Food Chains Transformation in the Context of EU Green Deal Strategy

Please cite this article as:

DOI: 10.24818/EA/2022/60/305

The Green Deal sets ambitious goals for the transformation of food systems. They aim to create a positive impact on the environment by adapting to climate change, protecting and restoring biodiversity, ensuring a high level of public health and the need for food. Food chains are becoming tools by which these goals can be achieved. Their transformation is not simple at all, given their vulnerability by concentrating production in certain geographical areas, population growth in areas with low agricultural potential, the effects of the COVID-19 pandemic, and more recently, the impact of the war in Ukraine. In these circumstances, the EU aims to find urgent solutions through the Green Deal and the Farm to Fork strategy, which will lead to characteristic food systems that make them healthy, environmentally friendly, fair, resilient, and circulating.

Innovation, as a result of scientific and technological progress, should be the basis for the transformation of food chains. Its role is not limited to finding solutions to increase healthy food production, but is extended to anticipating and preventing possible side effects. Such side effects may be related to the adverse impact on climate change, carbon footprint, biodiversity, etc.

The difficulty of transforming food chains also comes from the need to reconcile social objectives (food quality, their availability for the whole population, demographic evolution, etc.) with economic ones (selling price, company profit, competition, etc.). All this is complicated by the increasingly global inflationary context, complemented by the energy crisis, fuel crisis, containers crisis, poor infrastructure, lack of drivers, etc.

Food waste, as a social, economic, and environmental challenge, is a desideratum of the Farm to Fork strategy. The topic is discussed in detail in the article “Food waste prevention solutions in the Annual Reports of European Companies”. The information collected from the reports of the companies that have joined the Green Deal reflects that the main concern is the production or processing stage, although food waste is found in all stages of the supply chain. A viable solution to reduce food waste is extensive collaboration of all chain links as stakeholders.

Ecological consumption and environmental orientation, as measures of the Green Deal, can be promoted through ecological marketing. The purpose of the paper “The impact of green marketing on the consumers’ intention to buy green products in the context of the Green Deal” is to highlight the fact that the future intention to buy ecological products is influenced by both green marketing tools and consumer behavior and attitude. Ecological behavior is more influenced by digital tools and less by product and communication policies. In this
regard, online advertising is gaining ground to the detriment of paper advertising, the promotion of e-Commerce, which is considered more environmentally friendly than traditional, and the use of recycled materials for advertising tools. These elements of the current ecological behavior of consumers significantly influence the intention to buy ecological products in the future.

The Farm to Fork strategy aims at the sustainability of agri-food production and distribution processes. One means of implementation refers to the reduction of pesticides and fertilizers in agricultural production. This is addressed in the article “The impact of pesticide and fertilizer use on agricultural productivity in the context of the “Farm to Fork” strategy in Romania and the European Union” through two models of analysis of the correlation between the decrease in pesticides and fertilizers on agricultural productivity. The studies are carried out both in the European Union and in Romania. The objectives of reducing the pesticides and fertilizers contained in the Farm to Fork strategy will not significantly influence Romania’s agricultural productivity, given that our country uses such products to a lesser extent than the European average. Additionally, the increase in the price of these chemicals, by increasing the price of natural gas, makes them less attractive for use in agricultural production.

The transformation of food chains, as a central element of the Green Deal, depends on factors such as the level of development of food systems, the profile of consumers, political factors, etc. Starting from the consumer profile, the paper “The European consumers’ preferences for organic food in the context of the European Green Deal” focuses on the study of this topic. A remarkable result of this is that the implementation of the European Green Deal should take into account both the specifics of each Member State and the profile of consumers. To these are added the adoption of strategies to raise awareness of the positive socio-economic and environmental impact of the consumption of ecological food. Educating the consumer towards responsible and sustainable consumption promotes the recognition of the quality of ecological products and, implicitly, the component of sustainable development at the level of the European Union.

A major goal of the Farm to Fork strategy is to increase sustainable consumption of food in general and organic in particular. A way to stimulate these aspects can be achieved by labeling products, and blockchain technology contributes to the traceability of “organic” products, according to the article “Consumer attitude towards the use of blockchain technology. Study on the implementation of the “Green Deal” strategy for organic foods”. Starting from the objective of studying consumers' perception of the use of blockchain technology, it is concluded that it has a positive impact on the distribution of foodstuffs, in general, and ecological goods, in particular. Additionally, blockchain technology is appreciated by young consumers, who are aware of its usefulness in organic food chains in the medium and long term.

A healthy and sustainable environment is also based on the use of sustainable food packaging. Packaging recycling and sustainability are components of green marketing. A central element of it is the knowledge of consumer behavior toward the use of sustainable food packaging, which is the purpose of the article “The impact of the “green transition” in the field of food packaging on the behavior of Romanian consumers”. The main benefit of using sustainable packaging is the ability to reduce the degree of environmental pollution. This ensures favorable conditions for the development of environmentally friendly and sustainable food systems, which also depends on the ability of companies to effectively communicate the benefits of placing sustainable packaging for their products on the market.
Concerns about healthy nutrition and the reduction of food waste, on which the Green Deal is based, can also be highlighted through the analysis of scientific output that has addressed these issues. Thus, the paper “Bibliometric analysis of the Green Deal policies in the food chain” conducted research of this type of papers published between 2000 and 2021. Most of the articles come from authors in Italy, India, and the United States, and most were published in 2021. A systematization of existing knowledge is underway, research gaps are identified, and a set of challenges and opportunities for application is being implemented with the success of the Green Deal in food chains.

The originality of the papers in this issue contributes significantly to better understanding, preparation, and support of the transformation of food chains. The topics covered highlight the defining components of the Green Deal and the Farm to Fork strategy. The challenges of their implementation are accentuated by the current socioeconomic context, determined by the consequences of the COVID-19 pandemic, the energy crisis, inflation, the war in Ukraine, etc.

Associate Editor,
Cristinel Vasiliu