SUMMARY

The evaluation was commissioned in order to create calculation methodologies of result indicators of Operational Programme for EU Structural Funds Investments for 2014-2020 8th priority "promoting Social inclusion and combating poverty" 8.2.1 specific objective "Reduce disparities in the quality of life caused by geographical conditions and demographic processes" and to determine the achieved values of the indicators.

For the implementation of the 8.2.1 specific objective only one measure had been planned – measure no. 08.2.1-CPVA-R-908 "Modernisation of rural areas". The aim of the measure – to decrease the disparities of living quality by promoting social and economic development in target territories. The aim is being achieved by solving complex problems of target territories: by modernization of public areas and public buildings and by improvement of the public infrastructure in other ways. According to the administrative rules of the measure, various projects could be implemented in **66 target territories** – in areas, which were made as the target territories by the decisions of Regional Development Councils (30 cities, 22 towns and 14 villages). The target territories are in 35 municipalities.

The aim of the evaluation – to create calculation methodologies of monitoring result indicators "Share of employed in the target territories" and "Attracted additional tangible investments to the target territories" and to determine the achieved values of these indicators in each target territory.

The evaluation is composed of 4 parts. *In the first part,* the evaluation's object, aim, objectives and methods are presented. *In the second part,* possible alternatives how to calculate the achieved values of the result indicators are analysed and as the result the optimal way to do so is determined, the recommendations how to use the methodologies to calculate actual values are stated and finally the achieved values are estimated. *In the third part,* the conclusions of the evaluation (the answers to the evaluation's questions) are stated. *In the fourth part,* the strategic suggestions and the recommendations are presented.

The calculation methodology of the result indicator "Attracted additional tangible investments to the target territories" and the achieved values.

The three alternatives to calculate the achieved values of this indicator were analysed:

- **Alternative No. MI1.** The achieved values of the indicator could be calculated by assigning part of factual tangible investments calculated by the official statistics according to the number of residents in the target territories, i.e. the same methodology which was applied to determine the initial value of the indicator. By using this methodology the achieved values would be comparable to the values of the equivalent result indicator which is being applied to other specific objective of the OP (7.1.1). However, due to the fact that the OP's 8.2.1 specific objective is being implemented in much smaller target territories, the determined values in this way would be inaccurate.
- **Alternative No. MI2.** The achieved values of the indicator could be calculated by determining statistical link between tangible investments and number of operating entities by applying linear regression analysis. However, the determined statistical link would be equal to all Lithuania territories without differences between municipalities, urban and rural areas. Due to the fact that the OP's 8.2.1 specific objective is being implemented in small target territories, the link could not be accurate enough to reflect the actual situation in the target territories and the determined values of the indicator in each target territory would be rather inaccurate.
- Alternative No. MI3. The tangible investments in the target territories could be calculated by
 inserting number of operating entities data to the linear regression model, however also by
 supplementing this data to reflect the economic activity of the entity and number of employees
 in it.

Due to constrains related to the data availability, the adjusted alternative No. MI3 was chosen. The optimal calculation methodology of the result indicator "Attracted additional tangible investments to the target territories" is based on the determination of the coefficients at municipality level via the application of multiple linear regression analysis. The multiple linear regression analysis is applied to determine statistical link between tangible investment and the other two independent variables (number of operating entities and positive change of number of employees in operating entities). The calculation reveals that the changes in these independent variables explains 85% of changes in tangible investments in municipalities. As the result of this statistical link the assessed tangible investments in a target territory and the rest part of municipality, which do not have a status of target territory, are calculated. By knowing that the sum of assessed tangible investment in a target territory and the rest part of municipality, which do not have a status of target territory, is equal to 100% and by knowing the official estimate of tangible investment in municipality, which is calculated by the Statistics Lithuania, we can determine the actual value of tangible investments in a target territory. In the evaluation the attracted additional tangible investments is considered to be all tangible investments which were not financed by public funds (ESIF, the State budget, project beneficiary and its partners) from the measure. This approach is the most accurate and the most reliable from all considered alternatives and is completely in line with the official tangible investment data of Statistics Lithuania.

In the evaluation it was determined that during 2015-2016 (additional) tangible investments (flow) in the target territories were equal to 429,3 million Eur. The initial value and the target value of the indicator were calculated using different methodology and in different target territories, therefore, they are incomparable to the achieved values in 2015-2016 calculated in this evaluation. The estimated value (429,3 million Eur) should be used as the "initial" value, because the implementation of projects under the measure in 2015-2016 have not started yet. We proposed to consider that the target is achieved, if tangible investments in the target territories in 2023 is at least 527,1 million Eur, while additional tangible investments – at least 478,2 million Eur. Therefore, the OP's initial and the target values should be adjusted accordingly.

