Food loss and food waste: Identification of extent, causes and prevention of food losses and waste

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Statement of the problem: About 1.3 billion tones of foods are wasted every year worldwide (one third of world food production). This enormous wastage exists at the same time as one billion people in the world are suffering and dying from hunger. Food wastage has many negative ecological, economic, ethical and cultural impacts. The purpose of this study is to identify the extent, causes and prevention of global food wastage.

Methodology & Theoretical orientation: A literature review is carried out to identify causes and prevention of food wastage.

Findings: Food is lost or wasted throughout the food supply chain (FSC) from initial agricultural production down to final household consumption. On a per capita basis, much more food is wasted by consumers in developed countries than in developing countries. According to the literature, in developed countries food is to great extent wasted at the consumption level, meaning that it is thrown away even if it is still suitable for human consumption. A significant food loss however, also occurs at the early stages of FSC. This is mainly related to consumer behaviour and lack of coordination between different actors in the FSC. Also due to quality standards, which reject food items not compiled to it still taste and nutritional value are not affected. Insufficient purchase planning, confusing about “best before” and “use by” date and careless attitude of those consumers who can afford to waste food. This waste in developed countries can be reduced by raising awareness among food industries, retailers and consumers and finding out good and beneficial use for safe food that is presently discarded. In developing countries, food is lost mostly during the early and middle stages of the FSC and much less at the consumer level. The causes of food losses mainly connected to financial, managerial and technical limitations in harvesting techniques, storage and cooling facilities in hot climate conditions, infrastructures, packaging and marketing systems. Food losses in those countries can be reduced by investing in infrastructure, transportation, food industries and packaging industries and strengthening the FSC by encouraging small formers to organize and to diversify and upscale their production and marketing.

Conclusion & Significance: The current amounts and dynamics of food wastage indicate that the issue for feeding the world is not only how much food we produce: rather, it is how food is produced, distributed and consumed and how resources (environmental, economic and human) are used in the process. In developing countries, solution should be made at producer level while in developed countries, it should be made at the consumer level.

Recommendations: Across the FSC, better measuring and monitoring system of food wastage is needed. The food wastage reduction targets need to be set at global, national, sub-national and corporate levels. Increasing of the investment in reducing post-harvesting losses in developing countries through a participation of public and private sectors is required. Raising awareness program in school and political initiatives are possible starting points to change people’s attitudes in developed countries towards the current massive food waste.

Biography
M A K K P Perera has her expertise in the field of Water and Food Safety and Quality. Her investigation on food losses and waste is based on literature and her knowledge on food chemistry, analytical chemistry, food quality management and 18 years of experience in food quality control. She has identified range of causes and prevention methods of food losses. All findings of this study are based on literature and her 18 years of experience in the field of Food Safety and Quality.

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