

TWINNING CONTRACT

**Support to the State and Entity Statistical
Institutions, phase V**

Bosnia-Herzegovina



MISSION REPORT

on


Extended household budget survey (EHBS)

Component no 2, Activity 2.2

Mission carried out by Giorgio Della Rocca, Istat

16-20 July 2012

Version: Final

		 STATISTICS DENMARK

IPA 2008

Author's name, address, e-mail (keep the relevant information)

Giorgio Della Rocca

Istat

Piazza Indipendenza 4

00184 Rome

Italy

Tel: +39 06 4673 3622

Email: dellaroc@istat.it

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List of Abbreviations

BiH	Bosnia and Herzegovina
BHAS	Agency for Statistics of Bosnia and Herzegovina
CONCORD	Controllo e Correzione Dati
DEI	Data Editing and Imputation
EHBS	Extended Household Budget Survey
ESS	European Statistical System
FIS	Institute for Statistics of Federation of Bosnia and Herzegovina
HBS	Household Budget Survey
RSIS	Institute for Statistics of Republika Srpska
Istat	Italian National Institute for Statistics
ToR	Terms of Reference

Executive Summary

If report-core text- exceeds 4 pages

Include information to Project Leaders and the RTA.

Main conclusions and highlights from findings.

1. General comments

This mission report was prepared within the Twinning Project „Support to the State and Entity Statistical Institutions, phase V”. It was the fourth mission devoted to EHBS within the Component 2 of the project.

The concrete objectives of the mission were:

1. To finalize the definition of the new nomenclature of the all HBS variables in order to harmonize the 2011 survey data with the previous surveys (from 2004 and 2007), specially for Diary and Self -Consumption questionnaires.
2. Based on the final weights, to do the analysis of main socio-demographic indicators (Household & Individuals) at level of State and Entity and rural and urban areas, to do the comparison with the previous surveys, to detect possible irregular behaviors and trends and to find reasons for them
3. Analysis of average monthly household expenditure for classes and groups of COICOP classification (3 digit Groups and 4 digit Class for the Food group) at level

of State and Entity, and urban and rural areas, comparison with the previous surveys.

4. Poverty estimation and main characteristics of poor households at level of State and Entity, and urban and rural area and types of households, comparison with the previous surveys.
5. Preliminary analysis of estimates and missing values on income and investments and on the two new modules on health and social inclusion.
6. Overall analysis of the results and indicators in order to assess the validity of the DEI procedure within the HBS 2011.
7. Final tuning of the DEI procedure.

I would like to express his thanks to all officials and individuals met for the kind support and valuable information received during the stay in Bosnia-Herzegovina, and which highly facilitated my work.

This views and observations stated in this report are those of the consultant and do not necessarily correspond to the views of EU, BHAS / FIS / RSIS or Istat.

2. Assessment and results

Introduction

Main objectives of the mission were the verification of the data editing and imputation process and the preliminary estimate of the results as well as the comparison with the previous surveys.

Current situation of process

The final sample weight and a new nomenclature of the variables object of analysis in order to harmonize the 2011 survey data with the 2007 one, specially for Diary and Self Consumption questionnaires has been done.

These activities allowed the analysis of the results and their comparison with the previous surveys.

In particular the subjects of the comparison were the demographic data, both on households and components, and average monthly expenditures data (these last were analysed both as single expenditures and aggregated within the main COICOP items).

In this phase some problems related to the distribution of some expenditure variables have been underlined. Furthermore, a deeply data analysis were done both before and after the E&I process and in some cases, in order to solve the problems, a verification of the softwares and of the acceptance limits of the ranges were done.

The analysis of average monthly expenditures underlined a good consistency with the previous surveys for data of Federation of Bosnia and Herzegovina and Republika Srpska. Regarding Brcko District a different trend has been recorded comparing the data with those of the previous surveys as showed in the following figure:

Survey Year	FEDERATION BIH	REPUBLIKA SRPSKA	BRCKO DISTRICT BIH	Total Bosnia Herzegovina
2004	1346.44	1227.33	1339.52	1301.82
2007	1649.72	1364.31	1318.47	1541.43
2011	1672.39	1381.45	1585.26	1569.33

Average monthly expenditures (in KM) by surveys' years, entity and total

These data shows the need to deep analyse the data related to Brcko district in order to verify:

- the households with outlier expenditures;
- sample error

Due to the short time of the mission the activities of the items 4, 5, 6 and 7 were not implemented. They will be analysed by Bosnian EHBS team and analysed during the next Study Visit which will take place in Rome.

3. Conclusions and recommendations

The DEI procedure regarding the expenditures on Final Interview, Diary and Self Consumption has been successful carried out and completed.

As described above, some problems have been identified and solutions have been suggested.

Concerning the E&I process and the preliminary analysis of estimates and missing values on income and investments and on the two new modules on health and social inclusion, they will be carried out jointly by the Bosnian EHBS team and Istat consultants through frequent exchange of information and evaluation of the output and figures and will be fine tuned during the Study Visit in Rome.

