

# Glossary of terms

**Animal feed:** ‘diverting material from the food supply chain\* - directly or after processing - to animals’. *\*excludes crops intentionally grown for bioenergy, animal feed, seed, or industrial use*’ [1].

**Anaerobic digestion:** ‘breaking down material via bacteria in the absence of oxygen. This process generates biogas and nutrient-rich matter’ [1].

**By-product:** ‘output from a production process that is not the main intended product, but which has a value as an input to other food, feed or non-food markets. To qualify as a by-product the material must meet certain criteria (e.g. have value and be certain to find a market)’ [2].

**Carbon dioxide (CO<sub>2</sub>):** ‘carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials, and also as a result of certain chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (or ‘sequestered’) when it is absorbed by plants as part of the biological carbon cycle’ [3].

**Circular economy:** ‘a circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life’ [4]

**Composting:** ‘breaking down material via bacteria in oxygen-rich environment. Composting refers to the production of organic material (via aerobic processes) that can be used as a soil amendment’ [1].

**Food:** ‘refers to any substance, whether processed, semi-processed or raw, intended for human consumption. It includes drink, chewing gum and any substance used in the manufacture, preparation or treatment of food but does not include cosmetics, tobacco or substances used only as drugs. Food products can be of animal or plant origin and are considered food from the moment that: (i) crops are harvest-mature or suitable for their purpose; (ii) animals are ready for slaughter; (iii) milk is drawn from the udder; (iv) eggs are laid by a bird; (v) aquaculture fish is mature in the pond; and (vi) wild fish are caught with fishing gear’ [5].

**Food loss:** ‘decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retail, food service providers and consumers’ [5].

**Food Loss Index (FLI):** ‘global indicator which focuses on food losses that occur from production up to (and not including) the retail level. It measures the changes in percentage losses for a basket of 10 main commodities by country in comparison with a base period. The FLI will contribute to measure progress towards SDG Target 12.3. The Food and Agriculture Organisation of the United Nations (FAO) is the agency leading the measurement of this global index’. [6].

**Food security:** ‘a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life’ [5].

**Food surplus:** ‘describes food products, ingredients, or part-made products that for a wide variety of reasons cannot be sold into intended end markets’ [2].

**Food waste:** ‘decrease in the quantity or quality of food resulting from decisions and actions by retailers, food services and consumers’ [5].

**Food Waste Index [FWI]:** ‘global indicator proposed for measuring food waste, which comprises the retail and consumption levels in under development. UN Environment is taking the lead on this sub-indicator’. UN Environment is the leading agency for this index’ [6]

**Food wastage:** ‘refers to any food lost by deterioration or waste. thus, the term ‘wastage’ encompasses both food loss and food waste’ [7]

**Greenhouse gases:** ‘gasses that trap heat in the atmosphere’ [3]

**Landfill:** ‘landfilling organic waste causes emissions of gases such as methane (a very potent greenhouse gas) and potentially pollutes soil and water, let alone odour and other societal nuisance. Landfills should be the last resort option for food waste management, especially in a context of increased land scarcity for Earth citizens’ [7].

**Methane (CH<sub>4</sub>):** ‘methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills’ [3].

**Prevent/Reduce:** ‘preventing food waste reduces the use of resources required for food production, labour and disposal costs, and reduces all the environmental, economic and social impacts linked to food waste disposal. Prevention is the most efficient way to deal with food wastage, as it is about limiting food wastage on the front end, while the other categories are about food wastage management’ [7].

**Recycling/Recover:** ‘recycling means turning waste into a new substance or product, such as compost, while recovering implies the production of energy from waste (i.e. through anaerobic digestion). Recycling/recovering comprises processing wastage into nutrient and/or energy.’ ‘These options allow energy or nutrients to be recovered, thus representing a significant advantage over landfill’ [7]

**Reuse:** ‘in the event a food surplus is produced, the best option is to keep it in the human food chain. This may call for finding secondary markets or donating to feed vulnerable members of society, so that it conserves its original purpose and prevents the use of additional resources to grow more food. If the food is not fit for human consumption, the next best option is to divert for livestock feed, thus conserving resources that would otherwise be used to produce commercial feedstuff.’ ‘What distinguishes reusing and recycling is that the latter alters the physical form of an object or material. Reuse is generally preferred to recycling because it consumes less energy and resources than recycling’ [7].

**SDG Target 12.3:** ‘United Nation’s Sustainable Development Goal, Target 12.3, calls for halving per capita global food waste at retail and consumer levels and reducing food loss along production and supply chains, including post-harvest loss, by 2030. Progress towards Target 12.3 is measured by Indicator 12.3.1 (Global Food Loss and Waste), which has been split into two-sub indicators: the **Food Loss Index** (12.3.1a) and the **Food Waste Index** (12.3.1b)’ [8]

**The food supply chain:** ‘consists of the following segments: (i) agricultural production and harvest/slaughter/catch; (ii) post-harvest/slaughter/catch operations; (iii) storage; (iv) transportation; (v) processing; (vi) wholesale and retail; and (vii) consumption by households and food services. Agricultural production, harvest and post-harvest/slaughter/catch operations refers to activities where produce is still on the farm or the producer’s premises. Post-harvest/slaughter/catch operations include cleaning, grading, sorting and treatments (e.g. for disinfestation on the farm or in a packing facility). Processing includes primary processing operations (e.g. drying, dehiscing, deshelling), which often take place on the farm and secondary processing (product transformation). The moment food is consumed or removed from the food supply chain defines the end point of that chain’ [5].

**Upcycled food:** ‘foods use ingredients that otherwise would not have gone to human consumption, are procured and produced using verifiable supply chains, and have a positive impact on the environment’ [9].

**Upcycling:** to reuse an object or material and turn it into an object of higher value or quality than the original.

**Voluntary agreements (VAs):** ‘schemes in which public and private sector organisations make commitments to improve their environmental performance, with-out the need for legislations or sanctions. They cover arrangements such as public voluntary programmes, negotiated agreements or unilateral commitments’. [10]

**Waste:** ‘any substance or object which the holder discards or intends or is required to discard’ [11].

**Waste hierarchy:** ‘priority order of waste management strategies, placing prevention at the top, followed by preparing for re-use, recycling, recovery, and as the last option, disposal’ [11].

**Waste management:** ‘means the collection, transport, recovery and disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker disposal’ [11].

**Waste valorisation:** ‘the process of converting waste materials into more useful products including food, animal feed, chemicals, materials and fuels’. [12]

## References:

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