58%	2.42%	4.75%	2.01%	3.32%	0.88%	0.85%	4.10%	3.74%	4.40%	1.64%
Blagoevgrad	Yakoruda	4.38%	4.09%	0.67%	4.58%	2.17%	4.00%	3.75%	2.62%	4.69%	2.48%	3.07%	1.12%	0.95%	3.81%	3.74%	4.71%	1.91%
Burgas	Aitos	4.15%	4.11%	1.09%	4.50%	3.08%	4.24%	3.82%	2.49%	4.72%	2.95%	3.11%	1.39%	1.28%	3.90%	3.80%	4.90%	1.37%
Burgas	Burgas	3.10%	3.31%	0.42%	4.03%	2.06%	4.12%	2.89%	2.21%	4.62%	2.42%	3.09%	1.00%	0.89%	2.71%	2.66%	4.90%	0.70%
Burgas	Kameno	4.79%	4.46%	0.84%	4.54%	3.17%	3.52%	4.33%	2.23%	4.76%	3.20%	3.56%	1.55%	0.98%	4.32%	3.92%	4.55%	1.40%
Burgas	Kamobat	4.27%	4.25%	0.73%	4.40%	2.99%	3.78%	3.99%	2.29%	4.66%	2.81%	3.44%	1.30%	0.99%	3.75%	4.77%	1.35%	1.02%
Burgas	Malko Tarnovo	4.83%	4.68%	1.20%	4.51%	3.69%	3.58%	4.47%	1.85%	4.80%	2.64%	3.90%	1.22%	1.12%	4.50%	3.91%	4.77%	1.40%
Burgas	Nesebar	4.11%	3.71%	0.49%	4.11%	2.01%	3.77%	3.50%	2.17%	4.68%	2.34%	3.03%	1.02%	0.94%	3.60%	3.15%	4.82%	1.37%
Burgas	Pomorie	4.22%	4.09%	0.71%	4.33%	2.71%	4.02%	3.80%	2.40%	4.68%	2.79%	3.13%	1.29%	1.02%	3.62%	3.53%	4.82%	1.06%
Burgas	Primorsko	4.41%	4.10%	0.97%	4.36%	2.90%	3.93%	3.94%	2.21%	4.77%	2.41%	3.29%	1.11%	1.16%	4.12%	3.69%	4.85%	1.36%
Burgas	Ruen	4.90%	4.51%	0.76%	4.80%	2.32%	3.65%	4.28%	2.67%	4.67%	2.92%	3.48%	1.71%	0.83%	4.52%	4.77%	4.27%	2.07%
Burgas	Sozopol	4.64%	4.21%	1.20%	4.39%	3.03%	4.15%	3.92%	2.27%	4.82%	2.35%	3.40%	1.05%	1.25%	4.37%	3.93%	4.87%	1.31%
Burgas	Sredets	4.48%	4.51%	1.25%	4.51%	3.86%	4.37%	3.46%	2.25%	4.77%	2.32%	3.55%	1.05%	1.27%	4.50%	4.14%	4.87%	1.59%
Burgas	Sungurlare	4.90%	4.68%	0.97%	4.67%	2.99%	3.51%	4.45%	2.36%	4.73%	3.09%	3.56%	1.50%	0.98%	4.60%	4.19%	4.54%	1.72%
Burgas	Tsarevo	4.11%	4.15%	0.89%	4.37%	3.05%	3.94%	4.04%	2.28%	4.75%	2.72%	3.21%	1.25%	1.16%	3.91%	3.65%	4.92%	1.49%
Varna	Aren	4.93%	4.53%	1.15%	4.54%	2.88%	3.52%	4.21%	2.28%	4.77%	2.62%	3.63%	1.22%	1.03%	4.82%	4.28%	4.29%	1.86%
Varna	Aksakovovo	4.62%	4.18%	1.15%	4.36%	2.64%	4.11%	3.72%	2.38%	4.74%	2.30%	3.33%	1.04%	1.20%	4.33%	3.90%	4.68%	1.21%
Varna	Beloslav	4.28%	4.02%	0.25%	4.24%	2.20%	3.99%	3.59%	2.45%	4.71%	1.65%	3.17%	0.69%	0.91%	3.19%	3.08%	4.72%	1.07%
Varna	Bjala	4.48%	4.41%	0.59%	4.45%	2.99%	3.51%	4.45%	2.36%	4.78%	2.94%	3.45%	1.4%	1.0%	4.05%	3.80%	4.75%	1.81%
Varna	Vana	2.82%	3.61%	0.32%	3.98%	1.82%	4.05%	2.63%	2.38%	4.61%	2.51%	3.03%	0.80%	2.61%	2.68%	4.92%	0.53%	1.02%
Varna	Vetino	5.07%	4.56%	0.60%	4.56%	1.81%	2.97%	4.40%	2.88%	4.85%	2.04%	3.90%	0.94%	0.75%	4.73%	3.98%	4.14%	1.04%
Varna	Vatchi Dol	4.96%	4.66%	1.19%	4.68%	3.34%	3.50%	4.55%	2.04%	4.86%	2.98%	3.75%	1.42%	1.07%	4.20%	4.60%	4.80%	1.12%
Varna	Denvia	3.92%	4.27%	0.81%	4.39%	3.19%	4.10%	3.96%	2.50%	4.71%	2.06%	3.20%	0.95%	1.21%	3.35%	3.37%	4.91%	1.13%
Varna	Dolni Chiflik	4.60%	4.53%	0.48%	4.58%	2.41%	3.51%	4.24%	2.64%	4.56%	2.93%	3.13%	1.40%	1.24%	3.59%	4.24%	4.03%	1.91%

(Continued)