4. Topics for the next meeting

The following activities will be implemented during the Study Visit planned in Istat, Rome:

1. *Fine tuning of the consumption data analysis*
2. *Analysis of income data*
3. *Analysis of investment data*
4. *Examination of extreme cases (household with extreme consumption/income)*

5. *Revision of some existing and creation of possible new derived variables (for ex. new household types)*
6. *Analysis of ad hoc modules and production of social inclusion indicators*
7. *Analysis of trends by geographical areas in terms of consumption, poverty and other important aggregates and variables*

List of Participants

Agency for Statistics of BiH

Edin Šabanović, Assistant Director in the Sector for Statistical Methodology, Standards, Planning, Quality and Coordination

Dajana Mitrović, Senior Advisor for HBS

Ševala Abaz, Head of the Division for Applications Design and Database Management

Marko Zekić, Junior Officer for Database Design and Programming

Institute for Statistics of Federation of BiH (FIS)

Mesuda Kamberović, Head of Price Statistics Division

Nataša Radović, Senior Advisor for Software Engineering

Džemal Borovina, Senior Associate for Application Development

Institute for Statistics of Republika Srpska (RSIS)

Sanja Panić, Senior Associate for HBS

Radoslav Latinčić, Assistant Director in the IT Sector

Igor Radan, Senior Associate – data base administrator

Expert

Giorgio Della Rocca

Twinning Project Administration 00 (387) 33/911-992

Bente Dyrberg, RTA, 00 (387) 66/657-967

Djemka Sahinbasic, RTA Assistant, 00 (387) 63/721-104

Extended Household Budget Survey (EHBS)
16th to 20th of July 2012
Terms of Reference - Activity 2.2
EU Twinning Project BA 08-IB-FI-03
Agency for Statistics of Bosnia and Herzegovina,
Sarajevo, Zelenih beretki 26

Component 1 Business Statistics

- 1.1. Statistical Business Register
- 1.2. Structural Business Statistics
- 1.3. Construction Statistics
- 1.4. Retail Trade Statistics
- 1.5. Tourism Statistics

Component 2 Extended Household Budget Survey

Component 3 Institutional Capacity

- 3.1. Long term strategy
- 3.2. Metadata and classification system development
- 3.3. Promotion of dissemination

Benchmarks

- A) Previously used methods of data editing and imputation (DEI) revised, DEI methods for HBS 2011 selected for further implementation and the plan for data editing and imputation prepared by 4th project quarter
- B) Procedures for data editing and imputation finished for both categorical and continuous variables by 8th project quarter
- C) Software for DEI developed and implemented and cleaned data base ready for analysis
- D) Necessary documentation for HBS prepared as a basis for first HBS metadata
- E) HBS data analysis revised and possibly improved. Dissemination means improved
- F) Development plan for future production of the HBS and EHBS prepared in the context of other social statistics (LFS, SILC, LSMS, etc.)

2.2. Activity

Final Tuning of the Data Editing and Imputation Procedures (DEI) and the Analysis of HBS 2011 Data

The expected activities are:

- To finalize the definition of the new nomenclature of the all HBS variables in order to harmonize the 2011 survey data with the previous surveys (from 2004 and 2007), specially for Diary and Self -Consumption questionnaires.

- Based on the final weights, to do the analysis of main socio-demographic indicators (Household & Individuals) at level of State and Entity and rural and urban areas, to do the comparison with the previous surveys, to detect possible irregular behaviors and trends and to find reasons for them
- Analysis of average monthly household expenditure for classes and groups of COICOP classification (3 digit Groups and 4 digit Class for the Food group) at level of State and Entity, and urban and rural areas, comparison with the previous surveys.
- Poverty estimation and main characteristics of poor households at level of State and Entity, and urban and rural areas and types of households, comparison with the previous surveys.
- Final analysis of estimates and missing values on income and investments data.
- Final analysis of estimates and missing values on the two new modules on health and social inclusion
- Overall analysis of the results and indicators in order to assess the validity of the DEI procedure within the HBS 2011
- Final tuning of the DEI procedure.

Expected output

- All DE&I procedures finalized
- Clean data base prepared for the analysis
- Data analysis
- Main HBS 2011 prepared for dissemination
- Mission report – summarized and detailed version completed
- General and detailed activity plans and draft ToR for the next mission prepared and agreed by all partners (BHAS-BD/ FIS/RSIS participants, experts and RTA)

Explanation of the Expected outputs:

According to the Project plan, excluding last three missions related to different survey topics, there is one more mission within Component 2-Activity 2.2., which is related to data analysis and editing and imputation for the Household Budget Survey in Bosnia and Herzegovina in 2011. The original project plan for this mission has envisaged the engagement of Finnish experts, however it would be the best to have an Italian expert to carry it out this technical mission due to the fact that all these technical missions already have been carried out by Italian experts. Italian experts know all details of the whole survey processes and current survey methodology and can work with us in order to finalize all activities which are foreseen for the fifth mission. The aim of this mission is to get the clean data base ready for analysis and to produce main survey results to be disseminated in July.

Agenda

16 July (Monday) – 20 July (Friday)

Time	Event	Purpose / detail
16 July 2012 09:00-13.00	Welcome Presentations and discussions of the present status of the DE&I. Explanation of the work done by statisticians from B&H in the period between two missions.	Introduction on the program of the week All participants
16 July 2012 14:00-17.00	Final analysis of estimates and missing values on income and investments	BiH participants Experts
17 July 2012 09:00-13.00	Final analysis on new modules on health and social inclusion variables.	BiH participants Experts
17 July 2012 14:00-17.00	. Final tuning of the DEI procedures	BiH participants Experts
18 July 2012 09:00-13.00	.Revision of the DE&I procedures from the beginning up to current stage	BiH participants Experts
18 July 2012 14:00-17.00	Overall analysis of the results and indicators in order to assess the validity of the DEI procedure within the HBS 2011.	BiH participants Experts
19 July 2012 09:00-13.00	Harmonization the 2011 survey data with the previous surveys (from 2004 and 2007) and detection of possible irregular behaviors and trends.	BiH participants Experts
19 July 2012 14:00-17.00	Next mission-Which topics? What to do for the next mission?	Possible suggestions BiH Participants Experts
20 July 09:00-13:00	Debriefing	Other issues and evaluation of the Mission Experts BiH Participants