

NATIONAL HUMAN DEVELOPMENT REPORT 2013

RURAL DEVELOPMENT IN BOSNIA AND HERZEGOVINA: MYTH AND REALITY



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ISSN 2303-503X

The views expressed in this report are those of the authors and do not necessarily reflect the views of the United Nations Development Programme.

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FOREWORD

Dear Reader,

It is my distinct pleasure to present to you the eighth National Human Development Report for Bosnia and Herzegovina. The report is dedicated to a topic that is repeatedly on the minds of citizens and policymakers alike; a subject riddled with myths and preconceptions - Rural Development. The analysis presented in this NHDR tries to identify the myths and to focus on and open the debate on the reality.

Bosnia and Herzegovina (BiH) is one of Europe's most rural countries and over sixty percent of the country's citizens live in rural areas. As such, a central question regularly argued by political and economic leaders is: do these rural areas, and agriculture in particular, have the potential to become the engine of BiH's economy. It equally poses questions as to the advantages and disadvantages of rural life: are these rural areas sanctuaries from urban pressures, the epitome of a long and healthy life, or are they solitary places, on the edge of misery, far from the political, economic and social structures of the nearest urban centres? Finding the answers to these two questions is a crucial step forward for human development in Bosnia and Herzegovina.

This National Human Development Report explores these questions, focusing specifically on rural issues through the ever-present myths and stereotypes. Debunking these myths, however, is not in itself an end, nor does the report intend to become an all-encompassing blueprint for rural development in the country. Its main goal is to prepare the ground for a candid debate regarding the future of rural development, especially in the context of the country's eventual European approximation process.

For some people the findings of the report may come as a surprise, but for most they should be convincing enough to initiate a conversation about the future of the country and more specifically the role of its rural communities. Common perceptions portray rurality as a synonym for underdevelopment and backwardness, yet, rural areas are not any significantly worse off than towns; indeed, small towns are often more impoverished and disadvantaged than villages. Likewise, the report argues that contrary to popular belief, agriculture is unlikely to be the driver of rural economic development in the country. Agriculture does play an important, somewhat cultural role, which is inextricably linked to rural development, but rural communities should not be separated from urban regions in terms of infrastructure, the development of non-agricultural economic activity and services, or education.

The key policy point of the report is that rural areas cannot exist in isolation from nearby towns and cities and consequently from the economic, social and political mainstream of the country as a whole. What is good for Bosnia and Herzegovina is good for its rural areas.

In a country that is so chronically plagued by endless and fruitless political debates that only perpetuate apathy and lethargy among its people, shifting the focus to vital issues is an imperative that can no longer be postponed. This report hopes to set an agenda for the future, which focuses on tangible and actual problems. It should provide a solid basis for constructive

debates over the imminent and longer-term steps that could ensure the consistent, systemic and strategic handling of rural development in the country in a fully integrated and holistic way. The bad news is that time is running out, as the country is already facing strong trends of rural migration into towns, coupled with an aging population and a low birth rate. The failure to call for action may have dramatic consequences ten years from now, when such trends become irreversible.

Furthermore, the halt of BiH's approximation to the EU may have profound consequences for rural development. Without EU markets, common agricultural and environmental policy approaches, and ultimately funding and intelligent subsidies, rural areas are particularly susceptible, being the first to suffer the effects of environmental degradation and economic shocks.

This report provides a thought-provoking, solid base for important discussions on rural development. Assisting authorities and communities to reverse current trends can help put Bosnia and Herzegovina back on the path to development. Obscuring the real issues in the forest of political disagreements would be a tragic alternative.



Yuri Afanasiev

UN Resident Coordinator and
UNDP Resident Representative

EXECUTIVE SUMMARY

Bosnia and Herzegovina is one of the most rural countries in Europe. Around 60% of the population live in rural areas, whether defined as villages or as scarcely populated municipalities, and only Montenegro, Ireland and Finland have a higher share of rural population.

Demographically, rural communities tend to be older than urban, with a smaller proportion of people working and driving the local economy. There is also a gradual migration of people from rural to urban areas, with the share of the population living in rural areas probably falling by about 10% every generation.

Economically, the big divide is between the cities and the rest of BiH, with official statistics showing that Sarajevo, Banja Luka and the four other big cities¹ have almost 40% lower unemployment, 25% higher wages and over twice the *per capita* GDP of the rest of the country, all of which attracts a significant movement of people to the cities. Outside these main centres of population and economic activity, the urban municipalities – dominated by medium-sized towns – actually perform worse than rural areas on almost every economic indicator. Thus for economic purposes the municipalities can usefully be divided into three groups – city, other urban and rural – where the cities perform best, the other urban worst, and the rural areas occupy an intermediate position but are still closely linked to the economic fate of the nearby urban centres.

However, when it comes to infrastructure and services the picture is different and depends more on the size of the individual settlement than on the characteristics of the whole municipality. Here villages (small settlements not administratively recognised as urban) are different from either towns or cities. A Rural Household Survey² commissioned for this project showed that villagers have much greater distances to travel to services such as banks, hospitals and secondary schools, though most have a small shop, primary school and perhaps a clinic within a reasonable distance. Whilst electricity and telephone lines are available almost everywhere, many villagers use wood for heating and have septic tanks rather than connections to mains sewerage, with quite a few drawing their water from springs and wells.

Most rural households have no involvement with agricultural training or advisory services, with less than a third of even the biggest farms being reached. Half of rural households own a computer, usually with an Internet connection, but the main way they obtain information is through watching television, suggesting that television should be the primary tool for delivering extension advice.

UNICEF³ research indicates that village dwellers do not suffer a big disadvantage in terms of formal education, with the large majority managing to get their children to school despite the distances involved. However, for those families already at high risk of dropout, particularly the Roma minority, the need to travel may be the final straw that induces children to give up on their

“ Outside these main centres of population and economic activity, the urban municipalities – dominated by medium-sized towns – actually perform worse than rural areas on almost every economic indicator.

”

1 Tuzla, Zenica, Mostar and Bijeljina, each of which has at least 100,000 inhabitants.

2 http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/poverty/rural-development-in-bosnia-and-herzegovina-myth-and-reality.html

3 http://www.unicef.org/bih/media_21363.html

“
Some 49% of
BiH GDP and
wage income is
generated by rural
municipalities.
”

education. Early childhood education is a different story, with rural children receiving slightly less support at home and only one third as much access to kindergartens as urban children.

Most rural households generate their income in one of two ways: from regular employment (52%) or from social benefits (36%), with relatively few depending on agriculture, self-employment or investment income. Several indicators suggest that the rural population is not very entrepreneurial, with most preferring a steady job to starting their own business, and families in employment having higher average incomes than the self-employed.

More than half of village households have little or no involvement with agriculture, though around a third manage “smallholdings” where they produce fruit, vegetables and livestock products mainly for their own consumption, and about 16% may be classified as farmers, in that they manage at least three hectares and/or three livestock units. However, most of these smallholders and farmers still gain the majority of their income from employment or social benefits. Only 6% of rural households depend on agriculture for the majority of their income, and these typically manage holdings of 1-10 hectares and/or livestock units.

In terms of Human Development Indicators, village dwellers consider their lifestyle to be healthier than that of towns or cities, most manage to overcome the obstacle of distance and do achieve access to education, and average incomes appear to be similar to those in towns, though not as high as in cities. Whilst human development faces special challenges in rural areas, it appears that the people of Bosnia and Herzegovina have risen to those challenges and that – in terms of these indicators – its rural population is not significantly disadvantaged compared to their urban counterparts.

Rural people need three things: jobs, services and infrastructure - including a transport infrastructure that will allow them to access the jobs and services of nearby towns and cities. An approach to rural development that is focused on the farm will fail to deliver these needs to any significant degree, and so in Bosnia and Herzegovina, rural development must be seen as an economic, rather than an agricultural, challenge. Agricultural support is a particularly inefficient means of assisting rural areas and, since most of the money goes to the larger farmers, it tends to subsidise the rich at the expense of the poor.

Some 49% of BiH GDP and wage income is generated by rural municipalities, so almost half the direct cost of rural development measures will be borne by rural communities themselves, through the extra taxes they pay to help fund the rural development programme. In addition, the extra tax burden on urban areas will reduce their economic growth, having a knock-on effect on the surrounding rural areas that depend on them for jobs and trade. The mechanisms of rural development are such that it is usually the larger businesses and the more articulate businessmen and women who are successful in competing for funds; this may have the desired effect of supporting those entrepreneurs who create jobs and build the local economy, but it may also have the undesirable effect of transferring resources from the less wealthy to the better off.

Thus rural development measures need to be carefully designed and efficiently implemented if they are not to increase income disparity and actually make rural areas poorer; priority should usually be given to “public goods” and “club goods”⁴ that could not be delivered without the funding and catalytic effect of a rural development programme.

⁴ Public goods are goods that are non-rivalrous and non-excludable, ie public television; club goods are goods that are non-rivalrous and excludable, ie satellite television

A careful examination of rural areas, and rural-urban comparisons with a whole host of indicators, show that many common assumptions of rural life are more myth than reality and should not be used as a basis for rural development policy. In particular, rural areas are much more similar to, and closely linked with, urban areas than commonly assumed, and agriculture plays a marginal and diminishing role in economic life, even if it remains culturally important.

The key policy point is that rural areas do not exist in isolation; they are closely linked to the fate of the nearby towns and cities and to the economic, social and political life of the country as a whole. What is good for Bosnia and Herzegovina is good for its rural areas, and the top priorities must be to improve government, reduce bureaucracy and corruption, and create a climate in which businesses can flourish whether in villages, towns or cities.

Given these realities, development policy should focus on the following priorities:

- 1 Improving the quality of life in rural areas by providing local communities with the infrastructure and services which they see as priorities;
- 2 Creating the environment for agriculture to develop as a competitive business, responding to climate change, market developments and new technologies, and making a net contribution to the national wealth and budget;
- 3 Recognising the important contribution that small-scale agriculture makes to national food production, balance of payments and rural livelihoods;
- 4 Improving roads and public transport, so that village dwellers can more easily access the jobs and services in nearby towns and cities;
- 5 Alleviating rural poverty, particularly through providing pensioners with an adequate standard of living;
- 6 Strengthening the overall economy, to which rural areas are inextricably linked;
- 7 Encouraging entrepreneurs to set up businesses in the urban centres of rural municipalities, as a source of jobs and trade for the whole surrounding area;
- 8 Resuming and accelerating EU integration, to give access to EU markets and its regional, rural and agricultural funds;
- 9 Tackling the fundamental problems of poor government, bureaucracy and corruption, which hinder growth and competitiveness in both rural and urban areas;
- 10 Remembering always the real costs as well as the hoped-for benefits of rural development measures, and being thoughtful in design, efficient in implementation, and ruthless in evaluation.

Note: Financial values in this report are in US Dollars, based on the August 2013 UN Official Exchange rate of USD/BAM 1.475



INTRODUCTION

1 INTRODUCTION

Today, for the first time in human history, more than half the world's population lives in cities. These are the centres of government, of education, of commerce, and – for most sectors – the pillars of economic development. But what of the other half of humanity that lives in rural areas where distances are greater, services fewer and further between, and economic opportunities different and more limited? How are they to keep pace with the march of human development?

This question is of particular concern for Bosnia and Herzegovina, where some 60% of the population live in rural areas. Development of these rural areas in its fullest sense – how healthy people are, the access they have to education, employment and services, the extent to which they have choice and control over their lives – makes a massive contribution to the human development of the country as a whole. This NHDR turns the spotlight on rural areas to see how they are developing and where they may be lagging behind, and to identify which features rural areas share in common with the rest of the country, and which are specifically rural issues that need special attention in the drive to help all citizens of Bosnia and Herzegovina fulfil their potential.

As Bosnia and Herzegovina progresses along the road of European integration it will begin to receive assistance under the EU's rural development programme for potential Member States: IPARD – the "Instrument for Pre-accession in Agriculture and Rural Development". This instrument has its own well-developed system of sector studies, programming documents, measures, implementation, monitoring and evaluation, and so it is not the goal of this report to make detailed programming recommendations for the country.⁵ Instead, the report seeks to ask the questions that should come before the programming stage, to examine some of the assumptions that commonly underlie rural development and see how well they pertain to the particular circumstances of Bosnia and Herzegovina.

Some of the most commonly held views of rural areas, in BiH and elsewhere, include:

- *Rural areas are significantly different from urban areas in many respects, in terms of their economy, services, social structure and attitudes;*
- *Rural areas have limited economic opportunities, with high unemployment and low wages;*
- *Agriculture is central to rural communities;*
- *Agriculture has the potential to drive economic recovery.*

This report takes a careful look at these and other common rural assumptions, to see which are myths and which are realities.

“
Development of these rural areas in its fullest sense makes a massive contribution to the human development of the country as a whole.
”

⁵ The EU has already started to roll out this process in BiH, including a series of sector studies carried out in 2011. However, the pace of progress will depend considerably on actions by BiH itself; on 5th June 2013 the Office of the EU Special Representative announced that the European Union had suspended a EUR 5 million aid grant to Bosnia and Herzegovina because its authorities failed to complete preparations for two agriculture and rural development projects.

The EU rural development process is discussed further in Section 1.3.

1.1 Human development and rural development

The emphasis on “human development” grew out of concerns that the traditional economics-based approach to international development was too focussed on the creation of wealth, and paid insufficient concern to the broader range of factors that affect the maintenance and enjoyment of life. UNDP has been a leading proponent of this approach since 1990, when its first global Human Development Report opened with the words “*People are the real wealth of a nation*”. Since then it has published an annual Global Human Development Report and more than 600 National and Regional Human Development Reports.

Measuring human development⁶

The most widely-used measure of human development is the UNDP’s “Human Development Index” (HDI), which measures three axes of human development:

- Health (life expectancy at birth)
- Income (Gross National Income *per capita* at purchasing power parity)
- Education (average of the “mean years of schooling” that each adult has actually achieved and the “expected years of schooling” that a child should normally receive)

These three indices are combined as a geometric average to give the country’s overall HDI score as a value between 0 and 1.

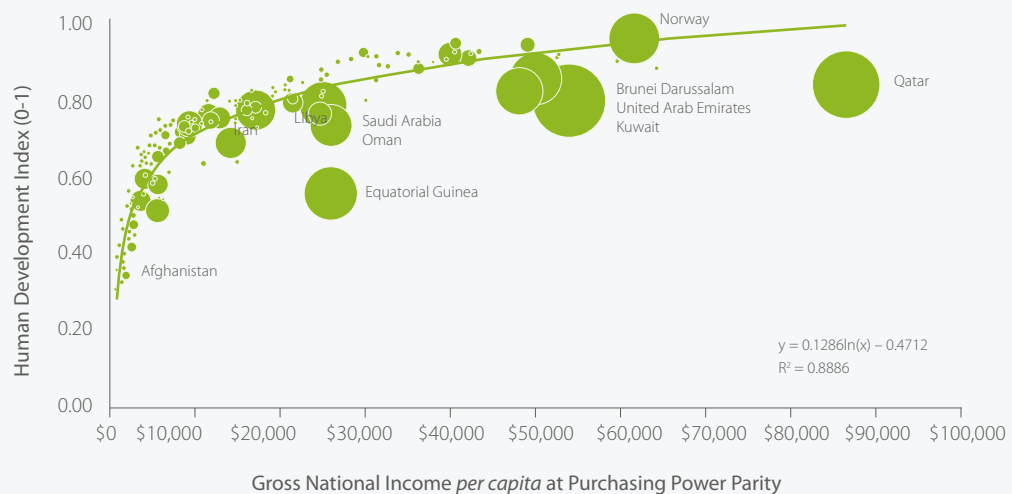
It has been observed that the HDI correlates quite strongly with *per capita* Gross National Income (GNI)⁷, particularly for countries whose wealth is not based on oil:

6 See http://hdr.undp.org/en/media/HDR_2010_EN_TechNotes_reprint.pdf for a discussion of the current HDI methodology and the changes introduced in 2011, together with the methodology of the “Inequality-adjusted Human Development Index”, the “Gender Equality Index”, and “Multidimensional Poverty Index”.

7 Goss, S, 2013 “Why are some countries richer than others? Part II: Money isn’t everything” http://issuu.com/steve_goss/docs/why_are_some_countries_richer_ii. HDI data from UNDP website; GNI data from World Bank website.

FIGURE 1.1

HDI vs GNI
Bubble sizes indicate *per capita* oil production



As in several of the previous reports, this eighth National Human Development Report for Bosnia and Herzegovina focuses on a particular aspect of human development, in this case rural development.

1.2 Human development in Bosnia and Herzegovina

In the 2013 UNDP global HDR, BiH ranked 81st out of 186 (See Table 1.1 and Appendix A), placing it in the second quartile and thus classed as a “Country with high human development” (the first quartile being classified as “Countries with very high human development”). BiH has the lowest income score of this group of countries, ranks midway in terms of life expectancy, and is second from last in terms of education, indicating that BiH has some way to go, particularly in relation to education and income.

Country	HDI value	Global HDI rank	Life expectancy at birth	Mean years of schooling	Expected years of schooling	GNI pc (\$ PPP 2005)	EU accession status
Slovenia	0.892	22	79.5	11.7	16.9	23,999	Member State (2004)
Czech Republic	0.873	28	77.8	12.3	15.3	22,067	Member State (2004)
Slovakia	0.840	35	75.6	11.6	14.7	19,696	Member State (2004)
Hungary	0.831	37	74.6	11.7	15.3	16,088	Member State (2004)
Poland	0.821	39	76.3	10.0	15.2	17,776	Member State (2004)
Croatia	0.805	47	76.8	9.8	14.1	15,419	Member State (2013)
Montenegro	0.791	52	74.8	10.5	15.0	10,471	Candidate Country
Romania	0.786	56	74.2	10.4	14.5	11,011	Member State (2007)
Bulgaria	0.782	57	73.6	10.6	14.0	11,474	Member State (2007)
Serbia	0.769	64	74.7	10.2	13.6	9,533	Candidate Country
Albania	0.749	70	77.1	10.4	11.4	7,822	Recommended for Candidate
fYR Macedonia	0.740	78	75.0	8.2	13.4	9,377	Candidate Country
BiH	0.735	81	75.8	8.3	13.4	7,713	Potential Candidate

TABLE 1.1

Individual indicators and overall HDI score for 13 Central and Eastern European countries, including global ranking and current status in relation to the EU

Source: UNDP global Human Development Report, 2013 “The Rise of the South: Human Progress in a Diverse World”, p.144-145.

“ The latest estimate for BiH is that 14% of the population live below the absolute poverty line.

”

Since the previous report (UNDP global Human Development Report, 2011 “Sustainability and Equity – *A Better Future for All*”), BiH has dropped back from 74th place to 81st place, falling behind the former Yugoslav Republic of Macedonia which maintained its ranking of 78.⁸

1.2.1 What is rural development?

There is no agreed definition of rural development, but it is essentially concerned with improving the quality of life in rural areas. In practice, rural development measures vary considerably in their aims, from a focus almost entirely on economic development, to a much broader mix on economic, social and environmental goals that is more in tune with the human development paradigm. With about 60% of the population living in rural areas, the extent to which they are “healthy, wealthy and wise” is captured in the National Human Development Index. This report therefore takes the established tools of rural development research and applies them to deepen our understanding of human development in Bosnia and Herzegovina.

1.2.2 Poverty in the urban and rural areas of BiH

Estimates of poverty in BiH for this NHDR are based on UNICEF’s 2006 Multi-Indicator Cluster Survey (MICS) and the 2007 Household Budget Survey (HBS). Preliminary data from the 2011-12 MICS and 2012 HBS has just been released and shows little change from the findings of the earlier surveys used in this report.

2010 Multi-dimensional Poverty Index

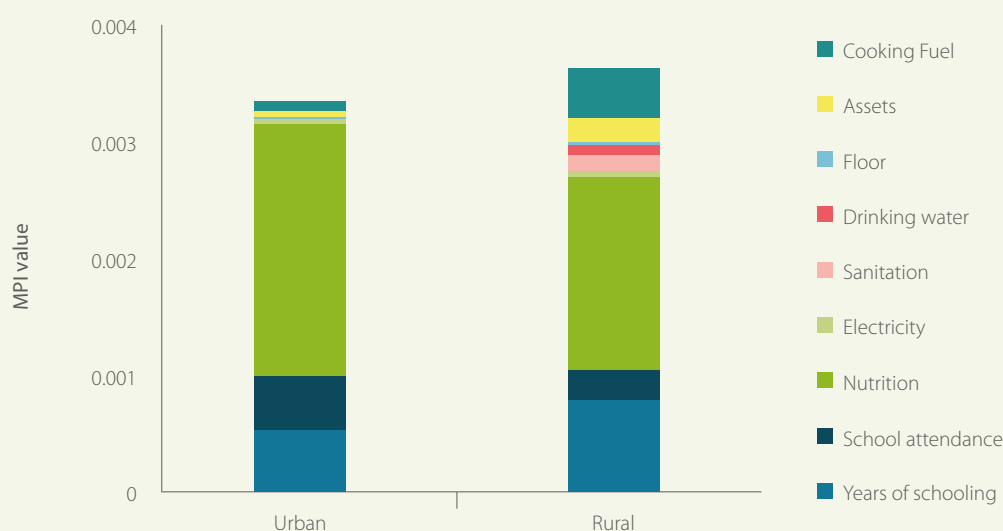
The Multi-dimensional Poverty Index (MPI) introduced in the 2010 Human Development Report seeks to measure how widespread poverty is, how serious (deep) it is, and what its main elements are. The latest estimate for BiH⁹ is that 0.8% of the population live in multi-dimensional poverty (which may be compared with the figure of 14.0% of the population living below the absolute poverty line), and that the intensity of deprivation amongst the poor is 37.2% (i.e. on average households were rated as “deprived” for just under four of the ten indicators used in the MPI). The MPI index combines these two values to get a single overall figure where higher values mean a bigger problem of poverty. The aggregate MPI score for BiH is 0.003, the same as Serbia but better than Albania at 0.005 or FYR Macedonia at 0.008.

In 2011, the “Oxford Poverty and Human Development Initiative” published a country briefing on BiH based on UNDP survey results, including a comparison of poverty in urban and rural settlements, as measured by the MPI¹⁰. The paper does not quote the absolute, but the results are shown in Figure 1.2.

8 Further information on trends over time and results from the other indices of human development can be found in the online Annex section to this report at http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/poverty/rural-development-in-bosnia-and-herzegovina--myth-and-reality.html

9 http://www.ophi.org.uk/wp-content/uploads/Tables_1_2_Full_Country_2011_MPI_6_Dec_2011.xlsx?cda6c1

10 <http://www.ophi.org.uk/wp-content/uploads/Bosnia-and-Herzegovina-OPHI-CountryBrief-2011.pdf>

**FIGURE 1.2**

Contribution of Indicators to the MPI at the national level, for urban and rural areas.

Overall, poverty in rural areas is rated as about 9% more serious than in urban areas, with differences in each of the three axes of poverty:

- **Education:** The combined score is almost the same for urban and rural areas, but differs in its composition:
 - In rural areas it is more common to find a household in which no member has completed five years of schooling (probably reflecting in part the older age structure of rural areas);
 - In urban areas it is more common to find households where children of school age are not enrolled in school.
- **Nutrition¹¹:** This is the biggest element of poverty in both urban and rural areas of BiH, but in urban areas it is significantly more common to find households in which at least one person is malnourished.
- **Wealth:** Rural areas scored worse than urban areas on all six measures of material poverty, but the biggest difference came from the score for cooking fuel. In the MPI, wood is treated as a “dirty fuel”, and the relatively common practice of using wood-fired stoves for cooking and heating in rural areas had a big impact on the overall index. It could be argued that the kinds of factory-built stoves commonly used in BiH are inconvenient more than dirty; if this measure were removed from the index then the better nutritional status of rural areas almost exactly offsets their lower wealth score, resulting in almost identical overall MPI scores for urban and rural areas.

11 The other component of the “health” axis – child mortality – was not measured in BiH.

“

One in ten people in rural areas (i.e. outside of urban settlements) lived below the poverty line, compared to 17.8% in urban areas.

”

2007 Household Budget Survey

This survey was carried out by the State Statistical Agency and entity statistical institutions, with support and technical assistance from the UK and Italy. Survey participants recorded all of their expenditure and food consumption over a two-week period, allowing the calculation of a “General Poverty Line”: the minimum *per capita* food and non-food expenditure required by people who were just satisfying their basic nutritional requirements.

This found that 19.6% of people in rural areas (i.e. outside of urban settlements) lived below the poverty line, compared to 17.8% in urban areas, and that poor rural families spent on average 5.2% less than the General Poverty Line, compared to a 4.7% shortfall amongst urban families, i.e. consumption poverty was 10% more widespread and 9% deeper in rural areas. This rural-urban pattern was repeated across almost all entities and indicators, though none of the differences was statistically significant.

However, in terms of the proportion of **households** that were poor, as opposed to the proportion of **people**, the difference was much bigger: 23.9% of rural households were poor, compared to 11.0% of urban households. The reason for this was the household size:

- The average household size in the survey was 3.4 members in rural areas and 3.1 in urban areas;
- The average size of poor rural households was 2.8 members, notably smaller than average, indicating a higher share of one- and two-member households, probably pensioners;
- The average size of poor urban households was 5.1 members, much higher than the urban average, suggesting that many of these poor households are families with children. It is understood that Roma families featured more highly in the urban sample than the rural, and may well make up a significant share of its poor.

Various data in this NHDR confirm that there are more elderly people in rural areas, reflected in both the average age (40 in rural areas as compared to 38 nationally; see Section 6.1.3) and the share of the economically-active population (27% in rural areas as compared to 45% in Sarajevo and 33% in other urban areas; see Section 3.3.2), but the rural-urban difference in the size of poor households is still quite striking.

This suggests that there are at least two different target groups for poverty-alleviation measures, each requiring different approaches:

- **Poor families with children** may be assisted through child and maternity benefits, and through improved access to jobs and day-care so that parents can earn sufficient income to lift themselves out of poverty;
- **Poor pensioners** are not reached by either of those benefits and are no longer in the labour force, so reductions in unemployment and improvements in the job market will do nothing to help them; they must be assisted through the pension system or possibly through targeted concessions and subsidies on things such as public transport, medical expenses and utility charges.

The differences between rural and urban areas are not black-and-white; there are poor families with children in rural areas and poor pensioners in urban areas. However, these conclusions do suggest that improving the economic situation in rural areas will have only limited impact on reducing rural poverty.

1.3 The theory and practice of rural development

1.3.1 Theory

Contemporary theories of rural development, as advanced by academics, interest groups and policymakers, fall into three main schools of thought:

- The “agrarian” approach, which sees the farming community as guardians of the countryside and a fundamental mainstay of rural life. This approach emphasises the multifunctionality of agriculture, the historic diversity of farming systems and the central role that farming has played in the development of rural culture. It sees farmers as a natural target for rural development support, partly to help them to preserve traditional farming practices, landscapes and habitats, and partly to help them adapt to change, exploit new opportunities and respond to society’s changing expectations for its rural areas.
- The “local development” approach, which focuses on the diversity of rural activities and stakeholders, and recognises that in many cases agriculture now accounts for a rather small share of rural output and employment. This approach sees rural areas as holistic socio-economic systems with various human and natural resources, and with multiple drivers of change. They prefer to be “neutral” when prescribing solutions and strategies, and would place the farming community as just one of the groups of stakeholders with equal rights to bid for development resources.
- The “urban hubs” or “polycentric” approach (see Box 1.1), which promotes the development of a number of larger towns and cities throughout the country to generate economic activity and offer jobs and trade to the surrounding rural areas.

All three schools ascribe considerable importance to protecting the environment and stress the need for rural development to address social as well as economic goals.

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The differences between rural and urban areas are not black-and-white; there are poor families with children in rural areas and poor pensioners in urban areas.

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BOX 1.1

Polycentric development in Slovenia

In 1964, Slovenia took a policy decision to develop a number of centres throughout the country, to offer equal opportunities to people wherever they lived. The structure was originally based on five cities at the top level and by eight towns at the medium level, though the concept evolved over the years. In a country as compact as Slovenia, this means that almost the entire population lives within an hour's drive of at least one of these centres.

The main tools used to promote this approach were spatial planning, location of administrative functions, and the location of state- and socially-owned enterprises. Over the last 20 years there has also been a big increase in the number of municipalities, as local communities sought to maximise their share of government funds allocated for local development. This approach has resulted in very little inequality between regions, and there has also been little abandonment of rural villages, though the activities of tourism and agriculture may also have contributed to this.

Two more recent trends may call into question the continuation of this model:

- Since Slovenia's independence and the growth of the market economy, private businesses have gravitated more towards Ljubljana and the other large cities, which they find more attractive than the smaller centres;
- The explosion in the number of municipalities (now standing at 212, giving an average of just 9,700 people per municipality, compared to 26,000 in BiH) and the associated increase in local infrastructure spending, has become a major burden on the budget which, in Slovenia's current financial crisis, is no longer sustainable.

Source: Polycentric urban system between state regulation and market economy – the case of Slovenia. Vladimir Drozg, 2012, in Csapo and Balogh, Development of the settlement network in Central European Countries: Past, present and future.

This experiment by one of the former Yugoslav republics shows that hub development can be successful, at least in a country where a large share of total spending is directed by government. The challenge now may be how to adapt this model to countries with a more dominant private sector and a more constrained government budget.

Various other approaches can also be identified, such as the "liberal free-market" approach, which questions the wisdom of any government intervention where there is no clearly-demonstrated market failure. This approach is often evident in strategies developed by organisations such as the World Bank or IMF, but as yet it has had no major impact on EU rural development policy.

1.3.2 Practice

Within Europe, the large majority of rural development funding is delivered according to the EU model, as set out in Council Regulation (EC) No. 1698/2005 and supporting legislation. EU Member States implement this model directly, supporting rural development with a combination of EU funds, national co-financing and investment by the beneficiaries themselves, according to a clearly-defined process of planning, implementation and monitoring. Countries aspiring to join the EU develop their national systems along similar lines, as part of the overall process of harmonisation with the *acquis communautaire* and with the specific goal of being able to benefit from EU funds under the EU's Instrument for Pre-accession in Agriculture and Rural Development (IPARD)(See Box 1.2). Thus, it is little exaggeration to say that, within Europe, practical rural development is the EU's rural development policy.

EU rural development policy is managed by the Commission's Directorate-General for Agriculture and Rural Development (DG AGRI) as the "second pillar" of the Common Agricultural Policy,¹² where:

- **Pillar 1** comprises regular support to agricultural activities through market intervention, the Single Farm Payment, and subsidies linked to agricultural production. The full cost is met from the EU budget through the "European Agricultural Guarantee Fund" (EAGF).
- **Pillar 2** comprises investment grants for modernisation of farms, public good measures in rural areas, and other rural development measures. Part of the cost is borne by the EU budget through the "European Agricultural Fund for Rural Development" (EAFRD), with the balance provided by national co-financing and the beneficiaries themselves.

These two pillars together comprise the "Common Agricultural Policy" (CAP), which currently accounts for 48% of the total EU budget, split approximately 75:25 between Pillar 1 and Pillar 2. Just as rural development policy at the EU level forms part of its agricultural policy and is managed by the DG AGRI, so most Member States and aspiring countries implement rural development through their own ministries responsible for agriculture, though with the words "Rural Development" increasingly featuring in their official titles.

The EU Rural Development Regulation organises support according to three vertical "axes" and a fourth horizontal approach:

- **Axis 1:** Improving agricultural competitiveness;
- **Axis 2:** Improving the environment and supporting land management;
- **Axis 3:** Improving the quality of life and diversifying the economy in rural areas; and
- The "**Leader approach**", which implements local strategies for rural development through public-private partnerships.

¹² http://ec.europa.eu/agriculture/cap-funding/index_en.htm

These four sets of objectives are pursued through the following measures:¹³

- 1 Training in new farming techniques and rural crafts;
- 2 Assisting young farmers to set up farms;
- 3 Assisting older farmers to retire;
- 4 Modernising farm buildings and machines;
- 5 Assisting farmers to meet demanding EU standards, e.g. environmental, animal welfare and public health;
- 6 Helping establish food processing facilities on the farm so that farmers can earn more income from farm products by adding value to them;
- 7 Improving product quality and marketing of quality products;
- 8 Setting up of producer groups in the new Member States;
- 9 Support for farming in mountainous areas and other areas with handicaps;
- 10 Renovating villages and rural facilities;
- 11 Encouraging tourism;
- 12 Protection and conservation of rural heritage;
- 13 Agri-environment measures to improve the environment;
- 14 Development strategies put in place by Local Action Groups, addressing any of the following four “themes”:¹⁴
 - The use of know-how and new technologies to make the products and services of rural areas more competitive;
 - Improving the quality of life in rural areas;
 - Adding value to local products, in particular by facilitating access to markets for small production units via collective actions;
 - Making the best use of natural and cultural resources, including enhancing the value of sites of community interest selected under Natura 2000.

Most of the measures have a strong focus on farms (directly targeted by the first nine measures) and are based around the countryside and village. Measures to support the rural population by creating jobs in local towns would therefore not be eligible.

In addition to the agricultural and rural development policy implemented through the EAGF and EAFRD, the EU has three other “structural funds”: the Cohesion Fund, which receives 36% of the total EU budget, the European Fund for Regional Development (EFRD) and the “European Social Fund” (ESF). These are used in a variety of ways to support **regional development**, and although they are not regarded as part of **rural development** policy, some of their measures could support the development of urban hubs in rural areas.

¹³ http://ec.europa.eu/agriculture/capexplained/index_en.htm

¹⁴ http://ec.europa.eu/agriculture/rur/leaderplus/faq_en.htm#190

It should be noted that the European Parliament, the EU Council of Ministers and the European Commission have reached an agreement on reforming the common agricultural policy (CAP) post-2013.¹⁵ The objective of the reform is to provide a simpler and more efficient CAP with instruments that will continue to be structured around two pillars: the first pillar would contain the support paid to all farmers on a yearly basis, whereas the second pillar would remain the support tool for community objectives (rural development), giving Member States sufficient flexibility to respond to their specific requirements on a multi-annual, programming and contractual basis. The reformed CAP should play a key role in achieving the overall objective of promoting smart, sustainable and inclusive growth, representing the EU's strong response to the challenges of food safety, climate change, growth and jobs in rural areas.¹⁶

15 After almost two years of negotiations between the Commission, the European Parliament and the Council, a political agreement on the reform of the CAP was reached on 26 June 2013. The formal adoption of the reform by the European Parliament and the Council will come later in 2013 with a view to having the CAP reform in place as from 1 January 2014. More on: http://ec.europa.eu/agriculture/cap-post-2013/agreement/index_en.htm

16 Dacian Cioloş, European Commissioner for Agriculture and Rural Development, Brussels, June 26, 2013: http://europa.eu/rapid/press-release_IP-13-613_en.htm

The European Commission allocates funds for rural development in prospective new Member States (including Bosnia and Herzegovina) through its IPA programme ("Instrument for Pre-Accession"), in particular through IPA component 5 dedicated to agriculture and rural development and known as IPARD ("Instrument for Pre-Accession in Agriculture and Rural Development"). Bosnia and Herzegovina does not benefit during the present programming period 2007-2013, since eligibility for the IPARD component is limited to "Candidate Countries" and is not available to "Potential Candidate Countries" such as BiH.

For the programming period 2014-2020, Candidate Country status will no longer be a precondition to access the IPARD. However, certain conditionalities posed by the European Commission will need to be met, relating to strategic preparations, institutional arrangements and co-ordination, and the administrative capacity needed to prepare for and efficiently absorb IPARD funds.¹⁷

When defining the allocation of IPA funds between the different components that will affect rural and urban territories in Bosnia and Herzegovina (for example, Measure 301: "Improvement of rural infrastructure"), the European Commission and the country authorities will need to define the area coverage for both the regional and rural development funds, since in some cases both funds could potentially finance similar activities.

The division is usually territorially based, according to population size. In the case of Croatia and Bulgaria the demarcation has been a municipality population threshold of 10,000 people. Municipalities below this threshold were eligible for local infrastructure investment under IPARD, while those above this threshold were eligible under IPA component 3 (regional development), independent of their population density or their rural-urban status.

BOX 1.2

EU support for rural development in potential new Member States

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Whilst rural development theory is increasingly recognising the declining role of agriculture and the importance of urban-rural linkages, this is not yet being implemented in mainstream rural development practice, where the majority of money is still targeted at farms.

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It can therefore be surmised that, whilst rural development theory is increasingly recognising the declining role of agriculture and the importance of urban-rural linkages, this is not yet being implemented in mainstream rural development practice, where the majority of money is still targeted at farms. For BiH, this may create tension between the priorities it identifies and the measures that it is able to finance.

It should also be recognised that national governments support their rural areas through a host of other measures and ministries, in areas such as transport, education, health care, social services and regional development. Total public transfers to rural areas through these non-specific measures are many times greater than expenditure through explicit rural development, and provide a number of opportunities to address rural priorities that lie outside the EU rural development framework. These opportunities are also available to BiH – provided that rural issues are sufficiently integrated into the overall planning process at each of its levels.

¹⁷ See the “Proposal for a Regulation of the European Parliament and of the Council on the Instrument for Pre-accession Assistance (IPA II)” of 7 December 2011, COM(2011) 838 final, which states that “The delivery of assistance will be made more flexible and tailored to address needs, by allowing undifferentiated access to assistance (irrespective of candidate or potential candidate status), albeit with a different scope or intensity, on the basis of needs and technical and administrative capacity.”



**WHAT IS
SPECIAL ABOUT
BOSNIA AND
HERZEGOVINA?**

2 WHAT IS SPECIAL ABOUT BOSNIA AND HERZEGOVINA?

At the beginning of the 1990s after the Berlin Wall came down, the Iron Curtain lifted, the EU began to look eastwards and the face of Europe changed forever. Yugoslavia, sitting between East and West and already rupturing after the death of Tito, started to tear apart in the longest and bloodiest conflict Europe has seen since 1945. For Bosnia and Herzegovina (BiH) the fighting lasted from March 1992 to December 1995 and resulted in the emigration of over two million people and massive internal displacement, with significant and enduring effects on the demography and economics of its rural communities. The Dayton Peace Agreement that ended the war created a unique administrative structure for the country, consisting of two “Entities” – the Federation of Bosnia and Herzegovina (FBiH), further subdivided into ten “Cantons”, and Republika Srpska (RS) – together with the smaller Brčko District (BD). This unique structure has profound effects on every aspect of policy making, implementation and enforcement. The psychological effects of war still surface from time to time, and every draft decision will be carefully scrutinised for its potential effects on each group as well as on the balance of power and resources between the state, entities, cantons and municipalities. In BiH it is not sufficient to come up with a solution that works technically and economically, it must also be politically acceptable in this extremely complex environment.

When peace came and the people of BiH began to rebuild their country, they had to deal not only with the economic and material destruction of war, but also to embark on the same long, hard road to economic reform as the rest of central and eastern Europe, and it is often hard to separate the effects of the two. When the global financial crisis struck in 2007, and then precipitated the ongoing Eurozone crisis, BiH was also affected and, with a currency pegged to the Euro, remains highly sensitive to developments in the wider European economy.

When Croatia joined the EU in July 2013, BiH found itself on the doorstep of the EU. As a potential candidate country itself, BiH is haphazardly working towards a future within the EU. Almost all its export products already enjoy tariff-free access to the massive EU market, whilst the country benefits from considerable financial support under the EU’s IPA and is looking forward to further benefits once it is able to participate in the IPARD.