District	Municipality	Indicator																						
Varna	Dalgopol	1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1	7.1		
Varna	Provadia	4.77%	4.59%	0.77%	4.64%	5.63%	3.49%	4.38%	2.39%	4.19%	3.95%	2.75%	3.35%	1.20%	1.35%	4.26%	4.06%	4.44%	4.44%	4.65%	2.07%	0.89%	0.37%	
Varna	Sunnyovo	4.41%	4.10%	1.29%	4.51%	3.12%	4.51%	3.24%	2.34%	3.61%	4.20%	2.23%	4.69%	2.85%	3.53%	1.35%	0.99%	3.96%	4.73%	1.54%	10.4%	0.49%	0.98%	
Varna	Veliko Tarnovo	4.41%	4.44%	0.73%	4.56%	3.02%	3.61%	4.20%	2.23%	4.68%	2.77%	4.69%	2.22%	3.15%	0.88%	0.73%	3.19%	3.22%	4.73%	0.39%	1.04%	0.38%	1.11%	
Veliko Tarnovo	Gorna Oriahovitsa	4.14%	3.89%	0.26%	4.17%	1.31%	3.84%	2.68%	2.08%	3.15%	3.08%	2.08%	4.17%	2.08%	3.41%	0.86%	0.86%	3.20%	2.82%	4.67%	0.72%	1.10%	0.39%	1.15%
Veliko Tarnovo	Elena	4.56%	3.99%	0.83%	4.41%	2.70%	3.73%	3.90%	2.15%	4.5%	2.42%	3.75%	2.42%	3.53%	1.09%	1.02%	4.05%	3.56%	4.65%	1.18%	1.09%	0.38%	1.03%	
Veliko Tarnovo	Zlatarsitsa	4.66%	4.34%	0.56%	4.49%	2.56%	3.44%	4.14%	2.18%	4.19%	2.37%	2.36%	3.65%	1.08%	0.88%	4.05%	4.05%	4.59%	1.42%	1.08%	0.37%	1.12%	1.12%	
Veliko Tarnovo	Ljaskovets	4.57%	3.41%	0.46%	4.11%	1.87%	3.70%	3.48%	1.99%	4.75%	1.81%	3.55%	0.75%	0.90%	0.82%	0.82%	3.83%	3.23%	4.37%	0.94%	1.09%	0.38%	0.99%	
Veliko Tarnovo	Pavlicheni	4.78%	3.82%	0.51%	3.35%	2.43%	3.41%	3.80%	1.91%	4.74%	2.21%	3.75%	0.97%	0.89%	0.85%	4.30%	3.61%	4.17%	1.05%	1.04%	0.37%	1.06%		
Veliko Tarnovo	Poiski Trambesti	4.96%	4.31%	0.59%	4.47%	2.41%	3.39%	4.01%	2.02%	4.76%	2.02%	3.86%	0.89%	0.85%	4.30%	4.30%	4.30%	4.30%	4.30%	1.05%	1.04%	0.37%	1.06%	
Veliko Tarnovo	Svisthtov	4.62%	4.37%	0.26%	4.50%	1.42%	3.66%	3.28%	3.40%	4.80%	2.06%	3.22%	0.87%	0.65%	3.92%	4.03%	4.47%	0.56%	1.00%	0.36%	1.00%	1.00%		
Veliko Tarnovo	Strazhista	4.70%	4.50%	0.65%	4.50%	2.32%	3.42%	4.23%	4.64%	2.42%	3.49%	1.13%	0.86%	4.36%	3.84%	4.45%	1.45%	1.09%	0.40%	1.17%	1.17%			
Veliko Tarnovo	Suhindol	4.52%	4.02%	0.64%	4.44%	2.90%	3.50%	3.89%	1.92%	4.70%	2.16%	3.89%	0.96%	0.93%	3.71%	3.15%	4.31%	0.92%	1.15%	0.38%	0.99%			
Vidin	Belogradchik	4.16%	3.76%	1.41%	4.36%	3.53%	4.33%	3.81%	1.93%	4.38%	2.36%	4.63%	1.04%	1.46%	4.30%	3.81%	4.92%	1.13%	1.13%	0.38%	0.78%	0.78%		
Vidin	Bojintsi	-	4.39%	0.00%	4.61%	3.16%	1.52%	4.92%	-	4.94%	2.48%	4.49%	1.16%	0.60%	3.94%	3.54%	4.49%	1.07%	0.38%	0.38%	0.38%	0.38%		
Vidin	Bregovo	5.00%	3.78%	0.59%	4.59%	2.35%	3.23%	3.79%	1.66%	4.90%	2.37%	3.70%	1.06%	0.87%	4.08%	3.33%	4.28%	0.98%	1.07%	0.35%	1.12%	1.12%		
Vidin	Vidin	4.05%	3.34%	0.79%	4.17%	2.58%	4.04%	3.36%	1.96%	4.76%	2.17%	3.50%	0.91%	0.88%	3.51%	3.51%	4.51%	0.92%	1.15%	0.38%	0.99%			
Vidin	Grămada	5.05%	4.48%	0.46%	4.30%	3.47%	2.77%	4.23%	0.91%	4.89%	1.77%	4.32%	0.77%	0.85%	3.84%	3.84%	4.82%	4.33%	1.00%	1.17%	1.17%	0.92%		
Vidin	Dimovo	5.00%	4.63%	1.32%	4.49%	3.03%	3.60%	4.30%	2.05%	4.35%	2.26%	3.94%	1.02%	1.11%	4.80%	4.16%	4.34%	1.21%	1.11%	0.37%	1.02%	1.02%		
Vidin	Kula	4.89%	4.19%	0.53%	4.17%	2.88%	3.21%	4.01%	1.54%	4.33%	1.98%	4.03%	0.86%	0.87%	3.84%	3.04%	4.52%	1.02%	1.16%	0.38%	0.83%	0.83%		
Vidin	Makresh	3.73%	5.05%	0.76%	4.44%	3.22%	4.65%	2.21%	4.65%	-	4.97%	2.26%	4.36%	1.00%	0.77%	4.89%	3.75%	3.75%	1.03%	1.18%	0.38%	0.52%		
Vidin	Novo Selo	4.96%	4.59%	0.63%	4.35%	2.01%	3.73%	4.27%	1.26%	4.87%	2.31%	4.25%	1.04%	0.72%	4.68%	3.76%	4.39%	1.19%	1.06%	0.38%	0.81%			
Vidin	Ruzhentsi	5.04%	4.62%	1.56%	4.53%	3.11%	3.63%	4.42%	2.00%	4.90%	3.04%	4.94%	1.45%	1.22%	5.0%	4.50%	4.35%	1.31%	1.12%	0.37%	0.79%			
Vidin	Chuprene	5.08%	4.79%	1.41%	4.54%	2.87%	3.22%	4.59%	1.58%	4.92%	2.41%	4.99%	1.10%	1.09%	5.0%	4.41%	4.26%	1.47%	1.11%	0.36%	0.78%			
Vratsa	Borovian	4.91%	4.41%	0.92%	4.45%	1.76%	3.39%	4.03%	2.19%	4.71%	2.38%	3.81%	1.10%	0.94%	4.68%	4.03%	3.88%	1.06%	1.14%	0.38%	1.14%			
Vratsa	Biala Statina	4.55%	3.94%	1.09%	4.38%	2.57%	3.99%	3.67%	2.22%	4.76%	2.35%	3.55%	1.06%	1.17%	4.27%	3.77%	4.59%	0.94%	1.12%	0.33%	1.01%			
Vratsa	Vratsa	3.71%	3.01%	0.54%	4.07%	1.97%	4.02%	3.07%	2.09%	4.71%	2.22%	3.25%	0.91%	0.97%	3.18%	2.81%	4.80%	0.67%	1.14%	0.40%	0.90%			
Vratsa	Kozlodui	4.06%	3.50%	0.80%	4.22%	2.07%	4.14%	3.23%	4.67%	2.49%	3.00%	1.06%	1.08%	3.75%	3.45%	4.78%	1.00%	1.06%	1.06%	1.11%	1.11%			
Vratsa	Krivotoli	5.05%	4.74%	1.38%	4.54%	3.52%	3.59%	4.41%	1.77%	4.89%	2.31%	4.07%	1.01%	1.15%	4.72%	4.03%	4.47%	1.24%	1.08%	0.38%	0.79%			
Vratsa	Mezdra	4.69%	4.07%	0.56%	4.15%	1.31%	3.71%	3.39%	2.13%	4.83%	1.92%	3.83%	0.83%	0.93%	3.85%	3.85%	4.48%	0.84%	1.16%	0.38%	1.03%			
Vratsa	Mizia	4.86%	3.97%	0.87%	4.25%	2.50%	3.67%	3.88%	2.00%	4.82%	1.70%	3.69%	0.73%	0.93%	4.24%	3.53%	4.47%	0.99%	1.17%	0.37%	1.05%			
Vratsa	Oryahovo	4.86%	4.16%	0.75%	4.41%	2.59%	3.53%	3.96%	1.94%	4.79%	3.80%	0.86%	0.92%	4.15%	3.47%	4.39%	1.08%	1.09%	1.09%	0.96%				
Vratsa	Roman	4.73%	3.94%	0.84%	4.62%	2.25%	3.62%	3.82%	2.13%	4.82%	2.32%	3.71%	1.04%	1.02%	4.23%	3.65%	4.42%	1.24%	1.11%	0.39%	0.85%			
Vratsa	Hainedin	5.08%	4.27%	0.93%	4.45%	1.84%	3.30%	4.08%	1.86%	4.87%	2.10%	3.97%	0.93%	0.91%	4.71%	3.92%	3.80%	0.97%	1.13%	0.38%	0.79%			
Gabrovo	Gabrovo	3.75%	3.19%	0.25%	4.04%	1.98%	3.77%	3.12%	1.98%	4.73%	2.11%	3.58%	0.85%	0.85%	4.24%	3.47%	4.27%	0.56%	1.16%	0.41%	0.73%			
Gabrovo	Driyanovo	4.40%	3.27%	0.56%	4.19%	2.40%	3.66%	3.50%	4.77%	2.20%	3.75%	0.93%	0.91%	3.48%	2.91%	4.62%	0.84%	1.14%	0.39%	0.81%				
Gabrovo	Sedilevo	4.55%	3.70%	0.45%	4.27%	2.23%	3.56%	3.64%	2.16%	4.72%	2.10%	3.65%	0.90%	0.86%	3.67%	3.07%	4.56%	0.92%	1.12%	0.39%	0.86%			
Gabrovo	Triavna	4.02%	2.71%	0.24%	4.06%	2.57%	3.79%	3.37%	1.68%	4.77%	1.82%	3.69%	0.73%	0.89%	2.73%	2.23%	4.71%	1.18%	1.08%	0.40%	0.79%			
Dobrich	Balchik	4.47%	4.14%	1.07%	4.44%	2.89%	4.04%	3.94%	2.34%	4.80%	2.73%	3.69%	1.26%	1.19%	4.23%	3.90%	4.84%	1.54%	0.99%	0.39%	1.03%			
Dobrich	General Toshevovo	4.92%	4.52%	1.19%	4.52%	3.39%	3.75%	4.40%	2.07%	4.89%	2.83%	3.68%	1.34%	1.16%	4.56%	4.09%	4.75%	1.66%	0.96%	0.38%	0.91%			

(Continued)

