

IMPACT OF AGRICULTURAL FARMS ON THE ENVIRONMENT OF THE PUCK COMMUNE:

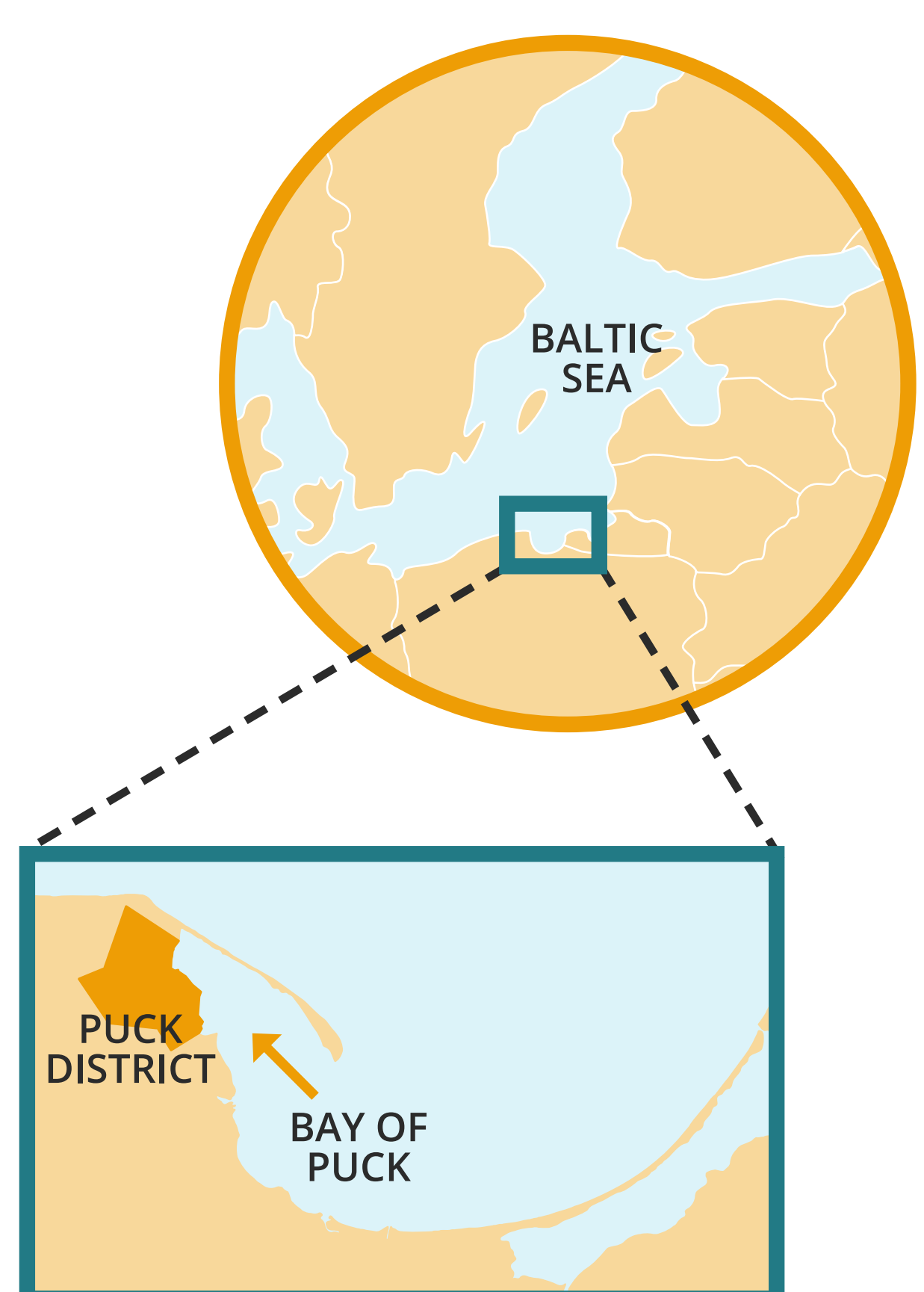
Integrated Agriculture Calculator – CalcGosPuck

INTRODUCTION

Leaching of nutrients from agricultural areas is the **main cause of water pollution** and eutrophication of the Baltic Sea.

Estimating Nitrogen (N), Phosphorus (P) and Potassium (K) values in a nutrient balance can help to reduce the impact of agricultural production on the environment and improve the farming economy.