The the calculation methodology of the result indicator "Share of employed in the target territories" and the achieved values.

The three alternatives to calculate the achieved values of this indicator were analysed:

- **Alternative No. U1.** The most reliable and accurate approach to calculate the achieved values of the indicator would be to conduct representative surveys in each of the target territories at least twice during the programming period (for example, in 2019 and in 2021). However, the application of this approach is very costly in terms of time and money (the benefits of knowing the actual values of the indicator would not be proportional to the costs). To apply this approach one would need to receive at least 21 thousand representative answers to the survey (couple hundred in each target territory).
- **Alternative No. U2.** To calculate the values of the indicator by analysing Statistics Lithuania data which are used to calculate values of "Employment rate" indicator. However, during the evaluation it was revealed that it is not feasible to do so without increasing the size of Population employment statistical study, which is conducted by Statistics Lithuania. That is due to the fact that Statistics Lithuania acquired data are not accurate enough to calculate employment rate at lower than municipality level.
- **Alternative No. U3.** To calculate the values of the indicator by using the statistical and administrative data (Population registry, "Sodra", Statistics Lithuania)

The optimal calculation methodology of the result indicator "Share of employed in the target territories" is based on Statistics Lithuania detail statistics data about number of employees in operating entities, which is being collected since 2015. From this data we are able to calculate isolated employment in each target territory and each municipality. Taking into account the economic integration level between a target territory and a municipality, which is the main employer to residents of the target territory, open employment of the target territory is calculated. Finally, taken into account the possibility that a person, who do not have a job contract, will become a self-employed,

the actual share of employed in the target territory is determined. According to this methodology, the values of the indicator are compatible with Statistics Lithuania employment data.

In the evaluation it was determined that the value of monitoring indicator "Share of employed in the target territories" in 2018 was 65,5%. In the target territories the value of this indicator varies from 46% ("Didžiasalis" village) to 88% ("Vievis" city). The creation of new jobs in target territories and surrounding municipalities and rise and increase in popularity other forms of employment (jobs without employment contracts) positively affect the value of the indicator. Employment rate in Lithuania since 2011 to 2018 have increased from 60,2% to 72,1%. The employment rate have increased due to relatively fast economic growth and decrease of working age population.

The initial value and the target value of the indicator were calculated using different methodology, therefore, they are not fully comparable with the determined value in this evaluation. If we compare despite this incomparability restriction, the target value which was stated in the OP is already achieved in 2018. One possible explanation might be that favourable economic conditions and decrease of working age population due to the aging society and emigration have led to significantly higher values of the indicator.

Strategic suggestions and recommendations

Strategic suggestions:

- 1) To involve Statistics Lithuania into calculation of monitoring indicators values, especially in cases, where the equivalent indicator is already calculated by Statistics Lithuania just on country or regional level, while to monitor the progress of intervention same indicator needs to be calculated at lower territorial level.
- 2) Take measures which would help to access administrative data for the monitoring purposes. For example, in legislation related to management and control of system one should state that there is an obligation for various government institutions which manages state registries to provide administrative data which is needed to calculate monitor indicators free of charge and in clearly defined terms.
- 3) In descriptions of monitoring indicators should be stated, is and if so which administrative data is needed to calculate values of the indicators, is the needed data available publicly and if not to foresee measures which will be taken when the need arises.
- 4) At least twice during the programming period to do an impact evaluation of the measure no. 08.2.1-CPVA-R-908 "Modernisation of rural areas". The evaluation should include case studies of the target territories with the aim to fully evaluate an impact and results of the intervention, as well as quantitative methods which would allow to assess the net effect of the intervention to investments and employment.
- 5) In the future for monitoring purposes one should not use the indicator which reflects the annual flow of tangible investment, but instead the indicator should reflect the total sum of tangible investments during a certain period.

Recommendations:

- 1) The initial value of the result indicator "Attracted additional tangible investments to the target territories" should be the one calculated in the evaluation for 2015-2016 (respectively one should adjust the value in the OP and in the implementation plan of the measure).
- 2) Taking into account the assumptions which were applied while the OP was prepared, the target value of the indicator "Attracted additional tangible investments to the target territories" should be recalculated and adjusted.