Geographically, much of Bosnia and Herzegovina is quite mountainous and this terrain, together with the poor state of many roads, means that distances that appear short on the map can represent a lot of travelling time, making many rural communities more remote than they would initially seem. The country is also practically land-locked: whilst it enjoys 24 km of Adriatic coastline around the town of Neum, there is as yet no commercial cargo port, so the main route for bulk imports and exports is by rail to and from the Croatian port of Ploče. This route now runs through the European Union, with its stringent veterinary, phytosanitary and other controls. An agreement has been reached assigning special status to Ploče for goods in transit

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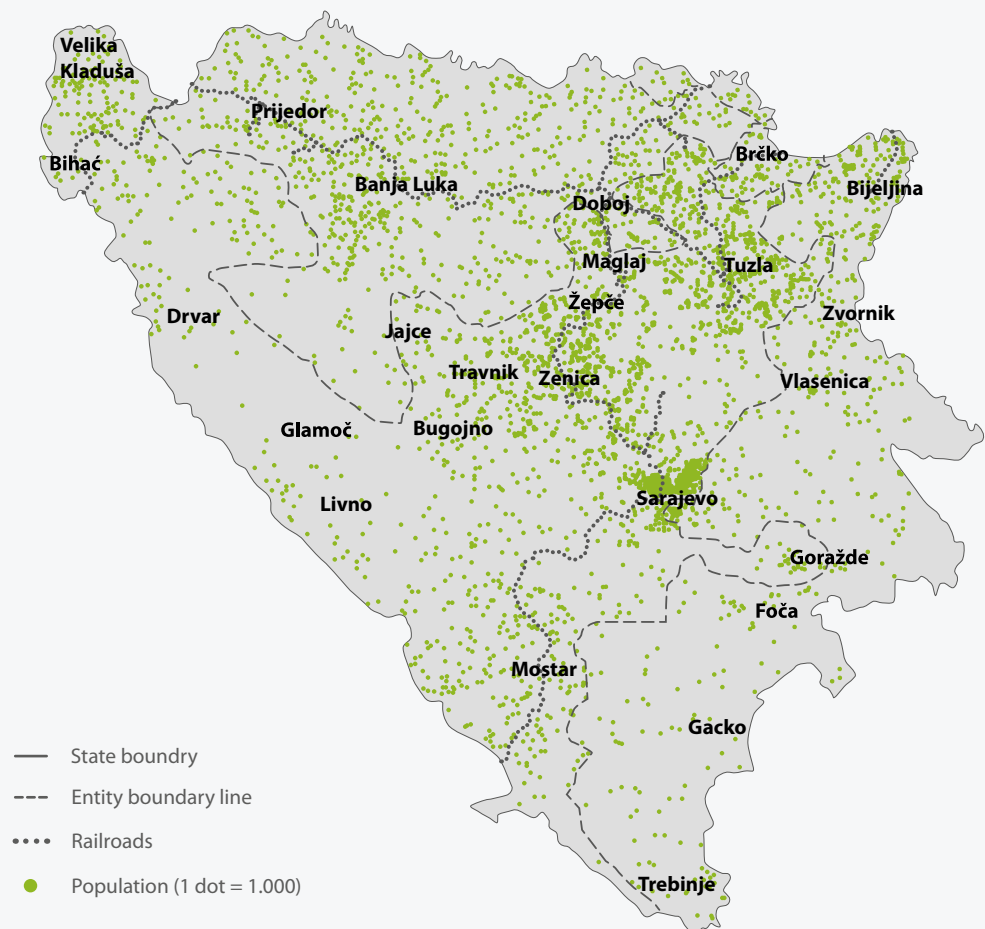
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to and from BiH; this should help to keep this trade flowing smoothly once the initial teething problems are worked out. Croatia is currently BiH's biggest trading partner. Taking the livestock sector as an example, in 2010 trade with Croatia was greater than that with all 27 EU Member States combined, and included a considerable value of exports, whilst trade with the EU was almost entirely one-way – imports into BiH. Although exports to the EU face almost no tariff barriers, they must meet exacting EU hygiene and marketing standards, which have so far proven hard to meet, particularly in the highly demanding livestock sector. Thus Croatia's recent entry to the EU will be a serious shock for the BiH economy, a challenge for which no adequate solution has yet been found. Tripartite talks between the EU, Croatia and BiH are underway to find solutions, but an agreement has yet to be reached.

Another specific feature of Bosnia and Herzegovina is the weakness of its statistical base: the last full population census was conducted in 1991 – before the massive population movements resulting from the war, and despite determined efforts to rebuild and modernise its statistical systems, the reliability of data remains an issue. This NHDR recognises this weakness but seeks to move on and draw the best conclusions it can from the available data. A new census is scheduled for October 2013 and once the new data is available, many of the issues covered by this report can be updated and understood in greater detail and accuracy.

FIGURE 2.1

BiH population distribution, topography and main roads



Source: BiH Agency for Statistics, via the "MyPlace" website

An aerial photograph of a vast, green agricultural field, likely a vineyard or orchard, with rows of plants stretching across the landscape. A small tractor is visible in the upper left quadrant. The image is overlaid with large white letters 'B' on the left and 'E' on the right, and a central text block.

**HOW RURAL IS
BOSNIA AND
HERZEGOVINA?**

3 HOW RURAL IS BOSNIA AND HERZEGOVINA?

Bosnia and Herzegovina is certainly one of the most rural countries in Europe, with between 40-60% of its population living in rural areas, according to the definition used.

There are several different definitions of “rural” in common use (see Annex 2). Some are “area approaches”, typically defining a region, municipality or county as rural or urban according to its population density and number, whilst others are “settlement approaches” that classify individual settlements as urban or rural, based either on their size or on their administrative classification by the national authorities.

However, it should be noted these are not two different ways of measuring the same thing, but ways of measuring fundamentally different things:

- The “area approach” treats all residents of a sparsely-populated municipality the same, whether they live on an isolated farm or on the top-floor flat in the principal town of the municipality. This approach should correlate best with economic factors that act over a relatively wide area but is not a good guide to individual households’ access to agricultural land or infrastructure, such as water supply and sewerage.
- The “settlement approach” treats all inhabitants of villages and micro-settlements the same, whether they live in the remotest corner of the country or on the outskirts of Sarajevo. It is most likely to correlate with access to land, infrastructure and local services but is not a good guide to economic factors such as unemployment or wage rates.

Both approaches have been used in BiH by different organisations and in different datasets. The approach of this report is to make clear which definition has been used for each dataset, and to take account of this when drawing conclusions. All major data resources are listed in Annex 8, with a note as to the definition of rurality used by each.

The most rural countries in Europe include Montenegro, Finland and Ireland. The OECD’s definition places BiH fourth, with 61% of its population living in predominantly rural areas.¹⁸ Other countries with around half of their population living in rural areas include Norway and Sweden in the north, Austria and Slovenia in Central Europe, and Poland to the north-east. Directly comparable data are not readily available for the other former Yugoslav republics or Albania, but most of them probably also fall in this group of countries with roughly equal urban and rural populations.

It is interesting to note that the most rural countries, in terms of population share, include some of Europe’s richest countries as well as some of its poorest.¹⁹ This suggests that “rural” does not necessarily mean “poor”, and that rurality is not an insurmountable barrier to economic and human development.

“Rural” does not necessarily mean “poor”, and rurality is not an insurmountable barrier to economic and human development.

¹⁸ Different estimates made in recent years come up with values of 60.4-60.8%.

¹⁹ One indicator of wealth is *per capita* GDP. The IMF website quotes “Purchasing Power Parity” GDP by country and shows, for example, that although BiH and Slovenia are both former Yugoslav republics and rank next to each other on the rurality graph, Slovenia manages to achieve 3.5 times the GDP of BiH: USD28,645 as compared to USD8,133 for BiH.

FIGURE 3.1

SHARE OF POPULATION LIVING IN PREDOMINANTLY RURAL AREAS (OECD AREA DEFINITION)



Source: BiH data from the EU-funded "BiH Strategic Plan for Harmonisation of Agriculture, Food and Rural Development (2008-2011)"; Montenegro data from the UNDP-funded report on "Montenegro Rural Enterprise Development"; all other data from "OECD regions at a glance – 2011".

3.1 Distribution of rural areas in BiH

Figure 3.2 shows five clusters of municipalities²⁰ where the population density exceeds 150 people per square kilometre:

- Around Sarajevo (in the centre) and spreading north-west to Zenica;
- Around Tuzla and Brčko (north-east of Sarajevo);
- Around Banja Luka (north-west of Sarajevo);
- Around Cazin (the north-west tip of the country);
- A small pocket around Goražde (south-east of Sarajevo).

With the exception of Goražde, almost all of the municipalities along the south-west and south-east of BiH are classified as rural (i.e., <100 people per km²).

These municipalities cover large swathes of the country and include many towns - so a significant proportion of “rural” inhabitants actually live in towns, whilst the “urban” municipalities also include some villages.

²⁰ Technically, the areas on the map and the administrative units for which data is quoted in Section 3.3 are Local Government Units, which may include municipalities, cities and Brčko District. However, the large majority are classified as municipalities and so that is the term used in this report.

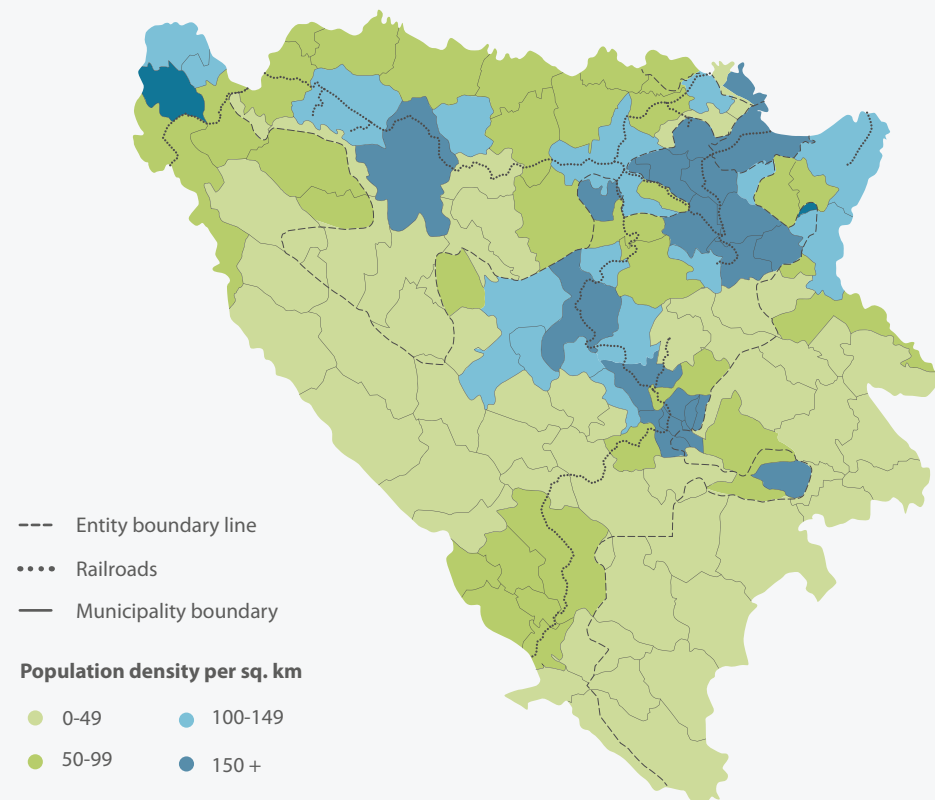


FIGURE 3.2

BiH rural municipalities (area approach)

However, there is rural and rural - someone who lives in a village 30 minutes' drive from a town and serviced by a good bus route has a very different set of opportunities and quality of life from a person living in a remote mountain hamlet cut off by snow for several weeks every winter. UNDP-funded research in neighbouring Montenegro showed that the pattern of employment in villages closely mirrored that of nearby towns, albeit with an increased emphasis on primary production, whilst remote rural areas were much more heavily dependent on agriculture, forestry, mining and associated activities. BiH has people living at both these extremes, though Figure 3.3 shows that most of the country is within reasonable distance of at least a small town.

Comparing this with the map of rural municipalities (Figure 3.2) shows that there are several urban settlements along the south-west and south-east borders of the country that lie in sparsely-populated municipalities. Their inhabitants are considered rural under the area approach but urban under the settlement approach.

UNDP analysis of official statistics²¹ divides the population into three groups according to area rather than settlement:

- Living in predominantly urban municipalities: 58%
- Living in semi-urban municipalities: 26%
- Living in predominantly rural municipalities: 16%

Municipalities classified as predominantly rural are those where the urban settlements (Figure 3.3) are few or small in size. Their inhabitants are likely to depend more on specifically rural activities such as agriculture and to have weaker social and economic links with the towns – factors that should be taken into account when adjusting rural development policies to specific local needs.

²¹ UNDP calculation based on data from Statistical Bulletin No. 110, Population of the FBiH 1991-2006, p.23, Federal Agency for Statistics and Household Budget Survey 2007, p.7.

BOX 3.1

Definitions: City, Town and Village

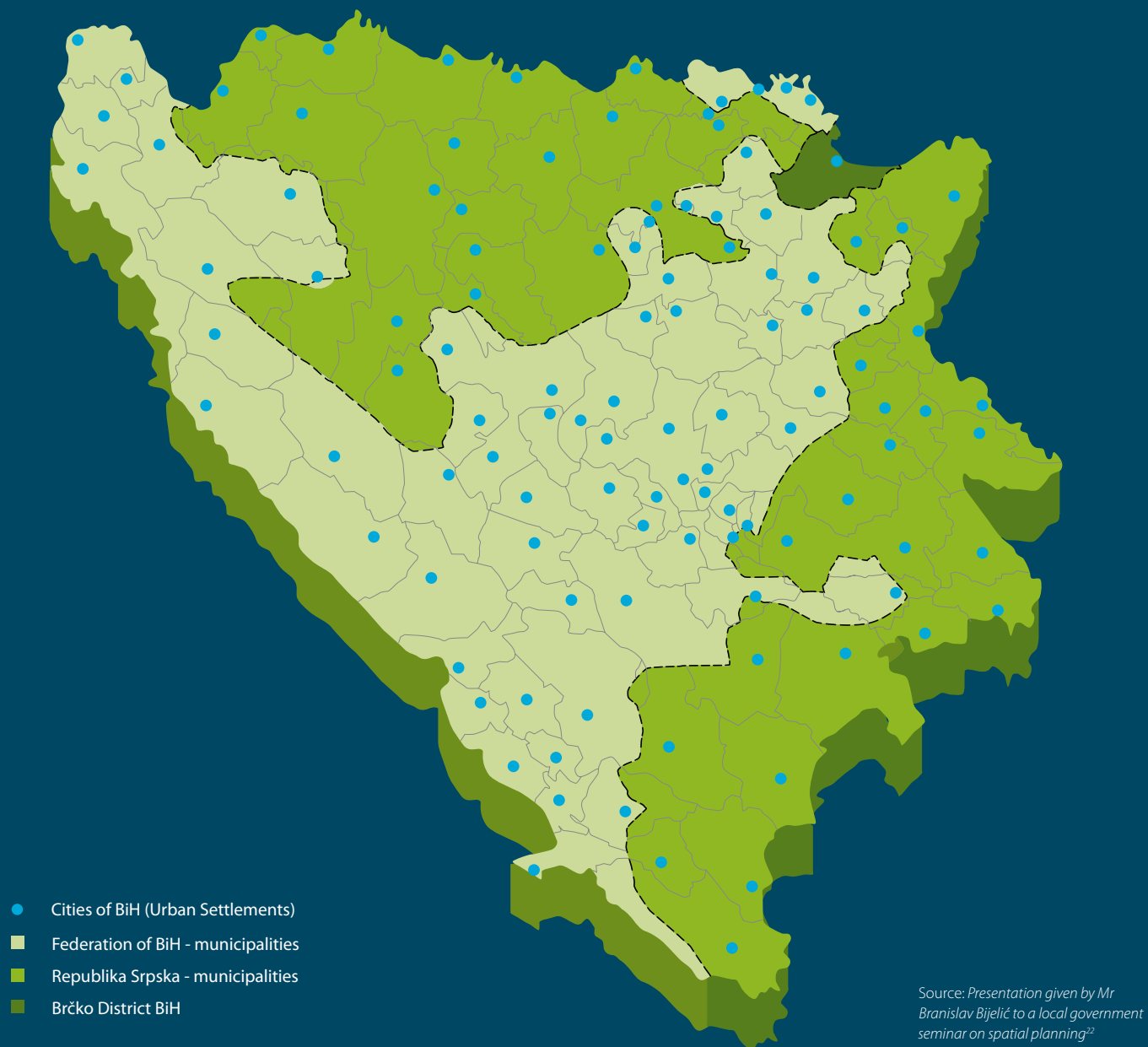
The urban planning system of BiH recognises 114 settlements as “urban”. The average size of these settlements is around 15,000 and ranges from several thousand to more than 400,000 in the Sarajevo conurbation. All of these settlements are classified as “urban” in the UNICEF MICS survey and in the Rural Household Survey (from which they were excluded). For the purposes of this report, these urban settlements are divided into two groups:

- **Cities:** Settlements with at least 100,000 people
- **Towns:** All other urban settlements

All other settlements – ranging from a single isolated house to a settlement with a population of a few thousand – are treated as “rural” in the MICS and the Rural Household Survey, and are referred to in the report as **Villages**.



FIGURE 3.3 CITIES (URBAN SETTLEMENTS) OF BOSNIA AND HERZEGOVINA IN 2011.



22 <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CDEQFjAA&url=http%3A%2F%2Fwww.apps.org.rs%2Fppt%2F4ZLATIBOR2012BBIJELIC.pps&ei=vaYCUdv-GZTY4QSA9YDYCg&usg=AFQjCNF2gN6llp-hptT-15BpViwfoO1j5Q&bvm=bv:41524429,d:bGE>

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For that large part of the rural population which is within commuting distance of a town or city, economic opportunities depend more heavily on the economic health of their nearest urban centre than on that of the village itself.

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3.2 Population distribution in BiH

Around 25% of the BiH population lives in the six major cities: Sarajevo with more than 440,000 people, Banja Luka with around 250,000 inhabitants, and Tuzla, Zenica, Mostar and Bijeljina each with around 100-130,000 people.²³

A further 15% live in around 100 towns, some lying in densely-populated urban municipalities and some forming the administrative centre of scarcely-populated rural municipalities. Most of these towns have a few thousand inhabitants, but there are also several medium-sized towns where the population is measured in tens of thousands.

Most of the other 60% live in a series of villages of a few hundred to a few thousand people, whilst a small proportion lives in very small hamlets or isolated houses.

Typically, village houses are generously spaced along the roads, usually with a small plot of surrounding land where they can keep livestock and grow fruit and vegetables. Many households also own one or more plots further from the road, accessible by foot and tractor, where they can cultivate crops or make hay. Most of the villages are within reasonable travelling distance of a town or city, making it possible for people to work in town during the day and then return to tend their livestock and gardens. However, bus services usually follow the main roads, so people in the smaller villages often have to walk some distance and then wait at the roadside to flag down the bus as it passes by. Along the south-western and south-eastern edges of the country, urban centres are fewer and further between, so it takes longer to travel to and from the town.

In the fertile plains of the north-east, houses tend to be more widely spaced to give easier access to their land, so that one village almost merges into the next. In the more mountainous areas, the main villages are nestled in the valleys, and the higher land has clusters of just a handful of houses every few kilometres. Whilst the proportion of the total population living in these mountainous conditions is very low, they have serious problems of access, as there may be no nearby bus service and some of the smaller roads can remain blocked by snow for long periods in the winter.

For that large part of the rural population which is within commuting distance of a town or city, economic opportunities depend more heavily on the economic health of their nearest urban centre than on that of the village itself, as shown by the following statistical analysis.

²³ The *municipalities* housing these six cities contain 29% of the total population, but some of these people will live in outlying towns and villages, so the actual city population is probably closer to 25%.

3.3 A statistical comparison of rural and urban areas

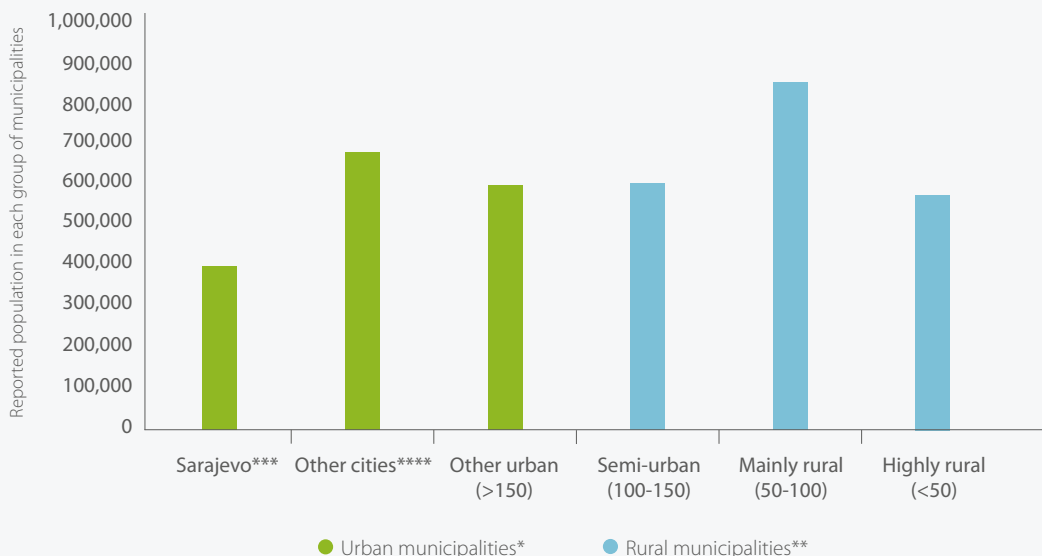
Most official statistics in BiH are originally collected by entity- and district-level statistical institutions; the BiH Agency of Statistics collates a number of these datasets as well as producing some of its own. As obtaining comparable local statistics from multiple sources is difficult, the Center for Social Research Analitika, through its “MyPlace” project, has compiled this data into a consistent and readily accessible format. Their website²⁴ presents a series of official statistics on each of the 142 municipalities in BiH, including estimates of population and population density, and forms the basis for this section of the NHDR. Within the “MyPlace” format, municipalities are placed into six groups, according to their degree of rurality, based on population density. This use of the “area approach” to defining rurality is considered most likely to detect urban-rural differences in economic factors, which tend to operate at a larger scale than that of an individual village.

Based on the urban-rural division illustrated in Figure 3.4, 45% of the total population is urban and 55% rural (this figure differs from previously-quoted 60% as Mostar and Bijeljina are included in the urban group as ‘other cities’).

3.3.1 Net migration

The general net migration trend (people moving into the municipality minus those moving out) is that people are moving into Sarajevo and other larger cities at a slightly lower rate, and moving out of other urban and rural municipalities. The *other urban* municipalities are losing population faster than either the *semi-urban* or the *mainly rural*, but the *highly rural* municipalities are shrinking almost as fast as the other cities are growing.

24 <http://www.mojemjesto.ba/en/>



(Numbers in brackets are population per square kilometre)

FIGURE 3.4

Population distribution in BiH

- * *Urban municipalities* include Local Government Units
- ** *Rural municipalities* have less than 150 people/km²
- *** *Sarajevo* includes the four City Municipalities and three adjoining urban municipalities
- **** *Other cities* all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively

Source: Official statistics collated on the “MyPlace” website, <http://www.mojemjesto.ba/en/>

These findings would appear to support the widely-held view of rural-urban migration. However, an analysis of the variability of the data (as shown by the error bars²⁵) reveals a considerable difference in the migration rate, with 30% of rural municipalities gaining population and 70% losing. Within greater Sarajevo (RS and FBiH), two municipalities (Centar and Stari Grad) are losing population, whilst others are gaining.

It therefore appears that there is no significant difference in the net migration rate between urban and rural, but that the difference between the cities (Sarajevo and the other cities) and the highly rural municipalities is very significant. Indeed, a genuine population shift seems to be taking place, with Sarajevo and the other large cities growing, and the most rural municipalities shrinking. The pace of migration is relatively slow, however, with urban areas growing at the rate of 0.2% per year and rural areas shrinking at around 0.15% annually. At the two extremes, Sarajevo is growing at 0.4% per year whilst the most rural municipalities are shrinking at 0.3%.

Across all municipalities, population density (i.e. rurality) accounts for just 16% of overall variation in the migration rate, and 84% must be explained by other factors. Neither semi-urban/mainly rural areas (home to 40% of the population) nor large towns show any significant net migration in either direction. Meanwhile, for their own valid reasons, people are slowly and consistently leaving the villages and small towns of the most rural municipalities, to move to the capital and

²⁵ These indicate one standard deviation either side of the mean: just over two-thirds of municipalities in each group fall within the error bars, and almost a third fall outside them, meaning that there is very considerable variation in the migration rate.

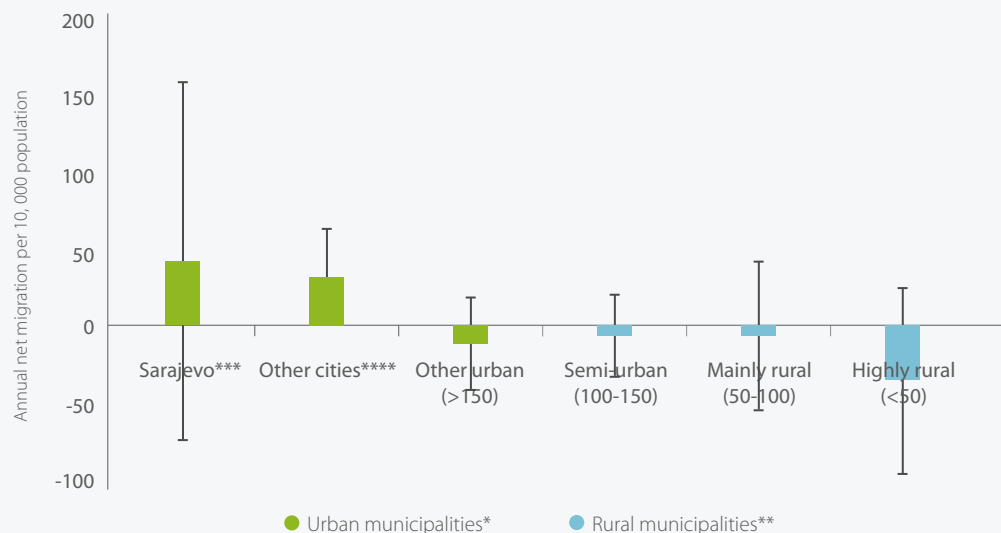
²⁶ Excludes the two smallest municipalities, Istočni Drvar (38) and Petrovac (406), which show very high emigration and immigration, respectively.

²⁷ 2010 Data; municipalities with missing or impossible values for certain variables (e.g. percentages greater than 100) are excluded; some other outlying values are also excluded.

FIGURE 3.5

Net Migration rate²⁶

- * **Urban municipalities** include Local Government Units
- ** **Rural municipalities** have less than 150 people/km²
- *** **Sarajevo** includes the four City Municipalities and three adjoining urban municipalities
- **** **Other cities** all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively



Source: Official statistics collated on the "MyPlace" website, <http://www.mojemjesto.ba/en/>²⁷

Numbers in brackets are population per square kilometre. Error bars show 1 standard deviation either side of the mean.

other large cities, or leaving the country for good. If public policy is to try and resist outmigration from rural areas, then it is important to investigate what factors underlie this phenomenon; clearly there is far more involved here than just population density, and other possible factors such as remoteness, transport infrastructure and ethnic balance should be investigated.

3.3.2 Labour force

The proportion of the total population that is economically active, i.e. either working or available for work, tends to be smaller in villages and smaller towns compared to large towns and cities. For around one in six rural municipalities, the economic activity rate is so low that it represents a serious challenge.

In Sarajevo almost 45% of the population is economically active, with this figure dropping to 33% in other urban areas and to 27% across all the rural groups (Figure 3.6). This presumably reflects the movement of people into Sarajevo, and other large cities, to seek work, and a relatively high percentage of pensioners in rural areas.

The policy significance of this is that where the labour force ratio is low, a relatively small proportion of the population must support a large number of non-working people. Whilst the main social transfers such as pensions are made on a statewide basis, an area where most of the population is retired will not feel very dynamic and may not be able to support a wide range of shops and services.

28 2010 Data; municipalities with missing or impossible values for certain variables (e.g. percentages greater than 100) are excluded; some other outlying values are also excluded.

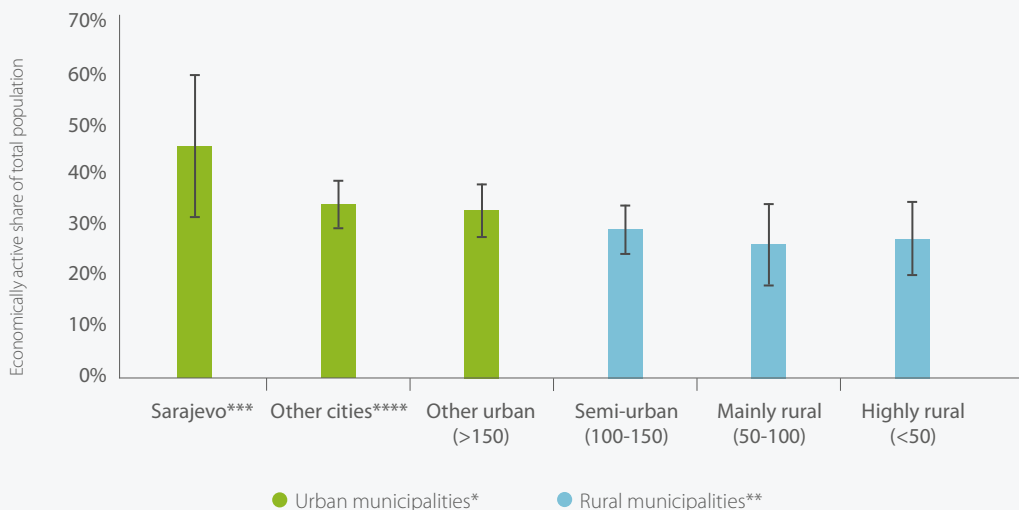


FIGURE 3.6

Economically active population (employed and unemployed) as share of total population

* *Urban municipalities* include Local Government Units
 ** *Rural municipalities* have less than 150 people/km²
 *** *Sarajevo* includes the four City Municipalities and three adjoining urban municipalities
 **** *Other cities* all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively

Numbers in brackets are population per square kilometre. Error bars show 1 standard deviation either side of the mean.

Source: Official statistics collated on the "MyPlace" website, <http://www.mojemjesto.ba/en/>²⁸

The most noticeable urban-rural divide is in the labour force. There are 19 municipalities,²⁹ all rural, where the labour force makes up less than 20% of the total population, presenting a particular economic challenge. However, population density is still a very poor predictor of the labour force ratio, and so other factors must be involved as well.

3.3.3 Unemployment

Unemployment is much lower in Sarajevo and other big cities than in the rest of the country. The biggest problem of unemployment lies in “Other urban” areas, while rural areas show an intermediate level of unemployment that does not vary with their degree of rurality.

Unemployment in Sarajevo is low (32%) when compared to the rest of the country and is highest in the “Other urban” municipalities (58%). Unemployment in all three rural groups (47%) is very high by international standards but shows no correlation with population density. Average unemployment rates show little difference between rural (49%) and urban (46%) areas.

29 These municipalities are:

- Labour force share of 15-20%: Srebrenica, Lopare, Kalinovik, Trnovo (RS), Prnjavor, Kozarska Dubica, Novo Goražde/Ustiprača, Sanski Most, Prozor-Rama, Donji Žabar, Derventa, Srbac, Drvar, Petrovo, Tomislavgrad;
- Labour force share of 10-15%: Osmaci, Pelagićevo, Vlasenica;
- Labour force share of < 10%: Ravno.

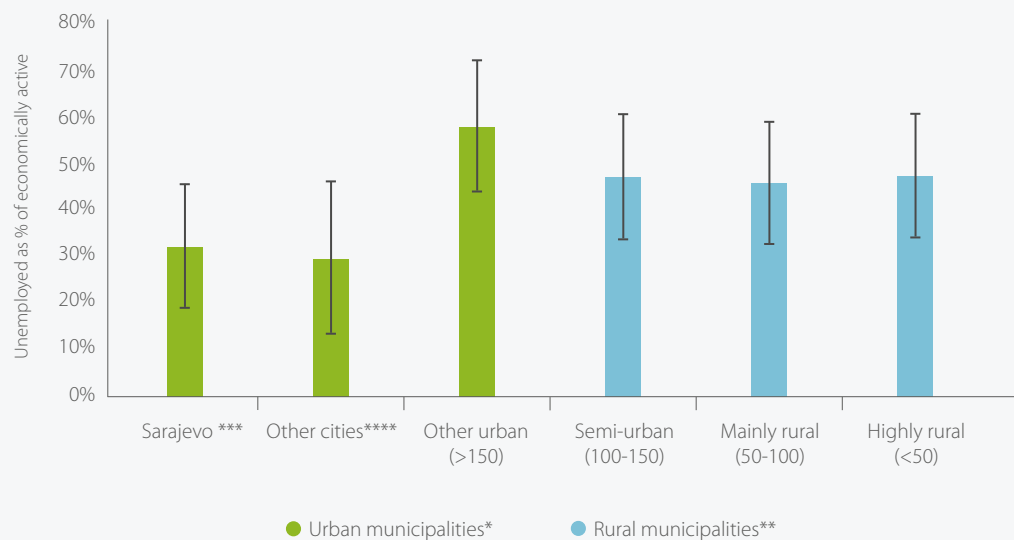
Data not available for Istočni Stari Grad.

30 2010 Data; municipalities with missing or impossible values for certain variables (e.g. percentages greater than 100) are excluded; some other outlying values are also excluded.

FIGURE 3.7

BiH unemployment rate
(unemployed as a percentage of
economically active)

- * *Urban municipalities* include Local Government Units
- ** *Rural municipalities* have less than 150 people/km²
- *** *Sarajevo* includes the four City Municipalities and three adjoining urban municipalities
- **** *Other cities* all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively

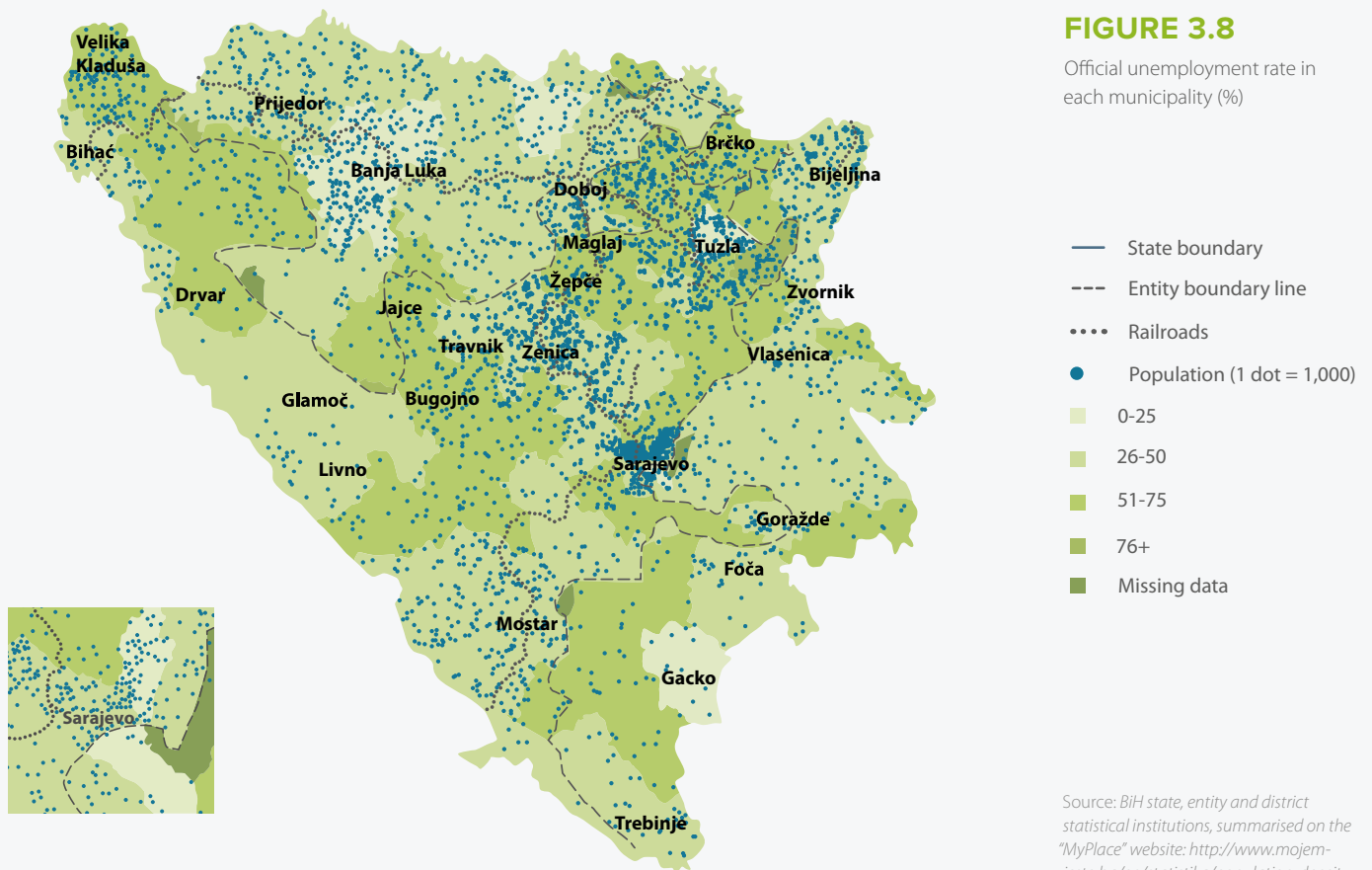


Source: Official statistics collated on the “MyPlace” website, <http://www.mojemjesto.ba/en/30>

Numbers in brackets are population per square kilometre. Error bars show 1 standard deviation either side of the mean.

There is very little correlation between rurality (i.e. population density) and unemployment.³¹ Banja Luka, for example, has quite a high population density but very low unemployment, whilst Tuzla and the surrounding municipalities have a similar or even denser population distribution but markedly higher unemployment. Equally, along the border with Croatia, the municipalities around Mostar have a moderate population density and moderate unemployment, whilst those around Glamoč are more remote and have much lower population density, but show similar levels of unemployment.

31 This analysis takes into consideration official (registered) unemployment, which is significantly higher than the employment rate based on the ILO methodology, which amounted to 28% in 2012 according to Labour Force Survey (2012). The difference between the official (registered) and ILO data is due to fact that people tend to register as unemployed for social security reasons, i.e. medical and pension benefits.



Unemployment rates differ significantly across the municipalities of BiH, but neither population density nor remoteness explain this. Part of the explanation may be historical: over time people gravitated towards the main sources of employment, such as state- or socially-owned mines, factories and other enterprises; with the general economic collapse that followed the break-up of Yugoslavia, many of these former employers went out of business but the people remained, giving pockets of unemployment in quite densely-populated areas. Since then the regrowth of enterprise around Sarajevo, Banja Luka and some other big cities has helped to bring their unemployment rate down, but left many medium-sized towns with a lingering problem of high unemployment.

3.3.4 Average wages

Wages are highest in Sarajevo, followed by the “Other cities”, and lowest in “Other urban” areas. Rural areas have an intermediate wage level, which does not vary with their degree of rurality.

Monthly average net wages range from BAM961 (USD651) in Sarajevo, to BAM844 (USD572) in “Other cities”, to BAM656 (USD445) in “Other urban”. The monthly net wage in rural areas is BAM732 (USD496).

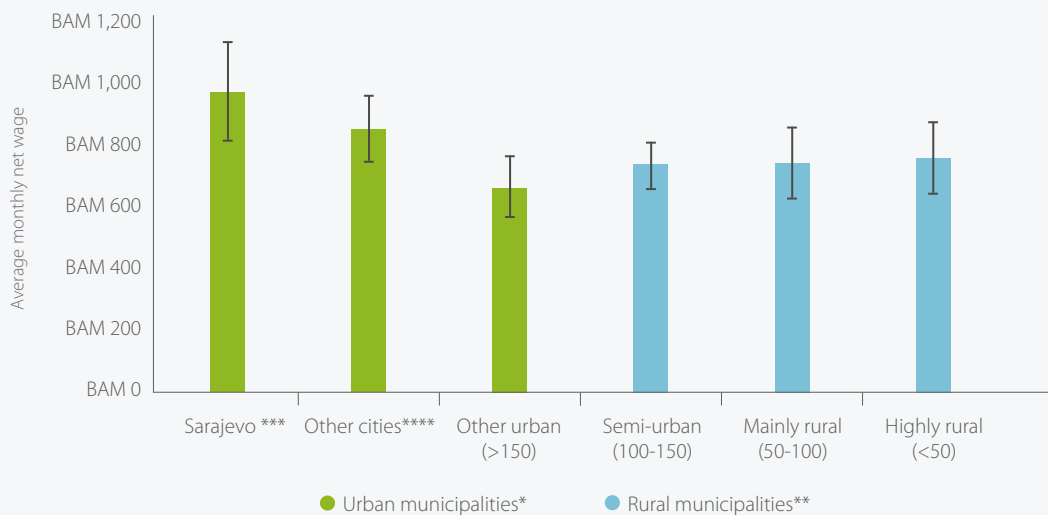
Comparing the rural and urban municipalities, the simple average of net wage rates is almost identical, at BAM733 (USD 497) in urban areas and BAM732 (USD496) in rural. However, the labour force is larger in the cities, where wages are higher, so the weighted average for urban areas rises to BAM838 (USD568) compared to BAM733 (USD497) in rural municipalities.