The purpose of the project was to determine the **current and future environmental status of surface water and groundwater quality in the Puck Commune** and its impact on the Bay of Puck environment.



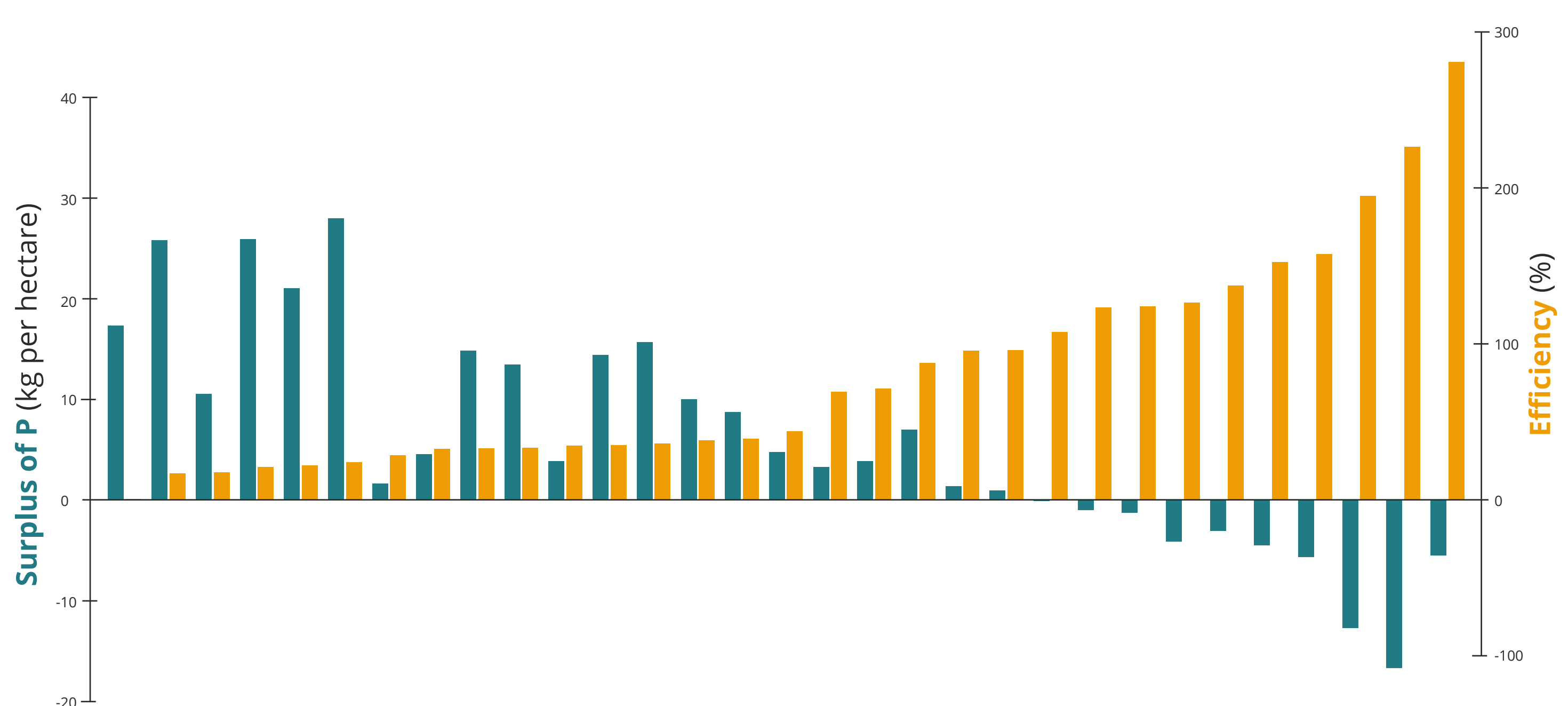
METHODS

To calculate the nutrient balance, we used a method called “at the farm gate”. Based on this method, the agriculture calculator “CalcGosPuck” was developed.



RESULTS

Nutrient efficiency was highly variable. The graph below shows the **surplus** and **efficiency** of phosphorus (P) on each of the farms.



CONCLUSION

The CalcGosPuck works as an independent application to calculate the pollution emission from agricultural holdings to the environment, including surface and groundwater, but it can also serve to calculate the nutrients' distribution over agricultural areas.

CalcGosPuck will help to raise farmers' awareness about NPK flow on farm scale and to improve nutrient management.