



# Small area estimation vision for Jordan

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## General principles we could follow

- No increase in total sample size for Household Expenditure and Income Survey (HEIS) and other sample surveys [1].
- To obtain reliable estimates of poverty and other characteristics, use administrative data as much as possible.
- Due to possibly not very high-quality administrative data in the pilot stage and the use of outdated census population (sampling frames), area-level small area estimation (SAE) models are more suitable [2].
- Let SAE models be simple as possible if they yield estimates of sufficient accuracy.
- Document all steps.

# Search of auxiliary data for SAE

## Steps in relation to Component 1:

1. Inventory of all administrative sources available.
2. Expert selection of the most relevant variables.
3. Obtaining the data on selected variables for the pilot experiments.
4. Transforming the obtained administrative data.
5. Analysing the suitability of the data for SAE.

## Population issues, calibration, and minimal SAE needs

- Let us study, for example, the Civil Status and Passports Department data to:
  - update Census 2015 data (sampling frames for statistical surveys);
  - and thus generate demographic information (population statistics);
  - and keep in mind Census 2025.
- Calibrate sample survey weights to aggregates of the updated demographic data.
- Use these aggregates also as covariates in SAE modeling.

## Other important administrative/external data for SAE

- Use, if possible, Cities and Villages Development Bank aggregated data on population movements as the covariates in SAE modeling.
- For poverty estimation in HEIS, the most powerful area-level covariates could be based on income data covering employee income, old-age benefits, and other benefits, if available.
- Administrative unemployment (and employment) data, if available, could be used as covariates to model labor and also poverty estimates in small areas.

## References

1. *Jordan Household Expenditure and Income Survey 2017-18 : Completion Note (English)*. Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/469111551866278210/Jordan-Household-Expenditure-and-Income-Survey-2017-18-Completion-Note>
2. Corral, P., Molina, I., Cojocar, A., & Segovia, S. (2022). *Guidelines to Small Area Estimation for Poverty Mapping*. <https://openknowledge.worldbank.org/handle/10986/37728>