32 2010 Data; municipalities with missing or impossible values for certain variables (e.g. percentages greater than 100) are excluded; some other outlying values are also excluded.

FIGURE 3.9

Average net wage (excluding overtime pay):

- * *Urban municipalities* include Local Government Units
- ** *Rural municipalities* have less than 150 people/km²
- *** *Sarajevo* includes the four City Municipalities and three adjoining urban municipalities
- **** *Other cities* all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively



Source: Official statistics collated on the “MyPlace” website, <http://www.mojemjesto.ba/en/32>

Numbers in brackets are population per square kilometre. Error bars show 1 standard deviation either side of the mean.

3.3.5 GDP

Rural areas tend to generate lower *per capita* GDP than urban areas because a lower proportion of their population is employed. Sarajevo and other large cities generate markedly higher levels of GDP that reflect higher productivity per worker, as well as a higher proportion of the total population in employment. GDP *per capita* and per person employed is lowest in the medium-sized towns.

GDP *per capita* is highest in Sarajevo, with rural areas showing little variation between the three groups. However, the lower activity rate in rural areas reduces the *per capita* GDP to an overall average of BAM4,780 (USD3,241) just 5% above "Other urban". Sarajevo benefits from a high activity rate, relatively low unemployment, and high productivity (reflected in its average net wage); these three factors together give it a GDP of almost BAM13,000 (USD 8,813), nearly triple that of rural areas.

Even taking out the factors of activity rate and unemployment rate, it is clear that cities have higher labour productivity than the rest of the country, as shown by the following estimates of GDP per person employed:

- Sarajevo: BAM42,800 (USD29,017)
- Other cities: BAM38,200 (USD25,898)
- Other urban: BAM30,900 (USD20,949)
- Rural (all groups): BAM33,200 (USD22,508)

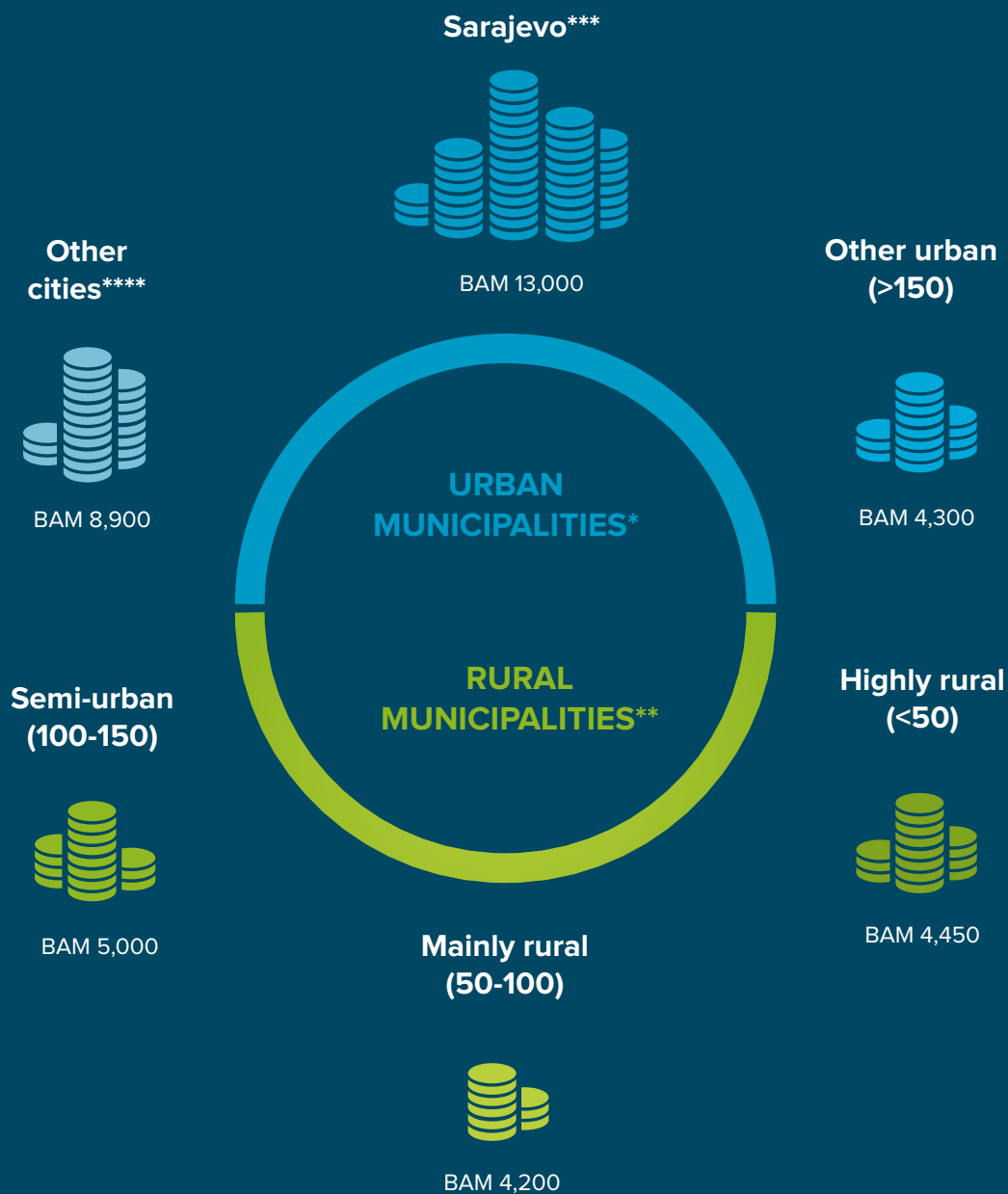
This indicates that there are fundamental differences in the nature of economic activity in the capital and other large cities, over and above the difference in the number of people employed.

Although the *per capita* GDP of rural areas is about 43% lower than urban *per capita* GDP, since 55% of the total population reside in rural areas, they still contribute 41% of national GDP. If Mostar and Bijeljina are put back with the other rural municipalities (returning to the often quoted 60:40 rural-urban population balance), then the share of total GDP generated in rural areas rises to 49%. (The sum of total wages also shows that 41–49% of all wage income is generated in rural areas, according to the definition used; this correspondence reflects the way in which municipal GDP estimates are based on wage rates and the number of people in employment.)

As with all statistics, these figures should be treated with some caution, particularly as they do not capture the contribution of the informal sector. One effect of this is that unrecorded agricultural activity will generate further GDP in rural areas, additional to the figures given here.

FIGURE 3.10

GDP *per capita*³³



* *Urban municipalities* include Local Government Units
 ** *Rural municipalities* have less than 150 people/km²
 *** *Sarajevo* includes the four City Municipalities and three adjoining urban municipalities
 **** *Other cities* all have more than 100,000 people, and include Mostar and Bijeljina with population densities of 95 and 148 people/km² respectively

Source: Official statistics collated on the "MyPlace" website, <http://www.mojemjesto.ba/en/>³⁴

USD/BAM 1.475
 (UN Official Exchange rate August 2013)

³³ Excludes one municipality with a population of 28 people which claimed a GDP of more than BAM115,000 *per capita*

³⁴ 2010 Data; municipalities with missing or impossible values for certain variables (e.g. percentages greater than 100) are excluded; some other outlying values are also excluded.

3.3.6 Cities, other urban, and rural

Population density is a very poor predictor of most demographic and economic variables in BiH, so if the country is divided into urban-rural on this basis alone, rural areas do not appear very different from urban municipalities. Some commonly-held views, such as that rural areas suffer from outmigration, high unemployment and low wages, do not present a very accurate picture of BiH reality when divided according to conventional definitions of rurality.

A better way of understanding BiH is to use a three-way split, into “cities”, “other urban” and “rural”.

Cities

Sarajevo and the other large cities behave very differently from the rest of the country. Combining the urban municipalities of Sarajevo and the other five municipalities with estimated populations of more than 100,000 – Banja Luka, Tuzla, Zenica, Mostar and Bijeljina – shows that these biggest six cities account for:

- 29% of the total population
- 35% of the economically-active population
- 43% of the employed workforce
- 48% of total GDP.

Comparing these cities with the rest of BiH gives the following contrasts:

Indicator	Cities	Rest
Net migration per 10,000 people	+36	-14
Economically-active share of population	35%	29%
Unemployment rate	31%	50%
Average net wage	BAM895 (USD607)	BAM715 (USD485)
<i>Per capita</i> GDP	BAM10,460 (USD7,091)	BAM4,730 (USD3,207)

Other urban

The 17 urban municipalities that do not contain or form part of cities house almost 1 in 6 of the total population (16%). Usually they consist of a medium-sized town (some tens of thousands of inhabitants), plus a number of smaller towns and villages.

These municipalities perform worst on almost every indicator, showing out-migration, the highest unemployment, the lowest wages and the lowest *per capita* GDP. They are arguably the sector of BiH society in greatest need of economic development.

Rural

The three groups of rural municipalities comprise a mix of smaller towns (of several thousand people) and villages (typically a few hundred to a few thousand people), with towns becoming increasingly small and scarce in the most rural municipalities. Overall this group shows a similar level of outmigration to the “other urban” areas (most pronounced in the highly rural municipalities), and levels of unemployment, wages and GDP that are midway between the cities and the “other urban”.

However, one key difference in these rural villages stems directly from their inhabitants’ age and family structure: a lower share of their population is economically active than in either of the urban groupings, reducing *per capita* GDP and the overall level of economic activity.

Development implications

An improvement in the economic situation of medium-sized towns would benefit not only their own residents, but also the whole surrounding rural areas for which the towns serve as economic and service hubs. A widening of the geographic focus of rural development to include these towns (often located in urban municipalities) would also imply a widening of the thematic focus, making more funds available for urban activities that have nothing to do with agriculture, forestry or the food industry.



**THE MULTI-INDICATOR
CLUSTER SURVEY**

4 THE MULTI-INDICATOR CLUSTER SURVEY

The latest Multiple Indicator Cluster Survey (MICS) published by UNICEF, carried out in BiH during the winter of 2011-12,³⁵ presents statistical data on 44 key indicators from both urban and rural settlements, and provides the opportunity to identify those aspects of human development where rural areas really are different (see Annex 3 for detailed analysis).

The large majority of these indicators show either no statistically significant differences between urban and rural households, or inconsistent patterns of urban-rural difference across related indicators. However, the following differences do appear to be sufficiently important to merit further investigation and possibly a policy response:

- 1 The number of **rural households that are still without adequate sanitation** is a clear rural issue;
- 2 The overall **low level of kindergarten attendance**, particularly in rural areas, should be investigated to see to what extent it is a weakness that needs to be addressed, and to what extent it reflects families' ability or preference to look after their children at home. The 2007 National Human Development Report on Social Inclusion³⁶ recommended that BiH should "Provide preventive early education and thus offer an escape from generational deprivation" as one of its seven priorities for action;
- 3 There is some indication that **birth by caesarean section** is more common in rural areas; the possible causes and implications of this should be investigated;
- 4 The problem of **early marriage** is more prevalent in rural than urban areas, but may well be linked to particular ethnic groups (see for example the MICS Roma report).

35 http://www.unicef.org/bih/media_21363.html

36 http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/nhdr/nhdr-2007/



**WHAT ARE
THE TRENDS
AFFECTING BIH
AND ITS RURAL
AREAS?**

5 WHAT ARE THE TRENDS AFFECTING BIH AND ITS RURAL AREAS?

Rural areas are changing throughout Europe and the world. The two main trends are a movement out of agriculture into industry and services, and a migration of the population from rural to urban areas. How are these global and European trends affecting BiH, and which factors have the most influence on the pace of change?

5.1 Movement out of agriculture

The Agricultural Revolution that swept across Europe in the 17th-19th centuries released labour from the land and paved the way for the Industrial Revolution. The widespread adoption of tractors and milking machines after the Second World War permitted another exodus for agriculture, and a whole series of successive innovations – artificial fertilisers and pesticides, electric fences and quad bikes, plastic mulches and peat pots – have further increased labour productivity and led to a continuing decline in the agricultural workforce.

As well as reducing agricultural employment, this ongoing development has also had a major impact on farm structures, and the long-term trend across Europe is that roughly every generation (20-25 years) the number of farms and farmers halves, and the average farm size doubles. This rule of thumb has proved remarkably consistent from countries with the largest farms, such as the UK, to those with the smallest, such as Portugal. In Yugoslavia and other socialist countries this process was somewhat distorted by deliberate controls on farm size, but the long-term trend has once again become evident.

The agricultural population of the current EU has exactly halved over the 21 years from 1989 to 2010 (Figure 5.1) and this trend has applied very consistently across Member States, from the most agricultural to the least (Figure 5.2).

“

The agricultural population of the current EU has exactly halved over the 21 years from 1989 to 2010 and this trend has applied very consistently across all Member States, from the most agricultural to the least.

”

The results of this trend are that the labour input to EU agriculture is 2.4% of the total population working full-time, and ranges from 10.2% in Romania to as little as 0.6% in the UK.³⁷ If farm structures and investments allowed the full use of modern technology, it is probable that most countries in Europe could produce their food and manage their countryside by employing just 1% of their total population in agriculture. Thus it appears that the popular fear “if people continue leaving the countryside at this rate, there will be no one left to look after the land” is largely groundless, except in the most sparsely populated and agriculturally uneconomic parts of Europe.

Whilst there is some slowing down in the rate of crop yields increases over time, there is no indication that the movement of people out of agriculture is even beginning to slow down. Many modern innovations, such as robot-milkers and GPS-controlled tractors, directly pursue the goal of increasing labour productivity, as labour becomes more expensive and technology cheaper.

5.2 Movement from rural to urban areas

So technological change has allowed people to move out of agriculture, but where have they moved to: to other jobs in rural areas, or to the towns and cities? In fact, it is not so common for someone to actually leave agriculture; once they start in farming they will often continue as a farmer for the rest of their working life. It is their children who will have to decide whether to take over the family farm, to adopt a different occupation in the local area, or to move to the town. Thus the structure of rural areas is to a large extent determined by the decisions of the young. Throughout Europe people have been moving from rural areas to towns (Figure 5.3), though not as fast as they have been leaving agriculture. In the Western Balkans, where some 54% of the population lived in rural areas in 1989, the rural population now makes up just over 45% of the total. The twelve New Member States saw

³⁷ Source: Eurostat data for 2007 – total population, and farm labour force in full-time equivalents from the Farm Structures Survey.

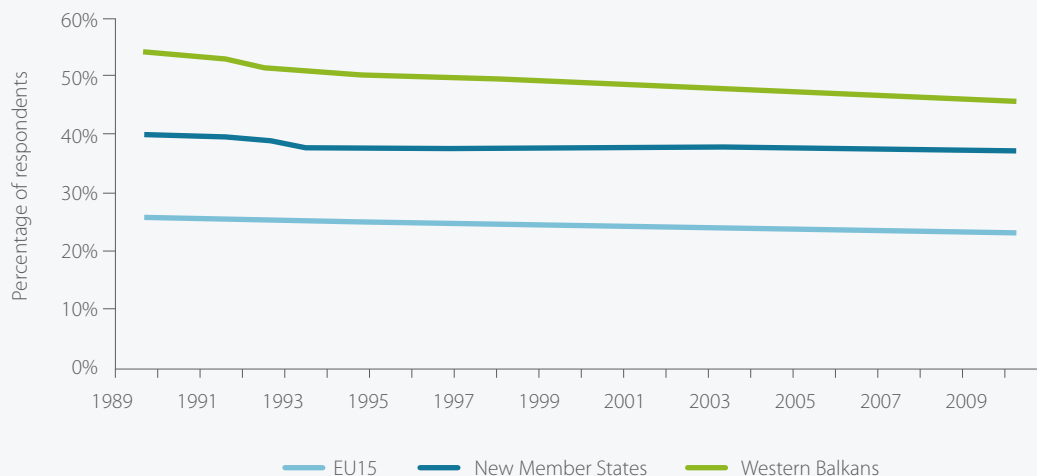


FIGURE 5.3

Share of total population living in rural areas

Source: FAOSTAT data for “rural” and “urban” population

“

Data shows a pronounced shift in the rural population, declining from 60% in 1989 to 51% in 2010.

”

a pronounced movement to towns in the tumultuous period of 1989-1993, but the urban drift then slowed considerably and by 2010 the rural population made up 37% of the total.

From 1989 to 2010 the rural population of the EU-15 declined by 3%, or 3 million people, whilst the urban population grew by nearly 35 million. This was despite tens of billions of Euros being spent on policies, such as “Less-Favoured Area” (LFA) payments and rural development measures, which specifically aimed to keep people in rural areas.

The FAOSTAT³⁸ data for Bosnia and Herzegovina shows a pronounced shift in the rural population, declining from 60% in 1989 to 51% in 2010.³⁹ Whilst this movement from country to town is relatively slow, it is both consistent and continuous; in every single country covered by FAOSTAT, the urban population has either outgrown or shrunk by less than the rural population, and thus the rural population share has declined. Across the whole area studied (i.e. EU-27 plus the Western Balkans), the share of the total population living in rural areas dropped by 10-11% in the course of 21 years.

Many of the countries most directly affected by the collapse of the soviet economic system at the end of the 1980s experienced a sudden halt to urbanisation, which entry to the EU has not reversed, but almost all of the former Yugoslav republics show continuing urbanisation. Annex 7 presents a more detailed analysis of rural-urban migration patterns in Europe from 1960 to 2011, looking at the different dynamics in the original EU-15, the new Member States and the prospective Member States, including BiH.

5.3 Agricultural employment

The share of the population engaged in agriculture appears to decrease by around 50% every generation, whilst the share of population living in rural areas declines by around 10% over the same period. Thus agriculture not only becomes less important as an employer overall, it also becomes steadily less significant even in the rural areas, and agriculture’s share of rural employment typically falls by around 45% with each new generation.

There is little reason to think that any of these trends will change or cease to apply to BiH, so planning for rural and human development should be based on the assumptions that the agricultural population will decline relatively rapidly, the rural population will decline more slowly, and the relative importance of agriculture in rural areas will continue to decrease. If long-term European trends continue to apply to BiH, by 2020 around 55% of its total population will live in rural areas (by both the OECD and the settlements definitions),⁴⁰ and the share of the rural workforce employed in agriculture will be little over half what is now.

³⁸ <http://faostat3.fao.org>

³⁹ The figure of 51% is intermediate between the values of 42% and 60%, and reflects yet another approach to defining and measuring the “rural” population

⁴⁰ FAO predicts the rural share of population to fall from 51% in 2010 to 45% in 2020. Their data originate from the “UN Demographic Yearbook”, which applies one particular “settlement approach” to define urban areas and consistently returns a lower share of rural population than the OECD “area approach”. See http://faostat3.fao.org/home/index.html#METADATA_GLOSSARY.

5.4 Factors affecting the pace of rural-urban migration

With agriculture shedding labour at a relatively rapid pace, why are people not moving to the towns even faster? For some it is undoubtedly a matter of choice: they simply prefer the quality of rural life to the opportunities and pressures of city life (see Section 6.7). But for most it is probably the fact that rural areas are where they happen to be – with their friends, family, homes and jobs – and the default option is to remain there. One important factor may be property values: in all but the most remote and depressed rural areas, a house is too valuable an asset to simply abandon, and most people would be unable to buy a house or flat in town until they had sold their current rural home. Thus as one household moves away to the town, another will take its place in the village, and so the overall shift may be closely tied up with new household formation and declining household size. If a young couple decide to set up on their own rather than share the house of one of their parents, and are able to afford the rent or mortgage to do so, then they are not tied to their village in the same way and may be more likely to look towards the greater economic opportunities and social choices of urban life. Thus, factors such as increased availability of credit, and programmes to assist young couples to buy their first home, could have an impact on the rural-urban balance.

5.5 The consequences of climate change

Although sometimes disputed and yet not widely accepted, the fact is that the impact of climate change can be observed in Bosnia and Herzegovina. Based on the comparative analysis for the periods of 1981-2010 and 1961-1990 (Figure 5.4), increases in annual air temperature in the range of 0.4 to 0.8°C were identified, whereas temperature increases during vegetation periods were up to 1.0°C.

Although significant variability in precipitation was not noted during the same period (Figure 5.5), the number of days with rainfall exceeding 1.0 mm decreased and an increase in the number of days with intensive rainfall caused disruptions in the pluviometric⁴¹ regime. Pronounced changes in annual rainfall patterns, coupled with temperature increases, are one of the key factors causing more frequent and intensive occurrences of drought and flooding in BiH.

The Initial National Communication to the UNFCCC concludes that Bosnia and Herzegovina is very vulnerable to climate change. This has been proven by the fact that the past four years (2009-2012) have all been characterised by extreme events: flooding in 2009 and 2010, drought and high heat in 2011 and 2012, cold in early 2012, and strong winds in mid-2012.

In order to anticipate further trends in temperature and precipitation changes two global climate models - SINTEX-G and ECHAM5 have been developed (Figure 5.6). They indicate a mean seasonal temperature increase of average +1°C until 2030, comparing to the base period 1961–1990 over all BiH territory. The largest increase of +1.4°C is expected during the summer (June–August). Models indicate uneven precipitation changes: a slight increase in precipitation in mountain and central areas is expected, while negative precipitation anomalies are projected for the other areas.

41 of, relating to, or used in the measurement of rainfall

FIGURE 5.4

Changes in annual air temperature in Bosnia and Herzegovina (during 1981-2010 compared with 1961-1990)

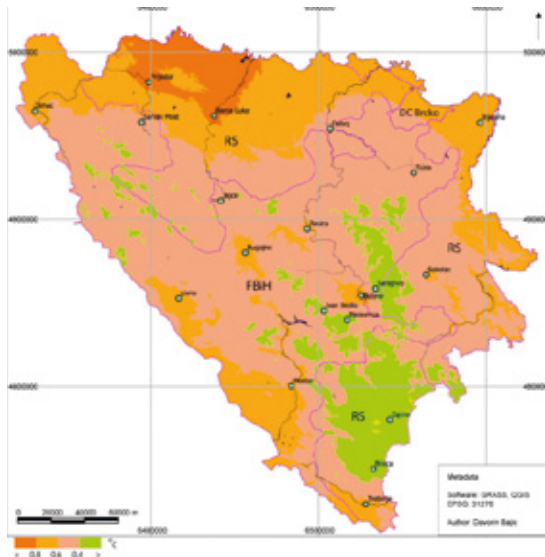


FIGURE 5.5

Changes in annual precipitation in Bosnia and Herzegovina (1981-2010 compared with 1961-1990)

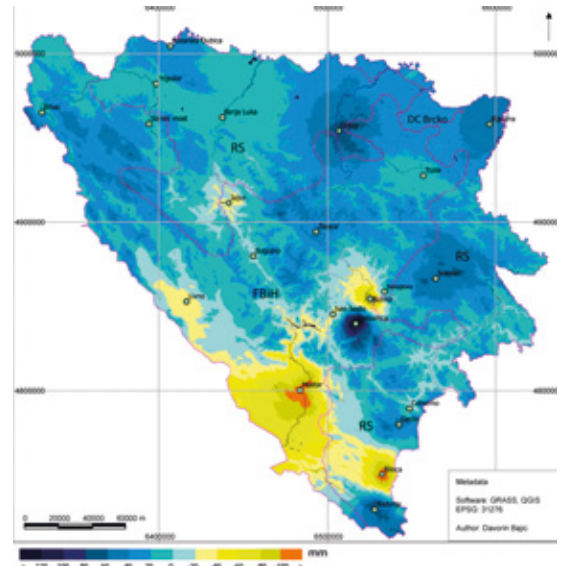
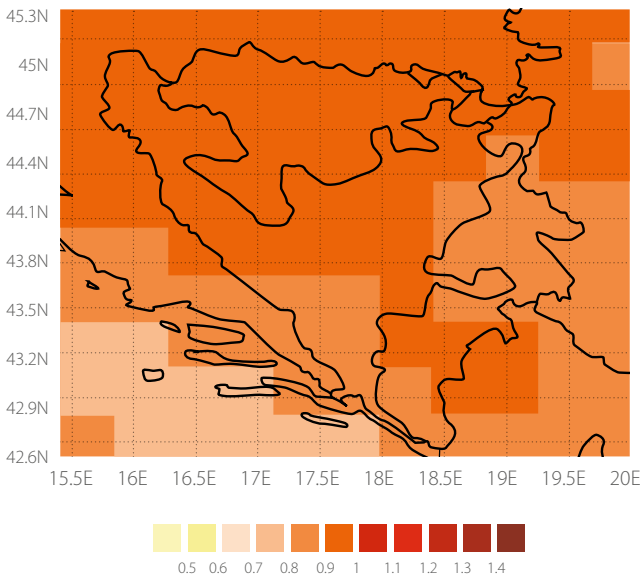


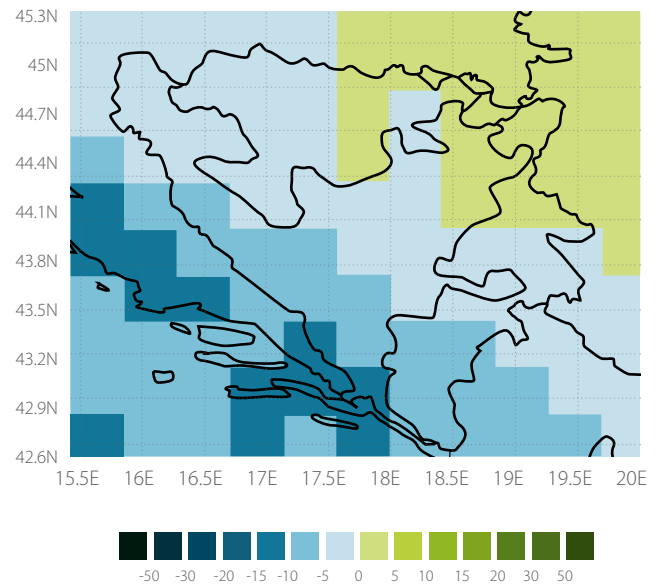
FIGURE 5.6

Average annual temperature change in °C and precipitation change in %

temperature change (°C), ann season (2001-2030) - (1961-1990) :: a1b



precipitation change (%), ann season (2001-2030) - (1961-1990) :: a1b



Rural areas are in the front line of climate change. Around 50% of BiH's land area is used for agriculture, a significant producer of the greenhouse gases methane and nitrous oxide; around 40% is under forest, an important sink for carbon dioxide; whilst up to 10% is bare rock, playing little role in the carbon economy.

Bosnia and Herzegovina became a member of the United Nations' Framework Convention on Climate Change at the end of 2000 and submitted its "Initial Communication" under the Convention in October 2009.⁴² The document includes an inventory of greenhouse gas emissions for 1990 and uses the "EH50M" model for South-East Europe to predict likely climate change. The inventory attributes almost 14% of carbon-equivalent emissions to agriculture, including 7% as nitrous oxide emissions from soil, mainly stemming from applied manure and fertiliser, and 4.5% as methane, mainly produced by cattle.

It is currently predicted that between 2031-60 average temperatures will rise by about 2°C, resulting in milder winters and hotter summers (with the maximum summer temperature rising by up to 5°C) and with the number of warm days increasing by about a month. Summer rainfall (June to August) will almost halve, and the overall weather pattern will become more variable, with an increase in the frequency of extreme events such as droughts, flooding, hail and strong winds.

As well as being a producer of greenhouse gases, agriculture is the sector most vulnerable to climate change. The impact of future climate change on the agricultural sector is forecast to be largely – but not entirely – negative. Hotter, drier, longer summers mean that crops will require more water whilst receiving less rainfall, thus increasing the need for irrigation. Despite the abundance of water resources in the country, irrigation infrastructure is very limited, for example, only 0.65% of arable land is currently irrigated.⁴³ The combination of rainfall spread, soil type, cropping patterns and irrigation infrastructure mean that the problem is concentrated in certain areas, with Mostar, Bijeljina, Brod and Tuzla being most affected by soil-water deficiency. Additional threats include an increased fire risk for cereal crops due to reduced moisture content; a greater risk of hail damage as hail storms become more common and more intense; and greater crop damage from strong winds and storms.⁴⁴ Livestock are also affected by higher peak and average temperatures, potentially leading to overheating and the spread of disease.

2012 represented the fourth consecutive year when agriculture suffered significant losses due to bad weather. The summer drought and high temperatures severely affected agricultural production and a high percentage of vegetables and corn in inland areas of the country were destroyed.⁴⁵ This has serious implications for rural areas in BiH, as it negatively impacts on rural households and household budgets.

The effects of climate change do provide some new opportunities, as an increase in minimum temperature, for example, enables the cultivation of late crops such as winter wheat, thereby

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As well as being a producer of greenhouse gases, agriculture is the sector most vulnerable to climate change.

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⁴² Initial National Communication of Bosnia and Herzegovina under the United Nations Framework Convention on Climate Change, 2009.

⁴³ Before the war the total was 1.0%, but has decreased markedly due to war damage, landmines and lack of maintenance

⁴⁴ *Hail prevention in the Republic of Srpska, Documentation and materials, 2012*. For example in Northern and Eastern Bosnia and Herzegovina the average number of days with hail is 26.3 over the last five years, with a minimum number of 21 hail days (2008 and 2011). This compares with an average of less than 10 hail days a year during 1961-1990.

⁴⁵ Association of Agriculture Producers.

providing greater yields. Nonetheless, the predicted rises in temperature, coupled with changes in rainfall and evaporation, are likely to significantly negatively impact rural areas and farming systems in Bosnia and Herzegovina, particularly in Mediterranean areas and in the North.

5.5.1 Options to reduce greenhouse gas emissions from agriculture

The most common weaknesses in BiH cattle production are poor forage production and conservation; poor feeding practices which fail to match the diet to the animals' changing requirements; poor storage and handling of manure; and poor milk hygiene.⁴⁶ The first three are directly linked to greenhouse gas emissions and several recommended actions could be taken that would both increase profits and reduce greenhouse gas emissions:

- Harvest forage crops, particularly grass, when they are younger and more digestible and protect the stored crop from weather damage; achieving this will often require a switch from hay to silage. Higher forage digestibility will reduce methane production as well as increasing the energy and protein supply to the animal and thereby reducing the need for expensive concentrates;
- Adjust the energy and protein content of the feed to the stage of lactation or growth, so as to take maximum advantage of the animals' genetic potential in early lactation and avoid wasting money in later lactation. As well as increasing yields and cutting costs, this will reduce the nitrogen content of manure and so decrease nitrous oxide production;
- Store manure properly, where it does not drain into watercourses, and incorporate it into the soil immediately after spreading. This will reduce water pollution, increase the nitrate supply to the crop, and reduce the emission of nitrous oxide.

Crop producers will also need to implement changes, such as adjusting fertiliser quantities and timing more closely to the needs of the crop, and taking better account of the nutrient supply from the soil.

These recommendations are nothing new, and are a standard part of any Code of Good Agricultural Practice. However, they are commonly ignored in BiH (and throughout the Western Balkans) for two main reasons:

- The very small-scale structure of farming, for example, two-thirds of cattle producers in BiH have just one cow, and over 99% have less than 20 head (see Section 7.1). Most farmers have no formal agricultural education, limited financial means, and raise their crops and livestock as a secondary activity whilst getting most of their income from a job or pension – meaning they have little incentive and limited ability to make the changes required;
- Major weaknesses in agricultural advisory services, which have only a fraction of the resources needed to work effectively with some 160,000 cattle producers and an even larger number of crop producers.

⁴⁶ IPARD sector study "The Meat and Dairy Sector in Bosnia and Herzegovina", FAO, 2012.

Looking at rural areas more widely, increasing the use of renewable energy sources will reduce carbon dioxide emissions, and here the current widespread use of wood as a fuel in rural homes should be examined as a possible base on which to build.

5.5.2 Options to respond to climate change

If the BiH climate does change as predicted then a whole range of different steps may be required to respond to the new conditions. .

- Changing farming systems and the crops and varieties grown, including the development and adoption of new varieties;
- Adopting new cultivation techniques, such as minimal tillage, to conserve soil moisture;
- Extending and improving irrigation infrastructure, and making increased use of drip irrigation and more sophisticated control of the duration and timing of water applications;
- Increased use of physical protection against hail and wind, particularly in orchards and vegetable production;
- Breeding livestock for increased heat tolerance;
- Redesign of livestock buildings for better temperature control, together with water sprays and active ventilation systems for certain kinds of livestock.


Making this happen in BiH will require a very proactive programme of adaptive research, well linked in to regional and global developments, as well as the mechanisms to transfer these new technologies to the farmers. Major improvements in agricultural training and advice will be needed if agriculture is to fulfil its potential, reduce its output of greenhouse gases, and respond to the threats and opportunities of climate change (see Section 6.4).

While the man on the street firmly believes that the climate is changing, and presents a risk to his or her wellbeing, there is little understanding among the population of what the detailed impacts are and how to adapt to them. Policymakers on the other hand all recognise that climate change is a threat but largely pay it “lip-service” as serious adaptation and mitigation measures are not being planned into policy responses.

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**WHAT ARE
THE SPECIAL
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LIFE IN RURAL
AREAS?**

6 WHAT ARE THE SPECIAL FEATURES OF LIFE IN RURAL AREAS?

Recognising the difficulties in obtaining reliable data, UNDP commissioned an extensive survey of rural households in Bosnia and Herzegovina to underpin this NHDR. Known as the “Rural Household Survey” (RHS) and conducted in 2012, it covered 3,055 village-based households, all situated outside designated “urban settlements”. It contained some 180 questions which were designed, wherever possible, to be compatible with existing Household Budget Survey and Labour Force Survey data. The RHS used the “settlement approach” to defining rurality, which is most likely to highlight urban-rural differences in respect of factors like access to services, infrastructure and involvement with agriculture. Section 6 summarises the findings of the RHS, supplemented and cross-checked against data from a variety of other sources (See online Annexes 4 and 5 for full details of RHS at http://www.ba.undp.org/content/bosnia_and_herzegovina/bs/home/library/razvoj/rural-development-in-bosnia-and-herzegovina--myth-and-reality/)

6.1 Demographics

The total population of a country is arguably its most important single statistic, but remains a matter of considerable discussion in BiH. The last population census was conducted in 1991, shortly before the war and the massive population movements that it caused. All subsequent figures are therefore estimates, with the latest value published by the BiH Statistical Agency being 3,840,000⁴⁷ as the mid-year estimate for 2011.⁴⁸ This represents a 12.3% drop from the 1991 census of 4,377,000. UN estimates put the BiH population at between 3.2-3.4 million inhabitants; the actual figure will be confirmed by the 2013 census.

⁴⁷ Extrapolated estimates from different surveys suggest 3.5 million as more realistic population size of BiH but this is yet to be verified by the forthcoming national census

⁴⁸ <http://www.bhas.ba/tematskibilteni/demografija%20konacna%20bh.pdf> Table 9.

Several factors underlie this change, in addition to the urban/rural population balance, the age distribution and household size:

6.1.1 Migration

Migration has long been a feature of life in Bosnia and Herzegovina, and the trends since the Second World War fall into several phases:

- **Immediate post-WWII** Rapid emigration, mainly for political and ethnic reasons.
- **1950s:** Internal migration from rural to urban areas, driven by the rapid programme of industrialisation in the new state of Yugoslavia and strongly encouraged by the authorities. This trend has continued since, but the most startling change from an agrarian to an industrial society took place in little more than a decade.
- **1960s and '70s:** Considerable emigration of relatively low-skilled workers to seek employment abroad as “gastarbeiter” (guest worker), allowing them to send regular remittances to their relatives back home. Typically these workers would maintain their property and social ties in BiH, to where they would eventually return and retire.
- **1990s:** Massive internal and external migration to flee the fighting, with an estimated 1.2 million people leaving the country and a further 1.0 million being internally displaced. Since the end of the war, UNHCR has attempted to monitor the process of population return. By September 2011 it estimated that around 450,000 people had returned from abroad (slightly under 40% of the number estimated to have left the country), and that some 580,000 Internally Displaced Persons (just under 60% of the total) had returned to their homes; almost half of these are classified as “minority returns”, in that people returned to areas where they were no longer in the majority ethnic group.⁴⁹

This means that around 750,000 former BiH residents have now largely settled in other countries (forming one of the world’s largest diaspora) or died abroad. Around 420,000 internally displaced did not return to their original homes; just over 110,000 are still officially registered as Internally Displaced Persons (IDPs), whilst the remainder have presumably passed away over the last twenty years.

- **2000 onwards:** Renewed economic migration in search of better opportunities, aided by increasing access to EU countries (now visa-free), with remittances once again becoming an important income source for many families.

The combination of emigration and partial return, together with internal natality and mortality, led to the estimated 12% drop in total population⁵⁰ over the 20 years from 1991 to 2011.

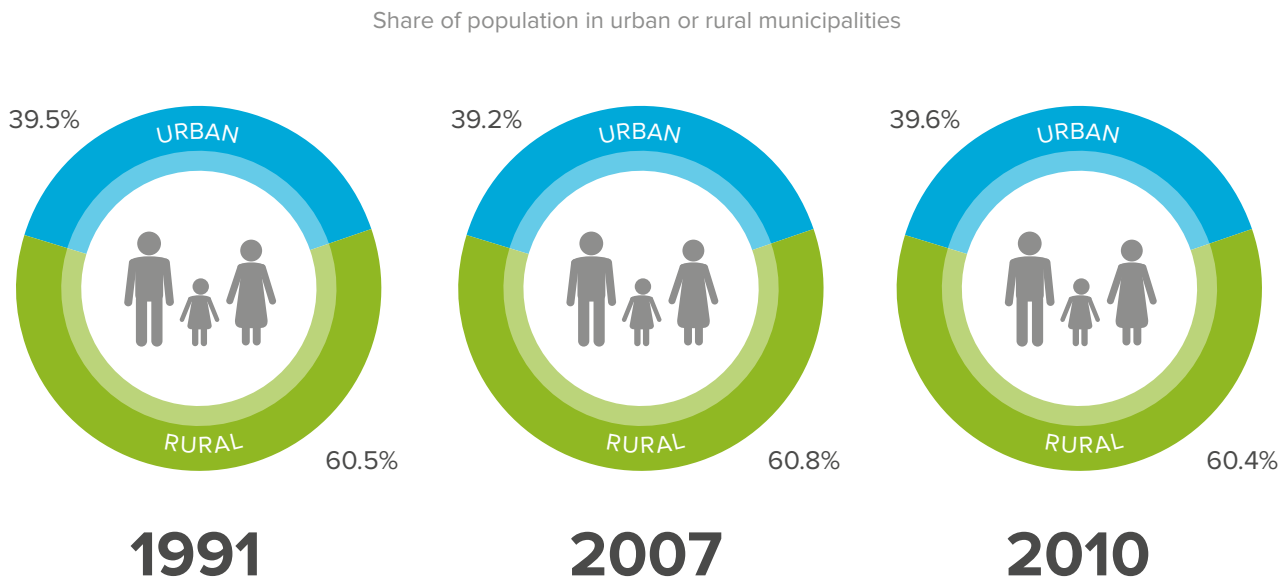
49 <http://unhcr.ba/wp-content/uploads/2011/10/September-Stat-Package1.pdf>

50 Up to 30% by some estimates! Again, the national census should verify it.

6.1.2 Rural population

The same factors that cloud estimates of total population also make it hard to measure the rural population, but the available data (see Figure 6.1) suggests that the proportion of the population living in rural areas (i.e. sparsely populated municipalities, applying the “area approach” of rurality) has remained almost constant in recent decades, showing a very slight rise from 60.5% to 60.8% from 1991 to 2007, and then falling back to 60.4% by 2010.

