

Macedonia Social Services Improvement Project (SSIP) P162246

Terms of Reference for Measurement of Early Childhood Development and Quality of Environments (MELQO) International STATA and Data Analysis Consultancy

I. OVERVIEW

The Government of the Republic of North Macedonia has received a Loan from the International Bank for Reconstruction and Development, to implement the Macedonia Social Services Improvement Project (SSIP). The development objective of the project is to expand access to and improve the quality of social services, including preschool services, for vulnerable groups.

The project comprises three key components. The first component, promoting social inclusion through improved access to social benefits and services will strengthen the overall social protection delivery system for improved services by existing social assistance recipients and by vulnerable groups.

The second component, expanding access to and improving the quality of preschool services will focus on improving access to and improving the quality of preschool services for children from socially disadvantaged backgrounds (that is poor children, children experiencing disabilities and Roma children). This will include improving system efficiencies by reducing fragmentation in the ECD (Early Childhood Development) sector.

The third component, project management, monitoring and evaluation will support the day-to-day management of project implementation, and the monitoring and evaluation of its objectives and outcomes.

The project will through these target interventions, contribute to the GoM's objectives to alleviate poverty and enhance human capital formation through the increased effectiveness and efficiency of the GoM's social safety net to reduce the inter-generational transmission of poverty in the long term.

The project plans to track implementation evidence on children's development and improvements to preschool quality. For this purpose, beginning in 2019, the Measuring

Early Learning Quality Outcomes (MELQO) was adapted for use in the country, a cohort of trainers and enumerators prepared for the fieldwork and the first baseline national data collection process completed in June 2022. MELQO includes two sets of tools: Child Development and Learning (MODEL) and Monitoring Early Learning Environments (MELE). To support the data analysis process, the Ministry of Labour and Social Policy wishes to engage an International STATA and Data Analysis Consultant.

II. OBJECTIVE AND SCOPE OF WORK

The overall objective of the implementation of MELQO in N. Macedonia is to measure the quality of early learning environments and establish the extent to which young children are being prepared for learning in primary schooling. To do this, both modules, MELE and MODEL have been adapted and used. Following data collection, these data and results must be cleaned, managed, analysed, and organised for writing reports.

The STATA and Data Analysis Consultant will join the Macedonian MELQO team already engaged on in the initiative to assist the scoring and comparison of data to create reports and make recommendations.

The MELE and MODEL data collection that is/shall be performed by separately engaged company includes 3 phases:

- Phase 1. Baseline data collection
- Phase 2. First follow up data collection
- Phase 3. Second follow up data collection

Under this assignment, the appointed consultant will be responsible (i) cleaning the MODEL AND MELE data, (ii) using STATA and prewritten do-files to analyze country specific data on child development, readiness for school and the quality of early learning environments including teacher practices, (iii) produce additional ad-hoc data analyses requested by ECEC Project Component Coordinator, and (iv) presenting results as required by the team.

Specific questions that require answering include:

- What is the overall functioning of the scale?
- What are patterns in children's learning, especially in relation to equity?

- To what extent are curricula standards or benchmarks in line with expectations articulated through national standards?

Scope of work

Establish a factor structure for the MODEL, this includes:

- Establish evidence of the presence of domains or latent constructs that drive children's observed scores on either the direct assessment or teacher/caregiver ratings.
- Empirically test the assumption that items will load onto domain-specific factors including literacy, mathematics, executive function, and fine motor for the direct assessment; and problem behaviors, social skills, and attention/self-regulation for teacher/caregiver reports on social/emotional development.
- Calculate scores that can be used to summarize children's overall performance on the MODEL, and to report on children's skills in specific areas

For the MELE this will include:

- Undertake an item-by-item analyses to determine which items have adequate ranges, and which are associated with predicted teacher or school characteristics.

Identify associations between MELE and MODEL data

- Examine the associations between child and family characteristics and other predicted associations with MODEL and MELE scores.

The consultant will thus fulfil the following:

- **Familiarize themselves** with the project, draft documents for the study and processes undertaken to adapt and implement the MELQO in Macedonia
- **Clean data** from data collection (CAPI or PAPI) as necessary
- **Manage data** files and produce any supplemental resources needed (e.g., codebooks)
- **Establish validity and reliability** of the data and make recommendations on how tools and data collection processes could be further strengthened.

- **Analyze data** on child development and readiness for school, create comparisons across data sets to better understand quality and children’s learning and development
- **Ensure that descriptive statistics are presented accurately** using MS Word formatted report
- **Conducting any additional data analyses** requested by the team leader
- **Prepare other work on automatized outputs** with the team leader

III. REPORTING OBLIGATIONS

The consultant shall submit the following reports on English language:

1. Report including recommendations regarding the conducted MELQO Baseline data collection
2. Report including recommendations regarding the conducted MELE Baseline data collection
3. Report including recommendations regarding the conducted First MELQO follow up data collection
4. Report including recommendations regarding the conducted First MELE follow up data collection
5. Report including recommendations regarding the conducted Second MELQO follow up data collection
6. Report including recommendations regarding the conducted Second MELE follow up data collection

IV. EXPERIENCE AND QUALIFICATIONS

The consultant appointed under this contract will have the following experience/qualifications:

- Minimum of Masters or PhD in a field related to behavioral and social sciences, including psychology, economics, and sociology
- Demonstrated significant experience managing large/multiple datasets and strong command of STATA

- Experience in Analyzing data on child development and readiness for school, Experience in Analyzing data on children’s skills in specific areas
- Conscientious, high attention to detail and able to take responsibility for ensuring the successful completion of assigned tasks
- Strong written and oral communication skills
- Highly organized and detail-oriented
- Oral and written fluency in English.

V. SELECTION METHOD AND CONTRACT

The selection method is Individual Consultant Selection and the contract shall be Lump Sum according to the World Bank Procurement Regulations for Investment Project Financing (IPF) Borrowers – Procurement in IPF of Goods, Works, Non-Consulting and Consulting Services, (Regulations) issued in July 2016, revised November 2017., www.worldbank.org

VI. DURATION OF THE ASSIGNMENT

The expected start date of the assignment is September 2022, and the expected duration of the assignment is till 30.06.2024.