SUPPLY AND DEMAND OF FISH IN BOSNIA AND HERZEGOVINA AND REPUBLIC OF SRPSKA

Aleksandar Ostojić¹, Neboša Savić¹, Nemanja Jalić¹, Vera Kanlić²
¹University of Banja Luka, Faculty of Agriculture, Republic of Srpska, Bosnia and Herzegovina
²Government of Republic of Srpska, Ministry of agriculture, forestry and water management, Republic of Srpska, Bosnia and Herzegovina

INTRODUCTION
The aim of this work is to analyze the fish market of Bosnia and Herzegovina (B&H) and Republic of Srpska (RS) by observing the supply and demand. In addition, the paper shows the level of Self - sufficiency of fish in the domestic market, also the Import Dependency Ratio (IDR). The data source of fish production was the data of official statistics (B&H Agency for Statistics and RS Statistical Office), while the data of the Indirect Taxation Authority of B&H was used for the foreign trade. The desk research was conducted for the period 2014-2019.

MATERIAL AND METHOD
The aim of the research is to analyze the production and consumption of fish in B&H and RS and to calculate the degree and trends of self-sufficiency in period 2014 - 2019. Combination of desk research from literature sources and data calculation from secondary sources were the method of the research. Fish production and consumption data were taken from statistical publications of Institute of Statistics RS, Agency for Statistics of B&H. Self-sufficiency was calculated on the basis of available data and own estimation of authors. The data obtained on imports and exports is used from the Indirect Taxation Authority database. Calculation of self-sufficiency is based on the relations:

1) Production + Import = Consumption + Export
2) Import Dependency Ratio (IDR) = Import x 100 / (Production + Import – Export)
3) Self Sufficiency Ratio (SSR) = Production x 100 / (Production + import – Export)
4) Per capita consumption = (Production + Import – Export) / Number of population

RESULTS AND DISCUSSION
In relation to the world scale, Bosnia and Herzegovina has a modest production and consumption of fish. Average production of trout in Bosnia and Herzegovina is about 3015 tons per year for the analyzed period. In Republic of Srpska, from 2014 to 2019, is produced about 55% of total B&H trout production and it is on the level about 1643 tons per year. B&H produce 630 tons of carp per year. Production is mainly related to RS, because 98% of all production is produced in Republic of Srpska (Graph 1).

B&H is import dependent from 70% to 87% for the analyzed period (average 74%) and RS from 50% to 82% (average 63%). Bosnia and Herzegovina self sufficiency ratio is on average about 55%. This ratio is about 94% in Republic of Srpska between 2014 and 2019. Consumption of fish products per capita in B&H and RS is at very low level. One person consumes a little more than 2 kg per year.

Graph 1. B&H and RS trout and carp Production (t)

Graph 2. B&H and RS fish trade, coverage in quantity and value

CONCLUSION
Until 2017. fish production grew at an average rate of 18.8% and in the 2018. and 2019. production was declining at a rate of -2.1%. The share of fish production in the RS in relation to B&H is from 44.5% to 67.3%. During the observed period, Bosnia and Herzegovina had a constant trade deficit in the exchange of fish, from -8.8 million to -4.7 million BAM. The maximum imports covered by exports for these five tariff codes was recorded in 2019. at the level of 80%. Republic of Srpska has a somewhat more favorable situation; there are periods of surplus and deficit: the negative value of the balance was determined in 2014. and 2018. while in other years it had a positive balance. Bosnia and Herzegovina is really dependent from imports, because 74% of needs satisfies from imports and in the case of Republic of Srpska about 64% of needs. In terms of self-sufficiency, Bosnia and Herzegovina meets 55% of its own needs for fish and Republic of Srpska 94% of its needs. Based on the results it is necessary to improve consumers education because of the health aspects of fish consumption.