FIGURE 6.1 BIH RURAL-URBAN POPULATION SPLIT 1991 TO 2010

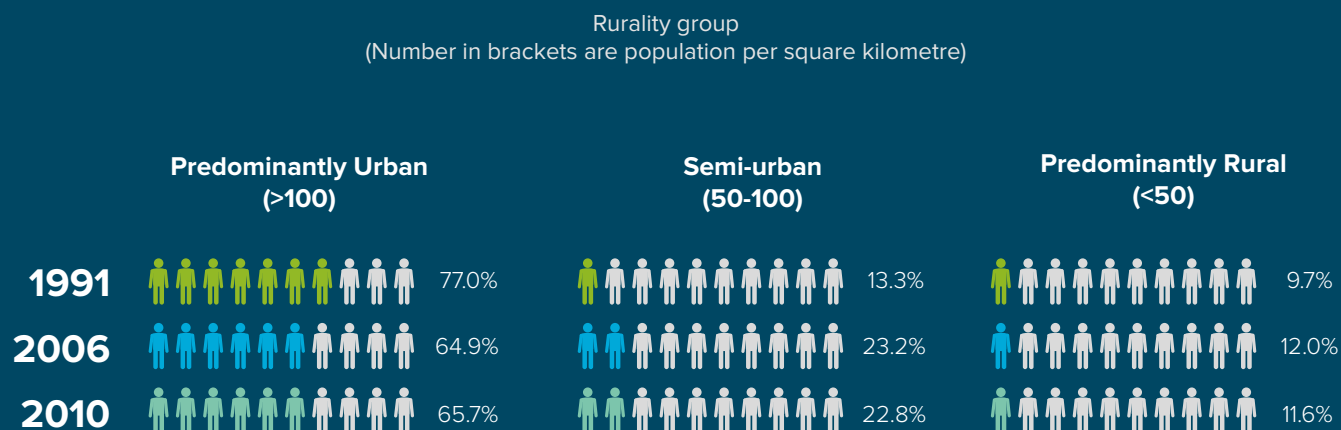


Source: Census 1991; Household Budget Survey 2007; Municipality data 2010

This static share of rural population goes against the long-term trends found throughout Europe (see Section 5.2), and may in part be an artefact from comparing different surveys using different methodologies.

To get a more detailed understanding of rural-urban population shifts, an analysis of the proportion of total population living in “Predominantly urban”, “Semi-urban” and “Predominantly rural” municipalities provides a clearer understanding of the population shift, however it still reveals that the share of population living in rural and semi-urban areas has remained almost unchanged.

**FIGURE 6.2 RURAL-URBAN POPULATION SHIFT IN FBIH
1991-2010**



Source: BiH Statistical Agency

Several important differences can be seen between the two entities: the Federation of Bosnia and Herzegovina (FBiH) (Figure 6.2) experienced a pronounced shift from urban to semi-urban over the period, together with a slight growth in the rural population share. Most of the change occurred between 1991 and 2006, with a small (and probably not significant) swing back from 2006 to 2010.

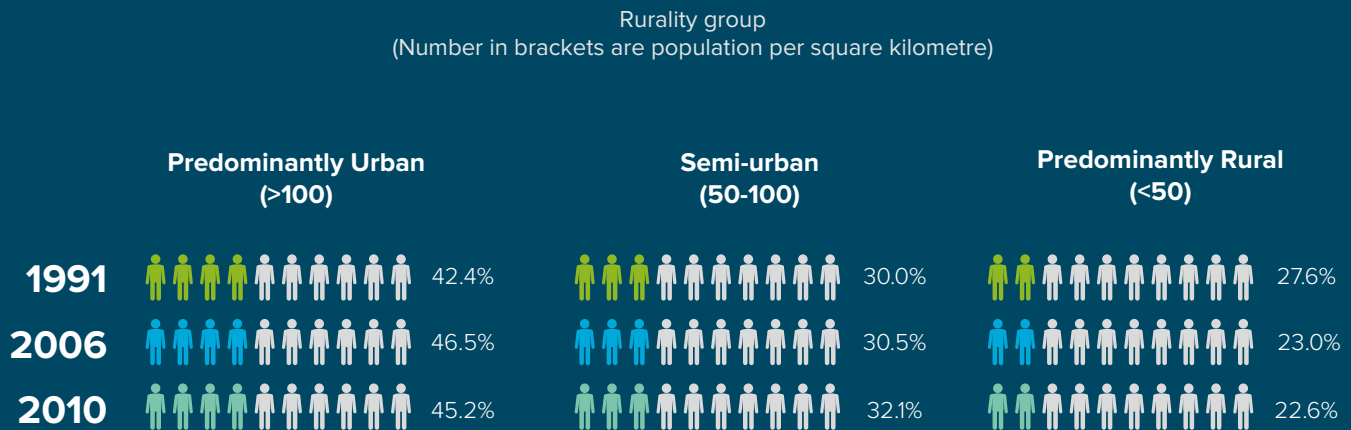
For the first 15 years, Republika Srpska (RS) (Figure 6.3) saw a movement from rural to urban, with very little change in the intermediate semi-urban population; the last four years saw some shift from urban to semi-urban.

The overall conclusion for BiH, that the share of population living in rural and semi-urban areas has remained almost unchanged, results from the combination of urban growth in what is now RS and urban shrinkage in the areas that have become FBiH.

It has been suggested that many people responded to the economic and other hardships of this period by moving back from the towns to the villages, where they could at least produce much of their own food and fuel, and generate some income from the sale of agricultural products. Whilst this may have happened during the 1990s, the data do not show any enduring effect, and suggest that in RS people were probably leaving the villages during the crisis years. However, it should be remembered that most countries of Europe saw a decline in the share of rural population over this period (see Section 5.2), so it is reasonable to assume that if BiH had not suffered the war and associated economic difficulties, there would have been a more pronounced movement towards the towns.

Whilst Bosnia and Herzegovina has experienced probably the greatest movement of population of any European country since the Second World War, the net result has been that the share of population living in rural areas has remained relatively constant. The data and the municipality-level analysis of Section 3.3 do not indicate a rapid depopulation of rural areas as people move to the towns, nor that the Bosnian war created any lasting reverse migration from

FIGURE 6.3 RURAL-URBAN POPULATION SHIFT IN RS 1991-2010



Source: BiH Statistical Agency

towns back to the countryside. However, there are significant differences from place to place, and some rural areas are indeed experiencing depopulation, whilst others see their population grow.

Data is not yet available for BiH on rural areas divided into “Predominantly Rural Close to a City” (PRC) and “Predominantly Rural Remote” (PRR). As an example of the potential importance of this division, Figure 6.4 shows the population change between 1995 and 2009 for these two kinds of regions in OECD countries:

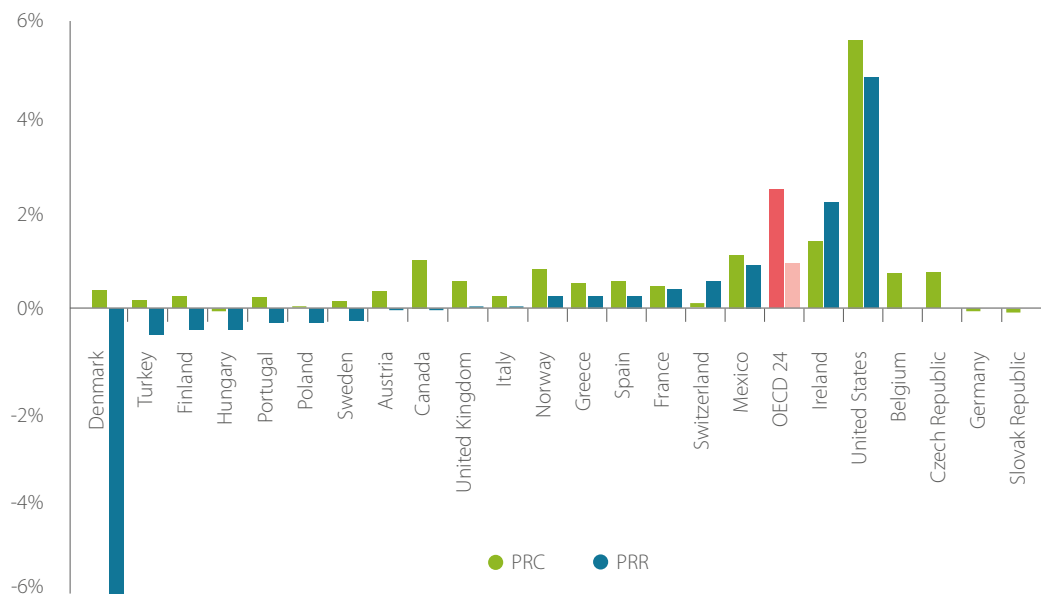


FIGURE 6.4

PRC and PRR population changes
– 1995-2009

Source: OECD Regions at a Glance, 2011.

With just the single exception of Ireland, every country experienced faster growth in rural regions close to a city than in remote rural regions, and in many cases the remote regions lost population whilst the rural regions close to a city grew.⁵¹ It is quite possible that the overall picture of relatively slow rural depopulation in BiH may hide some significant population movements between different rural areas.

6.1.3 Age structure

The overall population of Bosnia and Herzegovina is relatively young, with a mean age of 38.⁵² The female population is on average two years older than the male, with most of this difference occurring in the higher age brackets due to higher female life expectancy. Just over two-thirds of the population is of working age; this provides a strong demographic base to fund the major public expenditures of education, pensions and health care, though the ability of the state to meet these obligations will depend on its economy as well as demography.

However, a combination of falling birth rates and selective outmigration mean that the population is ageing. This is particularly so in rural areas where, over the 21-year period from the 1991 Population Census to the 2012 Rural Household Survey, the average age of the rural population increased from 33 to 40. Nationally, the most serious implication of this ageing trend is that a diminishing working population will have to support the pension and health-care costs of an expanding group of retired people. Within the rural areas, it means that there will be fewer people around to provide services to the ageing population, and once village shops, cafes and health facilities close, the less mobile elderly population can become very isolated.

6.1.4 Household structure

The average size of BiH households, as measured by the population census and subsequent surveys, has shown a steady decline from 3.6 people in 1991, to 3.4 in 2004 and 3.3 by 2007.⁵³ This indicates that households in BiH are somewhat smaller than the average for the New Member States (3.6) but still larger than those in the EU-15 (3.0).

The 2004 Household Budget Survey found that rural households were roughly 20% larger than those in urban settlements, with 3.63 as compared to 3.06 members.⁵⁴ The Rural Household Survey also revealed that about 81% of rural households were headed by men, with 85% of the female household heads being widows.

⁵¹ The four countries at the right of the graph – Belgium, the Czech Republic, Germany and the Slovak Republic – do not have remote rural regions according to this definition, whilst the Netherlands has no “Predominantly Rural” regions.

⁵² Household Budget Survey, 2007

⁵³ Source: 1991 Census; 2004 & 2007 Household Budget Surveys

⁵⁴ The 2012 Rural Household Survey generated a lower estimate for rural household size, at 2.9 people. This probably reflects some methodological differences as well as a continued shrinkage of both rural and urban households.

6.2 Income and employment

The Rural Household Survey allowed an independent estimate of the unemployment rate in rural areas. It focused on the different sources of household income such as regular employment, short-term and seasonal employment, pensions, etc.

6.2.1 Employment and unemployment

Unemployment nationally and in rural areas

The 2012 Labour Force Survey recorded a BiH unemployment rate of 28.0%, which was dramatically higher than the EU's 9.7% average. Since then the continuing impact of the Euro crisis has driven up unemployment throughout the EU, and very probably in BiH as well.

The BiH number, based on official statistics and the ILO definition, is almost certainly exaggerated by informal employment and self-employment (see Box 6.1), but even so it indicates that the employment situation in BiH is very serious.

The unemployment rate is measured as a share of the “economically-active population”, i.e. everyone who is either working (whether employed or self-employed) or willing to work, and therefore excludes people under 15, full-time students, housewives, pensioners, people on military service, and people unable to work.

The section of the Rural Household Survey dealing with employment included the option “*Unemployed (cannot get work, do not want to work)*”; some 38% of economically-active respondents chose this option.

However, the standard definition of an “unemployed” as used by the International Labour Organisation (ILO) also considers whether the person is currently without work, available for work, and actively seeking work. An approximation of this definition was applied to the Rural Household Survey data to select people who:

- a) Described themselves as unemployed;
- b) Were not currently working; and
- c) Were registered with the Employment Bureau.

This definition results in an unemployment rate of 19.0 for the rural areas of BiH.

Both the Labour Force Survey and the Rural Household Survey seek to measure actual employment irrespective of whether or not it has been formalised, but it is still probable that some respondents working informally for cash would omit to mention this to the interviewer. Thus the figures from both surveys are likely to over-estimate unemployment to some extent, just as the unemployment figures in other European countries may also be over-estimates.

Whilst the ILO definition is the one normally used for international comparisons, other definitions are also in use and so different (and often higher) figures for BiH may be encountered.

BOX 6.1

Measuring unemployment



Results from the Rural Household Survey (RHS) gave an estimate of 19.0% unemployment in rural areas – significantly lower than the national average – though there may be some methodological and sampling differences between this survey and the 2011 Labour Force Survey. However, both RHS and official statistics (Section 3.3.3) indicate that rural areas do not suffer from above-average unemployment.

Employment patterns nationally and in rural areas

The 2012 Labour Force Survey⁵⁵ gives a very general breakdown of employment (including self-employed and unpaid family workers) into agriculture (20.6%), industry (30.4%) and services (49.1%), with 167,000 being employed in agriculture. Unfortunately, the survey does not provide a further division for specific activities nor a classification between urban and rural.

Of the three broad categories, the only one that appears specifically rural is agriculture, which gives rise to the assumption that almost all agricultural work is carried out in rural areas. However, as the OECD approach classifies entire municipalities or other regions as either “urban” or “rural” on the basis of population density, a substantial amount of agricultural activity and employment may well be found in “urban” municipalities.

This section has examined overall rural employment and unemployment using currently available data, and Sections 6.3.2 and 7.3 use a number of other ways of looking at specifically agricultural employment. This area would benefit from further survey work to look in detail at what rural people do and where they work, so as to build up a more comprehensive picture of the rural economy and its linkages to urban areas.

6.2.2 Rural household income

It is always a challenge to obtain accurate income data through surveys, partly because of the respondents’ natural tendency to be cautious and under-report their income (Box 6.2), and partly because of the difficulty in placing a monetary value on products produced and consumed by the household or obtained by barter.

55 http://www.bhas.ba/tematskibilteni/lfs_bh.pdf

The Rural Household Survey questionnaire sought to collect income data in two progressive steps:

- Firstly, respondents were asked which sources of income they had, from a list of 30 possible options in six groups (income from employment; income from self-employment; income from property and other assets; receipts from abroad; receipts from family members in BiH; pensions and other social payments). Respondents could, and usually did, list more than one source of household income.
- The respondents were invited to state how much income they received from each of the sources they had just identified. Some provided this information, whilst some declined to give figures.

In analysing the data, respondents who declined to indicate their sources of income were simply excluded from the analysis, as if they had not even been interviewed.

In calculating the average income from each source, the average was based on just those who stated an amount of income, but applied to all those who said that they received some income from this source. In other words, somebody who admitted that they received income from a particular source but declined to state the amount, was assumed to receive the same level of income from this source as those who both listed this income source and stated the amount received.

Income data is notoriously difficult to collect, in particular because of many respondents' understandable suspicion that their responses might not be kept confidential and could find their way back to the tax department or other authorities. Three main sources of bias can be identified:

- 1 Respondents might inaccurately state their sources of income. In particular, somebody involved in the grey economy (e.g. employed but paid in cash and not declared to the authorities) might well choose to keep quiet about this source of income. There is no particular reason why somebody would do the opposite, i.e. list a source of income which they do not in fact have, so this bias will tend to under-estimate total household income.
- 2 Many respondents stated that they had a particular source of income but declined to disclose the amount. The share of people declining to disclose the amount ranged from 0% (for certain categories of rental income that applied to only a few people) up to 97% (for remuneration of board members). Averaged across all possible income sources, only one-third of respondents who stated that they had a particular income source were prepared to declare the amount. It is quite plausible that those with the higher incomes would be more reluctant to declare the amount, so this bias may also tend to under-estimate total household income.
- 3 Finally, respondents who did declare the amount of income they received from a particular source might give an inaccurate amount, either because of not knowing the precise amount (e.g. income from sale of own produce), or by deliberate under- or over-statement. Somebody wishing to impress the interviewer might deliberately over-state their income, whilst someone concerned about possible taxation might choose to under-state the amount. The latter seems more likely, and thus this bias would also tend to under-estimate total household income.

Overall, all three potential biases are likely to operate in the same direction, possibly leading to quite a significant under-estimate of total household income. The one mitigating factor here is that other regular surveys tend to apply the same methodology and suffer from the same biases and thus, whilst the estimated absolute value of income may not be very robust, the comparison with other surveys should be relatively reliable.

BOX 6.2

Measuring income



With this caveat, the results of the Rural Household Survey for overall monetary income were as follows:

TABLE 6.1

Monetary income

SOURCE OF INCOME	AVERAGE MONTHLY HOUSEHOLD INCOME		SHARE OF HOUSEHOLDS RECEIVING INCOME FROM THIS SOURCE %
	AMOUNT BAM	PROPORTION %	
Agriculture	50	6.5	9.4
Employment	517	67.4	53.4
Self-employment	13	1.7	1.8
Services & seasonal	12	1.5	4.8
Assets	9	1.1	2.5
Support:	167	21.7	51.2
Remittances	1	0.2	1.2
Family	3	0.3	1.7
Social payments	163	21.2	49.6
Total	767	100.0	-

NOTE: USD/BAM 1.475 (UN Official Exchange rate August 2013)

Source: 2012 Rural Household Survey

Information was collected for 30 categories of potential household income and combined into the income groups shown. By far the most common and important sources of income were from salaries/benefits earned through employment with a company or international organisation; and formal/informal support payments from social payments and remittances from abroad. Self-employment was relatively rare, as was income received from assets, while less than 10% of the households surveyed reported agriculture as a source of income.

Looking at the absolute level of income, the total household income of BAM767 (USD 520) per month may be compared with the following national averages:

- BAM416 (USD282) per month, the poverty line per adult equivalent set in 2011 (implying a monthly requirement of around BAM1,100–1,400 (USD746-949) for a typical rural household of 3.4 people, including adults and children).
- BAM545 (USD369), the average monthly household income recorded in the 2001-2004 “Household Survey Panel Series;
- BAM830 (USD566) the average monthly household income of returning diaspora families surveyed for an IOM study;⁵⁶
- BAM1,370 (USD929) per month, the average real household consumption calculated in 2012.⁵⁷

⁵⁶ “To BiH or not to BiH? A report on the return of young Diaspora to the BiH labour market”; UNDP Youth Employability and Retention Programme, 2011: <http://www.un.ba/novost/9885/to-bih-or-not-to-bih>.

⁵⁷ Preliminary data from the 2011 Household Budget Survey. The headline figure of BAM1,672 (USD1,133) includes an imputed value for the consumption of home-produced food and fuel, and imputed rent. Since neither of these imputed elements was included in the household income estimates of the RHS, the most relevant comparison is with the actual cash expenditure figure of BAM1,370 (USD929).

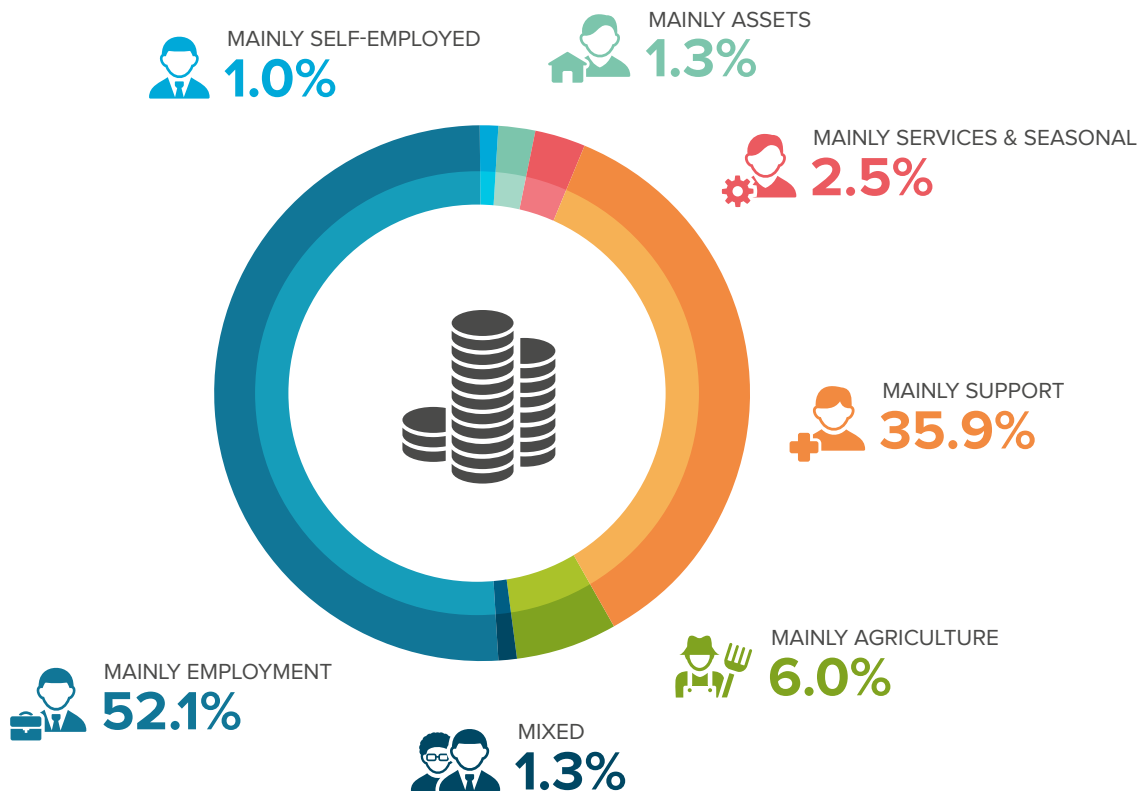
Whilst the data on rural and urban incomes are not directly comparable, it does appear that many rural households are living on the edge of poverty, or worse – which is consistent with the findings of the poverty analysis based on the 2007 Household Budget Survey (see Section 1.2.2). To understand this better, the following section divides the surveyed households into groups according to type and level of income.

6.2.3 Households divided by primary income source

The RHS analysis of the primary sources of income in rural households (see Figure 6.5) revealed that the majority (52%) of rural households surveyed generated half or more of their income from regular employment, whilst 36% received most of their income through various forms of support. Only 6% of households earned the majority of their income from agriculture, with even fewer depending on services and seasonal work, income from assets, or self-employment.

Each of the households was classified according to which of the six main categories accounted for the majority of its income. Households where no one category reached 50% of total income were classified as “Mixed”, though only 1.3% fell into this group; in fact, most households show the exact opposite of pluri-activity, with the dominant source of income accounting for 85-95% of the total for each of the other groups:

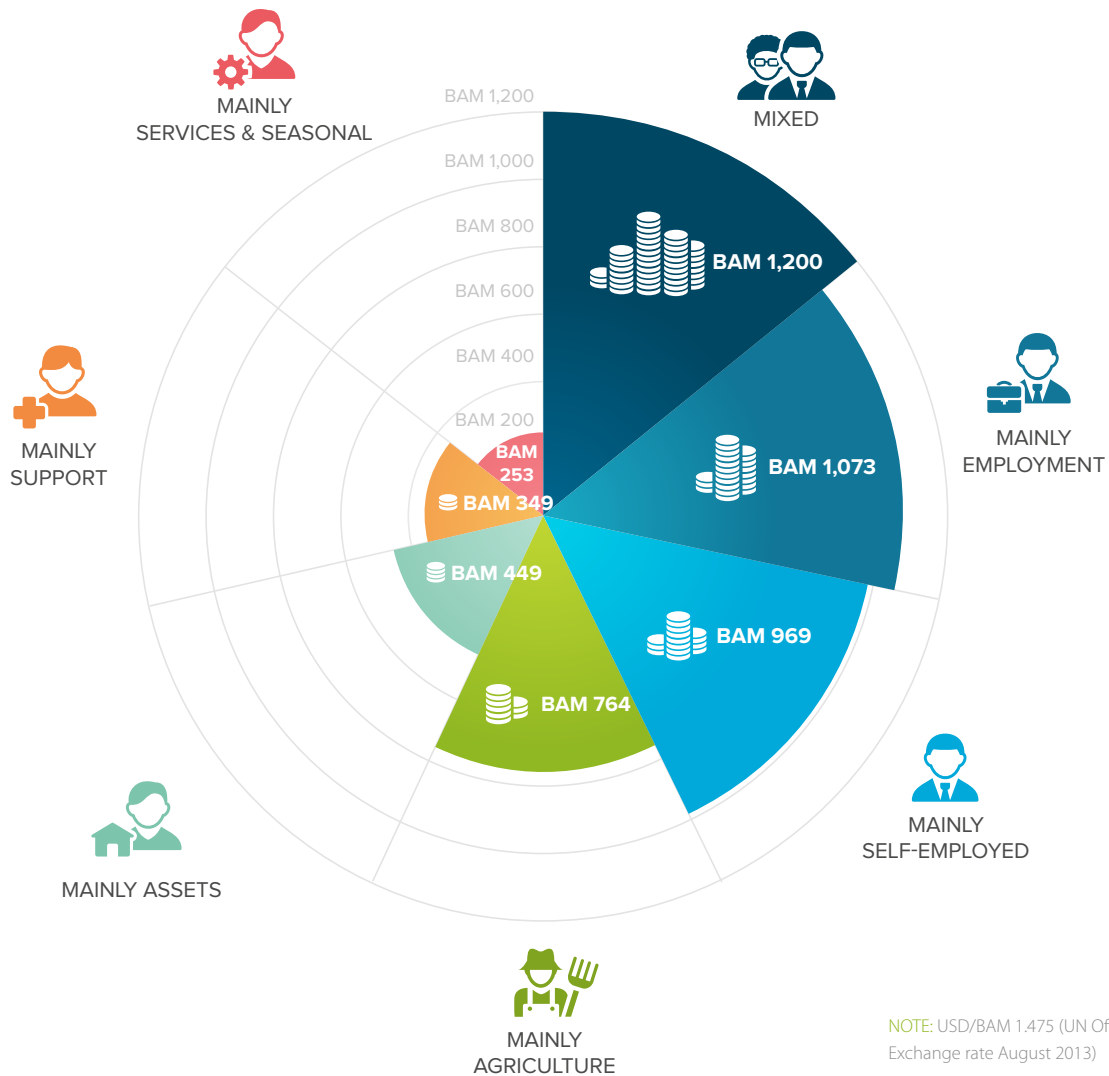
FIGURE 6.5 BREAKDOWN OF RURAL HOUSEHOLDS BY PRIMARY SOURCE OF INCOME



By dividing households according to the primary source of income, it is possible to see how the monthly incomes vary according to the income type (Figure 6.6).

The analysis showed that the wealthiest households earn their income from several sources, whilst the poorest are those providing services and those involved in short-term and seasonal work. Those households which rely on earning an income from agriculture fall midway between the two. The large group of households living mainly from support payments are also struggling and those living mainly on income from assets are significantly below the survey average, suggesting they are poor families trying to generate income from renting out whatever assets they possess.

FIGURE 6.6 AVERAGE HOUSEHOLD INCOME BY PRIMARY INCOME SOURCE



6.2.4 Income distribution

By examining both the income distribution and the sources of income for households in different income brackets (Figure 6.7), the RHS found that, the largest group of households earn BAM200-400 (USD136-271) per month and are almost entirely dependent on social payments. The second largest group earn BAM800-1,000 (USD542-678) and generate almost all of their income from regular employment.

Almost 90% of households in the survey declared a monthly income below the calculated “family consumption basket” of BAM1,370 (USD929) though two factors should be borne in mind:

- 1 The income figures generated from the RHS are believed to be under-estimates, and a few percent of the responses were so low as to be completely implausible;
- 2 Almost half of rural households produce some proportion of their own food, giving them an advantage over urban households.

Even so, it appears that a lot of rural households are living in or near poverty and in particular pensioners and others living on social benefits.

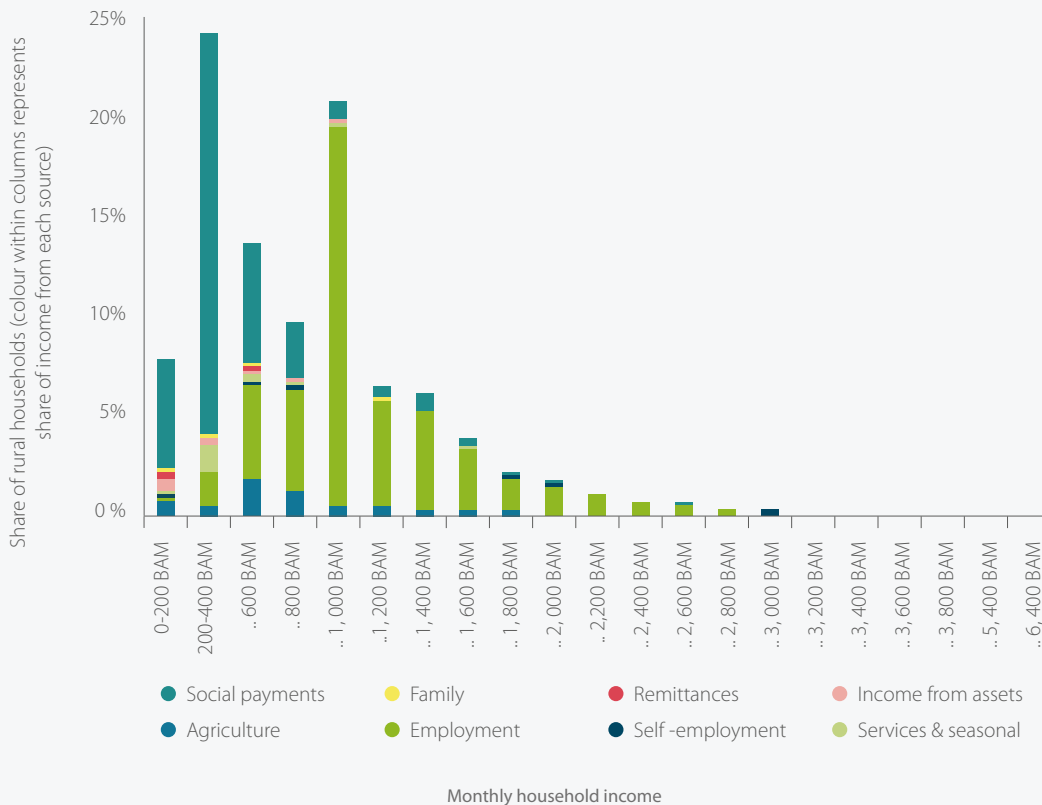


FIGURE 6.7

Income distribution of rural households, showing breakdown of monthly income

“

There are two main groups of households in the villages of Bosnia and Herzegovina: poor families depending heavily on social payments, and middle-income families that gain the large majority of their income from paid employment.

”

Clearly there are two main groups of households in the villages of Bosnia and Herzegovina: poor families depending heavily on social payments, and middle-income families that gain the large majority of their income from paid employment.

There are a few successful farmers, but no particularly successful entrepreneurs in other fields; it seems that, for the large majority of rural households in BiH, the best way to secure a high income is not to go into agriculture nor to start your own business, but to go out and get a good job. And the one thing you do not want to do is to end up dependent on social payments.

6.2.5 Employment, income and gender

Rural areas continue to reflect traditional gender roles with more than a third of women describing themselves as housewives and men more than twice as likely to be employed, self-employed or engaged in contract work (Figure 6.8). However, women comprise 40% of those employed in the 16-26 age group and 30% in the 46-55 age group, indicating a significant emancipation of women over the last 30 years. (Figure 6.9) The 18% of women amongst the 56-65 year-old group reflects, to a large extent, the tendency for women to retire earlier, as well as of the changes taking place in the 1970s and '80s when they would have taken the decision on career or family.⁵⁸

To answer the question of whether these gender role characteristics are specifically rural or a countrywide feature, a comparison was made of the results of the Rural Household Survey with the national results of the Labour Force Survey. The comparison found that women in rural areas tend to comprise a smaller proportion of the employed and self-employed workforce than nationally, indicating an even greater rural-urban difference. This is in line with comments made in many reports about the role of women in rural areas.

Looking at the gender differences in household income, the RHS showed that male-headed households tend to have higher incomes than those headed by women. Additionally, single female households appear to earn very low monthly incomes and, as 70% of these women are aged 60 or above, it is quite likely that they are widows.

⁵⁸ In some countries of Western Europe, many women stop working for a number of years to raise children, then return to work when their youngest child starts school. If this pattern were common in BiH, then the “30” column would be lower than both the “20” and the “40”, which is not the case. This probably reflects the relatively generous maternity leave offered in BiH, with such mothers still counting as employed.

FIGURE 6.8 EMPLOYMENT OR ACTIVITY BY GENDER

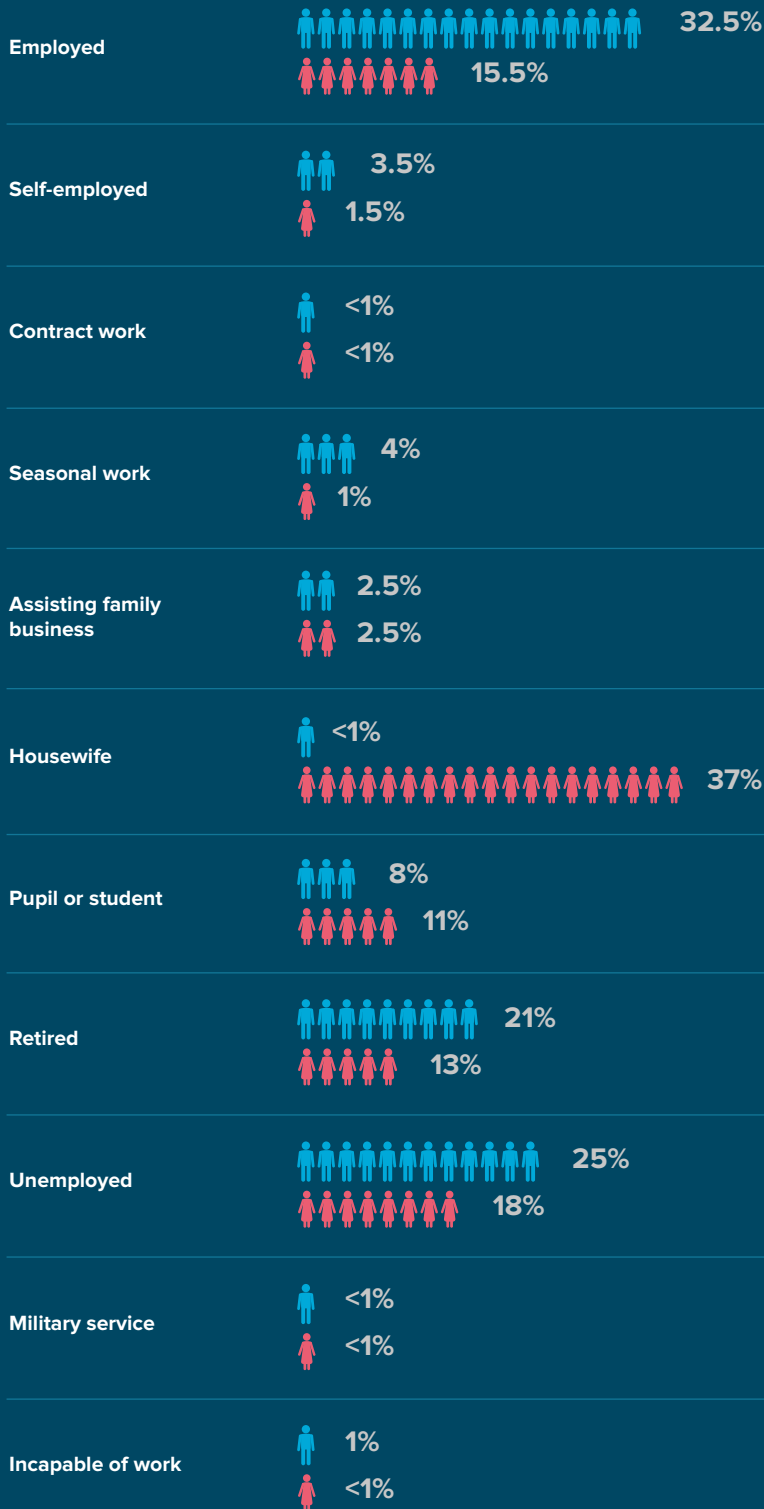
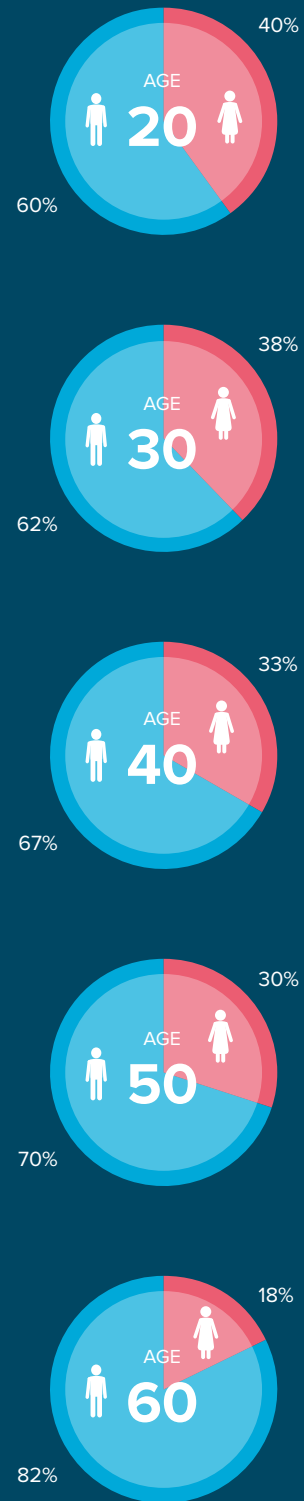


FIGURE 6.9 GENDER SHARES OF PEOPLE EMPLOYED, BY AGE GROUP



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More than a third (36%) operate “smallholdings”, producing a significant share of their own food requirements, but with a relatively small involvement in agricultural markets.

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6.2.6 Informal employment

One statistical problem affecting the whole region is the significant amount of informal employment. On the one hand, the high level of payroll taxes and social contributions gives employers a major incentive to pay cash-in-hand and not report all of their workers. On the other, registering as unemployed can bring a number of benefits in terms of health insurance and reduction in various official charges, so people who are actually working may still register as unemployed. The combination of these two factors means that official data tends to under-estimate employment and over-estimate unemployment; the fact that the registered unemployment is 45% and the statistical estimate using the ILO definition is “just” 28% gives some indication how large this discrepancy may be.

The situation in agriculture is particularly complex, as someone may spend some of their time labouring or doing contract work for a farming neighbour – paid in cash – and some tending their own crops and livestock, with part of the output being sold – again usually for cash – some bartered and some consumed by their own household. This common pattern of activity helps to boost the economic resilience of rural households, but can make it difficult to get a firm picture of either income or employment; with around 60% of the total population living in rural areas, such informal farming activities can significantly distort even national statistics. In recognition of this problem, some of the questions in the Rural Household Survey were designed to give at least an indication of the importance of formal and informal agricultural work and trade.

