

TWINNING CONTRACT

JO/13/ENP/ST/23

Strengthening the capabilities of the Department of Statistics in Jordan



STUDY VISIT REPORT

on

Sampling Methodologies

Activity no 2.3 Study visit to Member State

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List of Abbreviations

DoS	Department of Statistics
CSB	Central Statistical Bureau of Latvia

Brief Summary

The visit was about the sampling methodologies in Central Statistical Bureau of Latvia, the visit lasted for (four days and included the following detailed activities:

- **Day One:**
 - ✓ Theoretical presentations in sampling techniques.
 - ✓ Theoretical presentations in weighting.
 - ✓ Theoretical presentations in variance estimation.
- **Day Two:**
 - ✓ Theoretical presentations in statistical business register.
 - ✓ Theoretical presentations in imputation for business surveys.
 - ✓ Theoretical presentations in statistical farm register.
 - ✓ Theoretical presentations in statistical dwelling register.
- **Day Three:**
 - ✓ Theoretical presentations in Imputation for social surveys.
 - ✓ Practical exercises in Imputation for social surveys.
- **Day Four:**
 - ✓ Practical exercises in sampling (using R and SPSS software).
 - ✓ Practical exercises in weighting (using R and SPSS software).
 - ✓ Practical exercises in variance estimation (using R and SPSS software).

1. General comments

This study visit report was prepared within the Twinning Project „Strengthening the Capabilities of the Department of Statistics in Jordan”. It was the 5th mission within Component 2 “Sampling techniques” of the project.

The concrete objectives of the study visit were:

- Access to the Central Statistical Bureau of Latvia experience in sampling techniques, Weighting, Imputation in Economic, Agricultural and Household surveys.
- Different frames (Household, Economic, Agricultural frame) and how to update it. It was found that Central Statistical Bureau of Latvia depends on registers in design and sampling in addition to the frames from censuses also utilized these frames in imputation missing data.

The participants of the study visit would like to express their thanks to all officials and individuals met for the kind support and valuable information which they received during their stay.

2. Lessons learned

The Information Sampling Team has been briefed of the work mechanism of the Central Statistical Bureau of Latvia during this visit through lectures, presentations, discussions and practical exercises. There was a focus on some of the subject that was identified in advance by our visit team before leaving the Department of Statistics (DoS). The topics were as follows:

- Economic establishments frame and how to update it, especially there is a change in this frame, and transmission establishments from one activity to another economic activity.
- Household frame "how to deal with the big difference in the numbers of families after the update, both increases and decreases".
- Sampling errors for economic, agricultural and household surveys.
- Imputation for the missing data, whether total or partial, and the advantages of each method, and when we use each method.
- Sampling techniques.
- Weighting.

3. Conclusions and recommendations

- To proceed DoS work in the Sampling techniques using R and SPSS software.
- Enhance the DoS staff capability in using such software in sampling techniques.

Annex 1. Programme

Programmed of the study visit to the Central Statistical Bureau of Latvia: Sampling methodologies (Activity 2.3)

1st Day, 28 October

09:30 – 10:00	Introduction, practical arrangements (Aija Žīgure, Mārtiņš Liberts)
10:00 – 10:50	Sampling techniques -theory (Mārtiņš Liberts)
10:50 – 11:10	<i>Coffee break</i>
11:10 – 12:30	Sampling techniques –theory (Mārtiņš Liberts)
12:30 – 14:00	<i>Lunch</i>
14:00 – 15:20	Weighting -theory (Mārtiņš Liberts)
15:20 – 15:40	<i>Coffee break</i>
15:40 – 17:00	Variance estimation -theory (Mārtiņš Liberts)

2nd Day, 29 October

09:30 – 10:50	Statistical Business Register (Mārīte Baranova)
10:50 – 11:10	<i>Coffee break</i>
11:10 – 12:30	Imputation for business surveys (Linda Oinaskova)
12:30 – 13:15	<i>Lunch</i>
13:15 – 14:35	Statistical Farm Register (Anita Raubena)
14:35 – 14:55	<i>Coffee break</i>
14:55 – 16:15	Statistical Dwelling Register (Staņislavs Barkovskis)

3rd Day, 30 October

09:30 – 10:50	Imputation for social surveys -theory (Mārtiņš Liberts)
10:50 – 11:10	<i>Coffee break</i>
11:10 – 12:30	Imputation for social surveys -practical exercises (Svetlana Nesterova)
12:30 – 14:00	<i>Lunch</i>
14:00	<i>Riga Sightseeing</i>

4th Day, 31 October

09:30 – 10:50	Sampling -practical exercises (Juris Breidaks, Andris Fisenko)
10:50 – 11:10	<i>Coffee break</i>
11:10 – 12:30	Weighting -practical exercises (Jeļena Vaļkovska)
12:30 – 14:00	<i>Lunch</i>
14:00 – 15:20	Variance estimation -practical exercises (Juris Breidaks)
15:20 – 15:40	<i>Coffee break</i>
15:40 – 17:00	Conclusions and general discussion (Mārtiņš Liberts)