District	Municipality	Indicator																							
Dobrich	Dobrich selska	5.000%	4.71%	1.2	1.3	2.1	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1	7.1			
Dobrich	Dobrich	3.16%	3.32%	0.52%	0.53%	4.16%	2.53%	3.40%	3.81%	4.51%	2.20%	4.91%	3.05%	3.67%	1.00%	0.98%	1.26%	4.96%	4.53%	4.64%	1.74%	0.87%	0.33%	0.97%	
Dobrich	Kavarna	4.19%	4.16%	1.18%	4.36%	3.29%	4.28%	3.95%	2.28%	4.80%	2.26%	4.68%	3.05%	3.13%	1.00%	0.98%	2.36%	4.96%	2.560	2.73%	4.90%	0.89%	1.06%	0.40%	1.02%
Dobrich	Krushari	4.94%	4.73%	1.09%	4.83%	2.99%	3.51%	4.57%	2.58%	4.75%	3.47%	3.48%	1.71%	0.97%	0.97%	4.86%	4.49%	4.43%	3.85%	3.85%	4.96%	1.69%	0.98%	0.38%	0.96%
Dobrich	Teniel	4.67%	4.39%	1.15%	4.66%	2.94%	3.97%	4.13%	2.55%	4.77%	2.88%	3.23%	1.38%	1.17%	4.45%	4.17%	4.73%	1.89%	0.83%	0.83%	1.36%	1.36%	1.20%	1.31%	
Dobrich	Shabla	4.79%	4.10%	0.56%	4.33%	2.94%	3.42%	4.10%	1.87%	4.84%	2.45%	3.74%	1.11%	0.87%	3.86%	3.33%	4.63%	1.26%	1.05%	0.38%	0.92%	0.92%	0.92%	0.92%	
Kardzhali	Ardino	5.04%	4.16%	0.00%	4.77%	2.68%	3.09%	4.48%	2.10%	4.83%	3.60%	3.37%	1.77%	0.64%	4.31%	3.93%	4.48%	1.81%	0.94%	0.39%	0.94%	0.39%	0.94%	0.94%	
Kardzhali	Dzhebel	4.81%	4.28%	0.07%	4.73%	2.47%	3.53%	4.13%	2.47%	4.74%	3.40%	3.07%	1.65%	0.64%	3.87%	3.82%	4.57%	1.78%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	
Kardzhali	Kirkovo	5.04%	4.19%	0.14%	4.71%	1.83%	3.18%	4.18%	2.39%	4.79%	3.40%	3.31%	1.66%	0.58%	4.43%	4.06%	4.14%	1.89%	0.85%	0.85%	0.85%	0.85%	0.85%	0.85%	
Kardzhali	Krumovgrad	4.76%	4.29%	0.16%	4.71%	2.11%	3.45%	4.08%	2.49%	4.68%	3.12%	3.25%	1.49%	0.63%	4.09%	3.86%	4.44%	1.99%	0.87%	0.87%	0.87%	0.87%	0.87%	0.87%	
Kardzhali	Kardzhali	4.24%	3.83%	0.41%	4.54%	2.36%	3.80%	3.59%	2.38%	4.62%	2.9%	3.11%	1.37%	0.80%	3.44%	3.36%	4.72%	1.23%	0.97%	0.39%	0.97%	0.39%	0.97%	0.97%	
Kardzhali	Momchilgrad	4.69%	4.03%	0.39%	4.73%	2.54%	3.65%	3.94%	2.50%	4.78%	3.40%	3.13%	1.65%	0.76%	3.72%	3.72%	4.63%	1.62%	0.92%	0.36%	0.92%	0.36%	0.92%	0.92%	
Kardzhali	Chernoochene	4.99%	4.03%	0.00%	4.82%	1.84%	3.22%	4.04%	2.51%	4.78%	3.69%	3.31%	1.83%	0.58%	4.32%	4.10%	4.04%	1.79%	0.85%	0.85%	0.85%	0.85%	0.85%	0.85%	
Kyustendil	Babov Dol	4.86%	3.91%	0.58%	4.29%	2.51%	3.61%	4.00%	2.04%	4.94%	1.75%	3.48%	0.77%	0.97%	3.89%	3.35%	4.68%	1.12%	1.16%	0.39%	0.39%	0.39%	0.79%	0.79%	
Kyustendil	Boboshevo	5.04%	4.64%	0.07%	4.32%	2.40%	2.74%	4.57%	1.68%	4.88%	2.18%	4.01%	1.01%	0.72%	4.51%	3.69%	4.34%	1.42%	1.15%	0.37%	0.77%	0.77%	0.77%	0.77%	
Kyustendil	Djupnitsa	4.10%	3.06%	0.74%	4.11%	2.45%	3.99%	3.42%	2.34%	4.30%	2.35%	3.56%	1.04%	0.94%	3.09%	3.09%	4.78%	0.98%	1.11%	0.49%	0.49%	0.49%	0.95%	0.95%	
Kyustendil	Kocherinovo	5.07%	4.49%	0.51%	4.25%	2.74%	3.11%	4.29%	1.61%	4.82%	2.13%	3.96%	0.96%	0.81%	4.26%	3.46%	4.40%	1.29%	1.09%	0.39%	0.71%	0.39%	0.71%	0.71%	
Kyustendil	Kyustendil	4.27%	3.13%	0.94%	4.13%	2.74%	4.06%	3.53%	1.81%	4.81%	2.32%	3.50%	1.00%	1.15%	3.84%	3.26%	4.82%	1.02%	1.44%	0.40%	0.80%	0.40%	0.80%	0.80%	
Kyustendil	Nevestino	1.05%	5.01%	0.27%	4.55%	3.29%	1.88%	4.87%	-	5.01%	2.72%	4.41%	1.29%	0.64%	4.92%	3.92%	3.58%	1.34%	1.09%	0.39%	0.49%	0.49%	0.49%	0.49%	
Kyustendil	Rila	4.69%	4.05%	0.53%	4.20%	3.01%	3.20%	4.20%	1.46%	4.87%	1.98%	3.80%	0.85%	0.89%	3.88%	3.12%	4.78%	1.37%	1.11%	0.39%	0.70%	0.70%	0.70%	0.70%	
