

## **Using the Input-Output Model for Evaluating the Impact of Environmental Restrictions on the Economic Development of the Republic of Buryatia, Russia**

Topic: 514E Environmental Analysis for Development (1)

Author: Zorikto B. DONDOKOV

Co-Authors: Konstantin Pavlovich Dyrkheev

Lake Baikal is a unique natural site listed on the UNESCO World Heritage List. There is a special regime for natural resources management throughout the Baikal Natural Territory (BNT), which covers Lake Baikal and the surrounding specially protected areas. The activity of timber and wood processing companies, agricultural enterprises, and fisheries is prohibited or strictly limited in this area. It negatively affects social and economic development of the BNT, which covers over 72% of the territory of the Republic of Buryatia, Russia.

The study presents calculations of direct and indirect economic losses of the region due to declining production and lost earnings in related sectors. These calculations are made based on the Input-Output Table of the Republic of Buryatia for 2011, which includes 50 types of economic activity.

The paper proposes an input-output model for analyzing social and economic development of the region using strict environmental restrictions as exogenous variables. The authors evaluate multiplier effects of the increment of gross output, tax revenues, and employment. They also make scenario calculations of direct and indirect economic losses of the Republic of Buryatia stipulated by the impact of restrictions on economic activity in the Baikal Natural Territory.

\* This research is funded by the Russian Foundation of Fundamental Research under Research Project No. 15-46-04321: "The study of the impact of the "Baikal Factor" on the social and economic development of the Republic of Buryatia based on the input-output model with an expanded composition of endogenous parameters".