

Abstract

We estimate the willingness-to-pay for conserving crop diversity in the Czech Republic. Discrete choice experiments are used to elicit preferences for the conservation of wine, hop, and fruit tree varieties, while a double-bounded dichotomous choice approach is used to elicit preferences for the conservation of unspecified, “general” crop diversity. The WTP values are derived for both of these contingent products from a sample representative of the general Czech population (n=731) and a sample of respondents living in the South Moravian region that is characterized by agriculture and wine production (n=418). We demonstrate a strong preference for conserving fruit trees over hops and wine varieties, and derive positive mean WTP of the general Czech population (ages 18-69) of 56 Kč (\$2.26). Mean WTP for the conservation of general crop diversity is 167 Kč (\$6.80). On average, residents of South Moravia have a greater WTP for “general” crop as well as fruit tree conservation. In total, the Czech adult population (ages 18-69) has an aggregate WTP of ~1.25 billion Kč (\$50.5 million) for the conservation of general crop diversity, and ~410 million Kč (\$16.8 million) for the conservation of fruit trees, revealing the previously unmeasured social welfare benefits of these activities. The estimated benefits of crop diversity conservation based on the stated preference method present the first welfare estimate of its kind for Czech crop diversity, and are an important contribution to the valuation of a resource that has the potential to help adapt agriculture to climate change.

JEL Classification

Q18, Q51, Q57

Keywords

Crop diversity, plant genetic resources for food and agriculture (PGRFA), stated preferences, discrete choice experiments, double-bounded dichotomous choice, multinomial logit, willingness to pay, consumer preferences

Author’s e-mail

Ntyack@gmail.com

Supervisor’s e-mail

Milan.Scasny@czp.cuni.cz