Kyustendil	Sabareva Bania	4.73%	3.61%	0.48%	4.15%	1.85%	3.67%	3.64%	1.85%	4.75%	1.99%	3.54%	0.86%	0.88%	3.82%	3.31%	4.52%	1.17%	1.10%	0.38%	1.16%	0.38%	1.16%	1.16%	
Kyustendil	Treldiano	4.13%	4.95%	0.55%	4.27%	2.17%	4.09%	4.28%	1.34%	4.62%	-	5.02%	2.22%	4.36%	1.00%	0.77%	4.95%	3.81%	3.81%	1.17%	1.27%	0.38%	0.44%	0.44%	
Lovedach	Apritsi	4.62%	4.20%	0.17%	4.09%	2.99%	3.29%	3.70%	1.26%	4.85%	1.67%	3.94%	0.66%	0.81%	3.06%	3.06%	4.65%	0.91%	1.10%	0.37%	0.94%	0.37%	0.94%	0.94%	
Lovedach	Letnitsa	4.35%	4.41%	0.65%	4.51%	3.01%	3.39%	4.09%	2.05%	4.68%	2.60%	3.90%	1.20%	0.90%	3.85%	3.43%	4.57%	1.30%	1.06%	0.37%	1.10%	0.37%	1.10%	1.10%	
Lovedach	Lovedach	4.19%	2.84%	0.38%	4.11%	1.80%	3.64%	3.25%	1.81%	4.74%	2.25%	3.58%	0.93%	0.85%	3.39%	2.77%	4.63%	0.75%	1.13%	0.40%	0.82%	0.40%	0.82%	0.82%	
Lovedach	Lukout	4.21%	4.34%	1.34%	4.45%	3.09%	4.03%	3.98%	2.39%	4.72%	3.02%	3.53%	1.43%	1.33%	4.51%	4.15%	4.77%	1.37%	1.06%	0.37%	1.00%	0.37%	1.00%	1.00%	
Lovedach	Teteven	4.61%	4.01%	0.58%	4.28%	2.01%	3.67%	3.86%	2.22%	4.70%	2.27%	3.41%	1.01%	0.91%	4.03%	3.55%	4.53%	1.31%	1.10%	0.40%	0.96%	0.40%	0.96%	0.96%	
Lovedach	Trojan	4.54%	3.07%	0.34%	4.11%	1.89%	3.51%	3.45%	1.69%	4.75%	2.01%	3.63%	0.87%	0.84%	3.54%	2.77%	4.58%	0.78%	1.15%	0.40%	0.83%	0.40%	0.83%	0.83%	
Lovedach	Ugurdini	4.84%	4.66%	0.70%	4.49%	4.09%	2.99%	4.39%	1.84%	4.67%	0.03%	3.98%	1.44%	0.84%	4.45%	3.77%	4.31%	1.21%	1.10%	0.37%	0.91%	0.37%	0.91%	0.91%	
Lovedach	Yablanitsa	4.26%	4.06%	1.34%	4.46%	3.02%	4.06%	3.89%	2.08%	4.87%	2.49%	3.03%	1.42%	1.32%	4.48%	4.16%	4.76%	1.24%	1.08%	0.36%	1.08%	0.36%	1.08%	1.08%	
Montana	Berkovitsa	4.41%	4.04%	1.34%	4.32%	3.44%	4.26%	3.89%	2.08%	4.87%	3.62%	3.62%	1.13%	1.38%	4.28%	3.83%	4.89%	1.17%	1.09%	0.38%	0.83%	0.38%	0.83%	0.83%	
Montana	Boichinovtsi	5.00%	4.56%	1.25%	4.45%	2.60%	3.59%	4.22%	2.20%	4.86%	2.25%	3.90%	1.04%	1.10%	4.76%	4.17%	4.29%	1.20%	1.12%	0.36%	0.93%	0.36%	0.93%	0.93%	
Montana	Brusartsi	5.04%	4.39%	1.57%	4.50%	3.37%	3.91%	4.20%	1.93%	4.97%	2.15%	3.94%	1.00%	1.30%	4.84%	4.23%	4.49%	1.09%	1.16%	0.41%	0.82%	0.41%	0.82%	0.82%	
Montana	Valchedium	4.84%	4.53%	1.63%	4.45%	3.63%	4.11%	4.14%	2.08%	4.87%	2.47%	3.88%	1.15%	1.38%	4.72%	4.20%	4.69%	1.17%	1.05%	0.36%	0.96%	0.36%	0.96%	0.96%	
Montana	Vashets	4.25%	4.53%	1.40%	4.57%	3.77%	4.16%	4.18%	2.44%	4.84%	2.50%	3.68%	1.14%	1.39%	4.42%	4.05%	4.92%	1.33%	1.05%	0.37%	0.86%	0.37%	0.86%	0.86%	
Montana	Georgi Damyanovo	4.68%	4.47%	1.47%	4.46%	1.36%	2.77%	4.36%	1.50%	4.98%	2.13%	4.22%	0.73%	0.73%	4.77%	3.88%	3.32%	1.08%	1.15%	0.38%	0.51%	0.38%	0.51%	0.51%	
Montana	Lom	4.11%	3.72%	1.35%	4.27%	3.32%	4.48%	3.58%	2.12%	4.86%	2.12%	3.54%	0.91%	1.45%	4.10%	3.68%	4.91%	1.20%	1.14%	0.39%	0.80%	0.39%	0.80%	0.80%	
Montana	Medkovets	5.08%	4.71%	1.48%	4.51%	3.15%	4.41%	4.17%	1.70%	4.94%	2.39%	4.07%	1.09%	1.13%	4.96%	4.29%	4.19%	1.20%	1.05%	0.37%	0.79%	0.37%	0.79%	0.79%	
Montana	Montana	3.85%	3.09%	0.83%	4.11%	2.45%	4.21%	3.27%	2.08%	4.78%	2.13%	3.29%	0.89%	1.16%	3.49%	3.11%	4.85%	0.87%	1.16%	0.40%	0.95%	0.40%	0.95%	0.95%	
Montana	Chiprovtsi	4.99%	3.83%	0.29%	4.28%	2.58%	2.88%	4.18%	1.20%	4.94%	1.65%	4.06%	0.72%	0.83%	4.10%	3.14%	4.24%	1.07%	1.17%	0.38%	0.73%	0.38%	0.73%	0.73%	

