# Chapter 51

# Comparing the Effects of Unsustainable Production and Consumption of Food on Health and Policy Across Developed and Less Developed Countries

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## **ABSTRACT**

The unsustainable food consumption across high-income countries (HICs) and low-income countries (LICs) is expected to differ in nature and extent, although no formal evidence in this respect has been documented. Documenting this evidence is the aim of this chapter. Specifically, the chapter seeks to answer the following questions: 1) Do the contexts in less developed countries (LDCs) and developed countries (DCs) make the nature and extent of unsustainability in food consumption different? 2) Do the mechanisms of the linkage between unsustainability of food consumption and health outcomes independent of countries' contexts? 3) Are current policies against unsustainable food consumption equally effective in DCs and LDCs? These questions are answered by means of a systematic review of the literature for the period 2000-2017. The findings are that the nature and extent of unsustainability is quite different across contexts of LICs and HICs.

### INTRODUCTION

Unsustainable activity refers to actions that result in outcomes now that are due to worsen over the next period (Hobson, 2002). Consequently, in terms of production processes, unsustainable development has been referred to as processes resulting in the satisfaction of the current generation's needs without a guarantee of the same benefits for the next generation (Johnson et al., 2014:422). Unsustainable food consumption is defined in a similar fashion. It refers to food consumption/production levels and patterns

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that are likely to result in a continual decrease in welfare across generations. This welfare is expected to be lost in three domains as reported in the literature, these being environmental degradation, economic inefficiency, and negative social outcomes (Lefin, 2010). In the environmental domain, for example, food consumption/production becomes unsustainable when biodiversity that is crucial to the welfare of the next generation is reduced through food consumption/production processes. In the economic domain, the technical and allocative inefficiencies that arise from current consumption/production processes deprive the next generation of resources through wastage (Clapp, 2017;91). The unsustainability of food consumption in the social domain emerges from consumption/production processes that are degrading the environment whilst at the same time resulting in sicknesses, social conflicts and lower human capital formation, among many others social ills (Hobson, 2002, Hertwich and Katzmayr, 2003).

To date, the literature has referred anecdotally to the possibility that the nature and extent of unsustainability in food consumption might differ in both nature and extent depending on the livelihood and lifestyles of communities (Barnidge et al., 2011, Connell, 2010, Vermeir and Verbeke, 2006, Lehota, 2004, Schloster et al., 2012, Capone et al., 2014), on the economic processes (Vermeir and Verbeke, 2006), and on socio-cultural-political set ups (Vermeir and Verbeke, 2006, Thøgersen, 2010, National insitute of consumer research, 2010, Nemecek et al., 2016, Lorek and Fuchs, 2013). In this chapter the "nature of unsustainability" refers to specific features of unsustainability. As an example, a type of production process might result in deforestation in one setting, while it might lead to greenhouse gas emission in another setting. Furthermore, unsustainability might arise predominantly from inefficiency in production processes (weak unsustainability) or it might stem from consumption behaviours (strong unsustainability). With reference to the "extent of unsustainability", this chapter refers to quantities of damages arising from unsustainability. The differences in extent across different settings might arise from mitigating or aggravating factors affecting unsustainability that prevail in these different settings. The effects of consumption/production processes and institutions on unsustainable food consumption mean that differences in these processes imply differences in the vulnerability of the various populations and their coping strategies (Gautam and Andersen, 2016, Alemu, 2010, Charles et al., 2010), which in turn have a bearing on the environmental, economic and social domains of unsustainability.

DCs and LDCs more generally differ in many respects regarding food consumption/production processes and in institutional set-ups (Herrero and Thorntonb, 2010:20880, Thøgersen, 2010). DCs use mechanized and industrial agriculture in their food production processes (Mózner, 2013) and have more established regulations concerning environmental degradation (Charles et al., 2010). Economic and social behaviours are likely to be different to those in LDCs due to established social security systems in DCs that mitigate the impacts of unsustainable food consumption. In these countries over nutrition and consumption of saturated fats from meat products prevail (Herrero and Thorntonb, 2010). Diseases in these countries are predominately non-communicable such as heart diseases, diabetes and obesity-related disorders, which are related to the consumption of high-energy foods and fats (McKenzie and Williams, 2015b). In LDCs, agriculture is less mechanized and largely traditional (Pretty et al., 2013) and the population is increasing rapidly. Hunger and deficiency in micronutrients in diets are characteristic of the majority of the population (Randolph et al., 2007, Seligman et al., 2009, Alinov, 2010, Oni, 2010, Pretty et al., 2003). Furthermore, these countries suffer from very limited or an absence of social security systems and safety nets. Diseases for the majority of people in these countries are largely infectious.

These differences imply different consequences of unsustainability either directly or through the indirect effects of these set-ups, which also mean that standard policies across DCs and LDCs might not be equally effective (Connell, 2010, Randolph et al., 2007, Hobson, 2002). Because set-ups and lifestyles

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