6.3 Agriculture and farm types

By classifying rural households into four main groups (non-agricultural, gardens, smallholdings and farms) according to the amount of land cultivated and number of livestock kept, the Rural Household Survey established that just over half of rural households (51%) have no more involvement with agriculture than their urban or suburban counterparts, with over a third (36%) having no agricultural production at all. More than a third (36%) operate “smallholdings”, producing a significant share of their own food requirements, but with a relatively small involvement in agricultural markets. The net cash income they generate from agriculture represents just a few percent of total household incomes, but the food they produce has a significant income-saving effect in addition to this. Around 13% of households can be considered as full- or part-time farms, producing significant quantities for sale. However, even this group obtains more than three-quarters of household income from non-agricultural sources (mainly regular employment and social benefits), and so is more dependent on the non-agricultural economy and on social policies than on the agricultural economy and its policies. In fact, less than 1% of households can be classified as “commercial farms” and thus targeted by IPARD measures to improve agricultural production and marketing. This is the only group of households for which agriculture contributes more than half of gross income (see online Annex 5).

6.3.1 Income from agriculture

Although it is difficult to obtain reliable estimates of agricultural income, or indeed, total household income, 2,645 respondents to the RHS provided sufficient information on their land area (indicating their farm type) and on their sources of income, and a best estimate of their overall and agricultural income was therefore possible. As might be expected, the amount and share of agricultural income increase with farm size. Apart from the largest farms, agricultural income only makes a small contribution to the overall household income and households not involved in agriculture at all are better off than all smallholdings and the small and medium-sized farms.

Overall, rural households derive 6.6% of their income from agriculture, with this rising from under 1% amongst households that declared little or no land or livestock,⁵⁹ to 60% of total income on large farms. It is only these large farms that really depend on agriculture, with the small and medium farms averaging around a quarter of total income from agriculture.

FARM TYPE	PERCENTAGE OF HOUSEHOLDS	AVERAGE MONTHLY HOUSEHOLD INCOME			SHARE FROM AGRICULTURE %
		AGRICULTURAL	NON-AGRICULTURAL	TOTAL	
No agriculture	35	BAM 6	BAM 814	BAM 820	0.7
Garden	16	BAM 4	BAM 739	BAM 743	0.5
Smallholding	36	BAM 58	BAM 666	BAM 723	8.0
Small		BAM 35	BAM 688	BAM 722	4.8
Medium		BAM 48	BAM 711	BAM 758	6.3
Large		BAM 79	BAM 617	BAM 696	11.4
Farm	13	BAM 206	BAM 585	BAM 790	26.0
Small		BAM 159	BAM 595	BAM 753	21.1
Medium		BAM 197	BAM 562	BAM 759	26.0
Large		BAM 798	BAM 531	BAM 1,329	60.1
All households	100	BAM 51	BAM 718	BAM 767	6.6

TABLE 6.2

Agriculture and other income by farm type

NOTE: USD/BAM 1.475 (UN Official Exchange rate August 2013)

Source: 2012 Rural Household Survey

⁵⁹ How can a household with "No agriculture", i.e. zero values for both land and livestock, have any income from agriculture? One possibility is that they did in fact have some land or livestock, but declined to give details of them. Another is that the income from "Sale of own produce" was not in fact agricultural, but came from sale of wood, handicrafts, etc. A third is that the household had no or few livestock present on the day of the survey, but normally did keep livestock. Other possible explanations can also be envisaged.

Averages such as those shown above can hide some important variations and exceptions, so the following chart shows how the households within each farm type are divided up between the seven income types identified and analysed in Section 6.2 above:

FIGURE 6.10

Main source of household income by farm type



Source: 2012 Rural Household Survey

- Households without any agriculture at all or just with gardens show a similar distribution to the sample as a whole: 50-60% get most of their income from regular employment, whilst around 40% depend on social benefits.
- As might be expected, dependence on agriculture increases steadily with farm size, progressively taking the place of both earned income and support payments.
- Even amongst the smallholdings, there are some that depend on agriculture for the majority of their income, though more than 90% of all smallholdings depend on something else as their primary source of income.

- Something over a quarter of medium and large farms live mainly from agriculture, with a sizeable majority living from something else.
- The relatively small group of “large farms” has already been shown to have a significantly higher level of income than the rest of the sample, it also includes a very different distribution of household income types: rather few large farms depend on income from employment (and are probably too busy on the farm to have time for a full-time job), instead they tend to depend on support payments, agriculture, and mixed income sources.

If one were to try and define a “full-time commercial farm” as a household that managed at least 30 hectares and/or livestock units and generated more than 75% of its income from agriculture (which is the kind of picture many people in western Europe have in mind when they think of a “farm”), it would capture less than 0.2% of all rural households surveyed. Clearly, agriculture in Bosnia and Herzegovina must be looked at in a different light.

6.3.2 On-farm employment

The RHS found that it is very rare for paid workers to be employed on farms or smallholdings, with just 0.5% of rural households employing agricultural labour. Where workers were employed, it was an average of 3 people for 14 days, presumably for seasonal activities such as harvesting or fruit picking. The average daily wage was BAM31.00 (USD 21.00).

Half of all employment was on smallholdings and small farms, with 17% on large farms; although these are big enough to employ several people, there are too few large farms to create much employment overall. As around 22% of employment was reported by non-agricultural households, this would suggest that some respondents took account of non-agricultural labour when answering this question.

Overall, agriculture in BiH appears to be very much a family business, largely outside the formal labour market.

“

Half of all employment was on smallholdings and small farms, with 17% on large farms; although these are big enough to employ several people, there are too few large farms to create much employment overall.

”

6.4 Agricultural training and advice

The Rural Household Survey also investigated the usage of training, advisory and information services in BiH.

Overall participation in training appears to be low, with 10% of respondents attending, mostly from the wealthier households. Attendance also varies by entity, with 16% of respondents in RS participating in training, as opposed to 7% in FBiH. (Figure 6.11) The location of the training venue also affects attendance, as does the time involved in attending (respondents highlighted distance (44%) and time constraints (38%) as deterrents to participating in training).

As with training, meetings with agricultural advisors appear to be relatively uncommon, with 10% of respondents, also from the wealthier households, having any contact with advisory services. Again, there is a marked difference between entities, with 15% of respondents in RS meeting advisors, compared to 8% in FBiH. However, this may be explained by the fact that RS has a public farm advisory service whilst FBiH does not (Box 6.3). By far the most commonly used source of advice is television programmes. Internet, which is increasingly the preferred medium of organisations wishing to disseminate information, was only listed by 8% of all respondents. Therefore, if agricultural information is to be tailored to the needs of the target audience, advisory organisations will need to work actively with television companies (Figure 6.12).

BOX 6.3

Agricultural advisory services in Bosnia and Herzegovina

A recent EU-funded sectoral study in BiH looked at the state of agricultural extension and reported that:

One of the earlier EU support projects helped to set up systems of agricultural extension in each entity. After completion of the project, RS continued with an entity-level system whilst FBiH transferred the responsibility – along with the extension staff – to the canton level. Brčko District employs three advisors (“senior expert associates” in crop production, fruit production and cattle production) within the Department for Agriculture, Forestry and Water Management. The general feedback from stakeholders, in individual discussion as well as in the formal SWOT workshops, is that extension is one of the weak points within the agricultural system, particularly in FBiH.

Some recent support has been provided by the World Bank, and in 2010 both entity governments adopted their own mid-term development strategies for extension services in agriculture. The strategy for RS envisages that by 2015 twenty new specialist consultants and 74 primary agricultural advisers will be employed, with extension being delivered through both public and private extension services. The public advisory service is financed from the budget, and private services from their own resources and revenue generation, and they both need a licence for the provision of advisory services.

Source: Meat and dairy sector study for the IPARD programme in Bosnia and Herzegovina, FAO, 2012.

FIGURE 6.11 PARTICIPATION IN AGRICULTURAL TRAINING

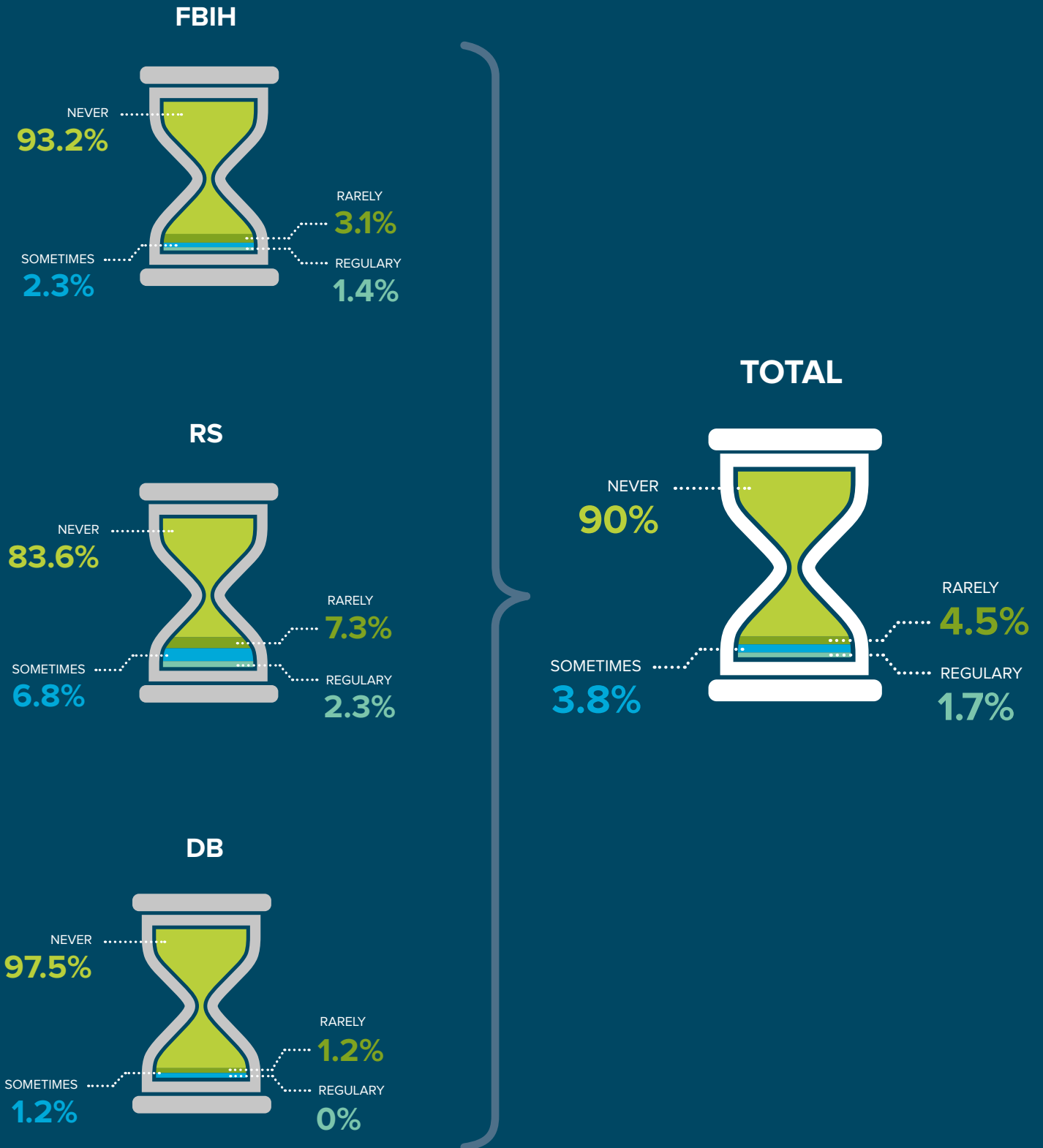
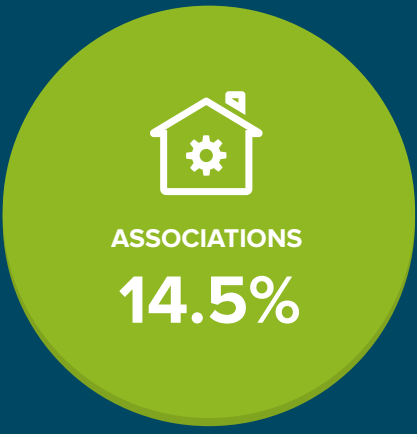
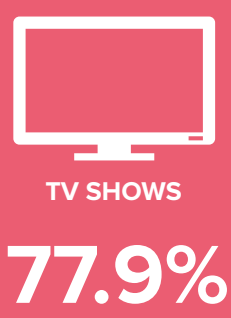


FIGURE 6.12 MAIN SOURCES OF (AGRICULTURAL) INFORMATION



6.4.1 Factors affecting use of training, advice and information

It is important to bear in mind here that the majority of rural residents are not farmers:

- Just over half of rural households (51%) have no more involvement with agriculture than their urban or suburban counterparts, with over a third (36%) having no agricultural production at all. Around 15% have a vegetable garden and some of these keep a few chickens for their own use; these households may be interested in the weather forecast, and perhaps in information about plant and animal pests and diseases, but they have little involvement with agricultural markets or new technologies, and hence a rather limited demand for information.
- Around 36% of rural households manage a smallholding of 0.1-3 hectares, sufficient to produce crops and livestock for their own needs and the occasional surplus for sale. These households will have some interest in agricultural markets and technologies, but agriculture usually makes a minority contribution to household income and so they may not be strongly motivated to seek out new knowledge.

The proportion of households participating in training or seeking advice (Figure 6.13) rises consistently with increasing agricultural activity, from around 2% of households with little or no agriculture, to almost 30% of large farms seeking training and advice. It is these rural households (13% overall), which are considered full- or part-time farms and produce significant quantities for sale, that require the full range of agricultural information and have a clear financial stake in improving their farming performance.



FIGURE 6.13
Use of agricultural training and advice

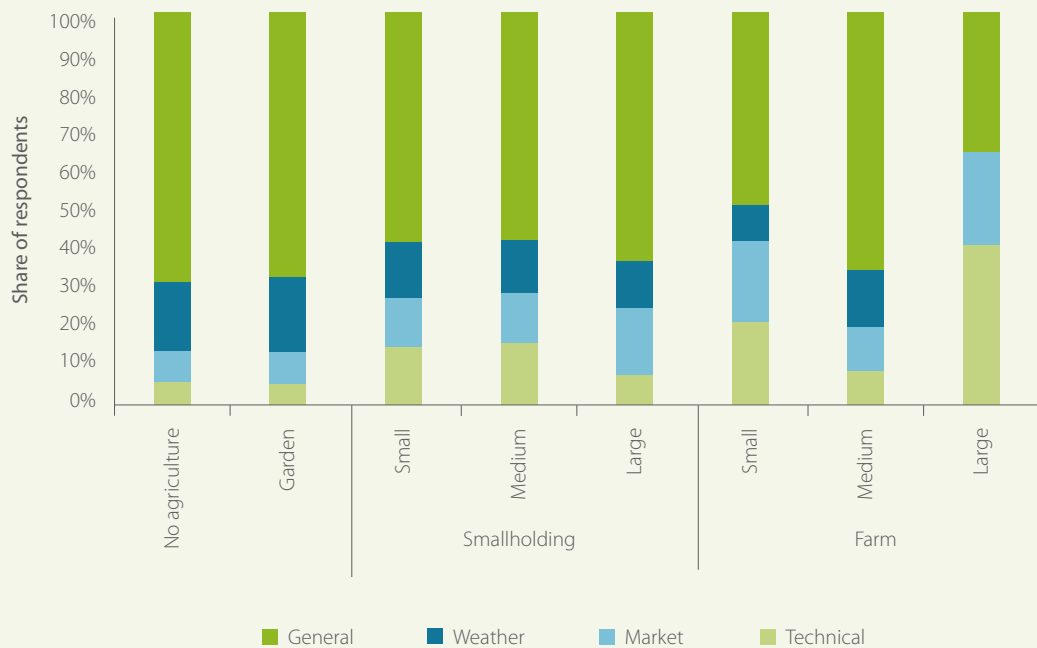
Source: 2012 Rural Household Survey

The type of information sought also varies with farm type, with larger holdings more likely to seek technical or market information (Figure 6.14). As holdings become larger they are more likely to seek technical or market information, with two-thirds of large farms saying that this was the kind of information they most often requested.

Thus, although only 10% of rural households use agricultural training and advice, advisory services are more effectively targeting and reaching the larger producers where their advice and training will have most impact. However, there is still very considerable room for improvement as the large majority of farmers and smallholders **do not** currently receive training or advice, or seek out technical and market information.

FIGURE 6.14

Type of information most often sought



Source: 2012 Rural Household Survey

Education and employment

Education level and employment status do not appear to affect the use of knowledge services to any great degree. Exceptions were those with high-school education, who are more likely to use the written media of books and magazines, but no more likely to use the Internet; and those with only primary education or no education, who are very unlikely to have regular contact with advisors. The main age-related effect was that under-45s are twice as likely to seek information from the Internet than are the older generation.

Income

When it came to household income, there was a clear distinction between those earning more than BAM1,500 (USD1,017) per month and all lower income brackets:

- Wealthier households were over 3 times more likely to attend training sessions and over 4 times more likely to meet with advisors;
- They also drew their information from different sources, being 7 times more likely to consult books and 3 times more likely to use a farmers' association. Wealthier households also made more use of the Internet (70% more frequent) and magazines (40% more frequent), and were 10% less dependent on television;
- The wealthy households also differed in the kinds of information they sought, being 70% more likely to request technical information and 50% more likely to use market information, whilst less often seeking general or meteorological information.

This begs the question of causality: are wealthier households better placed to access and use information services, or are they wealthier *because* they participate more in training and make more use of information and advice? Given that most of the sources of knowledge cost little more than time, income should not be a direct barrier to accessing these services; it therefore seems that it is the use of knowledge – and the proactive attitude that this implies – which contributes to households' wealth.

6.5 Education

6.5.1 The education system in BiH

The education system in BiH includes at least eight years of compulsory primary education. Republika Srpska has moved entirely to a 9-year system, whilst in the Federation some cantons still have eight years and some have nine. The only difference in the 8-year system is that children start school one year later, around the age of 7 instead of 6, and the second stage of schooling lasts only four years.

In the 9-year system, for the first four years,⁶⁰ around ages 6-10, one teacher has full responsibility for a class and the pupils learn all their subjects from that teacher. The next five years, ages 10-15, are more rigorously structured by age and subject, with different teachers covering different subjects and teaching only one year at a time.

Looking just at the numbers shows that a village of as few as 200-300 inhabitants could generate a class of around fifteen 6-10 year olds and so support a very small "4-year school". Most villages in BiH reach this threshold and so the youngest children normally have a school close by.

⁶⁰ The exact age depends on when in the year the child was born, so some children will start school at the age of 5 instead of 6 and finish each stage of schooling one year younger than described here.

“
 Whilst the first
 eight or nine years
 of schooling are
 compulsory for
 all children, the
 psychological and
 practical barrier of
 travelling to school
 can lead to some
 dropouts at the age
 of 10.
 ”

The increased specialism of the next five years obviously requires considerably more teachers and hence the school must be reasonably large, serving a population of at least a few thousand inhabitants; usually these are “9-year schools”, covering the first four years as well. Many BiH villages are too small to justify such a large school so one school will cover a few neighbouring villages, or a town and its surrounding area. This means that, from the age of 10 onwards, many rural children have to travel to school every day. In some cases there is a school bus service, but from the smaller villages it may be up to the parents to arrange the transport, thus some children have to walk a few kilometres to and from school every day.

Whilst the first eight or nine years of schooling are compulsory for all children, the psychological and practical barrier of travelling to school can lead to some dropouts at the age of 10. This is a large problem amongst those groups already at increased risk of dropping out of school (Roma, children from families in need, children of parents with a low level of education, and children with special needs) and is something that the authorities and organisations like UNICEF are working hard to address. Amongst agricultural households there is always work to be done, which can encourage families to pull their children out of school to help with the livestock and other chores, whilst in the Roma culture girls around this age may be expected to help care for their younger siblings and to prepare to become mothers themselves.⁶¹

After the age of 15, each child faces the choice of whether to leave school and seek work, or to move on to either a 3- or 4-year vocational “middle school” or a more academic 4-year high school (“gimnazija”). Teaching at this level is specialised by subject or vocation. In larger town there will be separate schools, such as a “Mathematical high school” and a “Machinery-technical middle school” and children will choose which to attend. In a smaller town, one school will offer a more limited range of subjects and children have to choose between the options available, or make arrangements to live in a larger town where they can study their preferred subject.

This means that rural children face a second travel barrier at the age of 15. As this stage of education is not compulsory, some rural children choose to end their education, whilst their urban counterparts move on to a middle or high school. A recent UN agencies’ survey⁶² found that more than 30% of children who decided not to attend secondary education cited the distance to school as the main reason. Studies also suggest that the outcomes of primary education are lower in rural areas than in towns.⁶³

The final stage of education consists of technical colleges and university faculties, with each subject being taught in only a few places in the whole country. Unless a student lives in a big city or happens to be close to the college or university of their choice, it is usual for them to move away from home and stay in student accommodation during term time; thus both rural and most urban children face similar barriers at this stage of education.

61 “Situation Analysis of Children and Families in Macedonia”; UNICEF, 2001.

62 “Non-enrolment and school dropout” in BiH, http://www.undp.org/content/bosnia_and_herzegovina/en/home/library/democratic_governance/non-enrolment-and-school-dropout-study/

63 See the OECD “Programme for International Student Assessment” (PISA), which covers 70 countries worldwide, not yet including BiH: www.oecd.org/pisa/aboutpisa/

Across BiH as a whole, the average years of schooling achieved is just 8.7. This places BiH as one of the worst countries in the region, with only the former Yugoslav Republic of Macedonia showing a lower result, at an average of just 8.2 years of schooling (see Appendix). It is therefore clear that overall educational achievement in BiH is low compared to the region and there are several possible reasons why rural children may choose to drop out of education. However, are these the real reasons for the lower level of education in rural areas?

Educational achievement in rural areas and nationally

Although no survey comparing data on educational achievements in both rural and urban areas of BiH has been conducted, a comparison of the survey results from the 2011 Labour Force Survey (“LFS”, for all of BiH), and the 2012 Rural Household Survey (“RHS”, for people living outside of urban settlements) indicates that the rural working age population is actually better educated than the labour force as a whole, and hence significantly better educated than their urban counterparts (Figure 6.15). This is the opposite of what would be expected according to the theory and survey results discussed earlier. It also goes against the general findings of the OECD “Programme for International Student Assessment” (PISA)⁶⁴ that the outcomes of primary education are poorer in rural areas.

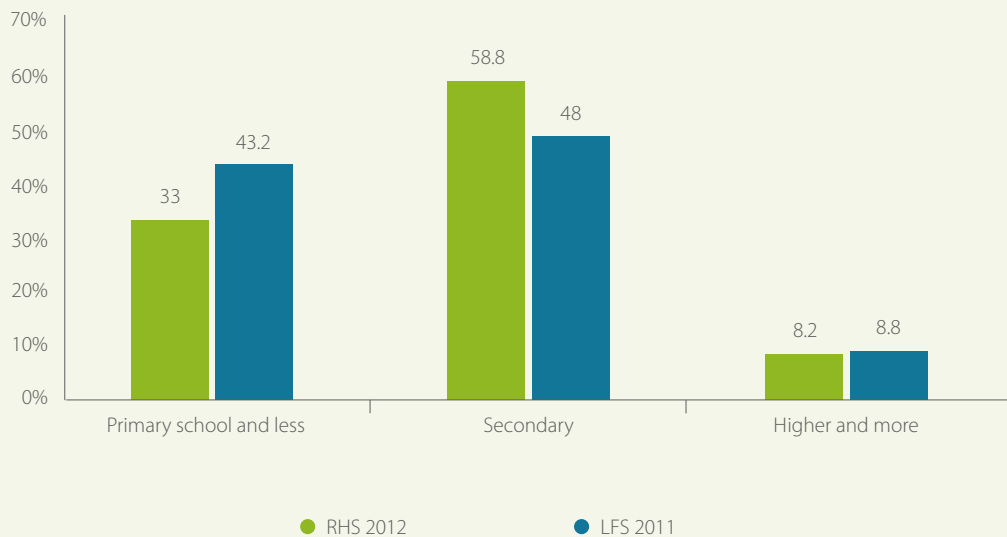


FIGURE 6.15
Highest level of education achieved in rural areas and overall

Source: Labour Force Survey, 2011; 2012 Rural Household Survey

⁶⁴ OECD “Programme for International Student Assessment” (PISA), which covers 70 countries worldwide, not yet including BiH: www.oecd.org/pisa/aboutpisa/

“ UNICEF statistics show a secondary school enrolment rate of 89% for BiH in 2010, but many of those children who start secondary school either drop out or fail to graduate.

”

There are always difficulties in comparing data from different surveys done at different times by different organisations using different methodologies, so the apparent contrast between the RHS and LFS findings should perhaps be treated with caution.

Data from the Rural Household Survey found the following educational results for the economically-active rural population:

- Primary education and above: 96%
- Secondary education and above: 78%
- University and higher education: 10%

UNICEF statistics show a secondary school enrolment rate of 89% for BiH in 2010,⁶⁵ but many of those children who start secondary school either drop out or fail to graduate.⁶⁶ Whilst language and computer skills are increasingly widespread amongst the young, these skills are usually taught at secondary school and beyond, so the 22% of rural BiH youth who do not proceed to or complete secondary education are seriously limiting their options for future employment.

The latest information from the UNICEF “Multi-Indicator Cluster Survey”, showed that rural areas had slightly higher levels of entry to and attendance at both primary and secondary school, compared to urban areas. The only areas in which rural areas showed any disadvantage was in the markedly lower proportion of children who received any pre-school education, a slight (and probably not significant) tendency for rural children to drop out of primary school after the sixth grade, and a very slightly lower level of literacy amongst young men (99.9% compared to 100.0%).⁶⁷

In terms of gender, both the Labour Force Survey and the Rural Household Survey found that males are significantly better educated than females, with around 18% more males than females completing secondary education (LFS found 57.5% male and 38.9% female; RHS found 67.3% male and 50.3% female).

Effect of education on rural employment and household income

For the potential rural labour force (excluding pensioners, housewives, students, people on military service and those incapable of work), having no formal education seriously reduces employment prospects. Only 39% of this group was formally employed, with 42% registered unemployed and 20% either self-employed or working informally at piece-work, seasonal work or assisting family members on a farm or other business. It is probable that many of those recorded as having “No education” did complete at least the first four or five years of primary education, but dropped out of school before receiving their “diploma for completion of primary education”.

⁶⁵ http://www.unicef.org/infobycountry/bosniaherzegovina_statistics.html

⁶⁶ The UNICEF report on “Non-enrolment and school dropout” in BiH, 2011, quotes on p.18 a survey carried out by the “Centre for Civic Initiatives” in 2009, showing the way in which children tend to drop out through the successive years of secondary education: <http://www.undp.ba/index.aspx?PID=36&RID=146>

⁶⁷ There was actually a larger literacy difference amongst young women – 99.1% in rural areas compared to 99.9% in urban – but there was considerable variation in the data and so the difference is statistically not at all significant.

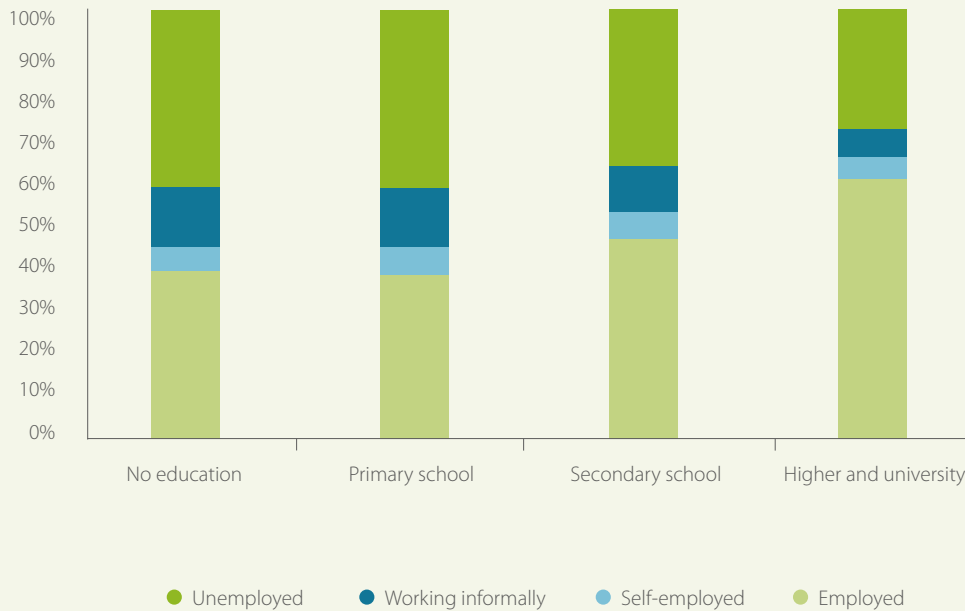


FIGURE 6.16

Occupation of the labour force by level of education

Source: 2012 Rural Household Survey

The benefits of education start to become apparent following the completion of secondary school and become even more pronounced with higher or university education. The role of self-employment and informal employment also declines with increasing education, so that most graduates are either formally employed or registered unemployed, with relatively few working for themselves or on less formal arrangements.

Education is not only important in terms of getting a job, it also influences earning potential, with households whose head had completed higher education earning around twice as much as other households.

6.5.2 Education and gender

ILO Working Paper 4/2011 on “Gender and Employment in Bosnia and Herzegovina - A country study”⁶⁸ states that women living in urban settlements tend to have almost twice as many years of education as their rural counterparts.⁶⁹ The data in Annex 3 to the ILO report imply that rural women now average just under 9 years of education, as compared to at least 11 in urban areas (a quarter higher in urban areas, not twice as high), and also show that rural men averaged

⁶⁸ http://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_170832.pdf

⁶⁹ The report does not make clear what definition of “rural” was used, but it probably uses the “settlement approach”, treating designated urban settlements as urban and everything else as rural.

around 10½ years of education compared to 12½ in urban areas.⁷⁰ There are therefore two different things happening:

- People in rural areas have on average around 2 years less education than those in urban areas, irrespective of sex;
- Females have around 1½ years less education than males, irrespective of rurality.

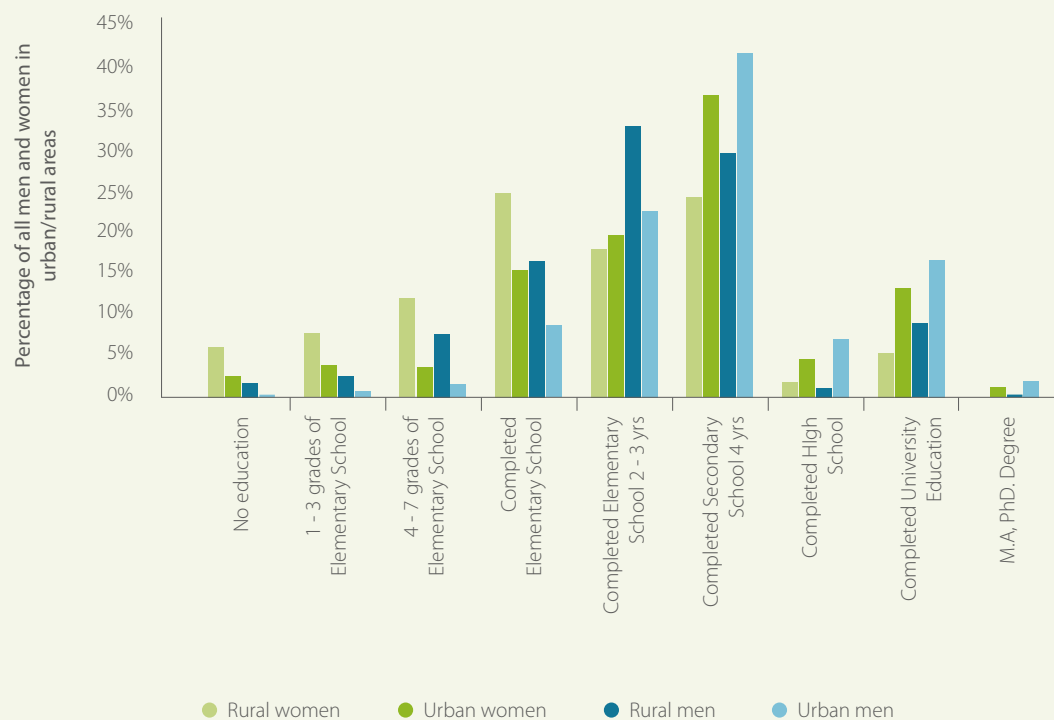
There is also a small gender-rurality interaction, with women in rural areas tending to have even more educational disadvantage than women in urban areas, equivalent to around half a year less education.

Thus, the myth that children in rural areas – particularly girls – receive at least two years less education than their urban counterparts is dispelled by current data. The gender gap in rural education lies mostly in the older generation and reflects the social and educational conditions of the 1940s, '50s and '60s. In the 21st century rural girls receive around 4% less education than boys, and rural children overall average as many, or more years of education as those in urban areas. Indeed, the MICS data show that the situation in rural education continues to improve, with the children attending secondary school rising markedly from 74% in 2006 to 92% in 2011-12.

⁷⁰ The ILO data reports educational achievement in broad bands (e.g. "4-7 grades of Elementary School") so some assumptions had to be made to calculate the average years of education by sex and rural-urban.

FIGURE 6.17

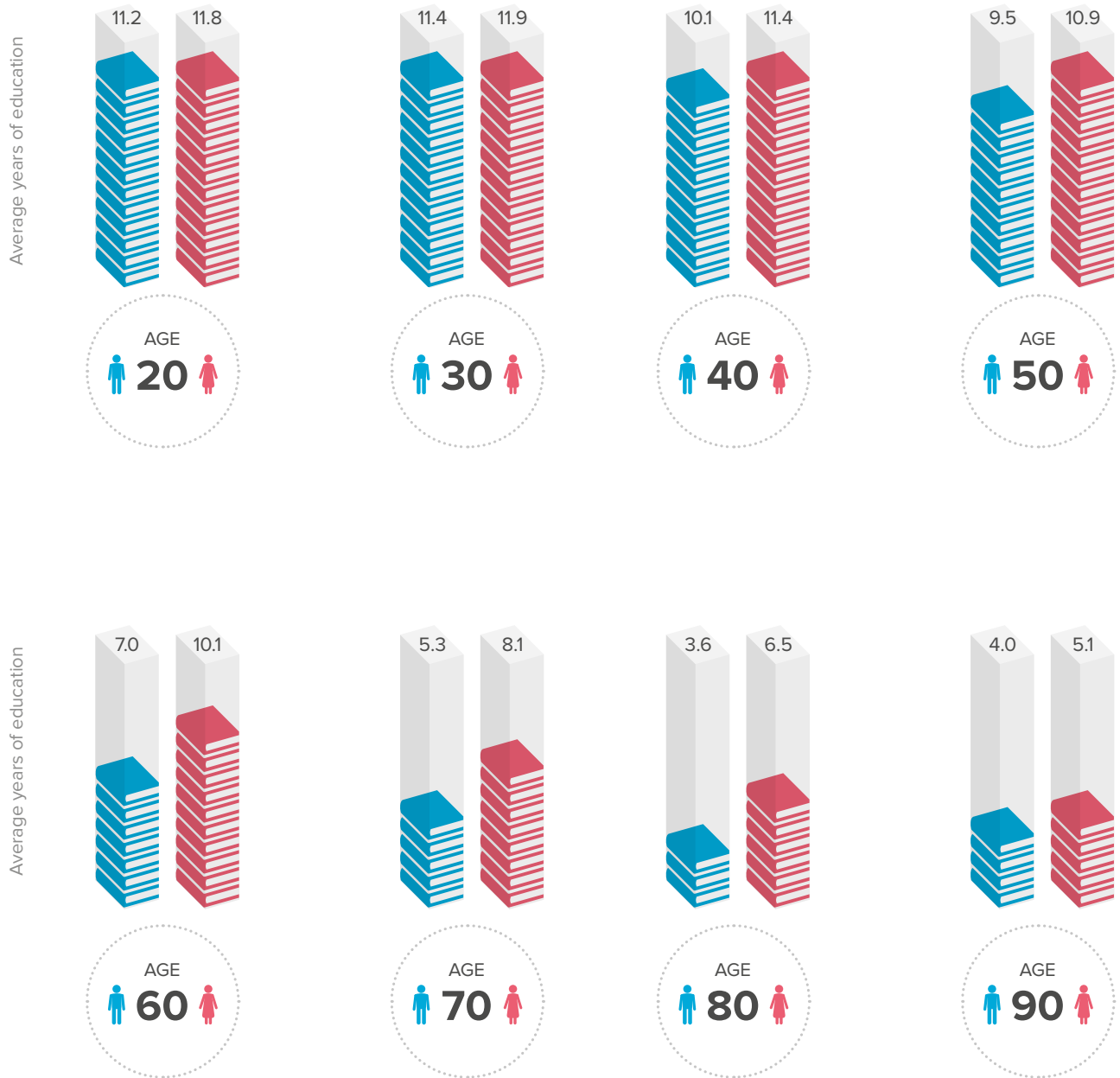
Highest level of education achieved by men and women in rural and urban areas



Source: ILO working paper on "Gender and Employment in Bosnia and Herzegovina", 2011.

FIGURE 6.18 YEARS OF EDUCATION COMPLETED VS. AGE AND SEX

Age rounded to nearest 10 years

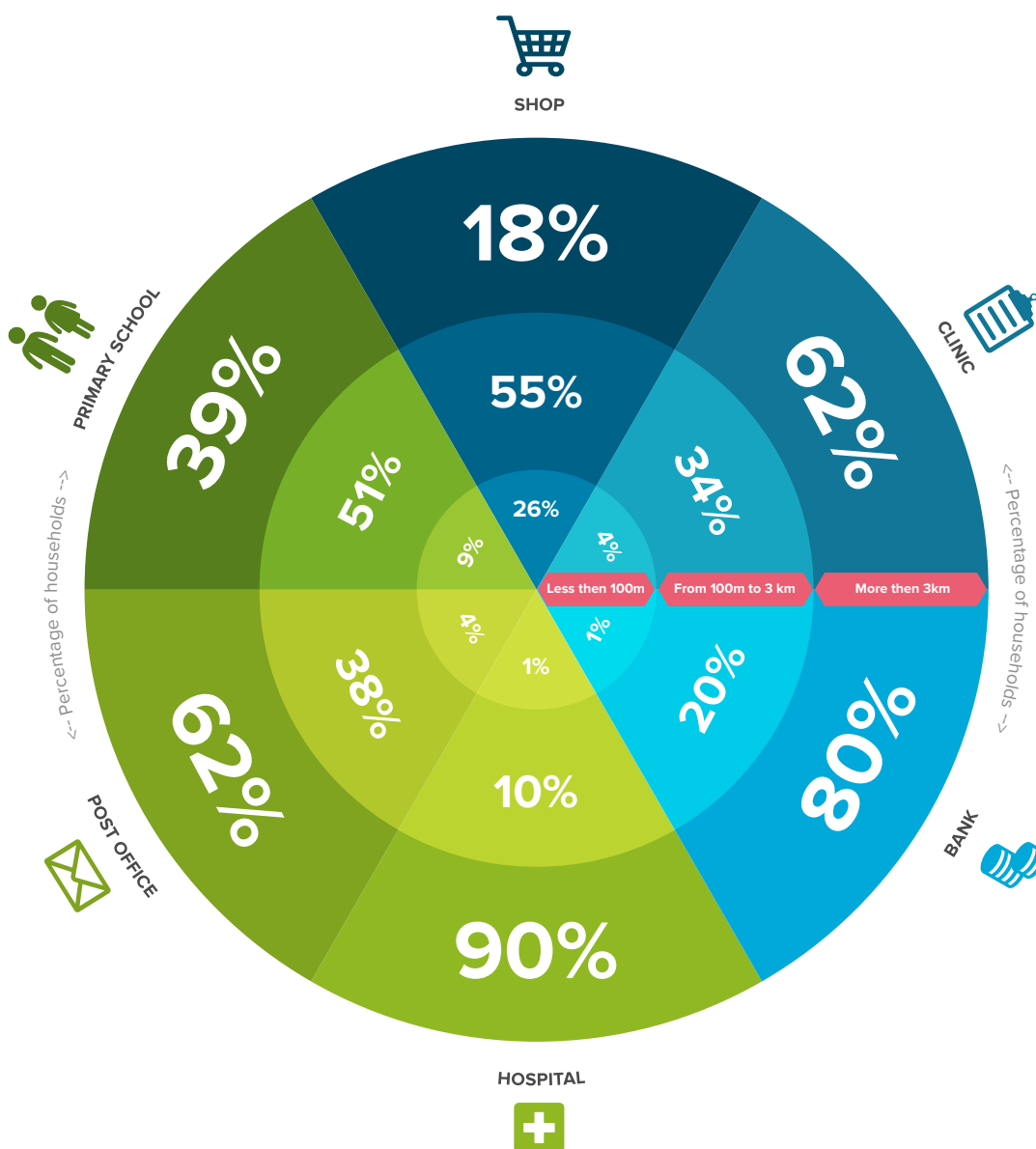


NOTE: "Rural Inhabitants Only"
Source: 2012 Rural Household Survey

6.6 Access to infrastructure and services

Two issues where the greater physical distance between people in rural areas might be expected to have the greatest impact relate to access to infrastructure and public services. The RHS established that more than half of rural residents live at least 3km from the nearest clinic, hospital, post office or bank, with rural post offices playing an important role in facilitating financial transactions such as paying bills or sending and receiving money. Despite the greater distances rural residents are required to travel to reach public services and the travel time and costs involved, the indicators of health and education suggest that these obstacles are somehow overcome.