(Continued)

District	Municipality	Indicator																					
Montana	Yakimovo	5.07%	4.69%	1.49%	1.2	1.3	2.1	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1	
Pazardzhik	Batak	4.73%	3.66%	0.32%	3.23%	3.56%	4.35%	2.13%	4.81%	2.47%	4.01%	1.16%	4.93%	4.27%	4.20%	5.03%	5.1	5.2	5.3	1.05%	1.05%	0.37%	0.84%
Pazardzhik	Belovo	4.92%	3.48%	0.65%	4.24%	1.97%	3.62%	3.86%	1.98%	4.84%	1.78%	3.47%	0.76%	0.94%	4.15%	3.51%	4.49%	1.21%	1.12%	0.39%	0.92%	1.07%	
Pazardzhik	Bratsigovo	4.80%	4.24%	0.70%	4.41%	2.35%	3.57%	4.03%	2.28%	4.77%	2.44%	3.61%	1.11%	0.89%	4.20%	3.77%	4.47%	1.39%	1.39%	0.33%	0.37%	1.08%	
Pazardzhik	Velingrad	4.19%	3.90%	0.73%	4.39%	2.48%	4.13%	3.58%	2.47%	4.63%	2.49%	3.11%	1.15%	1.04%	3.62%	4.75%	4.75%	1.36%	1.00%	0.38%	1.30%	1.30%	
Pazardzhik	Lestichovo	5.03%	4.61%	1.35%	4.48%	2.79%	3.62%	4.38%	2.10%	4.86%	2.58%	3.72%	1.21%	1.14%	4.95%	4.42%	4.42%	1.49%	1.03%	0.37%	0.91%	0.91%	
Pazardzhik	Paranizik	4.24%	3.79%	0.94%	4.25%	2.50%	4.13%	3.53%	2.33%	4.75%	2.51%	3.21%	1.12%	1.14%	3.94%	3.64%	4.82%	1.29%	1.01%	0.38%	1.12%	1.12%	
Pazardzhik	Paradijnshte	4.41%	3.42%	0.31%	4.20%	2.04%	3.85%	3.51%	2.17%	4.77%	1.97%	3.41%	0.88%	0.92%	3.84%	3.43%	4.62%	1.05%	1.11%	0.39%	1.11%	1.11%	
Pazardzhik	Peshtera	3.71%	4.01%	0.65%	4.41%	2.92%	3.99%	3.74%	2.40%	4.64%	2.74%	3.23%	1.27%	1.03%	3.24%	3.31%	4.87%	1.36%	1.01%	0.38%	1.25%	1.25%	
Pazardzhik	Rahitova	4.06%	4.34%	1.28%	4.54%	3.41%	4.60%	3.86%	2.74%	4.77%	2.28%	2.97%	1.06%	1.57%	3.90%	3.96%	4.99%	1.54%	0.93%	0.37%	1.14%	1.14%	
Pazardzhik	Septemvri	4.61%	4.12%	1.04%	4.38%	2.49%	4.06%	3.80%	2.53%	4.79%	2.25%	3.25%	1.02%	1.17%	4.30%	3.99%	4.69%	1.49%	1.00%	0.36%	1.26%	1.26%	
Pazardzhik	Strelcha	4.42%	4.04%	0.82%	4.35%	2.73%	4.19%	3.68%	2.44%	4.76%	2.38%	3.23%	1.07%	1.18%	3.90%	3.69%	4.83%	1.36%	1.01%	0.37%	1.16%	1.16%	
Pazardzhik	Samitska	4.26%	4.01%	0.96%	4.34%	2.73%	4.23%	3.29%	4.22%	4.76%	1.67%	4.88%	0.82%	0.90%	4.10%	3.36%	4.58%	1.15%	0.66%	0.39%	0.66%	0.66%	
Pernik	Breznik	5.02%	4.34%	0.58%	4.39%	2.23%	3.29%	3.63%	4.22%	4.76%	1.57%	4.79%	0.82%	0.80%	4.15%	4.08%	4.33%	3.25%	1.17%	0.39%	0.59%	0.59%	
Pernik	Zemen	4.79%	4.69%	0.45%	4.39%	3.43%	4.34%	4.57%	0.95%	4.94%	1.84%	4.15%	0.80%	0.81%	4.41%	4.34%	4.41%	1.17%	0.39%	0.59%	0.59%	0.59%	
Pernik	Kovachevtsi	2.75%	4.93%	0.06%	4.42%	2.45%	2.17%	4.53%	-	5.01%	4.62%	4.31%	1.62%	0.73%	4.70%	4.80%	3.61%	3.42%	1.05%	1.21%	0.49%	0.49%	
Pernik	Pernik	3.88%	2.81%	0.43%	4.02%	2.18%	3.97%	3.27%	1.90%	4.74%	1.98%	3.34%	0.80%	0.94%	3.03%	2.61%	4.84%	1.15%	0.40%	0.93%	0.93%	0.93%	
Pernik	Radomir	4.66%	3.73%	0.69%	4.22%	2.66%	3.69%	3.89%	1.84%	4.84%	1.93%	3.63%	0.84%	1.01%	3.81%	3.22%	4.69%	1.09%	1.18%	0.40%	0.77%	0.77%	
Pernik	Tan	4.88%	4.67%	1.44%	4.47%	3.59%	3.77%	4.41%	1.80%	4.96%	2.54%	3.96%	1.19%	1.30%	4.66%	4.06%	4.83%	1.43%	1.12%	0.38%	0.67%	0.67%	
Pleven	Belene	4.38%	3.51%	0.30%	4.29%	2.41%	3.73%	3.60%	1.98%	4.33%	1.88%	3.44%	0.80%	0.89%	3.20%	2.81%	4.79%	1.04%	1.10%	0.37%	0.99%	0.99%	
Pleven	Gulantsi	5.07%	4.47%	0.50%	4.44%	2.45%	2.97%	4.26%	1.66%	4.85%	2.09%	4.07%	0.99%	0.78%	4.41%	4.36%	4.04%	1.36%	1.07%	0.37%	1.01%	1.01%	
Pleven	Dolna Mitropoliya	5.01%	4.85%	0.43%	4.46%	2.61%	3.45%	4.09%	2.01%	4.79%	2.06%	3.94%	0.95%	0.95%	4.33%	4.36%	4.30%	1.20%	1.10%	0.41%	1.03%	1.03%	
Pleven	Dolni Dabnik	4.68%	4.16%	1.00%	4.46%	2.71%	3.58%	3.99%	2.10%	4.72%	2.57%	4.79%	1.21%	1.05%	4.41%	3.83%	4.36%	1.12%	1.11%	0.36%	1.06%	1.06%	
Pleven	Iksar	4.78%	4.11%	0.51%	4.32%	4.40%	3.38%	3.92%	2.04%	4.76%	1.97%	3.80%	0.88%	0.86%	3.99%	3.39%	4.29%	1.00%	1.11%	0.36%	1.18%	1.18%	
Pleven	Knezha	4.17%	3.95%	0.89%	4.35%	2.90%	4.01%	3.69%	2.28%	4.78%	2.50%	3.62%	1.15%	1.13%	3.69%	3.45%	4.73%	1.09%	1.09%	0.37%	1.13%	1.13%	
Pleven	Levski	4.79%	3.85%	0.64%	4.44%	2.38%	2.97%	4.26%	1.66%	4.85%	2.09%	4.07%	0.99%	0.78%	4.41%	4.33%	4.63%	1.04%	1.04%	0.37%	1.06%	1.06%	
Pleven	Nikopol	5.05%	4.59%	0.48%	4.46%	2.71%	3.58%	3.99%	2.10%	4.72%	2.57%	4.79%	1.21%	1.05%	4.41%	3.71%	4.24%	1.48%	1.03%	0.38%	0.92%	0.92%	
Pleven	Pleven	3.51%	3.06%	0.59%	4.07%	1.96%	4.10%	2.89%	2.16%	4.68%	2.37%	3.31%	0.99%	0.96%	3.12%	2.85%	4.80%	1.64%	1.10%	0.40%	0.97%	0.97%	
Pleven	Podrim	4.97%	5.27%	0.40%	4.40%	2.71%	3.38%	3.21%	2.01%	4.74%	2.03%	3.98%	0.90%	0.77%	4.18%	3.50%	3.96%	0.88%	1.11%	0.36%	1.05%	1.05%	
Pleven	Cherven Briag	4.41%	3.71%	0.65%	4.21%	2.41%	3.53%	3.86%	1.98%	4.78%	2.22%	3.47%	1.1%	0.99%	3.83%	3.43%	4.73%	1.16%	1.04%	0.39%	1.08%	1.08%	
Plovdiv	Asenovgrad	4.03%	3.69%	0.33%	4.30%	2.46%	3.90%	3.51%	2.25%	4.68%	2.65%	3.34%	1.21%	1.06%	4.01%	3.05%	4.43%	1.14%	1.04%	0.38%	1.26%	1.26%	
Plovdiv	Brezovo	5.06%	4.68%	1.46%	4.46%	3.28%	3.70%	4.33%	1.86%	4.72%	2.36%	4.02%	1.08%	1.18%	4.80%	4.19%	4.51%	1.34%	1.05%	0.37%	0.83%	0.83%	
Plovdiv	Kaloianovo	5.07%	4.26%	0.89%	4.36%	1.91%	3.33%	4.10%	1.98%	4.85%	2.44%	3.83%	1.13%	0.89%	4.68%	4.05%	4.21%	1.51%	1.02%	0.37%	1.12%	1.12%	
Plovdiv	Karlovo	4.38%	3.80%	1.09%	4.30%	2.77%	4.16%	3.66%	2.23%	4.78%	2.56%	3.41%	1.17%	1.23%	4.10%	3.74%	4.78%	1.24%	1.11%	0.38%	1.04%	1.04%	
Plovdiv	Krichim	3.35%	4.35%	0.87%	4.47%	3.21%	4.14%	4.04%	2.48%	4.65%	2.59%	3.22%	1.20%	1.23%	3.40%	3.57%	4.99%	1.92%	0.88%	0.38%	1.23%	1.23%	
Plovdiv	Kulden	3.97%	0.99%	0.98%	4.43%	3.17%	4.41%	2.29%	4.80%	2.29%	3.46%	1.03%	1.25%	3.40%	3.49%	4.92%	1.43%	1.03%	0.38%	1.05%	1.05%		
Plovdiv	Laki	4.85%	3.75%	0.66%	4.44%	3.28%	3.13%	4.44%	1.89%	4.87%	3.79%	4.32%	1.88%	1.09%	3.68%	3.49%	4.74%	1.26%	1.12%	0.41%	0.59%	0.59%	
Plovdiv	Maritsa	4.89%	4.06%	0.82%	4.30%	0.87%	3.73%	3.66%	2.40%	4.76%	2.51%	3.38%	1.14%	0.92%	4.52%	4.05%	4.21%	1.51%	1.05%	0.36%	1.39%	1.39%	
Plovdiv	Peutschista	3.60%	4.22%	1.82%	4.43%	4.19%	4.96%	3.94%	2.33%	4.94%	2.93%	3.40%	1.38%	2.05%	4.34%	4.24%	5.08%	1.58%	1.00%	0.40%	0.75%	0.75%	
Plovdiv	Plovdiv	2.72%	3.53%	0.52%	4.05%	2.16%	4.16%	2.73%	2.38%	4.61%	2.55%	3.10%	1.07%	0.89%	2.67%	2.80%	4.93%	0.65%	1.00%	0.40%	1.06%	1.06%	

