

## AGROINDUSTRIAL WASTE

The agroindustrial industry can be divided in two macro categories. The first includes those activities that require initial transformations of the produces by treating and manipulating crops (for example the transformation of wheat into flour, the first preservation of fruit and vegetables in fridges, etc). The second one includes the actual industrial transformations and that is the conversion of produces and goods in edible food products (pasta, preserved products from vegetables and animals, and so forth).

In the processing industry, waste and losses are mainly generated during processing phases that separate edible parts from non edible parts (please refer to the differences between edible parts and non edible parts of produces). In many cases, the activities of “trimming” at industrial level, can be more efficient in terms of potential loss of edible product, compared to that done by the consumer inside his home.

Efficiencies in transformation vary a lot from product to product. Overproduction, packaging, accidental damages and technical malfunction can also be counted as other causes for losses that are anyway difficult to avoid.

A UK study (WRAP, 2010) estimates that in processing industry 16% of raw material is lost, that equals 23% of the total food losses that happen in production, distribution, retail, domestic use phases. A study from the European Commission (European Commission, 2010), estimates that 39% of total food losses, excluding agricultural losses, are generated in the industry sector. However, it is important to pinpoint, as it is in the study, that the lack of clarity on the definition of food waste and loss in this sector “makes this estimate lower”.

According to samples considered, in 2012 in the Italian food and farming industry, the waste reached 2,6% of the total final production, and that is a total waste of 2,036,430 tons of produces.

**Table 1: Waste in food and farming industry 2012**

<b>INDUSTRIAL DIVISION</b>	<b>Produced quantity (t)</b>	<b>Wasted quantity (t)</b>	<b>Wasted quantity (%)</b>
<b>Production, processing and conservation of meat and meat-based products</b>	7.184.259	179.606	2,5
<b>Processing and conservation of fish and fish-based products</b>	202.917	7.102	3,5
<b>Processing and conservation of fruit and vegetables</b>	6.439.287	289.768	4,5
<b>Manufacturing of oils and animal and vegetable fats</b>	4.833.398	72.501	1,5
<b>Dairy products and ice-creams</b>	10.324.009	309.720	3
<b>Processing of corn seeds and starchy products</b>	12.030.932	180.464	1,5
<b>Manufacturing of other food products</b>	13.228.924	264.578	2
<b>Drinks industry</b>	24.080.487	481.610	2
<b>TOTAL</b>	<b>78.324.213</b>	<b>2.036.430</b>	<b>2,6</b>

*Source: Falasconi, 2013*

An interesting trend in recent years is the preparation, from the food industry, of fresh produces ready to be consumed, pre-packaged and/or wrapped (fruit salads, salads, etc.). For the non standard produce this commercial option could be an alternative to become waste. This trend could increase the total efficiency of the processing system.

Sure, this type of preparation can create processing residues, but industrial efficiency could be less expensive compared to the same domestic processing done on the fresh, loose product. We must stress that packaged products, unlike the loose ones, must show the expiry dates; therefore this could be considered a disadvantage for this kind of product, in the fight against waste. So the fresh, loose produce, not having an expiry date, allows a greater flexibility in assessing its conditions, in retail as well as at home.

Finally, it is certainly true that the ready to use products could increase consumption levels in some food categories (fruit and vegetables) because it is very easy to be consumed. To determine the impacts of this trend on waste, an ad hoc study would be necessary.

## **BIBLIOGRAPHY**

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