FIGURE 6.19 DISTANCE TO NEAREST PUBLIC SERVICE



Source: 2012 Rural Household Survey

With regard to infrastructure, the RHS analysis determined that 83% of rural households had indoor water taps, with this figure notably lower in RS (67%) than in either FBiH (91%) or BD (93%). When all “improved water sources” were taken into account (applying MICS data) almost all households, both urban and rural, were found to have access in some form or other. The most common form of sewerage in rural areas is a septic tank; most other households are connected to public sewerage. Only a few still have to use an outside toilet or “outhouse”.

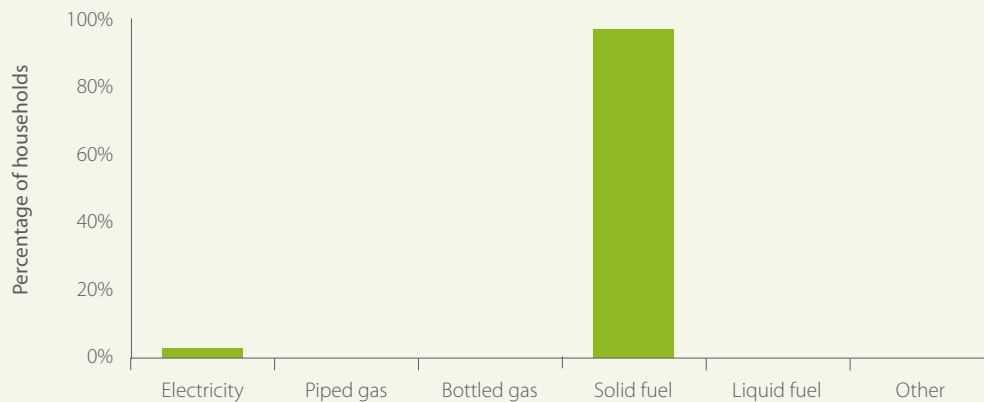


FIGURE 6.20

Main source of Heating

Source: 2012 Rural Household Survey

Only 0.3% of households used gas as their primary source of heating, though bottled gas is frequently used for cooking (the data from the “Multi-Indicator Poverty Survey” showed that just under 12% of rural households in BiH were dependent on “dirty” solid fuels for cooking; the most common arrangement is that wood or coal is used for heating, and gas or electricity for cooking). Wood, coal and other solid fuels are by far the most common form of heating, with electricity a distant second (Figure 6.20). Here, the data revealed a clear correlation with income, as those households earning more than BAM1,500 (USD1,017) per month are more likely to use electricity instead of solid fuel (12% heat with electricity). It should also be noted that, according to 2010 estimates from the Ministry of Human Rights and Refugees, 2,600 households are still not connected to the electricity grid.

As forests are the biggest natural resource in BiH, biomass could clearly be used for the production of thermal heat, electricity and domestic hot water. Equally solar and photovoltaic systems could provide sufficient energy for rural and remote areas. However, the absence of a legislative framework or strategy for using renewable energy, accompanied by the lack of awareness by decision-makers regarding the benefits of using renewable energy and an under-developed biomass value chain, all combine to block the use of these renewable energy alternatives.

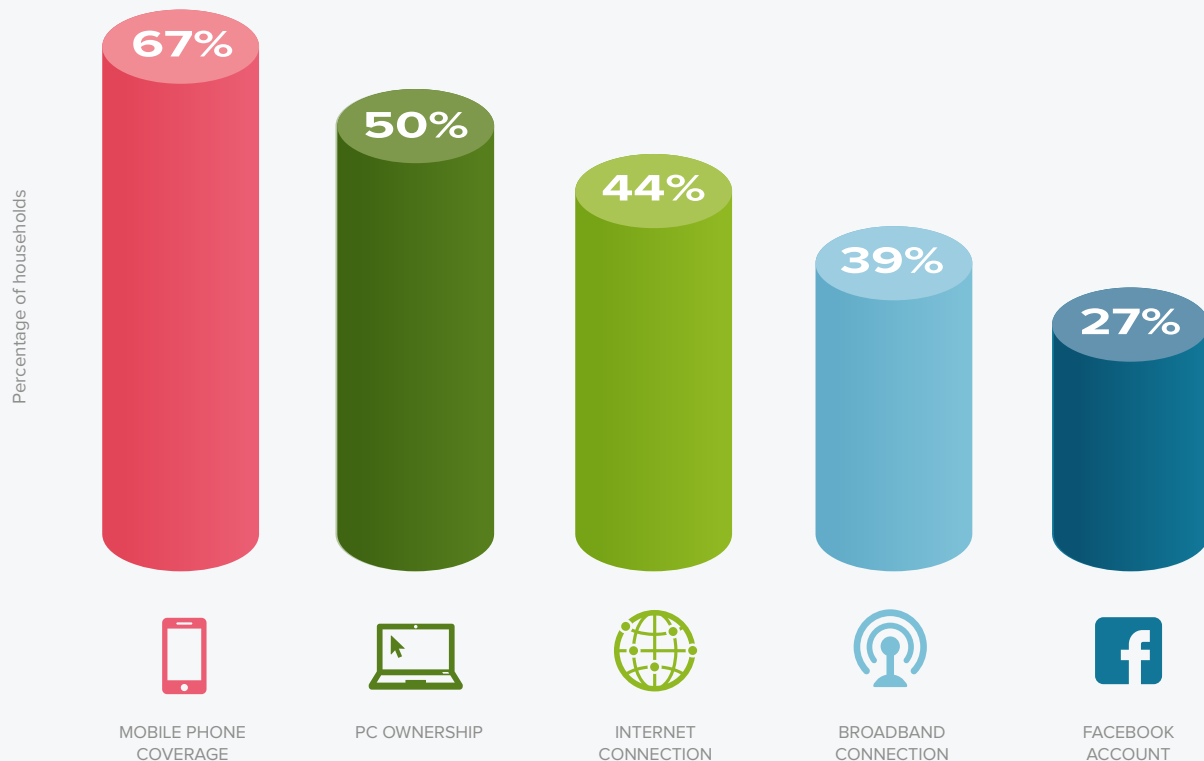
In order to realise the potential benefits of biomass the following actions will need to be taken: appropriate legislation drawn up and adopted (e.g. Law on Forestry in FBiH and RS); the biomass value chain developed; the knowledge of authorities/decision-makers regarding renewable energy increased; and the current capital investments into an electricity grid-connected network redirected into investment in off-grid solutions (stand-alone biomass cogeneration plants and hybrid solar/photovoltaic systems).

Information and communications technology

Two-thirds of rural households live in areas covered by a mobile phone network, while half own a personal computer. Of these, over three-quarters use the Internet, mostly via a broadband connection, giving these households access to many modern services, such as Internet banking.

The large majority (90%+) of young people in both rural and urban areas had experience in using both computers and the Internet, with usage tending to be 3-4% higher in urban areas. Urban youth tend to use the computer more, however education level shows a far strong correlation than rurality.

FIGURE 6.21 ACCESS TO ICT



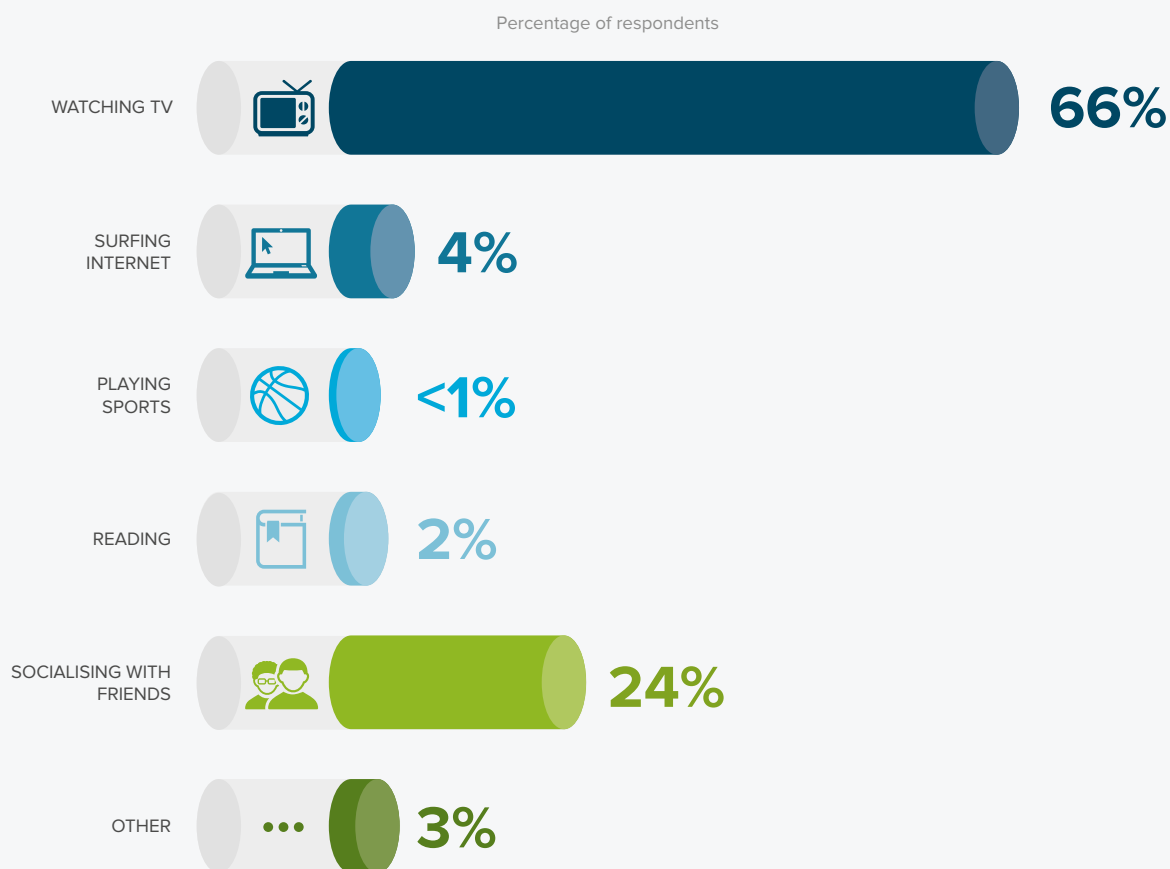
6.7 Social activities and attitudes

Social life in rural areas is more based around home and informal contacts, rather than around particular venues or organised social and sporting activities. The majority of people who live in rural areas prefer to spend their leisure time at home, mostly watching television (Figure 6.22). They occasionally meet with friends, either in cafes or at regular religious services; as might be expected, the difference between the two is related to age rather than any other factor.

6.7.1 Attitudes to EU accession

The process of economic transition, which has already begun in BiH but will be accelerated by EU accession, does tend to bring initial pain for eventual gain. The younger generations will pass through the difficult years and enjoy the results of a more affluent and open society, but older citizens may spend the rest of their lives in the “pain” phase and not live to see the real gains. Thus the views expressed may be quite a realistic assessment of the changes that EU accession will bring.

FIGURE 6.22 PREFERRED LEISURE-TIME ACTIVITY

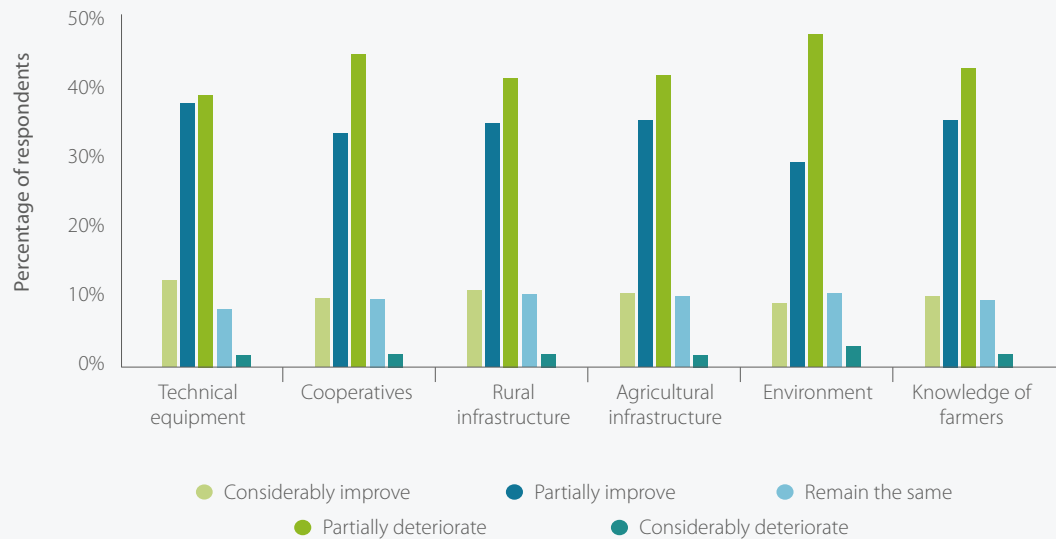


Just under half (43%) the respondents to the Rural Household Survey believed that entering the EU would make farmers better off, though this opinion was somewhat dependent on status as those who saw EU accession as more likely to bring improvements were mostly employed and earning more than BAM1,500 (USD1,017) per month.

In general, most people in rural areas either do not expect much to change with EU accession or expect to see only a partial improvement (Figure 6.23).

FIGURE 6.23

Expectations of change from EU accession



Source: 2012 Rural Household Survey

6.7.2 Rural versus urban life

Interestingly, living in the countryside is not considered as a substantial barrier in relation to social life, prospects of marriage and even income. Rural living should also bring the obvious benefits of good food and a healthier, cleaner environment. However, city life is considered clearly superior in relation to infrastructure, services, education and – most of all – employment opportunities (Figure 6.24).

However, these perceptions may not necessarily reflect the reality of rural life and two important issues stand out:

- *Health*: Here the rural-urban picture is quite complex; rural inhabitants are likely to be more active and to eat more fresh food (though for those who keep their own livestock the diet can be very high in saturated fats) but access to health care is more restricted and when something serious does happen, it can take a long time for an ambulance to arrive.
- *Environment*: Almost certainly the air quality is markedly higher in rural areas, but the same does not hold for drinking water – many rural households are dependent on wells for water and on septic tanks for sewerage; if the two are not adequately separated health risks can arise, and the chemical and microbiological quality of rural water supplies could easily fall below that of water drawn from protected sources and tested, filtered and chlorinated before delivery to consumers.

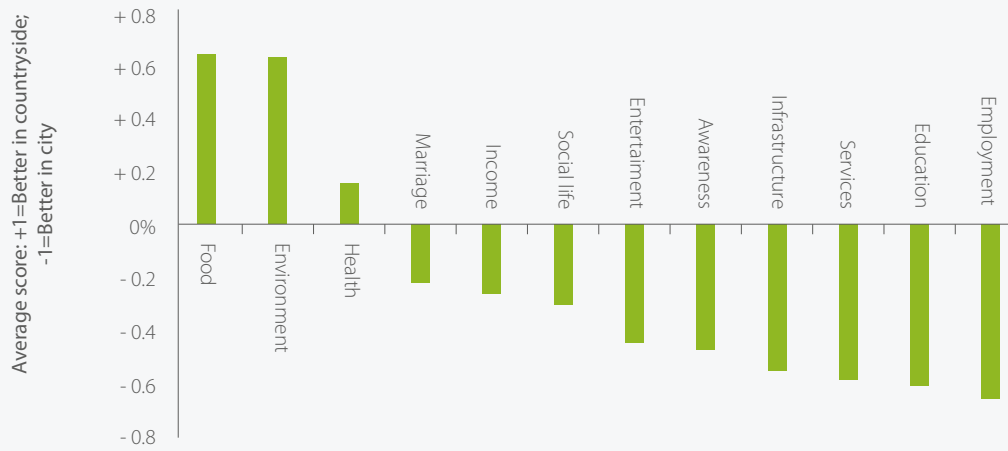


FIGURE 6.24

Quality of life in rural vs urban areas

Source: 2012 Rural Household Survey

6.7.3 Future plans and flexibility

More than half of the respondents in the Rural Household Survey were willing to take steps such as changing jobs, retraining or moving house in order to secure better employment. However, enthusiasm for an entrepreneurial life appears to be more muted, with some 60% ready to leave their current employment for a secure job with a state institution, and less than 20% prepared to sell their land to invest in a business venture proposed by their children.

Many people in BiH believe that agriculture can be the engine of economic development for the country. This view is rather at odds with evidence presented in this report, which suggests a rather more circumscribed role for agriculture.

Generally, most residents are relatively happy with their rural life, and are not envious of those who make the move to the big city. However, many seem to believe that change is inevitable and recognise the greater range of opportunities afforded by urban areas, and so expect the next generation to move out of the countryside – a view held equally in rich and poor households.

6.7.4 Climate change

Most people acknowledge that the weather has changed in the last 10 years, and the majority, regardless of age group, attribute this to climate change. However, few understand the implications and expected impact of climate change, especially in rural areas, and are unaware of the steps that will need to be taken to adapt to these changes.

6.7.5 Competitiveness

Farmers in BiH are deeply concerned about the competitive challenge that increasing European integration will bring, citing agricultural and commercial policy (66% of respondents), production volume (49%), market volume (40%), knowledge (39%) and access to inputs (28%) as factors which will have the greatest impact on their competitiveness.

The biggest issue is seen as being government policy for the sector, followed by the relatively small size of their production and the overall BiH market. The importance ascribed to government policy, even by small farmers who receive little or no government subsidies, may indicate something of a “dependence culture” where people expect government to solve their commercial problems.

6.8 Social inclusion and social capital

The results of the Rural Household Survey on social activities and attitudes may be supplemented by findings from two previous Human Development Reports on social inclusion and social capital.

The 2007 NHDR on Social Inclusion⁷¹ looked at how particular individuals and groups may become excluded from public services and from the mainstream of political, economic and social life. It developed three indices of social exclusion⁷² that brought together many of the issues discussed in this section of the report – living standard, health, education, participation in society and access to services – to give an overall picture including a comparison of urban and rural settlements. The findings revealed almost no difference between urban and rural areas with regard to general social exclusion and long-term social exclusion. However, extreme social exclusion, such as having no income or no primary education is far more serious in rural areas.

The general conclusion seems to be that social exclusion is a BiH-wide problem, rather than a particularly rural problem, and will require country-wide solutions. The 2007 NHDR observed that *“the similarity of the social exclusion analyses between the rural and urban populations and between ‘industrialized’ FBiH and ‘non-industrialized’ RS is particularly noteworthy ... this calls into question the stereotypical views on social exclusion in the case of BiH”*.

The report also highlighted the wide variations in the provision of health and other services between individual administrative areas, such as Cantons. This is in line with the conclusions of Section 3.3 of this NHDR, where official statistics show wide differences between municipalities that seem to have little to do with rurality.

The 2009 NHDR on Social Capital⁷³ found a marked difference between the percentage of the population belonging to associations in urban settlements (22.3%) and in rural areas (14.6%). However, most of this difference could also be accounted for by the different levels of membership in the two principal cities of Sarajevo and Banja Luka (22.9%) and in the rest of the country (16.6%). Once again, this is in line with the findings of Section 3.3 of this report, that the big divide in BiH is between the cities and the rest, rather than between urban and rural.

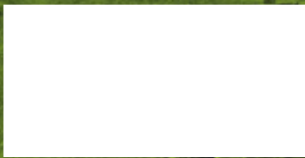
71 National Human Development Report 2007: Social Inclusion in BiH http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/nhdr/nhdr-2007/

72 (i) General Social Exclusion Index – HSEI [Human Social Exclusion Index] seven proxy indicators reflecting living standards, health, education, participation in society and access to services. (50.32% of the population); (ii) Extreme Social Exclusion Index (HSEI+1) reflecting basic processes and needs - 22% of the population; (iii) Long-term Social Exclusion Index measuring the population which has limited choices for improving their situation, thus being at risk of long-term exclusion (47% of the population).

73 The Ties that Bind: Social Capital in Bosnia and Herzegovina http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/nhdr/nhdr-2009/



7



**HOW IMPORTANT
IS AGRICULTURE
IN THE OVERALL
PICTURE?**



7 HOW IMPORTANT IS AGRICULTURE IN THE OVERALL PICTURE?

It is hard to discuss rural development without considering agriculture. As such, the Rural Household Survey deliberately asked a lot of questions dealing with agricultural production, marketing, incomes, attitudes and information. The EU's rural development policy grew out of its agricultural policy as the previous production-orientation of the Common Agricultural Policy became less necessary and less acceptable. Rural development is still managed by the European Commission's DG AGRI as the "second pillar" of the Common Agricultural Policy and retains a strong focus on farms. But is it correct to equate "rural" with "agricultural" in BiH? Will a rural development policy focussed around the farm deliver what society wants from its rural areas?

7.1 What is agriculture like in Bosnia and Herzegovina?

Bosnia-Herzegovina is very poor in agricultural resources. Large parts of the country are mountainous with shallow soils and less than 20% of the land is suitable for intensive farming. The agriculture sector's contribution to GDP is small, about 8% in 2011⁷⁴.

Milk and meat are Bosnia's principal agricultural outputs, produced mainly by privately owned smallholder farms. Dairy farming dominates agricultural production, and livestock production in general contributes nearly 60% of agricultural GDP. Other important agricultural products are wheat, maize, soybeans and tobacco, however the country imports over 65% of its food needs.

Agricultural yields could be increased substantially to meet a greater part of the country's food requirements and to increase exports, but the real challenge lies in the farming structure. There are around 640,000 rural households in BiH⁷⁵, many of which are involved in agriculture to some extent; a much smaller number of households consider farming as their main activity and source of income.

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Bosnia-Herzegovina is very poor in agricultural resources. Large parts of the country are mountainous with shallow soils and less than 20% of the land is suitable for intensive farming. The agriculture sector's contribution to GDP is small, about 8% in 2011.

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⁷⁴ *Bosnia and Herzegovina in Figures*, 2012. BiH Agency for Statistics. http://www.bhas.ba/tematskibilteni/BH_u_brojka_eng.pdf

⁷⁵ 2010 population estimate for municipalities with less than 150 people/km² is 2,321,000; 2004 Household Budget Survey found the average size of rural households to be 3.63 members; $2,321,000 \div 3.63 = 640,000$.

7.1.1 Livestock study

Livestock production is very important in Bosnia and Herzegovina, with 43% of all households in the Rural Household Survey keeping livestock of some kind. A recent EU-funded study of the BiH livestock sector⁷⁶ went into this area in considerable depth, and its key findings are summarised here to give a more complete picture of how this sector operates.

The EU study estimated that over 300,000 households kept livestock (47% of rural households, similar to the 43% of the RHS). Thus almost half of rural households keep livestock, even if just a few chickens. These livestock holdings can be broken down into three groups:

- **Household sector**, producing mainly for own consumption plus some informal sale. These farms generate most of their income from non-agricultural sources, but supplement both their diet and their income with home-produced livestock products. (This sector corresponds roughly to the “*Small*” and “*Medium smallholdings*” in the RHS).
- **Commercial sector**, consisting of large farms producing predominantly for sale to registered slaughterhouses and dairies. These are full-time farms, and agriculture represents the primary source of income for most of these households. (This sector corresponds roughly to the “*Large farms*” in the RHS, and includes the largest livestock farms not included in the RHS survey sample).
- **Small farm sector**, consisting of all farms that fall between these two groups, i.e. those that produce mainly for sale, but are still below the size that would normally be regarded as an economically-viable full-time farm in western Europe. These households typically have a mixture of agricultural and non-agricultural income sources. They market their produce both through informal channels, such as direct sale and green markets, and to registered slaughterhouses and dairies. (This sector corresponds roughly to the “*Large smallholdings*” and the “*Small*” and “*Medium farms*” in the RHS; over 70% of the households earning income from agriculture lie within this sector).

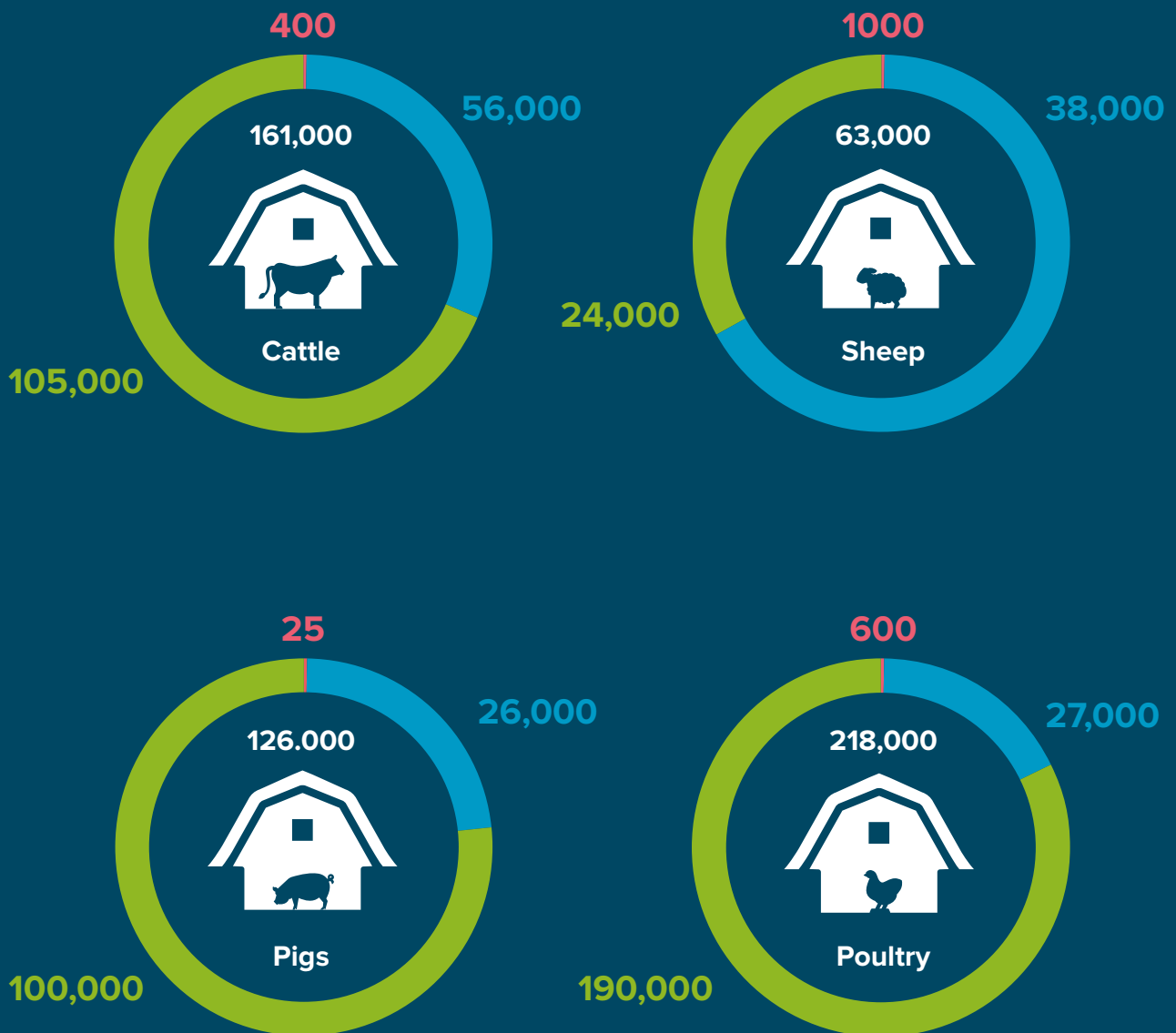
The distribution of farms and livestock between these three sectors (see Box 7.1) varies according to the kind of livestock.

In terms of the number of farms, the household sector represents the large majority of producers of cattle (63%), pigs (79%) and poultry (89%). Only in the case of sheep is the household sector pushed into second place (36%) by the small farm sector, which represents 63% of all sheep holdings.

⁷⁶ *The Meat and Dairy Sector in Bosnia and Herzegovina, 2012*; IPARD sectoral study carried out by FAO and funded by EU.

FIGURE 7.1 NUMBER OF FARMS BY SECTOR

● HOUSEHOLD SECTOR ● SMALL FARM SECTOR ● COMMERCIAL SECTOR



Source: IPARD sector study "The Meat and Dairy Sector in Bosnia and Herzegovina", FAO, 2012.

The commercial farm sector accounts for a very small number of farms for every species, with the following estimated numbers:

- Cattle: 400 farms (0.25%)
- Sheep: 1,000 farms (1.6%)
- Pigs: 25 farms (0.02%)
- Poultry: 600 farms (0.3%)

However, the distribution of animals between the three sectors gives a rather different picture, where for three of the four species it is the small farm sector that is dominant, accounting for 57% of all cattle, 69% of sheep and 52% of pigs.

The poultry sector shows a very different distribution, with 70% of all poultry on commercial farms (especially large broiler farms), followed by 20% on households; the small farm sector is not so significant in terms of poultry production, with only 10% of all birds.

The other species with a significant commercial farm sector is sheep, where 24% of all sheep are in large flocks and only 6% in small flocks for household use.

BOX 7.1

Classifying livestock farms

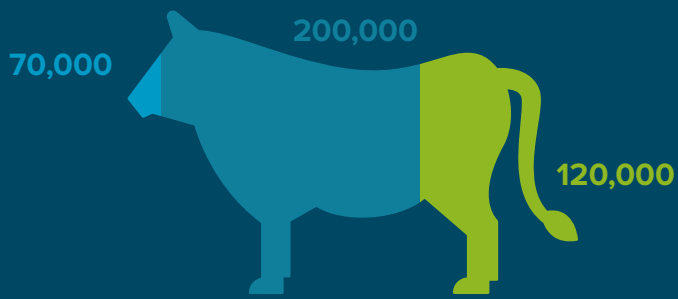
The graphs and numbers quoted in this section are based on the following definitions:

- Cattle: “Household sector” = 1 cow; “Commercial sector” = more than 20 cows
- Sheep: “Household sector” = up to 5 ewes or fattening lambs; “Commercial sector” = more than 100 ewes
- Pigs: “Household sector” = 1 sow or up to 3 fattening pigs; “Commercial sector” = more than 20 breeding sows or 200 fattening pigs
- Poultry: “Household sector” = up to 20 layers or 50 broilers; “Commercial sector” = more than 500 layers or 1,000 broilers

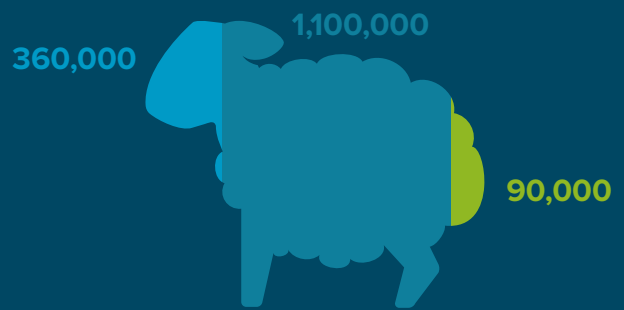
For all species, the “Small farm sector” consists of all holdings larger than “Household” but smaller than “Commercial”.

FIGURE 7.2 NUMBER OF ANIMALS BY SECTOR

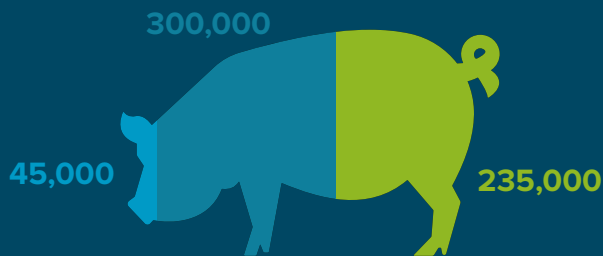
● COMMERCIAL SECTOR ● SMALL FARM SECTOR ● HOUSEHOLD SECTOR



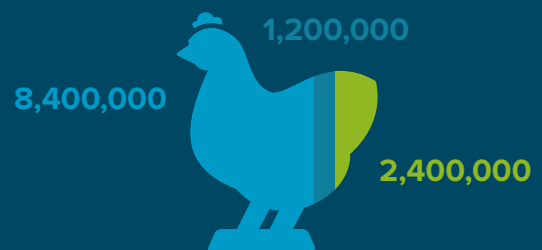
CATTLE
TOTAL: 390,000



SHEEP
TOTAL: 1,550,000



PIGS
TOTAL: 580,000



POULTRY
TOTAL: 12,000,000

Source: Estimates made in the Livestock Sector Study, based on multiple sources

One important aspect of BiH agriculture not covered by the Rural Household Survey is the major role played by informal marketing channels – the direct sale of fruit, vegetables, milk, dairy products and livestock to friends and neighbours, and the sale of many of these products through local “green markets”. In terms of output, household consumption and informal marketing account for around half of total livestock output in BiH:

Of the total rural population, approximately:

- 50% of households keep no livestock;

	Milk	Meat	Eggs
Household use	29%	18%	21%
Informal marketing	33%	28%	16%
Formal marketing	38%	54%	63%
Total output	100%	100%	100%

- 35% of households keep small numbers of livestock mainly for their own consumption;
- 15% of households keep livestock as a part-time activity to supplement their other sources of income;
- < 1% of households are full-time livestock farms, on a European scale.

This summary of livestock production is almost identical to that of agriculture as a whole derived from the Rural Household Survey, even though it was based on completely different data sources. Thus this picture can be treated with considerable confidence.

7.1.2 Crops

The other important agricultural sector in BiH is fruit, vegetable and grape production. In general this follows the same distribution as livestock holdings, though in this case it is more difficult to agree on the minimum size that counts as “agricultural”: if someone has a full-time job but grows a few vegetables and has some fruit trees in their garden, are they involved in agriculture? The Rural Household Survey labelled this agricultural area simply as “Gardens”.

Cereals and industrial crops are less important in BiH, and are rarely produced on a household scale, so this sector is comprised of a mixture of small farms and commercial farms.

7.2 Contribution of agriculture to rural household income

The question of incomes has been analysed extensively in the analysis of the Rural Household Survey, which revealed that 90% of rural households gain no cash income from agriculture, 3% gain a minority of their income from agriculture, while only 6-7% gain the majority of their income from agriculture.

The paradox in BiH is that while almost half of rural households are involved in some kind of agricultural production, less than 10% generate any cash income from this source. Most households involved in agriculture are producing for their own needs, not for sale, so agriculture frequently contributes to rural **livelihoods** but less often to rural **incomes**.

A further consequence of the known distribution of farm sizes and agricultural income shares is that agricultural support policies will only benefit a small proportion of the rural population. Domestic headage and area payments⁷⁷ are mainly available to that 13% of rural households classified as “farms”, though most of these are so small that the support payments will make only a small contribution to total household income. IPARD measures to improve agricultural competitiveness will be accessible only to the more successful farmers in the last group of “large farms”, representing less than 1% of the rural population. Market support gives some benefit to a wider range of households (e.g. the smallholder who keeps one cow but still sells some of their milk to a dairy), but also increases the cost of the food that they buy, so it is not clear whether the net effect is positive or negative.

7.3 Share of rural employment in agriculture

Given the fact that agriculture is predominantly a part-time activity in BiH, it is hard to measure its significance in terms of employment. The 2012 Labour Force Survey estimated that 814,000 people in BiH were employed or self-employed, and that 167,000 (20.6%) of these were engaged in agriculture. These figures include formal employees, both full- and part-time, self-employed and unpaid family workers, and it is likely that many of those engaged in agriculture come into these latter two categories.

This figure of 20.6% of employment being in agriculture is high when compared to other European countries, with the overall EU average being just 5.4%. It also differs from the findings of the Rural Household Survey, which presents a picture of small-scale, part-time farming where only 6.6% of rural households derive the majority of their income from agriculture.

About the only way to reconcile the known structure of farming in BiH with the Labour Force Survey finding would be to conclude that many of those people classified as “Employed in agriculture” are self-employed and unpaid family workers who in reality spent some of their time farming whilst also deriving income from sources such as pensions and other social payments, and from full-time, part-time and seasonal work that was not always declared to the authorities or recorded in the Labour Force Survey.

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The paradox in BiH is that while almost half of rural households are involved in some kind of agricultural production, less than 10% generate any cash income from this source.

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⁷⁷ “Headage payments” are subsidies paid per head of livestock; “area payments” are subsidies paid per hectare of land. Payment rates vary according to the type of livestock and the crop being grown.

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It is very rare for agriculture to play a dominant role in even the most remote of regions.

”

7.4 Regional variations in the importance of agriculture

The relative importance of agriculture in the rural economy tends to vary considerably from place to place, e.g.

- In a peri-urban village with a relatively high population density, the share of the population involved in agriculture either full-time or as a significant part-time activity will be relatively low, since most of the population is engaged in activities linked to the town;
- In a more remote village in a less-densely populated municipality, agriculture may represent a greater share of income and employment, simply because there are less people living there and working in non-agricultural jobs;
- But in some remote areas where the land is mainly mountain or forest, agriculture may again recede in importance.

The results of the Rural Household Survey indicate that it is very rare for agriculture to play a dominant role in even the most remote of regions. Of the 58 municipalities covered by the survey, in only one did agriculture constitute more than half of total household income. Looking at the 53 municipalities where at least 10 households were surveyed gives the following breakdown:

Share of total household income coming from agriculture	Proportion of municipalities
0%	26%
1-5%	30%
6-10%	17%
11-15%	8%
16-20%	9%
21-25%	8%
> 25% (one municipality, 40%)	2%

Source: 2012 Rural Household Survey

This shows that agriculture accounts for more than 10% of income in just over a quarter of municipalities. Thus, even in the villages of the most agricultural of municipalities, agriculture is still a minority source of income.

7.5 So how important is agriculture to rural BiH?

In terms of its contribution to rural livelihoods, it may be said that agriculture matters a little to many rural households, but matters a lot to very few. The rural areas of BiH may still be culturally agrarian, but economically they depend on industry, services and state benefits.

As agriculture develops and adapts to the realities of the EU market – in part with the assistance of future EU rural development funding – it will tend to substitute capital for labour and slowly concentrate onto a smaller number of large farms. In particular, EU food safety requirements for the livestock sector may lead to further polarisation, with larger producers and processors making the necessary investment to meet EU standards, whilst many smaller producers stop supplying formal markets and concentrate on informal sales and meeting their own needs. Thus agriculture cannot be seen as the main vehicle for rural development in BiH, neither now nor in the future.

“

Agriculture cannot be seen as the main vehicle for rural development in BiH, neither now nor in the future.

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CONCLUSIONS



8 CONCLUSIONS

This section focuses on the “reality of rurality” and looks at the three key issues of infrastructure, services and transport that always affect rural areas. The question of whether government should strive to keep people in rural areas is addressed directly, and followed up by looking at what people currently do in rural areas and at the full range of possibilities for rural employment.

The areas identified by the NHDR where further research is necessary to underpin a sound rural development policy are briefly summarised, and the section also looks at the core issues of democracy, bureaucracy and corruption – the factors which, more than any other, determine whether rural development initiatives will succeed or fail.