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District	Municipality	Indicator																			
Plovdiv	Parvomai	4.80%	4.28%	4.33%	2.76%	3.72%	3.98%	2.15%	4.80%	2.52%	3.68%	4.15%	4.06%	3.69%	3.80%	4.10%	3.86%	4.63%	4.73%	5.4%	6.2
Plovdiv	Balkovski	4.43%	4.20%	4.83%	4.30%	2.50%	4.06%	3.75%	2.62%	4.77%	2.37%	3.30%	1.09%	3.53%	0.91%	0.77%	4.42%	3.76%	4.00%	1.20%	1.50%
Plovdiv	Rodopi	5.02%	3.72%	0.55%	4.31%	-	3.53%	2.13%	4.78%	2.09%	3.28%	2.82%	2.82%	3.51%	1.34%	0.93%	4.42%	4.00%	4.36%	1.04%	0.38%
Plovdiv	Sadovo	4.81%	4.36%	0.77%	4.43%	2.05%	3.64%	3.96%	2.48%	4.72%	2.82%	3.51%	1.34%	0.93%	2.91%	2.74%	4.81%	4.00%	4.36%	1.28%	1.50%
Plovdiv	Sopot	3.54%	3.04%	0.43%	4.11%	1.59%	4.08%	3.20%	2.19%	4.70%	1.84%	3.17%	0.74%	1.00%	2.91%	2.74%	4.81%	0.82%	2.0%	0.40%	0.99%
Plovdiv	Stamboliiski	4.44%	4.14%	0.95%	4.26%	2.55%	4.06%	3.74%	2.43%	4.72%	2.37%	3.36%	1.07%	1.12%	4.00%	3.74%	4.73%	1.42%	1.02%	0.38%	1.24%
Plovdiv	Saedenevo	4.88%	4.49%	0.97%	4.34%	3.06%	3.63%	4.72%	2.04%	4.87%	2.34%	3.82%	1.08%	1.03%	4.29%	3.81%	4.69%	1.63%	1.03%	0.39%	1.13%
Plovdiv	Hisaria	5.01%	4.22%	0.68%	4.28%	2.87%	3.40%	4.05%	1.71%	4.83%	1.93%	3.87%	0.82%	0.86%	4.06%	3.34%	4.54%	1.21%	1.02%	0.37%	0.93%
Razgrad	Zavet	4.83%	4.34%	0.82%	4.29%	3.71%	4.10%	4.20%	4.74%	2.59%	3.28%	1.22%	0.91%	4.31%	3.97%	4.55%	1.83%	1.04%	0.35%	1.53%	
Razgrad	Ispetir	4.64%	4.25%	1.01%	4.64%	2.55%	3.94%	3.94%	2.49%	4.75%	2.50%	3.24%	1.16%	1.06%	4.30%	3.96%	4.70%	1.72%	0.93%	0.36%	1.36%
Razgrad	Kubrat	4.89%	4.24%	0.94%	4.70%	3.04%	3.63%	4.24%	2.19%	4.80%	3.07%	3.50%	1.47%	0.97%	4.35%	3.95%	4.61%	1.60%	0.92%	0.37%	1.12%
Razgrad	Laznitsa	4.84%	4.31%	0.28%	4.64%	1.82%	3.42%	4.13%	2.47%	4.69%	2.55%	3.18%	1.20%	0.71%	4.26%	3.88%	4.43%	1.78%	0.98%	0.37%	1.55%
Razgrad	Razgrad	4.23%	3.49%	0.57%	4.34%	2.01%	3.88%	3.33%	2.23%	4.66%	2.39%	3.25%	1.03%	0.89%	3.55%	3.19%	4.70%	0.91%	1.05%	0.39%	1.10%
Razgrad	Samuil	5.03%	4.53%	0.82%	4.77%	2.07%	3.43%	4.37%	2.46%	4.80%	2.69%	3.33%	1.28%	0.82%	4.71%	4.25%	4.36%	1.57%	0.94%	0.38%	1.33%
Razgrad	Tsar Kaloyan	4.80%	4.37%	0.12%	4.65%	2.23%	3.56%	4.16%	2.16%	4.74%	2.36%	3.49%	1.07%	0.70%	3.67%	3.36%	4.67%	1.57%	0.94%	0.38%	1.22%
Ruse	Borovis	5.07%	4.62%	1.49%	4.62%	3.62%	3.97%	4.40%	2.19%	4.79%	2.36%	3.49%	1.07%	0.70%	3.67%	3.36%	4.67%	1.57%	0.94%	0.38%	1.22%
Ruse	Biala	4.57%	3.90%	1.19%	4.37%	3.14%	4.14%	3.87%	2.06%	4.87%	2.25%	3.61%	0.99%	1.26%	4.22%	3.73%	4.78%	1.44%	0.96%	0.37%	0.89%
Ruse	Vetovo	4.52%	4.37%	1.31%	4.69%	3.72%	4.24%	4.22%	2.25%	4.85%	2.66%	3.44%	1.25%	1.38%	4.15%	3.90%	4.95%	1.74%	0.94%	0.37%	1.08%
Ruse	Dve Mogili	4.93%	4.32%	1.16%	4.57%	3.09%	3.83%	4.16%	2.10%	4.88%	2.27%	3.71%	1.02%	1.12%	4.44%	3.94%	4.65%	1.50%	1.01%	0.39%	1.03%
Ruse	Ivanovo	4.97%	4.35%	0.56%	4.48%	1.90%	2.88%	4.24%	1.56%	4.90%	2.20%	4.04%	1.00%	0.75%	4.63%	3.78%	4.71%	1.20%	1.05%	0.38%	0.93%
Ruse	Ruse	3.52%	3.47%	0.35%	4.11%	1.97%	3.99%	2.98%	2.29%	4.69%	2.16%	3.28%	0.87%	0.87%	4.22%	3.73%	4.78%	1.33%	1.05%	0.38%	1.02%
Ruse	Silivo Pole	5.02%	3.88%	1.14%	4.66%	3.15%	3.78%	4.19%	2.20%	4.87%	2.32%	3.62%	1.04%	1.10%	4.53%	4.01%	4.53%	1.38%	0.98%	0.36%	1.12%
Ruse	Tenovo	5.00%	4.45%	0.64%	4.53%	2.06%	2.98%	4.37%	1.84%	4.93%	1.99%	3.99%	0.94%	0.78%	4.70%	3.91%	3.85%	1.50%	1.09%	0.48%	0.98%
Silistra	Alfatar	4.86%	4.26%	1.17%	4.51%	2.15%	3.62%	4.31%	1.71%	4.95%	3.03%	3.91%	1.45%	1.19%	4.42%	3.90%	4.69%	1.57%	1.05%	0.37%	0.93%
Silistra	Gavintsa	4.95%	4.39%	0.51%	4.73%	2.32%	3.19%	4.31%	2.27%	4.74%	3.25%	3.56%	1.60%	0.73%	4.48%	4.06%	4.29%	1.92%	1.02%	0.36%	1.39%
Silistra	Dulovo	4.69%	4.08%	1.04%	4.68%	2.37%	3.91%	3.78%	2.52%	4.74%	2.95%	3.26%	1.41%	1.06%	4.35%	4.06%	4.54%	1.88%	0.89%	0.37%	1.63%
Silistra	Kainardzha	4.58%	4.78%	1.48%	4.77%	2.50%	3.80%	4.46%	3.62%	4.64%	3.17%	3.12%	1.58%	1.24%	4.93%	4.70%	4.66%	2.53%	0.93%	0.34%	1.52%
Silistra	Silistra	4.39%	3.28%	0.43%	4.25%	1.96%	3.74%	3.45%	2.08%	4.77%	2.43%	3.43%	1.05%	0.85%	3.50%	3.10%	4.65%	1.70%	1.09%	0.40%	0.91%
Silistra	Sitovo	5.03%	4.50%	0.94%	4.63%	2.18%	3.29%	4.34%	2.08%	4.83%	2.82%	3.70%	1.36%	0.92%	4.76%	4.18%	4.25%	1.71%	1.03%	0.36%	1.15%
Silistra	Tutrakan	4.81%	4.16%	0.56%	4.50%	2.83%	3.65%	4.08%	2.08%	4.83%	2.48%	3.60%	1.12%	0.56%	4.04%	3.78%	4.56%	1.41%	1.04%	0.38%	1.00%
Sliven	Kotel	4.68%	4.52%	1.68%	4.71%	3.64%	4.22%	4.38%	2.55%	4.35%	3.21%	3.71%	1.56%	4.89%	4.64%	4.93%	2.05%	0.92%	0.36%	1.01%	
Sliven	Nova Zagora	4.34%	4.17%	0.65%	4.48%	2.68%	3.69%	3.91%	2.41%	4.59%	2.83%	3.40%	1.32%	0.91%	3.87%	3.64%	4.60%	1.38%	0.97%	0.37%	1.37%
Sliven	Sliven	3.86%	3.92%	1.00%	4.37%	2.95%	4.16%	3.65%	2.40%	4.55%	3.01%	3.23%	1.40%	1.21%	3.83%	3.67%	4.87%	1.31%	1.02%	0.39%	1.05%
Sliven	Tvarditsa	3.79%	4.39%	1.29%	4.58%	3.51%	4.05%	4.18%	2.70%	4.57%	3.91%	3.38%	1.95%	1.46%	4.31%	4.27%	4.92%	1.82%	0.96%	0.36%	1.19%
Smolyan	Banite	4.90%	4.56%	0.00%	4.54%	2.26%	2.50%	4.33%	1.46%	4.87%	3.59%	3.72%	1.76%	0.59%	4.88%	4.28%	4.98%	0.99%	0.42%	0.43%	
Smolyan	Borino	5.04%	5.66%	0.12%	4.63%	-	3.45%	3.87%	2.37%	4.83%	2.62%	3.16%	1.23%	0.67%	4.41%	3.97%	4.66%	2.02%	1.03%	0.39%	1.33%
Smolyan	Devin	4.84%	3.82%	0.28%	4.44%	2.39%	3.44%	4.11%	2.09%	4.77%	2.74%	3.31%	1.27%	0.76%	3.93%	3.50%	4.62%	1.52%	1.04%	0.41%	0.87%
Smolyan	Dospat	4.74%	3.46%	0.18%	4.43%	-	3.87%	3.22%	2.51%	4.74%	1.77%	2.96%	0.76%	0.75%	3.85%	3.58%	4.36%	1.78%	1.02%	0.36%	1.80%
Smolyan	Zlatograd	4.64%	3.48%	0.00%	4.38%	2.28%	3.46%	4.04%	2.09%	4.75%	3.11%	3.18%	1.48%	0.76%	4.27%	3.73%	4.37%	1.67%	1.07%	0.41%	0.94%
Smolyan	Madan	4.82%	3.96%	0.26%	4.51%	2.26%	3.43%	4.21%	2.22%	4.75%	2.86%	3.09%	1.35%	0.75%	3.98%	3.64%	4.63%	1.71%	1.06%	0.41%	1.14%

