ANALYSIS REGARDING FOOD WASTE AND CONSUMPTION IN ROMANIA

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Abstract

Food waste and food loss is a global issue that became the focus point at FAO Conference from Romania in 2014. Losses occur along the supply chain, but the major responsible for the waste is considered to be the consumer and the consumption stimulation of some products. Preventing food loss and food waste is the key for improving the economy, increase the consumers incomes and improve food security. The article aim is to analyse the production and consumption level in Romania and to build a starting point for a future research among the food supply chain. Results indicate that the production level per person by different categories of agrifood products is significant higher than the consumption level for the same categories. Losses must be identified along the food supply chain and identify means of improving the situation.

Key words: suply chain, food safety, consumption, food waste, food loss

INTRODUCTION

Nowadays food waste became a sensitive issue because of the discrepancy between different areas in the world. While in some countries people suffer for hunger, in others consumers produce a massive food waste. One third of food is wasted annually at a global scale which means 1.3 billions tons per year (Gustavsson et al., 2011). This aspect was on the agenda at the 29th regional FAO Conference for Europe and central Asia from April 2014, in Bucharest were the participants concluded that food losses occur along the whole supply chain, while responsible for food waste is the consumer. The main cause for food loss is also the excessive stimulation of consumption especially for certain products.

Takase et al. (2005) consider that consumers are the main responsible with environmental problems generated by food waste and the solution is represented by a shift in their lifestyle and adopting a sustainable pattern of consumption.

Charles et al. (2010) noticed that 30-40% of food from developed and developing countries is wasted. The solution for this phenomenon is difficult to find because of the strong connection between food and cultural attitudes towards food. Parfitt et al (2010) considers that there are many responsible factors for the wasted food along the supply chain such as market economy, resources, legislation and others.

Urutyan (2013) highlights the importance of food losses which they are prevented could improve food security and increase incomes.

MATERIAL AND METHODS

The material used in the present article is based on secondary data like the Romanian official statistics and FAO reports and surveys in different countries form Europe and Central Asia. Studies regarding food losses are focused on five stages were losses could be identified: agricultural production, post-harvest handling and storage, processing and packaging, distribution and consumption (Tatlidil et al, 2013; Themen, 2013; Urutyan, 2013; Koester et al, 2013). The scope is to obtain the information needed for a future primary research among farmers and other stakeholders along the supply food chain. The article aim is to determine the production and consumption structure in Romania and to identify the main trends occurred along the food supply chain in order to spot the points were losses occur.

RESULTS AND DISCUSSIONS

Production level per person of main agrifood products indicate that between 2008-2012, there are generally decreased values for the majority of commodities except sunflower and sugar (Table 1).

Table 1

Production per person of main agrifood products

Year	2008	2009	2010	2011	2012
Cereal grains (kg)	819,3	730,2	825,5	1034,5	638,1
Wheat (kg)	349,6	255,4	287	354	263,6
Rye (kg)	1,5	1,6	1,7	1,6	0,9
Maize (kg)	382,2	391,5	446,6	581,6	296,2
Sunflower (kg)	57	53,9	62,4	88,8	69,6
Sugar beat (kg)	34,4	40,1	41,4	32,8	35,8
Potatoes (kg)	177,7	196,6	162,2	202,3	122,7
Vegetables (kg)	186	191,6	190,8	207,3	175,9
Fruits (kg)	57,4	65	70,1	73,5	56,2
Meat (kg)	69,4	70,8	64,5	67,4	66,3
Milk (litters)	287,3	276,8	242,7	248,5	240,5
Eggs (pieces)	326	305	306	314	318

Source: INSSE, 2014, https://statistici.insse.ro/shop/

The consumption structure of commodities categories indicates a constant level of consumption between 2008 and 2012, the most important categories being bread and pastries, eggs and vegetables. Generally there are no major discrepancies between 2008-2012 regarding the consumption level, except bread and other pastries, maize flower and eggs (Table 2).

Average monthly consumption per person by commodity groups

Year	2008	2009	2010	2011	2012
Bread and other pastries (kg)	9,223	8,974	8,732	8,565	8,584
Maize flower (kg)	1,024	1,008	0,951	0,967	0,908
Flower (kg)	0,781	0,822	0,823	0,815	0,8
Fresh meat(kg)	3,07	3,115	3,103	3,079	3,143
Milk(litters)	6,151	6,168	6,186	5,962	6,062
Eggs (pieces)	13,065	13,055	12,99	13,145	12,805
Fruits (kg)	3,312	3,552	3,557	3,399	3,389
Potatoes(kg)	3,614	3,586	3,488	3,465	3,48
Vegetables (kg)	7,305	7,627	7,382	7,597	7,575
Sugar (kg)	0,759	0,758	0,754	0,741	0,732
Alcoholic drinks (litters)	2,404	2,403	2,308	2,188	2,23

Source: INSSE, 2013
(https://statistici.insse.ro/shop/index.jsp?page=tempo3&lang=ro&ind=BUF110I)

Analysing the two statistics, it can be observed that for each commodity the production level is higher than the consumption level. For each commodity, analysis should be made following the major stages of post-harvest handling and storage, processing, packaging and distribution in order to identify the factors which cause losses.

CONCLUSION

In can be concluded that the food loss and food waste is a central element within the economy and their prevention could save consumers incomes and improve food safety at a global scale. The food waste is now of a high interest because is strictly related to the environment and its eradication could occur only throughout changing the consumer habits. In Romania the agricultural production strongly exceeds the consumption level which is why a study must be conducted in order to identify the links within the supply chain, where losses occur.

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