“
With most of the population spread out across small towns and villages, urban-rural distinctions easily become blurred.
”

8.1 EU rural development policy, and why BiH is different

The core ideas underlying the EU’s rural development policy are that any country can be divided into two sets of areas – urban and rural – where the rural areas are significantly different from the urban, are in many ways disadvantaged, and thus require public support. Agriculture is seen as a key facet of rural life in most regions and so a large part of the policy is focussed on supporting farmers and food processing, and in assisting farmers to diversify into other kinds of rural business.

In 1988, when the Commission’s Communication on “*The Future of Rural Society*”⁷⁸ was published, 27.5% of the then EEC’s population lived in rural areas; by 2005, when the “European Agricultural Fund for Rural Development” was created, this figure had fallen slightly to 26.4%, as continuing urbanisation amongst the original members slightly more than offset the impact of the generally more rural new Member States.⁷⁹ In 2011 BiH had 51.7% of its population living in rural areas; by every measure a very rural country.

However, the underlying principles of EU rural development policy appear to break down in BiH where the rural population share is around twice the EU average. With most of the population spread out across small towns and villages, urban-rural distinctions easily become blurred. When a rather limited quantity of high-quality farmland is spread out across such a large number of people, it is almost inevitable that agriculture cannot be the mainstay of most villages and rural households. And where around 60% of the population and 50% of GDP lie in rural areas, the idea of resource transfers from the urban majority to the rural minority falls down completely.

It is perhaps precisely because Bosnia and Herzegovina is so very rural that one rural stereotype after another turns out to be a myth. Indeed, the idea of a distinct rural development policy is less appropriate than policies that seek to develop BiH as a whole, whilst taking account of relevant societal variations, whether these stem from entity, ethnicity, age, gender or rurality.

⁷⁸ Commission Communication Transmitted to the Council and the European Parliament on 29 July 1988: COM(88)371 Final

⁷⁹ All data from the World Bank (<http://data.worldbank.org/indicator/SPRUR.TOTL.ZS>), where “Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.”

“

Alternative energy sources such as biomass and solar and photovoltaic systems can offer solutions in some areas and will need to be seriously considered.

”

8.2 The reality of rurality

However rurality is defined or measured, its over-riding feature is that the population is thinly spread and there is a considerable physical distance between people. This may take the form of small villages having a few kilometres of fields or unfarmed land between them and the next village, or of medium-sized towns being a considerable distance from the next major centre of population. The issue of distance is not just a common feature of rurality, it is its very essence, and something that – by definition – can never be changed. Hence it is little surprise that the two areas in which urban-rural differences are most consistently reported are infrastructure and services, since the costs of providing each rise markedly as the population becomes more thinly spread.

Ensuring infrastructure

The large majority of infrastructure utilities, such as roads, electricity, telephone, broadband internet, water and sewerage, require a physical connection to each and every dwelling, so it costs a lot more to install and maintain services to widely-spaced homes. Whilst the factor of distance cannot be changed, there are a number of technical solutions that can allow even isolated dwellings to enjoy good access to most of these services. Mobile phones have already started to transform the countryside, providing telephone access where it never existed before. The introduction of 4G may soon offer rural inhabitants broadband internet access as fast as that now provided in towns, though cost is likely to be an issue for some time. However, BiH's hilly topography means that the mobile phone system is not yet a universal solution, though it is conceivable that in the long term satellite-based services will render rurality totally irrelevant to the delivery of telephone, TV and internet services.

For those homes too remote from the public water and sewerage systems, properly constructed boreholes can be a perfectly adequate source of drinking water, and a well-designed and located septic tank or mini treatment plant can handle household effluent in a safe and environmentally-sound manner.

As far as roads are concerned, public provision already covers all but the smallest settlements, however, an estimated 2,600 households await connection to the electricity grid⁸⁰ with the most isolated of dwellings requiring the traditional solutions of a jeep and a generator. Alternative energy sources such as biomass and solar and photovoltaic systems can offer solutions in some areas and will need to be seriously considered.

The key limitation is almost always one of cost. As an example, the construction permit for a new house in a rural area will typically require a septic tank – in theory a waterproof concrete box built into the ground, in which all household sewage is collected and contained, then periodically pumped out into a tanker and taken away to a municipal sewage works for proper treatment and disposal. In terms of hygiene and the environment, this solution is equal in theory to having a connection to a main sewer. However, as septic tanks fill up quickly and emptying costs are high, they are commonly constructed with deliberate leaks or hidden overflows allowing the liquid fraction to drain into groundwater or the nearest watercourse. Thus untreated effluent is discharged into the environment. So in practice, septic tanks are an inferior solution,

80 2010 Estimate from Ministry of Human Rights and Refugees

and ideally the municipal sewerage networks should be extended to as many villages as possible, supplemented by green sewerage solutions.

Policymakers must decide to what degree they want to use public funds to mitigate the infrastructural disadvantages of rural areas, either by extending public services to ever-smaller settlements, or by providing grant assistance to help isolated dwellings install acceptable solutions.

Delivering services

In providing public services to thinly-distributed populations, the essential choice is between taking the services to the people, or the people to the services. The former implies smaller classes, less scope for specialists – whether subject teachers, medical experts, psychologists or sociologists – a more limited range of diagnostic and didactic equipment, and a generally higher cost per person served. The latter implies longer travel times for children going to school and patients going to hospital, and an increased temptation for rural dwellers to skip the service altogether. In the private arena, individual banks and retailers will decide whether or not they see profit in running a shop or branch in a small village, and the problem of travel is left to the customer.

Part of this may always remain as an inevitable cost of rurality, but there are many administrative and technical solutions that can help reduce the degree of disadvantage:

- Putting administrative processes on-line completely removes the factor of distance. It also allows a centralised agency to serve an entire country or entity, bringing considerable cost savings. Possible examples include issuing copies of birth, death, marriage and divorce certificates, and extracts from the land cadastre and business registers.
- Where physical copies of documents are required, the postal service is usually a good solution. If it is necessary to have sight of an original document or to compare a person against a form of photo identification, then greater use could be made of the large existing network of post offices and banks, which are already audited for financial and documentary transactions.
- When it is necessary to visit an administrative centre in person, then the “one stop shop” approach can help the applicant to finish the transaction in one visit, and not have to repeat the journey into town.
- Internet banking will be of particular value to that 80% of rural residents who live 3 km or more from the nearest bank. New technologies can have a radical impact on rural communities, like the way that transferring money by mobile phone suddenly brought banking services to people throughout rural Africa, and BiH should be energetic in adopting technologies that meet its particular needs.

BiH requires on average twice as many documents or separate procedures as the EU15 Member States need to carry out the same administrative tasks. The best way to reduce the administrative burden on rural residents may well be to reduce the overall level of bureaucracy in the country. On a more serious note, a serious regulatory reform effort specifically targeted at lowering the administrative burden on small and medium-size producers and companies is long overdue in BiH and is one of the main causes of the unattractiveness of BiH for foreign and domestic investment growth.

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BiH requires on average twice as many documents or separate procedures as the EU15 Member States need to carry out the same administrative tasks.”

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A number of countries, and the European Union, have implemented policies with the explicit goal of maintaining the population in rural areas. Is this an appropriate goal for Bosnia and Herzegovina to pursue?

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Shrinking distance

Whilst the essence of rurality is the distance between people, what really matters is KM (BAM) rather than km – time and cost rather than physical distance. If rurality were measured by the proportion of the population that lives more than an hour’s drive from a major urban centre only, then improvements in transport systems could make the country significantly less rural even while people stayed in their villages.

The problem in much of BiH is that its mountainous terrain means that most roads are narrow and winding, and both widening and straightening are difficult and expensive. The problem is compounded by an aging vehicle fleet, with the BiH Agency for Statistics reporting that 74% of the country’s vehicles are more than ten years old,⁸¹ and slow-moving lorries are a particular bottleneck and an ever-present temptation to risky overtaking manoeuvres.

Major investment will certainly be required but will bring benefits for centuries to come, benefits measured in time, in economic growth, and in human lives saved. A selective programme of upgrading major roads and installing periodic passing places on secondary roads may be an affordable compromise. Modernising the transport fleet should also be a policy goal, which might be pursued through the vehicle and fuel taxation system.

Many households are still without a car, or cannot justify the costs of driving to work every day, so the public transport system is another important part of the equation – a village with a regular bus service feels a lot less rural than one without.

8.3 Should it be a policy goal to keep people in rural areas?

A number of countries, and the European Union, have implemented policies with the explicit goal of maintaining the population in rural areas. Is this an appropriate goal for Bosnia and Herzegovina to pursue?

EU measures aiming to preserve the rural population

One of the most significant EU examples was Council Directive 75/268/EEC “on mountain and hill farming in certain less-favoured areas” with the objective “to ensure the continuation of farming, thereby maintaining a minimum population level or conserving the countryside in certain less-favoured areas”. The measure sought to maintain farming, and hence the rural population, in Less-Favoured Areas (LFAs) through livestock headage payments, known in the UK as “Hill Livestock Compensatory Allowances”.

The scheme and its objectives were successively modified over time, until finally superseded by the rural development regulation 1257/1999 which dropped the specific objective of maintaining population and instead pursued “the maintenance and reinforcement of viable social fabric in rural areas”.

An evaluation of the policy⁸² found that “Whilst the evidence is limited, the LFA measure seems to have had little influence in stemming population decline and has played a limited role in maintaining or

81 *Bosnia and Herzegovina in figures*, 2012. BiH Agency for Statistics.

82 *An evaluation of the Less Favoured Area measure in the 25 Member States of the European Union: A report prepared by the Institute for European Environmental Policy for DG Agriculture*, November 2006.

slowing down the decline in the agricultural labour force” and went on to conclude that “the original objective of seeking to prevent rural depopulation through continued agricultural activity has ceased to be relevant in most parts of the EU-15 as the share of employment directly dependent on agriculture has declined. The removal of this from the formal objectives of the LFA measure was therefore appropriate”.

In short, the evaluators concluded that trying to keep people in rural areas through targeted agricultural subsidies did not work, despite the billions of Euros spent on it, but they did not comment on whether seeking to maintain the rural population remained a valid objective that might be pursued through other policy measures.

Rural population and labour mobility

It is something of a cliché to talk about “today’s fast-changing world”; the lands of former Yugoslavia have seen a tremendous amount of change over the last century, and EU enlargement will bring yet more. Successful adaptation to change requires flexibility, particularly in the labour market, with people being prepared to learn new skills and move location to respond to changing opportunities. As old sectors decline and new sectors emerge, there will always be some areas to which people head, and others from which people seek to leave. Given that it is the young who tend to leave, this can create real difficulties for the older generation who are left behind, particularly in small villages where shops and services are already struggling to survive. Ultimately, however, the increasing cost of trying to resist change can bring even greater problems.

A human development perspective

Respondents in the Rural Household Survey seemed to have quite a realistic view of the advantages and disadvantages of rural life. They considered the rural environment to be better and healthier, and thought that people ate better in the countryside (Section 5.7.3). In all other respects, including income and employment, infrastructure and service, education and social life, they considered urban life to be better. The relative attraction of the two lifestyles will vary for different individuals and at different stages of life.

The essence of the human development paradigm is to increase people’s choices and opportunities, and to help them fulfil their potential in life. From this perspective – that of the person rather than the place – the goal is not to keep people in rural areas nor to encourage them to move to the city, but to increase the scope for individuals to choose the life that most suits them. If someone would like to stay in their village but cannot find work and so has to move to the city, they do not have much choice; conversely, if another person would like to move to the city but cannot afford the cost of housing there, then they too are constrained in their choice. In the real world none of us has unlimited choice, and publically-funded measures to increase the choices of one part of society may restrict the choices of those whose increased taxes must pay for the measures, so it comes down to a question of political priorities.

This report would therefore recommend that the government of BiH should not set an explicit goal of maintaining population in rural areas, but instead seek to provide all its citizens with an adequate standard of infrastructure and services, and to improve economic and employment conditions throughout the country.

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The government of BiH should not set an explicit goal of maintaining population in rural areas, but instead seek to provide all its citizens with an adequate standard of infrastructure and services, and to improve economic and employment conditions throughout the country.

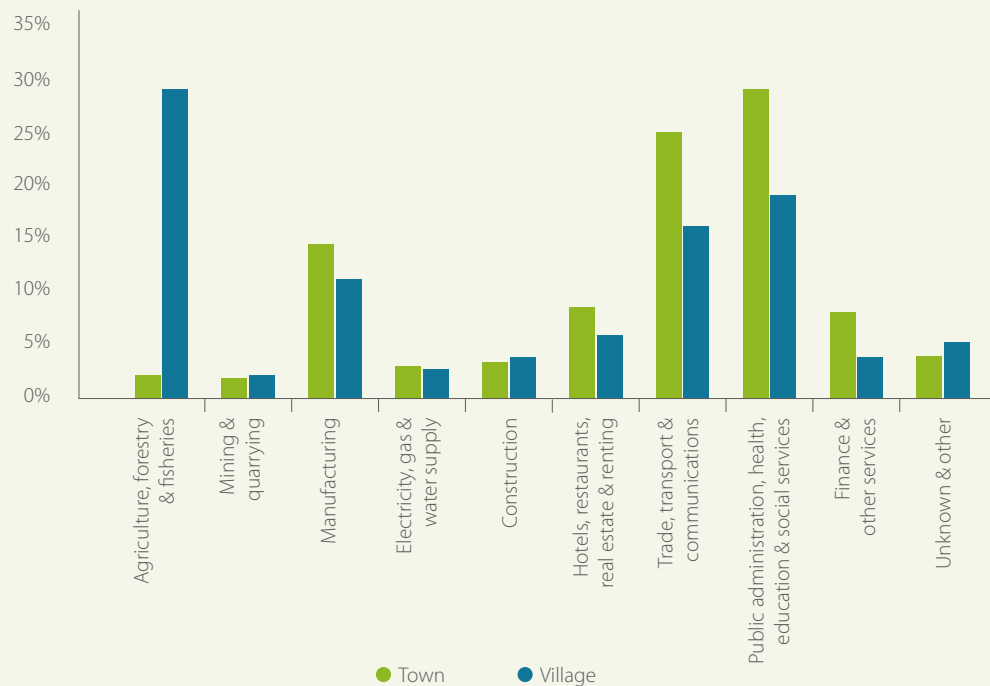
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8.4 What do people do in rural areas?

If, as discussed in Section 7, most people in rural areas do not work in agriculture, what do they do? Many are children, housewives, retired or otherwise outside the labour force, but the municipality-level data showed 28% to be economically active and 15% to be officially employed, so what jobs do these people do? Unfortunately neither the Rural Household Survey nor the Labour Force Survey gives a clear answer to this question, but some clues can perhaps be gained from neighbouring Montenegro, where the 2003 Population Census allowed an analysis of rural and urban employment patterns.

FIGURE 8.1

Breakdown of employment in urban and rural settlements of Montenegro (“towns” and “villages”), based on a 2010–2011 UNDP study



Source: *Montenegro rural enterprise development: Potential, options & interventions*, UNDP, 2011

Agriculture, forestry and fishing are somewhat more important in Montenegro, (accounting for 28% of employment compared to 21% in BiH), and show the most striking difference between town and village. For all the other sectors, the employment pattern in rural areas tends to mirror that of the towns.

The study analysed Montenegro in four regions and found that in the coastal municipalities, where most of the villages are a short distance inland and directly connected to the main coast road, employment patterns in villages very closely reflect those of the nearby towns, with just 8% of rural workers engaged in agriculture. At the other extreme, the four municipalities of north-west Montenegro, a very isolated region with poor transport links, show much more pronounced rural-urban differences, with over half of the rural working population engaged in agriculture and forestry. The traditional industries of mining, quarrying and manufacturing still play a significant role in the towns.

The other two regions defined in the study occupied an intermediate position, and the overall conclusion was that the more closely the villages are connected to towns and cities, the more closely they mirror the urban employment structures. It is very probable that this conclusion is directly transferable to Bosnia and Herzegovina.

So what do people do in rural areas? They sell food and clothes and televisions and toilet paper and lottery tickets and insurance and animal feed and fertiliser. They drive buses and taxis and fork-lift trucks and lorries and tractors. They serve as teachers and lawyers and administrators and policemen and doctors and nurses and vets. They work as waiters and cleaners and plumbers and electricians and farmers. They mend cars and washing machines and mobile phones and farm machinery. They produce furniture and toys and terracotta tiles and cabbages and cheese. In short, they do the whole range of jobs that people do in urban areas, though with a somewhat greater emphasis on those activities that make use of the resource of land, and somewhat less on those that are most affected by the constraint of distance. Looked at like this, rural development is freed from a narrow focus on agriculture, food processing, rural crafts and agro-tourism, to consider almost any activity that makes money and does not require a large specialised labour force or a great number of consumers right on its doorstep.

8.5 What are the main opportunities for rural areas?

Once rural development raises its sights above traditional land-based industries, it can see that for a rural area within reasonable travelling distance of a town or city, there are four main employment possibilities:

- 1 Working in agriculture, forestry or in processing their products; where the natural resources are present, mining, quarrying and stone-working may also be options;
- 2 Commuting to work in the town;
- 3 Working in the village to supply customers in the town. As an example, someone could set up a business making kitchen units, travelling to town to meet their customers and measure up, returning to the village to make the units, then delivering and installing to their urban customers. For some businesses the space available in rural areas can more than make up for the time and costs of travelling to town when needed;
- 4 Providing services to the rural population engaged in any of the above activities, as well as to the non-working population such as children, pensioners, housewives and the unemployed. These services may be directly linked to agriculture, such as selling feed and fertiliser, or quite generic, such as construction or running a petrol station, shop or hairdressers. Also important is providing public services in areas such as health care, education and administration, and in public utilities.

The roles of the second and third activities become more important the closer a village is to an urban centre – commuting or servicing customers in the town. These peri-urban areas are closely linked to the economic health of the town as their main source of employment and trade. In terms of quality of life and services, these areas are also closely linked to the towns, where people will travel regularly to shop, study, socialise or receive medical care.

“
 With the reduced opportunities for both travel-to-work and supplying urban customers, the primary industries of agriculture, forestry and mining tend to assume a greater importance.”

A rural development strategy for such areas might follow the concept of “hub development” and include three main elements:

- Ensuring the economic and social health of the urban areas;
- Ensuring good transport and communications between town and village;
- Encouraging the development of rural enterprises appropriate to the opportunities and demands of the accessible population – these enterprises could be anything with good commercial prospects and do not necessarily have to contain any special “rural” element.

Service provision in these areas typically follows the well-known model whereby basic services, such as primary education and routine health care, are provided in the village, whilst people travel into town to the high school or hospital. In Bosnia and Herzegovina, where car ownership is still far from universal, regular bus services are an essential part of this structure.

However, once the distance from town increases (with travel times of 45 or 60 minutes often being used to define “remote rural”) the balance between the four employment types shifts markedly. Daily commuting to work becomes less and less viable, so workers may spend the week boarding in the town or city where they work, returning to their homes and families at the weekend. Commuting may also cover greater periods and distances, such as the large numbers of manual workers from BiH who travel to neighbouring countries, such as Croatia, Serbia and Montenegro, to work on building sites or in seasonal tourism, typically staying for several weeks at a time and then going back to their villages to be with, and take money back to, their families.

The option of working in the village to produce goods and services for urban customers also becomes more difficult with increasing remoteness, and such businesses may have to rely on a representative or middleman in town to service the client, tending to put them at a disadvantage compared to their urban or peri-urban competitors.

With the reduced opportunities for both travel-to-work and supplying urban customers, the primary industries of agriculture, forestry and mining tend to assume a greater importance in these areas. With generally less money around, the provision of commercial services to the rural population is also diminished, and in some remote areas government-funded jobs in the local post office, municipality, school or health centre can be almost the only formal employment available, effectively constituting a long-term fiscal transfer from urban to rural areas.

It is in these remote rural areas that the challenges of rural development are greatest, and where specifically “rural” activities such as agricultural production, on-farm food processing or first-stage timber processing appear to be leading options, though the results of the Rural Household Survey indicate that even in the most agricultural of municipalities, agriculture still contributes a relatively small proportion of total income.

However, in a remote municipality with few economic opportunities, even the 10% or 20% of income that agriculture can supply will make a welcome contribution; there may also be some multiplier effects through the businesses supplying agriculture and trading or processing its products, though these are often located in the nearby town rather than in the village itself. Developments in agricultural markets and support measures can have a quite significant impact

on these more agricultural communities, and IPARD-type measures to improve agricultural competitiveness, processing and marketing are indeed relevant. However, it should never be forgotten that even in these most remote and agricultural of municipalities, most households depend on sources of income that are not connected with agriculture or the land.

Some possibilities for remote areas: Tourism and tele-working

The foregoing analysis suggests a gradual reduction in the range and scale of employment opportunities as rural areas become more remote, but there are two particular sectors where remoteness might not pose such an obvious barrier: tourism and tele-working.

Rural areas have some distinct assets as far as tourism is concerned, including peace and tranquillity, landscape beauty, traditional buildings and lifestyle, space for recreational activities such as hiking, biking and horse riding, and some spectacular natural playgrounds such as canyons to climb and rivers to raft down. BiH is very well endowed with such resources, and in a position to try and compete with all the other countries of Europe that are trying to market their rural areas as tourist destinations. There is now a lot of competition in this marketplace and so consumers can demand a lot, including competitive pricing, an adequate standard of service and a wide range of things to do while they are there – ranging from marked trails for hikers and cyclists, to interesting shops and things for the children to do. Access is very important, and the ideal situation is a rural area that has natural beauty and a feeling of remoteness yet can be quickly reached by car or by bus from the airport. Given the need for transport links and for a variety of activities and services, it is probable that an area needs a certain critical mass before rural tourism can really take off as a major part of the economy; there are a number of examples in the Balkans where resorts (usually starting off as ski resorts) have managed to achieve this critical mass and developed into all-year centres of rural tourism. If this approach is to be supported in BiH, then it may require a planned approach to development, with resources channelled into a few carefully selected sites rather than being offered as a general measure available to applicants throughout the country.

Image and marketing are extremely important in all forms of tourism, and here BiH has some work to do to resolve the real and perceived dangers of minefields, to get past the images of war, and to let people see the true value of its rural areas.

Another option often proposed for the development of remote rural areas is tele-working, whereby people can use the power of the internet to deliver knowledge-based services from anywhere in the country. BiH has a large number of young IT professionals, its rural areas are served by quite a good postal service and, as the Rural Household Survey showed, growing internet access with almost 40% of rural homes now having a broadband connection. Thus the basic pre-requisites for tele-working are already in place, even if the ability to make payments over the internet is still limited. However, the reality discovered throughout Europe is that people still like to interact with people, to meet their customers and suppliers and to exchange ideas and information. This means that, whilst tele-working is a real possibility, it is still easier to make this business succeed when there is an urban centre within driving distance.

8.6 The need for analysis

This NHDR has identified a number of areas where more research and analysis is needed to give a sound basis for rural and regional development planning:

8.6.1 Defining rural areas

Section 3 showed that most existing urban-rural datasets for Bosnia and Herzegovina either classify the municipalities according to their population density (area approach) or divide the population between those who live in designated urban settlements and those who do not (settlement approach). The analysis throughout this report has shown the limitations of both these binary classifications, and highlighted the special situation of intermediate-density municipalities and towns.

Most European countries have developed their own methods of classifying rural areas to meet their specific circumstances and needs, and it is strongly recommended that Bosnia and Herzegovina develop a new classification of its territory and population centres as the basis for rural development planning. This classification should:

- Use both the area approach and the settlement approach to classify the territory along two axes;
- Divide settlements into at least three groups – cities, towns and villages.

The 2013 Population and Housing Census should generate a dataset that would allow a new analysis and definition of rural areas in Bosnia and Herzegovina.

8.6.2 Analysing the differences between municipalities

The analysis of municipal-level data in Section 3.3 found that municipalities with very similar levels of population density varied widely in respect of key demographic and economic indicators such as migration, unemployment and wage rates. The map of unemployment (Figure 3.8) showed no obvious pattern to explain this, so why are some municipalities performing so poorly, and how can their problems be addressed? And if some rural municipalities are managing to create jobs, raise wages and attract incomers, do they have a secret that can be replicated across the rest of the country?

The 2010 UN Regional Disparity Assessment⁸³ revealed considerable geographic disparities in BiH society and concluded that 89 of the 142 municipalities in BiH are underdeveloped or extremely underdeveloped. According to the study the five best ranked geographical areas are: Sarajevo, Hercegovina-Neretva, Istočno Sarajevo, Banja Luka and Zenica-Doboj, whilst the five worst ranked geographical areas are Canton 10, Una-Sana, Bosnian Podrinje, Posavina and Bijeljina.

⁸³ BiH Regional Disparity Assessment 2010, United Nations, based on data from the 2007 Household Budget Survey and 2008 Labour Force Survey. Analyses of findings were conducted at the regional level for Demography; Education; Access to Utilities; Quality of Life, Standard of Living, Transport Infrastructure and Health; Employment; and Economic Disparity, Income and Poverty and Social Inclusion and Vulnerable Groups. In total, 19 indicators were used for regional ranking and 5 indicators for municipal ranking.

Targeted case studies of some of the best and worst performing municipalities, could provide further valuable insights for rural development planning as a whole.

8.6.3 Understanding urban decline

One of the most striking findings of the municipality-level analysis was that urban municipalities that do not contain a large city (of 100,000 people or more) have the highest unemployment, the lowest net wages, and a tendency for outmigration. These 17 municipalities, listed in the following table, have estimated populations ranging from just under 5,000 to just over 75,000, and an average population density of 215 people per square kilometre; one of them is Brčko District, with its special status outside either entity:

Municipality	Population	Population density
BRČKO DISTRICT	76,000	190
BREZA	14,000	200
CAZIN	63,000	180
DOBOJ ISTOK	10,000	250
DOBOJ JUG	4,500	440
GORAŽDE	30,000	210
GRAČANICA	52,000	240
GRADAČAC	46,000	210
KALESIJA	36,000	180
LUKAVAC	51,000	150
ORAŠJE	20,000	160
SREBRENİK	42,000	170
TEOČAK	7,400	260
TEŠANJ	48,000	310
VISOKO	40,000	170
VITEZ	25,000	160
ŽIVINICE	55,000	190

“

One of the most striking findings of the municipality-level analysis was that urban municipalities that do not contain a large city have the highest unemployment, the lowest net wages, and a tendency for outmigration.

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TABLE 8.1

Selective population data

The medium-sized towns found in these municipalities each have their own economic history, with particular industries or mines having supported the town in the past, but which have not weathered the economic transition well. They have the potential to become sources of employment for the surrounding rural areas and sources of trade for rural businesses, but only if their own economies can be revived. This will require a case-by-case analysis to discover what is causing their decline and to see what measures might bring new economic life: Do they need a better-educated workforce? Better access to credit? Improved links to the big cities?

The future for these municipalities is likely to be different from the past, probably with an economy based more on services than on industry; some may find a role as commuter towns for nearby cities, whilst others may continue to shrink as people “vote with their feet” and move to the cities where their skills and labour are in demand. None of these options is necessarily better or worse than any other, and the focus should be on ensuring that the people have adequate access to jobs and services, wherever they choose to live and to work.

Almost a quarter (24%) of the country’s total unemployed live in these 17 municipalities, so finding economic solutions for them will bring nationwide benefits, but solutions can only be found once the problems are properly understood.

8.6.4 Consulting on infrastructure and services

This NHDR has shown that urban-rural differences are greatest for issues that are directly affected by the essence of rurality – the fact that people are more spread out – and so emerge most consistently in respect of infrastructure and services. The ministries and local authorities responsible for health, education, social services, transport, water and sanitation must be well aware of these issues, and will already have policies, planning documents and investment programmes covering the whole country. Transport planners have to consider pan-European road networks and investments that take years. All these authorities are likely to come under conflicting pressures, with national and international demands to cut budgets on the one hand, and calls for better services on the other.

The planners of rural development in Bosnia and Herzegovina should work with these authorities, bringing in specialist knowledge from organisations such as UNDP, UNICEF, FAO, IFAD, WHO and local NGOs, and seek to ensure that the needs of rural areas are taken into account and a balance struck that is in the best interests of society as a whole.

8.7 The quality of government

One common theme of the past three Human Development Reports for BiH is the stress they put on the need for government reform.

The 2005 report on *Better Local Governance* concluded that:

“Reform in BiH, as elsewhere in the world, is embedded in politics, yet our assessment of the potential for political change is pessimistic. The political elite have not shown a commitment to reform and ordinary citizens are apathetic and disenfranchised. Civil society is still weak and BiH lacks a genuine ‘civil space’. Sadly, change continues solely to be driven by an increasingly assertive resident international community.

It is difficult to see therefore how the necessary reforms can ever come about. Our analysis also suggests a still more negative possibility: that the absence of strategies has not come about by chance or benign neglect, but is a direct consequence of dominant political forces’ implicit opposition to change. It is a depressing prospect but the key obstacle to decentralization may not be systemic weaknesses, but outright political opposition.

Our response to this possibility must be both positive and assertive. Reform is never the exclusive game of those with power, but a challenge to be achieved by all stakeholders. Real lasting progress is rarely revolutionary in character but is instead made up of a myriad of small and practical steps, taken by all manner of groups. This report seeks to support such a process; its analysis, arguments and proposals form ammunition for all those who are willing to fight for change. We also hold to the view that decentralization has a greater purpose in building the broad consensus that is necessary for comprehensive reform in modern day BiH.”

The *National Human Development Report 2007: Social Inclusion in BiH* noted that:

“The Dayton Agreement, often described as ‘a terrible way to end a terrible war’, has created a state structure that is complex and fragmented. The divisive political environment and the domination by the ethnically-based parties have together spawned indifference among the population towards political participation and the BiH constitution, which formed part of the Dayton Peace Accords, has ironically further encouraged ethnic division.”

The 2009 report on *The Ties that Bind: Social Capital in Bosnia and Herzegovina* came back to the over-riding issue of constitutions and government, saying that:

“Despite these positive signs, however, the pace of reform in the country is agonisingly slow. Constitutional reform, although generally recognised as crucial, remains a sensitive topic, in particular with regard to the direction this reform should take. The current constitutional structure, contained within the Dayton Agreement, is unnecessarily complex, unwieldy and expensive. Additionally, it provides for a decision-making structure which is inefficient and unaccountable. As such, it is unable to provide the basis for efficient decision-making or reform that would enable the country to make more rapid progress towards the EU. The European Commission (EC) delegation to BiH has requested that the country establish ‘more functional and sustainable institutional structures, yet there has been no serious attempt to amend or change the Constitution since the Parliamentary Assembly rejected a package of constitutional amendments in 2006.”

Unfortunately none of the research conducted or reviewed for this 2013 NHDR indicates that much has changed. Thus, rather than simply repeating what has been said many times before, this report looks at three aspects and indicators of governance – democracy, bureaucracy and corruption – to see how they impact on human development in general and on rural areas in particular, and to suggest how they can be used as a checklist for reform.

8.7.1 Democracy

The starting point to examine how well government works is perhaps to look at how government is formed in the first place – the extent to which it is selected, directed and changed by democratic processes. One attempt to measure the complex subject of democracy is the “Democracy Index” produced by the Economist Intelligence Unit⁸⁴ (Figure 8.2). Results are based on a combination of public attitude surveys and expert opinion.

BiH is currently 98th in the world, below all other EU members, potential members, candidate and potential candidate countries. Its biggest failings are in respect of “Functioning of government” and “Political participation”, where BiH occupies respectively 119th and 117th place in the world. BiH also has the lowest score for “Electoral process and pluralism”.

⁸⁴ https://www.eiu.com/public/topical_report.aspx?campaignid=DemocracyIndex12 The report contains a detailed description of the methodology, and also compares it with other measures of democracy, including the measures published by “Freedom House”.

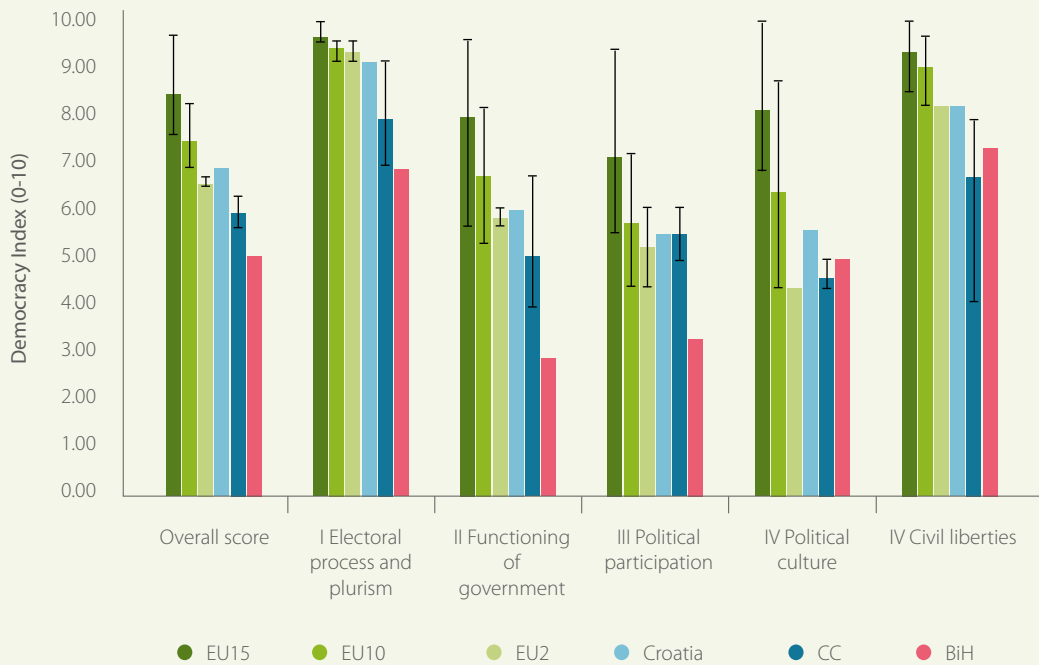


FIGURE 8.2

Democracy Index for BiH compared to current and potential EU Member States (highest is best)

NOTE:

“CC” is used for all countries that have applied for Candidate Country status, irrespective of whether or not they have received it⁸⁵

Source: Economist Intelligence Unit “Democracy Index 2012: Democracy at a standstill”; https://www.eiu.com/public/topical_report.aspx?campaignid=DemocracyIndex12

Most of the elements considered in the Democracy Index apply to BiH as a whole, but the implications of poor democracy – and in particular of the weak functioning of government – can have direct and serious implications for rural areas. A highly topical example is the system of veterinary and food safety control, where responsibilities are spread between the State Veterinary Agency and different inspection services at entity, canton and municipality level. There is no effective chain of command and the Chief Veterinary Officer for BiH does not have the power to suspend operations or exports from a slaughterhouse, dairy or meat processing plant that falls short of national and EU standards – which is one of the key powers that the European Commission looks for in the “Central Competent Authority” of any country wishing to export animals and animal products to the EU. Because of this institutional failing, BiH is not permitted to export meat, milk, livestock, dairy products or eggs to the EU and was depending heavily on the regional market, particularly Croatia.

However, having joined the EU on of 1st July 2013, Croatia now has to apply the same import rules as every other Member State and so has ceased to import all these products from BiH. Producers in other countries are more than happy to fill the gap in the market, and so whenever Bosnia and Herzegovina does eventually receive permission to supply the EU, it will have lost its established position in the Croatian market and have to work extra hard to regain it – representing a serious and long-term cost to livestock producers throughout the rural areas of BiH.

⁸⁵ “CC” includes Albania, Macedonia, Montenegro, Serbia and Turkey. Following the usual convention, “EU10” indicates the New Member States that entered the EU in 2004, “EU15” means the members immediately prior to that enlargement, and “EU2” means Bulgaria and Romania, which joined in 2007.

8.7.2 Corruption

Another measure of good government is the level of corruption in the country. The organisation “Transparency International” has been monitoring this since 1998 through its “Corruptions Perception Index”.⁸⁶ Corruption is by its nature illegal and hidden, so the index assesses how corrupt people perceive their country to be, based on reports and data from a number of reputable sources.⁸⁷

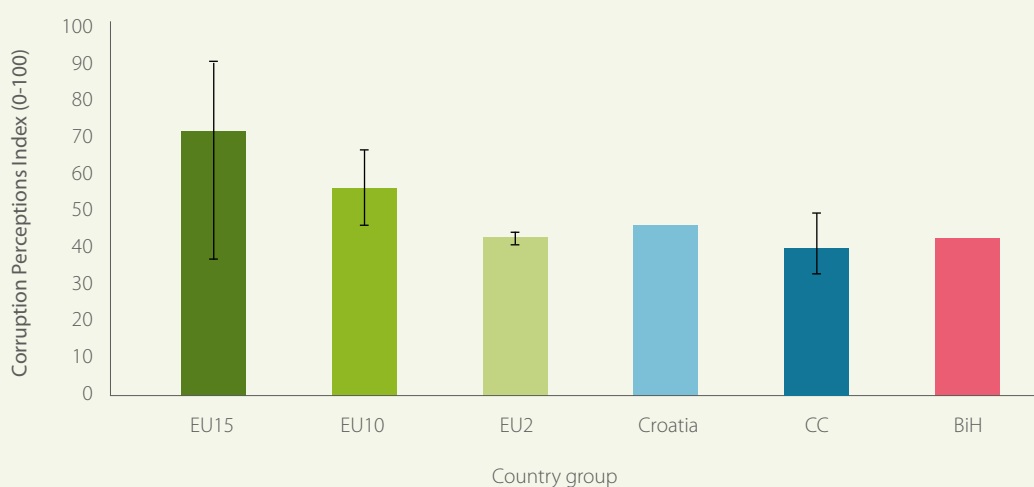
Countries are only included in the index if data are available from at least three different sources; for 2012 there were 7 data sources covering BiH and 3-10 sources for each of the other current and potential EU Member States.

FIGURE 8.3

Corruption Perceptions Index for BiH compared to current and potential EU Member States (highest is best)

NOTE:

A score in the following chart, where a score of 100 represents the most clean, and a score of 0 the most corrupt



On this index, BiH has at least moved out of last place amongst the current and potential EU member states, but with a score 30% below the EU average there is considerable scope for improvement.

A study by the UN Office on Drugs and Crime (UNODC) on “*Corruption in Bosnia and Herzegovina*”⁸⁸ found that citizens of Bosnia and Herzegovina rank corruption as the fourth most important problem facing their country today, after unemployment, the performance of the government and poverty or low standard of living.

⁸⁶ <http://www.transparency.org/research/cpi/>

⁸⁷ African Development Bank Governance Ratings 2011, Bertelsmann Foundation Sustainable Governance Indicators 2011, Bertelsmann Foundation Transformation Index 2012, Economist Intelligence Unit Country Risk Ratings, Freedom House Nations in Transit 2012, Global Insight Country Risk Ratings, IMD World Competitiveness Yearbook 2012, Political and Economic Risk Consultancy Asian Intelligence 2012, Political Risk Services International Country Risk Guide, Transparency International Bribe Payers Survey 2011, World Bank - Country Policy and Institutional Assessment 2011, World Economic Forum Executive Opinion Survey (EOS) 2012, World Justice Project Rule of Law Index 2012

⁸⁸ http://www.unodc.org/documents/data-and-analysis/statistics/corruption/Bosnia_corruption_report_web.pdf

Almost 21% of respondents who had contact with public officials in the 12 months before the survey reported paying a bribe, most commonly to a doctor (54%), police officer (52%) or nurse (31%). The survey found no significant differences in the prevalence of bribery in urban and rural areas, so this is a problem that applies to Bosnia and Herzegovina as a whole.

Globally, there is a relatively strong linear relationship between bureaucracy and corruption (55% correlation), with countries that rank poorly on Ease of Doing Business also having poor scores on the Corruption Perceptions Index. Compared to the general trend, most EU-15 countries have less corruption than their degree of bureaucracy would suggest, whilst many ex-Socialist countries are markedly more corrupt than other states with a similar business climate. BiH in fact contradicts this trend, since it is slightly less corrupt than the average for 30 ex-Socialist countries, but only Ukraine, Tajikistan and Uzbekistan have worse business conditions.