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District	Municipality	Indicator																					
Smolyan	Nedelino	1.1	1.2	1.3	2.1	2.2	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1	5.2	5.3	5.4	6.2	6.3	7.1	7.1	
Smolyan	Rudozem	4.52%	3.69%	0.05%	4.41%	4.41%	1.56%	3.48%	4.33%	2.23%	4.69%	3.51%	3.13%	1.71%	0.78%	3.69%	3.62%	4.68%	1.74%	1.06%	0.42%	0.84%	0.84%
Smolyan	Smolian	4.73%	3.86%	0.09%	4.23%	1.99%	3.71%	3.46%	2.15%	4.69%	2.68%	3.25%	1.18%	0.75%	3.38%	3.10%	4.74%	1.18%	1.00%	0.40%	0.94%	0.94%	0.94%
Smolyan	Chepelare	4.64%	3.61%	0.06%	4.24%	2.24%	3.37%	3.87%	4.88%	4.76%	2.29%	3.51%	1.00%	0.77%	3.66%	3.08%	4.66%	1.16%	1.11%	0.40%	0.78%	0.78%	0.78%
Sofia	Anton	4.89%	3.57%	0.50%	4.22%	-	3.35%	3.66%	2.03%	4.67%	1.55%	3.45%	0.64%	0.83%	4.47%	3.68%	3.87%	0.96%	2.1%	0.39%	1.78%	1.78%	1.78%
Sofia	Bogazhishte	4.23%	3.24%	0.25%	3.90%	1.41%	3.69%	3.24%	1.83%	4.69%	1.85%	3.47%	0.72%	0.85%	3.37%	2.70%	4.67%	0.80%	1.15%	0.40%	0.98%	0.98%	0.98%
Sofia	Bolevgrad	4.22%	3.38%	0.93%	4.16%	2.25%	4.21%	3.24%	2.22%	4.74%	2.22%	3.25%	0.95%	1.15%	3.85%	3.45%	4.75%	0.81%	1.11%	0.39%	1.00%	1.00%	1.00%
Sofia	Godech	4.62%	4.19%	0.21%	4.18%	2.93%	3.37%	4.08%	1.73%	4.84%	1.84%	3.77%	0.79%	0.85%	3.49%	2.89%	4.72%	1.26%	1.15%	0.40%	0.78%	0.78%	0.78%
Sofia	Gorna Malina	5.06%	4.06%	0.73%	4.25%	0.56%	3.29%	4.00%	1.89%	4.36%	1.64%	3.68%	0.69%	0.88%	4.66%	4.35%	4.93%	1.09%	1.17%	0.38%	0.92%	0.92%	0.92%
Sofia	Dolna Bania	3.33%	4.21%	1.32%	4.32%	3.52%	4.65%	3.75%	2.56%	4.77%	2.46%	3.17%	1.12%	1.67%	3.73%	3.80%	5.04%	1.04%	1.04%	0.38%	1.02%	1.02%	1.02%
Sofia	Dragoman	4.97%	4.31%	0.14%	4.28%	2.70%	3.01%	4.25%	1.60%	4.35%	1.74%	3.81%	0.75%	0.77%	4.00%	3.18%	4.59%	1.32%	1.14%	0.38%	0.82%	0.82%	0.82%
Sofia	Elin Pelin	4.74%	3.60%	0.30%	4.16%	-	3.52%	3.54%	2.01%	4.72%	1.92%	3.41%	0.82%	0.86%	4.16%	3.44%	4.41%	1.02%	1.14%	0.39%	1.05%	1.05%	1.05%
Sofia	Etropole	3.91%	3.58%	0.42%	4.14%	2.31%	3.89%	3.49%	2.16%	4.72%	1.85%	3.39%	0.76%	0.95%	3.14%	2.87%	4.75%	0.93%	1.17%	0.40%	1.04%	1.04%	1.04%
Sofia	Zlatitsa	3.78%	3.64%	0.56%	4.16%	2.45%	4.14%	3.42%	2.27%	4.67%	1.81%	3.34%	0.75%	1.04%	3.02%	2.94%	4.78%	0.88%	1.16%	0.40%	0.99%	0.99%	0.99%
Sofia	Ihtiman	3.92%	4.25%	1.55%	4.42%	3.62%	4.54%	3.93%	2.46%	4.81%	2.80%	3.19%	1.31%	1.70%	4.47%	4.22%	5.03%	1.50%	1.04%	0.38%	0.94%	0.94%	0.94%
Sofia	Koprivshtitsa	3.79%	3.58%	0.44%	4.18%	2.96%	3.89%	3.60%	2.01%	4.76%	2.03%	3.52%	0.88%	0.86%	3.59%	4.81%	4.80%	1.17%	0.49%	0.82%	0.82%	0.82%	0.82%
Sofia	Kostenets	4.46%	3.46%	0.60%	4.15%	2.26%	3.85%	3.60%	2.09%	4.78%	2.20%	3.34%	0.95%	0.97%	3.64%	3.23%	4.72%	1.07%	1.12%	0.39%	1.00%	1.00%	1.00%
Sofia	Kostinbrod	4.31%	3.55%	0.49%	4.04%	2.00%	3.93%	3.38%	2.05%	4.74%	1.74%	3.42%	0.70%	0.94%	3.40%	2.97%	4.71%	0.93%	1.13%	0.39%	1.13%	1.13%	1.13%
Sofia	Mirkovo	5.07%	4.52%	0.87%	4.32%	1.64%	3.10%	4.34%	1.70%	4.88%	1.75%	3.88%	0.76%	0.88%	4.84%	4.00%	4.06%	1.24%	1.14%	0.38%	0.69%	0.69%	0.69%
Sofia	Pirdop	3.56%	3.31%	0.56%	4.09%	2.36%	4.20%	3.19%	2.15%	4.71%	1.97%	3.37%	0.81%	1.02%	2.90%	2.78%	4.81%	0.80%	1.14%	0.39%	1.01%	1.01%	1.01%
Sofia	Pravets	4.34%	4.00%	1.31%	4.38%	2.81%	4.17%	3.74%	2.38%	4.79%	2.37%	3.34%	1.05%	1.35%	4.51%	4.06%	4.78%	1.17%	1.09%	0.39%	0.88%	0.88%	0.88%
Sofia	Samokov	4.23%	3.90%	0.21%	4.25%	3.12%	4.33%	3.72%	2.11%	4.80%	2.28%	3.42%	1.00%	1.33%	4.11%	3.69%	4.90%	1.32%	1.32%	0.38%	0.95%	0.95%	0.95%
Sofia	Svoge	4.94%	3.78%	0.21%	4.11%	1.10%	3.33%	3.80%	1.97%	4.81%	1.77%	3.54%	0.74%	0.78%	4.07%	3.40%	4.40%	1.17%	1.14%	0.38%	0.92%	0.92%	0.92%
Sofia	Silivnitsa	4.29%	3.51%	0.41%	4.11%	2.31%	3.85%	3.58%	1.97%	4.81%	1.83%	3.46%	0.76%	0.93%	3.26%	2.88%	4.75%	1.01%	1.15%	0.38%	0.99%	0.99%	0.99%
Sofia	Chavdar	4.93%	4.02%	0.63%	4.19%	-	3.25%	3.79%	2.13%	4.78%	2.38%	3.62%	1.08%	0.85%	4.60%	3.91%	4.03%	1.17%	1.14%	0.36%	1.17%	1.17%	1.17%
Sofia	Chelopec	4.95%	3.56%	0.58%	4.17%	-	3.33%	3.61%	2.10%	4.83%	2.09%	3.57%	0.93%	1.10%	3.84%	4.54%	4.66%	1.06%	1.09%	0.39%	0.88%	0.88%	0.88%
Sofia (stolitsa)	Stolichna	2.81%	3.76%	0.38%	4.11%	1.21%	3.35%	3.80%	1.97%	4.81%	1.77%	3.38%	0.74%	0.78%	4.07%	3.40%	4.40%	1.17%	1.14%	0.38%	0.92%	0.92%	0.92%
Sofia	Braiya Daskalovi	5.06%	4.78%	1.37%	4.59%	2.98%	3.42%	4.48%	2.05%	4.90%	2.85%	3.95%	1.35%	1.08%	4.94%	4.39%	4.29%	1.50%	1.01%	0.37%	0.87%	0.87%	0.87%
Sofia	Gurkovo	4.25%	4.46%	1.51%	4.43%	3.11%	4.35%	4.02%	2.68%	4.81%	2.10%	3.29%	0.96%	1.56%	4.62%	3.46%	4.36%	1.94%	0.95%	0.33%	1.22%	1.22%	1.22%
Sofia	Galabovo	4.61%	3.98%	0.80%	4.24%	2.74%	3.91%	3.84%	2.10%	4.83%	2.09%	3.57%	0.93%	1.10%	3.84%	3.42%	4.69%	1.32%	1.08%	0.37%	1.12%	1.12%	1.12%
Stara Zagora	Kazanlak	4.17%	3.26%	0.73%	4.17%	2.03%	4.01%	3.32%	2.10%	4.72%	2.25%	3.36%	0.97%	1.04%	3.65%	3.21%	4.72%	0.89%	1.15%	0.40%	0.90%	0.90%	0.90%
Stara Zagora	Maglizh	4.57%	4.52%	1.83%	4.65%	3.97%	4.09%	4.45%	2.26%	4.89%	4.10%	3.66%	2.09%	1.63%	4.98%	4.70%	4.91%	1.59%	1.08%	0.39%	0.82%	0.82%	0.82%
Stara Zagora	Nikoleovo	3.78%	4.52%	1.74%	4.71%	3.95%	4.19%	4.30%	2.59%	4.66%	4.20%	3.50%	2.16%	1.77%	4.69%	4.55%	4.96%	1.69%	1.03%	0.35%	0.95%	0.95%	0.95%
Stara Zagora	Open	4.46%	5.06%	0.65%	4.69%	3.56%	2.23%	4.84%	0.50%	4.92%	2.57%	4.33%	1.22%	0.69%	4.88%	3.33%	3.70%	1.43%	1.00%	0.39%	0.65%	0.65%	0.65%
Stara Zagora	Pavel Bania	4.78%	4.38%	1.24%	4.55%	2.53%	3.82%	4.12%	2.10%	4.73%	2.74%	3.49%	1.29%	1.15%	4.68%	4.25%	4.57%	1.63%	1.04%	0.37%	1.11%	1.11%	1.11%
Stara Zagora	Radnevo	4.52%	3.78%	0.19%	4.27%	2.74%	3.89%	3.82%	2.11%	4.80%	2.35%	3.41%	1.07%	1.08%	3.84%	3.41%	4.73%	1.10%	1.13%	0.39%	0.96%	0.96%	0.96%
Stara Zagora	Stara Zagora	3.60%	3.35%	0.22%	4.10%	2.34%	4.17%	3.88%	2.19%	4.71%	2.45%	3.22%	1.04%	1.03%	3.25%	3.48%	4.87%	1.07%	1.07%	0.40%	0.90%	0.90%	0.90%
Stara Zagora	Chirpan	4.38%	4.23%	1.00%	4.37%	3.20%	3.91%	3.96%	2.10%	4.76%	2.58%	3.68%	1.19%	1.13%	3.94%	3.56%	4.77%	1.03%	1.05%	0.38%	0.95%	0.95%	0.95%
Targovishte	Antonovo	4.84%	4.55%	1.54%	4.75%	3.22%	3.97%	4.43%	2.53%	4.92%	3.29%	3.37%	1.60%	1.36%	4.87%	4.57%	4.84%	2.01%	0.92%	0.37%	1.02%	1.02%	1.02%
Targovishte	Omurttag	4.76%	4.36%	0.97%	4.75%	2.82%	3.76%	4.20%	2.46%	4.75%	3.10%	3.26%	1.49%	1.02%	4.38%	4.10%	4.66%	1.83%	0.90%	0.37%	1.29%	1.29%	1.29%

