

Lithuanian Case Study Fact Sheet

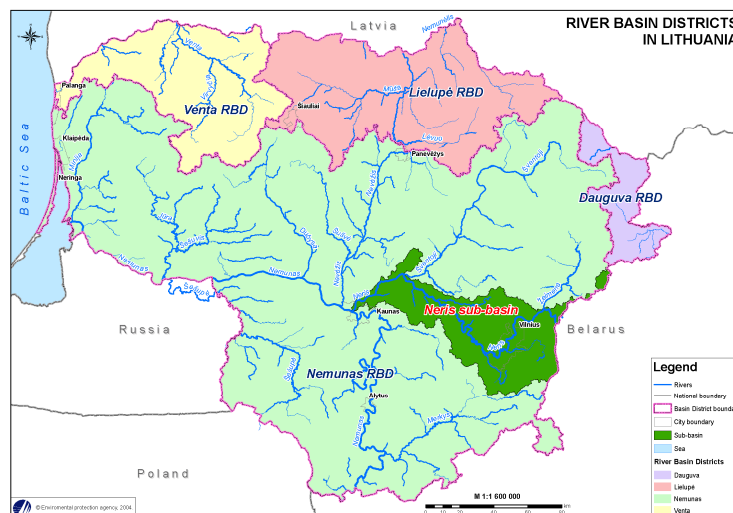
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The heart of AquaMoney ([see Policy Brief No. 1](#)) are 11 case studies from different European countries. Based on these case studies, AquaMoney developed guidelines for benefit transfer. This policy brief will present the main results of the Lithuanian Case study. The idea is to give policy makers an overview of the range of values that can appear and how the perception of environmental problems in the different countries differs.

The Lithuanian NERIS Case Study

The transboundary Neris river basin, a sub-basin of the Nemunas River Basin District, is situated in the eastern part of Lithuania. A part of the basin lies in the territory of Belarus, but the largest part of the river basin or 13,850 km² is situated in Lithuania. This covers more than 21% of the land area of Lithuania.



Map of the Neris River Basin

A total of 751,000 inhabitants live within the 11 municipalities included in the study area. In total 500 people were interviewed in 26 settlements in March 2008. The overall response rate of the survey was 55% and the co-operation rate was 95%.

The project sought to value improvement in water quality and river re-meandering using the contingent valuation (CV) method. The case study combined two valuation studies. The so-called national scenario was devoted to assessing the willingness to pay (WTP) for the improvement of river water quality and ecological status in the Neris river basin, while the other study, the Aquamoney common design part, was aimed at assessing the WTP for the improvement of water quality in one and in two lakes of Neris river basin. The average monthly income of a household that participated in the survey was LTL 1,777 (or EUR 515).

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Environmental situation

The hydrological system in the Neris river basin is comprised of longer and smaller tributaries; the number of lakes and rivers in the basin is quite large. Forests occupy about 28% of the Neris river basin area, wetlands make up 10% and lakes account for 2.5%. The main water users in the basin are households, industries and fisheries. The agricultural sector is not widely developed in this area. Various important ecosystems can be found across the Neris river basin. The Neris is a unique river because practically all the bed in the territory of Lithuania is natural. In the study water quality was characterised using a four level water quality ladder with colour codes from „red“ (poor ecological status) to „blue“ (very good ecological status). The study has revealed that inhabitants of the basin are quite aware of the current water quality in the basin – nearly half of inhabitants think that water quality is moderate, which is actually true. Respondents did not report any experiences with flooding or scarcity.

Willingness-to-Pay (WTP)

Almost half of respondents out of 500 stated that they would not contribute to the improvement of water quality in the Neris river basin, and a bit more than half said they would not contribute to both water quality and re-meandering. Thirty percent of those who pay zero are the so-called zero bidders and therefore could be still considered as valid bidders. The rest of those who refuse to pay are classified as protest bidders. The mean WTP for water quality improvement and river re-meandering (national part of the study) was estimated at LTL 48.2 (€14) per household per year. The WTP for improvement of water quality in one and in two lakes varied from €6 to €10 (mean LTL 21.7 (€6.3)) per person per year depending upon the scope of improvement.

Sensitivity to scope

People are willing to pay more for achieving good ecological status in rivers (good water quality and re-meandered rivers) than only for reaching good water quality. Households' willingness to pay is

also sensitive to the number of lakes improved (one versus two lakes), but to a lesser extent. There is evidence of some ordering effects upon values: mean WTP results of the ordering test show that the respondents prefer the “logical” presentation of two goods: first of all, the smaller change and then the bigger improvement of the rivers, to the reverse presentation of the two scenario parts. Mean willingness to pay in the first case is higher than in the second one.

Distance decay

The study has found weak or non-existent distance-decay. Sampling is quite important for such studies: there are too few respondents living very close to lakes under assessment and there are too many substitutes. Therefore it is more likely that people would hardly put some specific value on a water body that he or she probably has never been to.

Special Issues

In the Nemunas RBD, which makes up 80% of Lithuania's territory, the Neris study is only the second WTP study. It is promising, encouraging and assuring that the Neris river basin WTP study brought up very similar results to those of the first WTP study. There are usually many zero and protest bidders in Lithuania. It is not always clear how to classify and treat them; therefore, qualitative information on protests and a priori knowledge of the population is very useful. It is recommended to hold further discussions and analyses on this issue.

Summary

The study shows a positive willingness to pay for water quality improvements and brings valuable experience and numerical results, which are highly important for policy makers especially in view of the WFD goals.

Further information can be found in the Case Study Reports and in further Policy Briefs on:

www.aquamoney.org

