Abstract:

Fresh water is a renewable resource but it is also finite. Around the world, there are now numerous signs that human water use exceeds sustainable levels. Groundwater depletion, low or nonexisting river flows, and worsening pollution levels are among the more obvious indicators of water stress. Satisfying the increased demands for food, water, and material goods of a growing population while at the same time protecting the ecological services provided by natural water ecosystems requires new approaches to using and managing fresh water. There has been little attention to the fact that the organization and characteristics of a production and supply chain does actually strongly influence the volumes of water consumption and pollution that can be associated with a final consumer product. Uncovering hidden link between consumption and water use can form the basis for the formulation of new strategies of water governance. That is why in this diploma thesis we focus on introducing the indicator of freshwater use that looks not only at direct water use of a consumer or producer, but also at the indirect water use – *water footprint*. At a global scale, most of the water use occurs in agricultural production. That is the reason why we have chosen water-intensive goods like crops to show how water footprint accounting can work in conditions of the Czech Republic. Concerning the results we could have discussed the water footprint of crop production in water stress region like the Czech Republic in the context of the global situation.