(Continued and end)

District	Municipality	Indicator																	
Targovishte	Opaka	4.88%	4.35%	0.09%	4.72%	2.44%	3.53%	4.17%	2.46%	4.77%	2.3	3.1	3.2	3.3	3.4	4.1	4.2	4.3	5.1
Targovishte	Pojovo	4.70%	3.98%	0.32%	4.42%	2.45%	3.59%	4.07%	2.07%	4.73%	2.27%	3.53%	1.92%	3.34%	1.22%	0.71%	3.94%	3.71%	5.2
Targovishte	Targovishte	4.26%	3.91%	0.87%	4.41%	2.56%	3.97%	3.66%	2.29%	4.70%	2.51%	3.27%	1.12%	1.06%	0.91%	3.97%	3.42%	4.58%	1.15%
Haskovo	Dimitrovgrad	4.41%	3.50%	0.80%	4.25%	2.78%	3.96%	3.70%	2.02%	4.82%	2.28%	3.47%	1.02%	1.07%	0.70%	3.70%	3.29%	4.79%	1.17%
Haskovo	Halilgrad	4.79%	3.88%	0.30%	4.46%	2.30%	3.44%	4.09%	2.11%	4.81%	2.29%	3.52%	1.03%	0.77%	3.91%	3.50%	4.55%	1.59%	1.11%
Haskovo	Lubimets	4.15%	4.27%	1.33%	4.32%	3.55%	4.31%	4.00%	2.16%	4.82%	2.68%	3.57%	1.23%	1.42%	4.22%	3.90%	4.95%	1.73%	0.95%
Haskovo	Madzharovo	5.05%	4.59%	0.41%	4.76%	3.24%	2.91%	4.66%	1.88%	4.92%	3.69%	3.86%	1.83%	0.70%	4.46%	4.35%	3.98%	4.35%	1.49%
Haskovo	Mineralni Bani	5.05%	4.14%	0.64%	4.62%	1.63%	3.40%	4.01%	2.35%	4.83%	2.98%	3.46%	1.41%	0.77%	4.53%	4.06%	4.12%	1.50%	0.94%
Haskovo	Svilengrad	4.11%	3.91%	0.87%	4.21%	2.77%	4.12%	3.71%	2.21%	4.79%	2.40%	3.34%	1.05%	1.10%	3.73%	3.48%	4.90%	1.58%	0.98%
Haskovo	Simeonovgrad	4.06%	4.47%	1.39%	4.51%	3.65%	4.21%	4.22%	2.45%	4.77%	3.02%	3.49%	1.44%	1.50%	4.32%	4.11%	4.96%	1.65%	1.02%
Haskovo	Stambolovo	5.05%	4.58%	1.05%	4.76%	2.72%	3.53%	4.38%	2.33%	4.83%	3.17%	3.50%	1.55%	0.92%	4.72%	4.29%	4.37%	1.81%	0.86%
Haskovo	Topolovgrad	4.98%	4.48%	0.99%	4.43%	3.08%	3.53%	4.33%	1.87%	4.90%	2.33%	3.78%	1.05%	1.03%	4.53%	3.94%	4.65%	1.67%	1.01%
Haskovo	Harmanli	4.22%	4.12%	0.97%	4.35%	3.02%	4.06%	3.90%	2.27%	4.78%	2.58%	3.42%	1.19%	1.18%	3.88%	3.63%	4.86%	1.51%	1.03%
Haskovo	Haskovo	3.82%	3.56%	0.65%	4.26%	2.54%	4.09%	3.37%	2.22%	4.66%	2.59%	3.23%	1.17%	1.00%	3.26%	3.12%	4.85%	1.13%	0.92%
Haskovo	Veliki Preslav	4.64%	4.25%	0.92%	4.48%	2.74%	3.85%	4.00%	2.26%	4.78%	2.40%	3.51%	1.08%	1.04%	4.11%	3.74%	4.72%	1.47%	1.02%
Shumen	Venets	4.99%	4.61%	0.99%	4.83%	2.56%	3.59%	4.44%	2.60%	4.76%	3.10%	3.23%	1.52%	0.89%	4.72%	4.38%	4.42%	2.21%	0.86%
Shumen	Varbitsa	4.70%	4.66%	1.67%	4.78%	3.55%	4.24%	4.48%	2.52%	4.86%	3.02%	3.09%	1.45%	1.54%	4.89%	4.61%	4.98%	2.34%	0.85%
Shumen	Kaolinovo	4.83%	4.52%	1.36%	4.77%	2.74%	4.08%	4.14%	2.75%	4.78%	2.46%	3.04%	1.17%	1.21%	4.69%	4.39%	4.67%	2.19%	0.79%
Shumen	Kasپidjan	4.65%	4.31%	1.17%	4.53%	3.09%	3.96%	4.14%	2.33%	4.79%	2.44%	3.47%	1.12%	1.21%	4.39%	3.98%	4.74%	1.42%	1.04%
Shumen	Nikola Koziyro	4.79%	4.58%	1.55%	4.82%	3.05%	4.03%	4.32%	2.74%	4.76%	3.21%	3.14%	1.56%	1.33%	4.92%	4.64%	4.62%	2.10%	0.79%
Shumen	Novi Pazar	4.21%	4.16%	1.09%	4.44%	3.00%	4.14%	3.86%	2.34%	4.75%	2.49%	3.37%	1.13%	1.23%	3.99%	3.73%	4.87%	1.41%	1.04%
Shumen	Smiladovo	4.93%	4.54%	0.86%	4.64%	3.47%	3.46%	4.45%	2.08%	4.81%	2.92%	3.72%	1.41%	0.97%	4.22%	3.79%	4.68%	1.46%	0.98%
Shumen	Hitino	5.08%	4.69%	0.26%	4.81%	2.01%	3.01%	4.54%	2.17%	4.84%	2.42%	3.70%	1.16%	0.59%	4.69%	4.12%	4.11%	1.93%	0.88%
Shumen	Shumen	3.72%	3.74%	0.67%	4.21%	2.24%	4.02%	3.19%	2.38%	4.59%	2.34%	3.21%	0.98%	0.96%	3.32%	3.14%	4.86%	0.81%	1.06%
Yambol	Bolianovo	5.07%	4.81%	1.28%	4.67%	3.14%	3.38%	4.44%	1.83%	4.88%	3.13%	3.90%	1.51%	1.11%	4.89%	4.35%	4.60%	1.58%	0.98%
Yambol	Ehovo	4.72%	4.06%	0.89%	4.43%	3.21%	3.76%	4.18%	2.01%	4.83%	2.64%	3.52%	1.21%	1.07%	4.11%	3.65%	4.74%	1.38%	1.05%
Yambol	Straldza	4.64%	4.75%	1.65%	4.56%	3.69%	3.91%	4.54%	2.21%	4.83%	3.12%	3.73%	1.51%	1.48%	4.82%	4.44%	4.86%	1.44%	1.04%
Yambol	Tundzha	5.08%	4.72%	1.13%	4.52%	2.64%	3.20%	4.53%	1.78%	4.89%	4.01%	4.01%	1.21%	0.95%	4.88%	4.24%	4.08%	1.63%	1.01%
Yambol	Yambol	3.01%	3.30%	0.77%	4.21%	2.74%	4.31%	3.22%	2.29%	4.68%	2.54%	3.13%	1.11%	1.15%	2.95%	3.00%	4.92%	0.86%	1.09%

## ANNEX 5

### Descriptive statistics of the small area estimated ‘vulnerability’ indicators

Indicator	Mean	Std. deviation	Median	Minimum	Maximum
<b>1. Education</b>					
1.1. Share of children aged from 3 up to the age of starting compulsory primary education (6) who attend early childhood education and care	68,09%	13,35%	69,77%	1,08%	92,25%
1.2. Share of people aged 18-24 years that have completed at most lower secondary education and are not involved in further education or training	21,71%	7,75%	21,29%	7,69%	75,17%
1.3. Share of persons who felt discriminated against because of any ground in the past 12 months, when in contact with school authorities (as a parent/guardian or a student)	0,75%	0,72%	0,51%	0,00%	3,38%
<b>2. Employment</b>					
2.1. Share of people who self-declared their main activity status as ‘paid work’ (including full-time, part-time, ad hoc jobs, self-employment and occasional work or work in the past four weeks), 20-64 years	74,57%	3,60%	74,80%	64,81%	81,98%
2.2. Share of young persons, 15-29 years old with current main activity ‘neither in employment, education or training’ (NEET)	7,67%	3,75%	6,96%	0,31%	21,79%
2.3. Share of the population who felt discriminated against because of any ground in the past 12 months, when looking for a job, 16+	16,22%	4,69%	16,04%	2,28%	39,41%
<b>3. Poverty and social exclusion</b>					
3.1. At-risk-of-poverty rate (below 60% of median equivalised income after social transfers)	19,10%	5,46%	18,70%	5,42%	37,55%



(Continued)

3.2. Share of persons living in household where one person in the household gone to bed hungry in the past month because there was not enough money for food	4,89%	1,53%	4,85%	0,24%	12,83%
3.3. Share of people aged 16 years and more satisfied with their financial situation	33,42%	2,60%	32,96%	27,30%	42,56%
3.4. Share of people feeling of being excluded from society	6,66%	3,08%	5,91%	2,39%	21,90%
<b>4. Health</b>					
4.1. Share of persons with self-reported long-standing limitations in usual activities due to health problems, respondents	14,25%	3,33%	13,66%	8,24%	26,74%
4.2. Share of the population aged 16 and over reporting unmet needs for medical care due to one of the following reasons: 'Financial reasons', 'Waiting list' and 'Too far to travel' (all three categories are cumulated)	1,32%	0,70%	1,13%	0,40%	4,77%
4.3. Share of people who felt discriminated against because of any ground in the past 12 months, when accessing health services, 16+	1,03%	0,53%	0,88%	0,32%	4,27%
<b>5. Housing</b>					
5.1. Share of people living in housing deprivation (in an apartment too dark or leaking roof/damp walls, floors or no bath/shower or no indoor toilet)	21,90%	8,17%	20,58%	6,85%	43,17%
5.2. Share of people living in households having neither flushing toilet, nor shower, nor bathroom inside the dwelling	16,03%	5,18%	15,68%	5,07%	31,20%
5.3. Share of people living in household that does not have the minimum number of rooms according to the Eurostat definition of overcrowding	29,29%	6,10%	29,95%	12,15%	49,57%
5.4. Share of people who felt discriminated against because of any ground in the past 5 years, when looking for housing, 16+	1,93%	1,09%	1,74%	0,15%	6,68%

(Continued and end)

**6. Discrimination, harassment and hate crime**

6.2. Share of people experiencing harassment (overall – 5 acts) because of any ground in the 12 months before the survey	1,08%	0,18%	1,08%	0,60%	1,61%
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6.3. Share of people aged 16 years and more who were physically attacked (e.g., hit, pushed or kicked) because of any ground in the past 12 months	0,14%	0,01%	0,14%	0,10%	0,22%
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**7. Participation , building cooperation and trust**

7.1. Share of people who felt discriminated against (in any area) in the past 12 months and reported the last incident of discrimination	1,14%	0,63%	1,00%	0,14%	4,55%
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