8.7.3 Bureaucracy

One of the most important ways in which a government expresses itself is in the climate it creates for business and hence for the national economy. For some years the World Bank has sought to measure and monitor this through its “Doing Business” rankings, which measure 11 areas of business regulation under the two broad headings of “Complexity and cost of regulatory processes” and “Strength of legal institutions”:⁸⁹

⁸⁹ <http://www.doingbusiness.org>

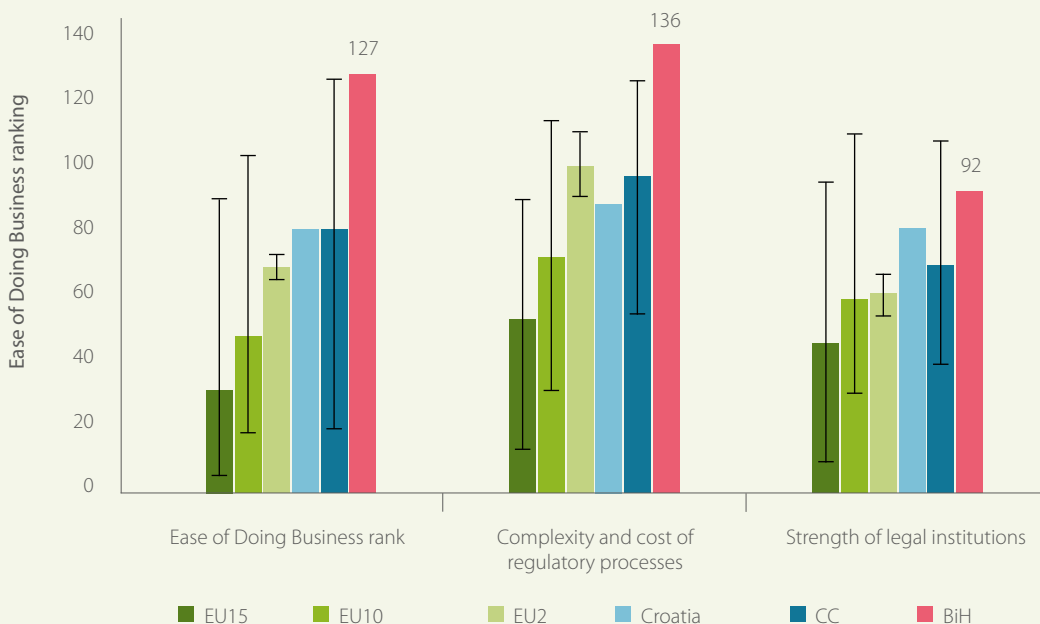


FIGURE 8.4

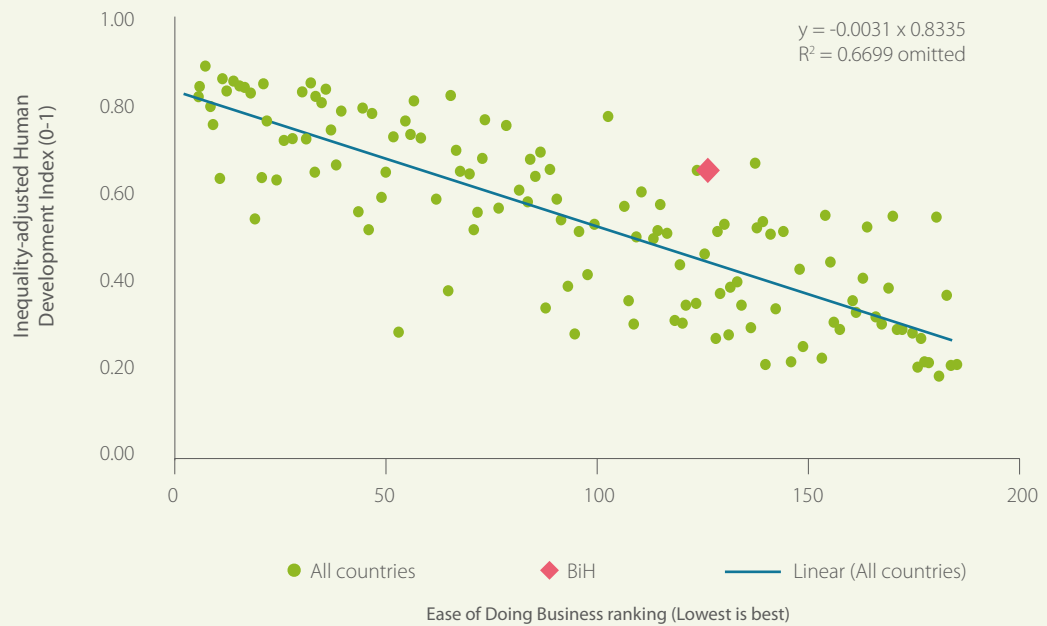
Ease of Doing Business ranking for BiH compared to current and potential EU Member States (lowest is best)

NOTE: “CC” also includes data for Kosovo

Source: : extracted from <http://www.doing-business.org/data/exploreconomies/bosnia-and-herzegovina>

FIGURE 8.5

IHDl vs Ease of Doing Business



Source: "Why are some countries richer than others? II: Money isn't everything"; S Goss, 2013⁹⁰

Administrative systems in most of the former Yugoslav republics still have their roots in post-war Yugoslavia and the pre-computer age, for example in the common insistence on original documents or certified copies of documents where many countries manage perfectly well with a simple photocopy or scan. It may be time to examine the assumptions and attitudes that underlie bureaucracy in BiH, and to see whether it is possible to take a real leap forward into a new era.

The World Bank rankings highlight just how costly and complex regulatory processes are in BiH; such as the fact that 12 separate procedures are required to start a business and 17 to obtain a construction permit. This represents considerable time and cost even for someone who just has to walk round the corner to the municipal offices, but is a much greater burden for a rural dweller who has to make a special trip into town for each one of these procedures. Thus, although the rules may be the same for everyone, the impact of bad bureaucracy will fall much more heavily on rural entrepreneurs.

Here the correlation between Ease of Doing Business ranking and IHDl extends from the countries with the best business environment to those with the worst, with a very high correlation coefficient of 67%. This is even stronger than the link between democracy and income, and the Inequality-adjusted Human Development Index correlates more strongly with ease of Doing Business than does the Human Development Index (63%), the Gender Inequality Index (59%) or Gross National Income (57%).

90 http://issuu.com/steve_goss/docs/why_are_some_countries_richer_ii

In international comparisons, BiH currently ranks 127th in terms of ease of doing business, placing it behind every current and potential EU Member State, and has a lower IHDl than any EU country. There is some good news for BiH, in that it scores better in terms of IHDl than its lacklustre business climate would suggest.

The business environment is, in fact, more important to broad indicators of human development than it is to the narrower economic measure of income. Perhaps this should not come as a surprise. Countries that rank well on their Ease of Doing Business, that have simple and swift procedures for things like opening a business or obtaining a construction permit, are also likely to have better procedures in relation to education and healthcare. Bad bureaucracy is strongly associated with inequality and low development. And as it is the wealthy and well connected who can most easily find a way round bureaucratic obstacles, removing such obstacles brings a disproportionate benefit to the poor and disempowered, and so significantly reduces inequality.

Improving the ease of doing business in Bosnia and Herzegovina may well be the single most important, achievable action the country can take to increase wealth, equality and human development in rural and urban areas alike.

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”



**SUMMARY AND
RECOMMENDATIONS**

9 SUMMARY AND RECOMMENDATIONS

The main findings and recommendations of this NHDR are presented here in answer to four key questions that help separate myth from reality:

- What is special about rural areas in Bosnia and Herzegovina?
- How important is agriculture?
- How should national policies take account of rural needs?
- What are the priorities for rural development?

9.1 Comparing rural and urban areas

- **No binary division of BiH into “rural” and “urban” areas can form an adequate basis for rural development policy.** If the “settlement approach” is used to define rurality, then someone living in a village on the outskirts of Sarajevo and travelling to work there every day will be placed in the same category as someone in a remote mountain hamlet; if the “area approach” is used, then a defined rural municipality will include people who live and work on farms in the same category as those who live in apartments in the local town and have no regular connection with the countryside. As a minimum, the classification should distinguish between cities, medium-sized towns, and rural areas dominated by villages, and should also take account of the distance to the nearest major urban centre. Analysis should also look at the relative importance of agriculture in each region to see whether this needs to be brought into the classification.
- **When only a two-way division is available, many of the stereotypical views of rural disadvantage prove to have little factual basis in Bosnia, with differences within rural areas being generally greater than those between urban and rural.** Notwithstanding, there is a clear divide between big cities and the rest of the country on a wide range of indicators.
- **The most disadvantaged geographical sector in BiH, on a range of economic indicators, comprises urban areas without a large city.** These have the highest unemployment, the lowest wages and the lowest GDP, resulting in the migration of people from towns to cities.
- **The urban-rural differences that are most clear and consistent are:**
 - Rural areas tend to have a more elderly population, a slightly higher level of unemployment, and hence a significantly lower share of their population in employment. A consequence of this is that rural areas have markedly lower *per capita* GDP and hence less money to go round;

- Infrastructure and services are weaker in rural areas, with households more often dependent on local sources of fuel, water and sanitation, and with greater distances to travel to their essential services;
- Whilst access to primary and secondary education appears equal in rural and urban areas, early childhood education in rural areas is dramatically lower than the already-low national average;
- Land is the resource which rural areas have in abundance, providing a small minority with an agricultural income but allowing almost half of rural households to produce some of their own food and so eat better than their urban counterparts.

9.2 Understanding the role of agriculture

- ***Agriculture and related activities provide a relatively small share of income, output and employment in rural areas.*** Measures based on agricultural support, farm modernisation and farm diversification are relevant for some households, but exclude a large share of the rural population; they should therefore be seen as one part of rural development but not as its central element.
- ***The professionalisation of farming will make the agricultural sector smaller in terms of the number of people it employs, but larger in terms of its contribution to national wealth.*** The very small average size of BiH farms is a major barrier to the introduction of new technology and business approaches, and if the formal agri-food sector is to cope with EU competition it will require a smaller number of larger and more professional farmers.
- ***Part-time farming will continue to make an important contribution to rural livelihoods for at least the current generation.*** Whilst the focus may be on helping professional farmers to meet EU standards, become more competitive and satisfy the ever-increasing demands of the supermarkets, the economic, nutritional and cultural contribution of “backyard farming” should never be forgotten. In particular, proposed new regulations should be carefully assessed for their potential impact on the small-scale sector.
- ***Agricultural information, training and advice will be critical to improving all parts of the agricultural sector.*** Current extension systems fall woefully short of meeting farmers’ needs, and much more attention must be given to this, one of the few areas of agricultural support where the benefit to the farmer can be many times greater than the cost to the taxpayer. Attention should also be given to environmental issues and to agricultural measures for climate change adaptation and mitigation.

9.3 Nationwide improvements that will benefit rural areas

- **Improvements in the overall economy and business climate will benefit all citizens, including those living in rural areas.** Well-recognised goals such as reducing bureaucracy and corruption (which thrives where bureaucracy is complex and opaque), and improving access to credit, training and business advice, will require national action and bring direct benefits to rural areas. Established indicators, such as the “Doing Business” rankings,⁹¹ can be used to help guide and monitor this process.
- **Rapid integration into the EU would benefit the whole economy, as well as giving rural areas access to considerable funds.** EU membership will require a lot from BiH, and currently seems a remote dream, but will also bring many benefits:
 - A new way of thinking, legislating and managing public administration that should benefit the whole economy;
 - Access to the world’s largest single market, a goal that is pressingly urgent now that Croatia has entered the EU;
 - Participation in the Common Agricultural Policy and Rural Development funding, which account for around 40% of the entire EU common budget.
- **Active participation in the United Nations Framework Convention on Climate Change,** taking advantage of funding opportunities to help farmers both reduce their emissions of greenhouse gases and adapt to the new challenges that climate change will bring.

9.4 Priorities for rural development

- **Several of the steps to rural development are already clearly laid out and can be implemented as soon as the current political deadlock is resolved;⁹² these include:**
 - Developing and accrediting the mechanisms needed to administer EU funds for agriculture and rural development, including the functions of Paying Agency, Managing Authority and associated inspection services;
 - Developing IPARD measures for implementation as soon as these funds become available; a series of EU-funded studies has already analysed the key sectors and made detailed proposals for measures, which can now be discussed, adapted and adopted;
 - Using national rural development measures both to build capacity for using EU funds, and to address specific needs that lie outside the EU rural development system.
- **The specific infrastructure needs of rural areas should be addressed,** particularly the serious deficiencies in water and sanitation that still affect a small proportion of rural homes. The public services responsible for water, sewerage and urban planning should be key partners in tackling this issue.

⁹¹ See www.doingbusiness.org/rankings, where BiH currently rates 126th out of 185 countries.

⁹² The proposed steps are conditional upon the country resuming its progress on the path to eventual EU integration.

- ***The challenge of how to improve early childhood education in rural areas, both in the home and in kindergarten facilities, is one that should be taken up*** by the national education and social services in partnership with international organisations.
- ***For rural areas close to urban centres, development of urban jobs and services may be the most effective and cost-effective way of supporting the rural population*** as well as bringing direct support to the medium-sized towns where economic development is weakest. To achieve this goal, rural development planners will need to move beyond a traditional land-based approach to rural issues and take on board the best experience of economic development and business creation, wherever the lessons were learned.
- ***Improvements in rural transport and communications will bring big benefits.*** With reduced travel times to urban centres, many more of BiH's rural dwellers will be able to access the economic and service opportunities enjoyed by the urban population. The topography of BiH makes road-building an expensive business, but improvements in roads and public transport will do much to reduce the disadvantage of rural areas, as well as directly helping to save lives.
- ***As rural development funds are strictly limited, BiH should seek to build rural concerns and objectives into its overall policies for transport, education, health-care and economic development.*** The rural share of nation-wide measures is many times greater than anything they will receive from designated "rural development" measures, and so the rural community should learn to advocate effectively for its specific needs within national policies.
- ***With the exception of funds provided by the EU, all rural development measures in BiH will involve the transfer of funds from urban to rural areas, and hence will reduce economic growth and service provision in urban areas in order to promote them in rural areas.*** Policymakers should pay careful attention to these costs, including the way in which reduced growth in urban centres will have a knock-on effect on neighbouring rural communities. They must also remember that rural areas produce almost half of GDP and so will be taxed directly in order to fund rural development measures.
- ***There are two long-term trends affecting Bosnia and Herzegovina, along with the rest of Europe and most of the world: a steady fall in the number of people engaged in agriculture, and a more gradual movement of people from villages into towns and cities.*** Both processes are happening relatively slowly in BiH, but they are taking place and there is every indication that they will continue. There is little evidence that government intervention can reverse these trends, and considerable debate as to whether this is even a desirable objective. Policies should therefore focus not on trying to resist the inevitable, but on helping people to adapt to change and make the most of the new opportunities that it brings.

1

**THE REAL AGENDA
FOR RURAL BIH**

0

10 THE REAL AGENDA FOR RURAL BIH

1

Serve the rural population by focussing providers and international organisations on the rural needs in health, education, social services, water and sewerage. Since budgets are always limited, difficult decisions and trade-offs will need to be made: Will diverting resources from urban to rural areas increase or decrease human development and equality? The equation will be different in every case, but change is possible.

2

Make agriculture wealthy, not through subsidies that hide inefficient production or the search for a “wonder cure” such as organic farming, small-scale food processing, or farmers’ associations, but by meeting the basic needs of ordinary farmers: well-functioning markets, adequate support services, and the transfer of knowledge, so that the technologies of crop and livestock production, already well-established in western Europe, can be adopted in BiH.

3

Shrink the country and share the economic strengths of the cities, through improved transport systems. This involves the main road arteries, selective widening of rural roads, modernising the lorry fleet and avoiding over-loading, and improving public transport. Put as many people as possible within one hour’s drive of a main city, using cars if they have them, public transport if they don’t.

4

Lift the rural retired out of poverty. Economic growth will benefit most of the population, but pensioners depend on pensions, so improvements in the pension system will be needed to lift them out of poverty.

5

Renew the towns. Currently unemployment blackspots, the medium-sized towns, have the potential to become powerhouses for the surrounding countryside, providing jobs for rural residents and trade for rural businesses. What do they need to make this transformation: Do they need better-trained staff? Less bureaucracy? Better access to credit? Targeted investment? Improved links to big cities? Once the problems are clear, solutions can be found and new life injected into these regions.

- 6** **Accelerate EU integration**, by adopting EU norms and increasing access to EU markets and funds. This will improve the overall government and business climate, and bring specific benefits for agriculture and rural development.

- 7** **Beat bureaucracy and get government working.** The No. 1 priority for urban and rural areas alike is to strengthen democracy, improve the functioning of government, slash bureaucracy and end corruption. The number of procedures and documents should be halved, to reach the average for the EU-15. Put government within reach of rural people through on-line systems and local access points.

The idea that Bosnia and Herzegovina can have high human development and vibrant rural areas whilst the country's fundamental problems remain unresolved is neither myth nor reality – it is fantasy.

APPENDIX

Human Development Report 2013, HDI global rankings

TABLE 1

Human Development Index and its components

HDI rank	HUMAN DEVELOPMENT INDEX (HDI)		LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
	Value	(years)	(years)	(years)	(2005 PPP \$)		Value	
	2012	2012	2010 ^{1a}	2011 ^b	2012	2012	2012	
VERY HIGH HUMAN DEVELOPMENT								
1	Norway	0,955	81,3	12,6	17,5	48.688	4	0,977
2	Australia	0,938	82,0	12,0 ^c	19,6 ^d	34.340	15	0,978
3	United States	0,937	78,7	13,3	16,8	43.480	6	0,958
4	Netherlands	0,921	80,8	11,6 ^c	16,9	37.282	8	0,945
5	Germany	0,920	80,6	12,2	16,4 ^e	35.431	10	0,948
6	New Zealand	0,919	80,8	12,5	19,7 ^d	24.358	26	0,978
7	Ireland	0,916	80,7	11,6	18,3 ^d	28.671	19	0,960
7	Sweden	0,916	81,6	11,7 ^c	16,0	36.143	6	0,940
9	Switzerland	0,913	82,5	11,0 ^c	15,7	40.527	2	0,926
10	Japan	0,912	83,6	11,6 ^c	15,3	32.545	11	0,942
11	Canada	0,911	81,1	12,3	15,1	35.369	5	0,934
12	Korea (Republic of)	0,909	80,7	11,6	17,2	28.231	15	0,949
13	Hong Kong, China (SAR)	0,906	83,0	10,0	15,5	45.598	-6	0,907
13	Iceland	0,906	81,9	10,4	18,3 ^d	29.176	12	0,943
15	Denmark	0,901	79,0	11,4 ^c	16,8	33.518	4	0,924
16	Israel	0,900	81,9	11,9	15,7	26.224	13	0,942
17	Belgium	0,897	80,0	10,9 ^c	16,4	33.429	3	0,917
18	Austria	0,895	81,0	10,8	15,3	36.438	-5	0,908
18	Singapore	0,895	81,2	10,1 ^c	14,4 ^f	52.613	-15	0,880
20	France	0,893	81,7	10,6 ^c	16,1	30.277	4	0,919
21	Finland	0,892	80,1	10,3	16,9	32.510	2	0,912
21	Slovenia	0,892	79,5	11,7	16,9	23.999	12	0,936
23	Spain	0,885	81,6	10,4 ^c	16,4	25.947	8	0,919
24	Liechtenstein	0,883	79,8	10,3 ^g	11,9	84.880 ^h	-22	0,832
25	Italy	0,881	82,0	10,1 ^c	16,2	26.158	5	0,911
26	Luxembourg	0,875	80,1	10,1	13,5	48.285	-20	0,858
26	United Kingdom	0,875	80,3	9,4	16,4	32.538	-5	0,886
28	Czech Republic	0,873	77,8	12,3	15,3	22.067	10	0,913
29	Greece	0,860	80,0	10,1 ^c	16,3	20.511	13	0,899
30	Brunei Darussalam	0,855	78,1	8,6	15,0	45.690	-23	0,832
31	Cyprus	0,848	79,8	9,8	14,9	23.825	4	0,869
32	Malta	0,847	79,8	9,9	15,1	21.184	9	0,876
33	Andorra	0,846	81,1	10,4 ⁱ	11,7	33.918 ^j	-15	0,839
33	Estonia	0,846	75,0	12,0	15,8	17.402	13	0,892
35	Slovakia	0,840	75,6	11,6	14,7	19.696	9	0,872
36	Qatar	0,834	78,5	7,3	12,2	87.478 ^k	-35	0,761

HDI rank		HUMAN DEVELOPMENT INDEX (HDI)	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
		Value	(years)	(years)	(years)	(2005 PPP \$)		Value
		2012	2012	2010 ^{1a}	2011 ^b	2012	2012	2012
37	Hungary	0,831	74,6	11,7	15,3	16.088	13	0,874
38	Barbados	0,825	77,0	9,3	16,3	17.308	10	0,859
39	Poland	0,821	76,3	10,0	15,2	17.776	7	0,851
40	Chile	0,819	79,3	9,7	14,7	14.987	13	0,863
41	Lithuania	0,818	72,5	10,9	15,7	16.858	7	0,850
41	United Arab Emirates	0,818	76,7	8,9	12,0	42.716	-31	0,783
43	Portugal	0,816	79,7	7,7	16,0	19.907	0	0,835
44	Latvia	0,814	73,6	11,5 ^c	14,8	14.724	10	0,856
45	Argentina	0,811	76,1	9,3	16,1	15.347	7	0,848
46	Seychelles	0,806	73,8	9,4 ^d	14,3	22.615	-9	0,808
47	Croatia	0,805	76,8	9,8 ^c	14,1	15.419	4	0,837
HIGH HUMAN DEVELOPMENT								
48	Bahrain	0,796	75,2	9,4	13,4 ^e	19.154	-3	0,806
49	Bahamas	0,794	75,9	8,5	12,6	27.401	-21	0,777
50	Belarus	0,793	70,6	11,5 ^f	14,7	13.385	11	0,830
51	Uruguay	0,792	77,2	8,5 ^c	15,5	13.333	11	0,829
52	Montenegro	0,791	74,8	10,5 ^f	15,0	10.471	24	0,850
52	Palau	0,791	72,1	12,2	13,7 ^e	11.463 ^m	18	0,840
54	Kuwait	0,790	74,7	6,1	14,2	52.793	-51	0,730
55	Russian Federation	0,788	69,1	11,7	14,3	14.461	0	0,816
56	Romania	0,786	74,2	10,4	14,5	11.011	16	0,836
57	Bulgaria	0,782	73,6	10,6 ^c	14,0	11.474	12	0,826
57	Saudi Arabia	0,782	74,1	7,8	14,3	22.616	-21	0,774
59	Cuba	0,780	79,3	10,2	16,2	5.539 ⁿ	44	0,894
59	Panama	0,780	76,3	9,4	13,2	13.519	1	0,810
61	Mexico	0,775	77,1	8,5	13,7	12.947	4	0,805
62	Costa Rica	0,773	79,4	8,4	13,7	10.863	12	0,816
63	Grenada	0,770	76,1	8,6 ^e	15,8	9.257	21	0,827
64	Libya	0,769	75,0	7,3	16,2	13.765	-8	0,791
64	Malaysia	0,769	74,5	9,5	12,6	13.676	-7	0,791
64	Serbia	0,769	74,7	10,2 ^c	13,6	9.533	16	0,823
67	Antigua and Barbuda	0,760	72,8	8,9	13,3	13.883	-12	0,776
67	Trinidad and Tobago	0,760	70,3	9,2	11,9	21.941	-28	0,743
69	Kazakhstan	0,754	67,4	10,4	15,3	10.451	8	0,791
70	Albania	0,749	77,1	10,4	11,4	7.822	21	0,807
71	Venezuela (Bolivarian Republic of)	0,748	74,6	7,6 ^c	14,4	11.475	-2	0,774
72	Dominica	0,745	77,6	7,7 ^f	12,7	10.977	-1	0,771
72	Georgia	0,745	73,9	12,1 ^o	13,2	5.005	37	0,845
72	Lebanon	0,745	72,8	7,9 ^f	13,9	12.364	-5	0,762
72	Saint Kitts and Nevis	0,745	73,3	8,4 ^e	12,9	12.460	-5	0,763

HDI rank		HUMAN DEVELOPMENT INDEX (HDI)	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
		Value	(years)	(years)	(years)	(2005 PPP \$)		Value
		2012	2012	2010 ^{1a}	2011 ^b	2012	2012	2012
76	Iran (Islamic Republic of)	0,742	73,2	7,8	14,4	10.695	-1	0,769
77	Peru	0,741	74,2	8,7	13,2	9.306	6	0,780
78	The former Yugoslav Republic of Macedonia	0,740	75,0	8,2 ^o	13,4	9.377	2	0,777
78	Ukraine	0,740	68,8	11,3	14,8	6.428	22	0,813
80	Mauritius	0,737	73,5	7,2	13,6	13.300	-17	0,745
81	Bosnia and Herzegovina	0,735	75,8	8,3 ^l	13,4	7.713	13	0,787
82	Azerbaijan	0,734	70,9	11,2 ^l	11,7	8.153	5	0,780
83	Saint Vincent and the Grenadines	0,733	72,5	8,6 ^e	13,3	9.367	-1	0,767
84	Oman	0,731	73,2	5,5 ^l	13,5	24.092	-51	0,694
85	Brazil	0,730	73,8	7,2	14,2	10.152	-8	0,755
85	Jamaica	0,730	73,3	9,6	13,1	6.701	14	0,792
87	Armenia	0,729	74,4	10,8	12,2	5.540	16	0,808
88	Saint Lucia	0,725	74,8	8,3 ^e	12,7	7.971	1	0,768
89	Ecuador	0,724	75,8	7,6	13,7	7.471	7	0,772
90	Turkey	0,722	74,2	6,5	12,9	13.710	-32	0,720
91	Colombia	0,719	73,9	7,3	13,6	8.711	-6	0,751
92	Sri Lanka	0,715	75,1	9,3 ^c	12,7	5.170	18	0,792
93	Algeria	0,713	73,4	7,6	13,6	7.418	4	0,755
94	Tunisia	0,712	74,7	6,5	14,5	8.103	-6	0,746
HIGH HUMAN DEVELOPMENT								
95	Tonga	0,710	72,5	10,3 ^c	13,7	4.153	26	0,807
96	Belize	0,702	76,3	8,0 ^c	12,5	5.327	8	0,767
96	Dominican Republic	0,702	73,6	7,2 ^c	12,3	8.506	-11	0,726
96	Fiji	0,702	69,4	10,7 ^c	13,9	4.087	24	0,794
96	Samoa	0,702	72,7	10,3 ^l	13,0	3.928	28	0,800
100	Jordan	0,700	73,5	8,6	12,7	5.272	8	0,766
101	China	0,699	73,7	7,5	11,7	7.945	-11	0,728
102	Turkmenistan	0,698	65,2	9,9 ^o	12,6 ^e	7.782	-10	0,727
103	Thailand	0,690	74,3	6,6	12,3	7.722	-10	0,715
104	Maldives	0,688	77,1	5,8 ^c	12,5	7.478	-9	0,715
105	Suriname	0,684	70,8	7,2 ^o	12,4	7.327	-7	0,710
106	Gabon	0,683	63,1	7,5	13,0	12.521	-40	0,668
107	El Salvador	0,680	72,4	7,5	12,0	5.915	-5	0,723
108	Bolivia (Plurinational State of)	0,675	66,9	9,2	13,5	4.444	7	0,740
108	Mongolia	0,675	68,8	8,3	14,3	4.245	10	0,746
110	Occupied Palestinian Territory	0,670	73,0	8,0 ^l	13,5	3.359 ^a	20	0,761
111	Paraguay	0,669	72,7	7,7	12,1	4.497	4	0,730
112	Egypt	0,662	73,5	6,4	12,1	5.401	-6	0,702

HDI rank		HUMAN DEVELOPMENT INDEX (HDI)	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
		Value	(years)	(years)	(years)	(2005 PPP \$)		Value
		2012	2012	2010 ^{1a}	2011 ^b	2012	2012	2012
113	Moldova (Republic of)	0,660	69,6	9,7	11,8	3.319	19	0,747
114	Philippines	0,654	69,0	8,9 ^c	11,7	3.752	11	0,724
114	Uzbekistan	0,654	68,6	10,0 ^a	11,6	3.201	19	0,740
116	Syrian Arab Republic	0,648	76,0	5,7 ^c	11,7 ^e	4.674 ^f	-2	0,692
117	Micronesia (Federated States of)	0,645	69,2	8,8 ^p	11,4 ^e	3.352 ^m	14	0,719
118	Guyana	0,636	70,2	8,5	10,3	3.387	11	0,703
119	Botswana	0,634	53,0	8,9	11,8	13.102	-55	0,596
120	Honduras	0,632	73,4	6,5	11,4	3.426	8	0,695
121	Indonesia	0,629	69,8	5,8	12,9	4.154	-3	0,672
121	Kiribati	0,629	68,4	7,8 ^e	12,0	3.079	13	0,701
121	South Africa	0,629	53,4	8,5 ^c	13,1 ^e	9.594	-42	0,608
124	Vanuatu	0,626	71,3	6,7 ^e	10,6	3.960	-1	0,672
125	Kyrgyzstan	0,622	68,0	9,3	12,6	2.009	24	0,738
125	Tajikistan	0,622	67,8	9,8	11,5	2.119	19	0,731
127	Viet Nam	0,617	75,4	5,5	11,9	2.970	9	0,686
128	Namibia	0,608	62,6	6,2	11,3	5.973	-27	0,611
129	Nicaragua	0,599	74,3	5,8	10,8	2.551	10	0,671
130	Morocco	0,591	72,4	4,4	10,4	4.384	-13	0,608
131	Iraq	0,590	69,6	5,6	10,0	3.557	-4	0,623
132	Cape Verde	0,586	74,3	3,5 ^e	12,7	3.609	-6	0,617
133	Guatemala	0,581	71,4	4,1	10,7	4.235	-14	0,596
134	Timor-Leste	0,576	62,9	4,4 ^s	11,7	5.446	-29	0,569
135	Ghana	0,558	64,6	7,0	11,4	1.684	22	0,646
136	Equatorial Guinea	0,554	51,4	5,4 ^o	7,9	21.715	-97	0,463
136	India	0,554	65,8	4,4	10,7	3.285	-3	0,575
138	Cambodia	0,543	63,6	5,8	10,5	2.095	9	0,597
138	Lao People's Democratic Republic	0,543	67,8	4,6	10,1	2.435	2	0,584
140	Bhutan	0,538	67,6	2,3 ^a	12,4	5.246	-31	0,516
141	Swaziland	0,536	48,9	7,1	10,7	5.104	-30	0,515
LOW HUMAN DEVELOPMENT								
142	Congo	0,534	57,8	5,9	10,1	2.934	-5	0,553
143	Solomon Islands	0,530	68,2	4,5 ^p	9,3	2.172	1	0,572
144	Sao Tome and Principe	0,525	64,9	4,7 ^s	10,8	1.864	7	0,579
145	Kenya	0,519	57,7	7,0	11,1	1.541	15	0,588
146	Bangladesh	0,515	69,2	4,8	8,1	1.785	9	0,567
146	Pakistan	0,515	65,7	4,9	7,3	2.566	-9	0,534
148	Angola	0,508	51,5	4,7 ^s	10,2	4.812	-35	0,479
149	Myanmar	0,498	65,7	3,9	9,4	1.817	5	0,537
150	Cameroon	0,495	52,1	5,9	10,9	2.114	-4	0,520

HDI rank		HUMAN DEVELOPMENT INDEX (HDI)	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
		Value	(years)	(years)	(years)	(2005 PPP \$)		Value
		2012	2012	2010 ^{1a}	2011 ^b	2012	2012	2012
151	Madagascar	0,483	66,9	5,2 ^p	10,4	828	28	0,601
152	Tanzania (United Republic of)	0,476	58,9	5,1	9,1	1.383	10	0,527
153	Nigeria	0,471	52,3	5,2 ^a	9,0	2.102	-6	0,482
154	Senegal	0,470	59,6	4,5	8,2	1.653	4	0,501
155	Mauritania	0,467	58,9	3,7	8,1	2.174	-12	0,473
156	Papua New Guinea	0,466	63,1	3,9	5,8 ^e	2.386	-15	0,464
157	Nepal	0,463	69,1	3,2	8,9	1.137	11	0,526
158	Lesotho	0,461	48,7	5,9 ^c	9,6	1.879	-8	0,476
159	Togo	0,459	57,5	5,3	10,6	928	16	0,542
160	Yemen	0,458	65,9	2,5	8,7	1.820	-7	0,474
161	Haiti	0,456	62,4	4,9	7,6 ^e	1.070	7	0,521
161	Uganda	0,456	54,5	4,7	11,1	1.168	5	0,511
163	Zambia	0,448	49,4	6,7	8,5	1.358	0	0,483
164	Djibouti	0,445	58,3	3,8 ^a	5,7	2.350	-22	0,435
165	Gambia	0,439	58,8	2,8	8,7	1.731	-9	0,448
166	Benin	0,436	56,5	3,2	9,4	1.439	-5	0,459
167	Rwanda	0,434	55,7	3,3	10,9	1.147	0	0,476
168	Côte d'Ivoire	0,432	56,0	4,2	6,5	1.593	-9	0,444
169	Comoros	0,429	61,5	2,8 ^a	10,2	986	4	0,484
170	Malawi	0,418	54,8	4,2	10,4	774	10	0,492
171	Sudan	0,414	61,8	3,1	4,5	1.848	-19	0,405
172	Zimbabwe	0,397	52,7	7,2	10,1	424 ¹	14	0,542
173	Ethiopia	0,396	59,7	2,2 ^a	8,7	1.017	-2	0,425
174	Liberia	0,388	57,3	3,9	10,5 ^e	480	11	0,502
175	Afghanistan	0,374	49,1	3,1	8,1	1.000	-3	0,393
176	Guinea-Bissau	0,364	48,6	2,3 ^o	9,5	1.042	-6	0,373
177	Sierra Leone	0,359	48,1	3,3	7,3 ^e	881	0	0,380
178	Burundi	0,355	50,9	2,7	11,3	544	4	0,423
178	Guinea	0,355	54,5	1,6 ^c	8,8	941	-4	0,368
180	Central African Republic	0,352	49,1	3,5	6,8	722	1	0,386
181	Eritrea	0,351	62,0	3,4 ^e	4,6	531	3	0,418
182	Mali	0,344	51,9	2,0 ^c	7,5	853	-4	0,359
183	Burkina Faso	0,343	55,9	1,3 ^o	6,9	1.202	-18	0,332
184	Chad	0,340	49,9	1,5 ^p	7,4	1.258	-20	0,324
185	Mozambique	0,327	50,7	1,2	9,2	906	-9	0,327
186	Congo (Democratic Republic of the)	0,304	48,7	3,5	8,5	319	0	0,404
186	Niger	0,304	55,1	1,4	4,9	701	-4	0,313
OTHER COUNTRIES OR TERRITORIES								
	Korea (Democratic People's Rep. of)	..	69,0	..	..	..	..	..

HDI rank	HUMAN DEVELOPMENT INDEX (HDI)	LIFE EXPECTANCY AT BIRTH	MEAN YEARS OF SCHOOLING	EXPECTED YEARS OF SCHOOLING	GROSS NATIONAL INCOME (GNI) PER CAPITA	GNI PER CAPITA RANK MINUS HDI RANK	NONINCOME HDI
	Value	(years)	(years)	(years)	(2005 PPP \$)		Value
	2012	2012	2010 ^a	2011 ^b	2012	2012	2012
Marshall Islands	..	72,3	..	11,7	..	..	..
Monaco	..	82,3	..	..	..	..	..
Nauru	..	80,0	..	9,3	..	..	..
San Marino	..	81,9	..	12,5	..	..	..
Somalia	..	51,5	..	2,4	..	..	..
South Sudan	..	..	..	..	..	..	..
Tuvalu	..	67,5	..	10,8	..	..	..
HUMAN DEVELOPMENT INDEX GROUPS							
Very high human development	0,905	80,1	11,5	16,3	33.391	—	0,927
High human development	0,758	73,4	8,8	13,9	11.501	—	0,781
Medium human development	0,640	69,9	6,3	11,4	5.428	—	0,661
Low human development	0,466	59,1	4,2	8,5	1.633	—	0,487
REGIONS							
Arab States	0,652	71,0	6,0	10,6	8.317	—	0,658
East Asia and the Pacific	0,683	72,7	7,2	11,8	6.874	—	0,712
Europe and Central Asia	0,771	71,5	10,4	13,7	12.243	—	0,801
Latin America and the Caribbean	0,741	74,7	7,8	13,7	10.300	—	0,770
South Asia	0,558	66,2	4,7	10,2	3.343	—	0,577
Sub-Saharan Africa	0,475	54,9	4,7	9,3	2.010	—	0,479
Least developed countries	0,449	59,5	3,7	8,5	1.385	—	0,475
Small island developing states	0,648	69,8	7,3	10,7	5.397	—	0,673
World	0,694	70,1	7,5	11,6	10.184	—	0,690

NOTES:

- Data refer to 2010 or the most recent year available.
- Data refer to 2011 or the most recent year available.
- Updated by HDRO based on UNESCO (2012) data.
- For the HDI calculation this value is capped at 18 years.
- Based on cross-country regression.
- Calculated by the Singapore Ministry of Education.
- Assumes the same adult mean years of schooling as Switzerland before the most recent update.
- Estimated using the purchasing power parity (PPP) rate and the projected growth rate of Switzerland.
- Assumes the same adult mean years of schooling as Spain before the most recent update.
- Estimated using the purchasing power parity (PPP) rate and the projected growth rate of Spain.
- Based on implied PPP conversion factors from IMF (2012).
- Based on the UNESCO Institute for Statistics (2012) estimate of educational attainment distribution.
- Based on projected growth rates by the Asian Development Bank (2012).
- PPP estimate based on cross-country regression; projected growth rate based on ECLAC (2012) and UNDESA (2012c) projected growth rates.
- Based on data from UNICEF Multiple Indicator Cluster Surveys for 2002–2012.
- Based on data on years of schooling of adults from household surveys in the World Bank's International Income Distribution Database.
- Based on an unpublished estimate of the PPP conversion rate from the World Bank and projected growth rates from UNESWCWA (2012) and UNDESA (2012c).^o
- Based on projected growth rates from UNDESA(2012c).
- Based on data from ICF Macro (2012).
- Based on PPP data from IMF (2012).

DEFINITIONS:

Human Development Index (HDI): A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. See Technical note 1 for details on how the HDI is calculated.

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

Mean years of schooling: Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level.

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

Gross national income (GNI) *per capita*: Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using purchasing power parity (PPP) rates, divided by midyear population.

GNI *per capita* rank minus HDI rank: Difference in rankings by GNI *per capita* and by the HDI. A negative value means that the country is better ranked by GNI than by the HDI.

Nonincome HDI: Value of the HDI computed from the life expectancy and education indicators only.

MAIN DATA SOURCES:

Column 1: HDRO calculations based on data from UNDESA (2011), Barro and Lee (2011), UNESCO Institute for Statistics (2012), World Bank (2012a) and IMF (2012).

Column 2: UNDESA (2011).

Column 3: Barro and Lee (2011) and HDRO updates based on UNESCO Institute for Statistics (2012) data on education attainment and on Barro and Lee (2010) methodology.

Column 4: UNESCO Institute for Statistics (2012).

Column 5: HDRO calculations based on data from World Bank (2012a), IMF (2012) and UNSD (2012a).

Column 6: Calculated based on data in columns 1 and 5.

Column 7: Calculated based on data in columns 2, 3 and 4.

ANNEXES:

In the interests of the environment, the Annexes to this NHDR have not been printed. They are instead available on the UNDP BiH website and can be accessed using the following link:

http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/library/poverty/rural-development-in-bosnia-and-herzegovina--myth-and-reality/

Annex 1: Human Development Indicators for BiH

Annex 2: Defining and Measuring Rurality

Annex 3: Rural-urban Comparisons in the Multi-Indicator Cluster Survey

Annex 4: Rural Household Survey - Methodology and Questionnaire

Annex 5: Rural Household Survey - Analysis and Data

Annex 6: Summary of recent NHDRs for BiH

Annex 7: Rural-urban population trends in Europe, 1960-2011

Annex 8: References and data sources



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