

FOOD IN A POLYCRISIS: CAN TOURISM HELP FOR A SUSTAINABILITY TRANSITION?

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Abstract

The paper highlights the challenges of the current global polycrisis as they relate to food, including decreasing life expectancies, climate change, biodiversity loss and geopolitical tensions. It then explains the dietary transition that has occurred globally and in Bulgaria with increased intake of animal-based foods, such as meat and dairy, emphasising the links with obesity and non-communicable diseases. Better dietary choices based on plant-based sources can help alleviate the pressures on the natural environment, improve human health and contribute towards finding solutions for the polycrisis. People in wealthier countries need to be able to make decisions conscientiously to reduce the presence of animal-sourced foods in their diets. Tourism experiences in the new category of wellness tourism can expose people to attractive plant-based dishes and act as an intervention and nudging tool for encouraging a sustainability transition in food.

Keywords: food, nudging, plant-based, polycrisis, sustainability, tourism, vegetarian, wellness tourism

JEL: E21, I12, H71, M31, O13, Z00

Introduction

In addition to being a recreational activity, tourism exposes people to many memorable experiences and food is one of them. The memories of exquisite and tasty meals persist longer than the duration of the tourist journey and people often try to repeat or recreate these sensations. Tourism and food go hand in hand; in fact, many tourist destinations become such because of their gourmet offerings and gastronomic reputation.

The magic of tourism has transformed local economies and created lasting effects on people's livelihoods and lifestyle, be it as host communities or visitors. It is also a diplomatic tool between nations and different cultures. Many depend on tourism for such a synergistic relationship, where different tastes, smells and flavours contribute towards a healthy attraction and collaboration. However, by

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its nature tourism is a short-term experience and what this paper asks is whether it can trigger long-lasting changes by exposing people to better food choices.

A need for better food choices is one of the aspects of the current polycrisis which is already having deep and severe impacts on life on this planet. Changing our dietary preferences can contribute towards finding some solutions to ease the burden on current and future generations. The paper argues that tourism can help. International tourism is particularly valuable for a small country like Bulgaria, but so is domestic tourism, which lures people to places of natural beauty or historic significance.

After describing the nature of the polycrisis, the paper specifically highlights the essence of the dietary transformation needed to combat its effects and encourage a sustainability transition. It then highlights that the potential Bulgarian cuisine has to facilitate a dietary change towards more plant-sourced food choices. Such a dietary shift should be a conscientious decision by consumers in societies, where food is freely available made on the basis of taste satisfaction and supported by health benefits. While governments can influence the policy environment through tools, such as dietary guidelines or taxation, ordinary consumers have a lot of power and control over their food preferences. Their choices will mainstream plant-based meals as the basis for a more sustainable lifestyle.

Methods

The analysis in this paper is based entirely on secondary data, including previously published refereed material in academic journals and books as well as publicly available statistical information on websites, such as Our World in Data and World Obesity Observatory. Blog and websites from reputable institutions, such as the Australian Broadcasting Corporation (ABC) and The Guardian, are also used. Another source is research evidence from trustworthy organisations, such as Statista. By bringing together insights from a range of disperse and disparate sources, the analysis takes a transdisciplinary approach and synthesises the existing evidence into a distinctive and coherent recommendation (Snyder, 2019).

In its nature, the study is a thematic analysis which draws evidence from previous research to generate a new approach to tourism, namely the development of wellness tourism as an intervention which can nudge people towards decreasing their intake of animal-based foods and replace them with plant-sourced options. Although the focus is on Bulgaria, similar implications can be drawn for other parts of the world.

The polycrisis and food

In September 2023, a new word was added to the Cambridge Dictionary. This word is polycrisis – “a time of great disagreement, confusion, or suffering that is caused by many different problems happening at the same time so that they together have a very big effect“ (Cambridge Dictionary, 2024). The Cascade Institute (2024) emphasises the global nature of the problems and adds further that such a time of a polycrisis can significantly degrade humanity’s prospects on this planet. This emergence and use of this new word has been long-coming with concerns about the state of the planet and its inhabitant species being raised since the 1970s by environmentalists, academics, professionals, policy-makers and civil society and religious organisations. Calls for a response to the crisis situation have been also made by religious organisations. For example, Pope Francis (2015) in his Encyclical letter „Praise Be to You Laudato si’: On Care for Our Common Home“ argued that the current ecological destruction is not separate from social decline and is a manifestation of the ethical, cultural and spiritual predicaments of modernity. In a similar vein, the Council of the Orthodox Church (2016) wrote: „This crisis has become more acute in recent centuries on account of the various divisions provoked by human passions – such as greed, avarice, egotism and the insatiable desire for more – and by their consequences for the planet”.

In essence, the polycrisis is the result of an unsustainable development where environmental, social and economic priorities have not been properly balanced causing deterioration of the ecological and human world. The polycrisis also extends to geopolitical relationships, threatens people’s lifestyle and the wellbeing of all species on the planet. Below are some manifestations (among many others) of the current polycrisis:

- decreasing human life expectancy – for the first time in fifty years of the history of the western world, life expectancies in countries, such as the USA, the UK and Australia started to decrease (Shmerling, 2022; Thomas, 2024; Yussuf, 2024) with the younger generation expected to live shorter lives. In addition, the years of a healthy lifespan without reliance on multiple medications, are also decreasing (Dewhurst et al., 2022);
- climate change – anthropogenic climate change is causing record temperature increases, extreme weather events, sea level raises and is expected to reach tipping points and irreversible shifts in the ocean oscillations; livestock is a major contributor to the increasing levels of greenhouse gases and methane in particular (Marinova and Bogueva, 2022).
- biodiversity loss – the world is losing its species at an unprecedentedly fast rate because of habitat destruction and climate change with associated droughts, floods, wildfires, icesheets melting and fresh water shortages;

currently 27% of the planet's land mass is used by the livestock industry for grazing and feed production (compared to only 1% occupied by human settlements, roads and infrastructure) resulting in decimation of native habitats (Ritchie and Roser, 2019);

- large-scale pollution of soils, water and the land – although some measures have been put in place to eliminate toxic materials, the pollution associated with the use of plastics and consequently microplastics, has reached alarming levels with scientists estimating them being present in every animal species, including humans; packaging is exceedingly responsible for the increased plastics pollution (Fleck, 2024);
- refugees – the number of people fleeing zones of conflicts, hunger or places where they are unable to grow food is projected to further increase (FSIN and GNAFC, 2024);
- geopolitical tensions – military operations across the world are disrupting among others the supply chains of fertilisers causing price hikes (Digicomply Insights, 2024);
- new emerging diseases and disease patterns – some associated with climate change, e.g. dengue fever, others with factory farming of livestock animals, e.g. zoonotic diseases (Marie and Gordon, 2023) and even more worryingly, with scientific endeavour, e.g. gain of function research (Mathur, 2022) are a booming threat, particularly given the excessive use of antibiotics on farm animals and the development of antimicrobial resistance.

According to the EAT-Lancet Commission (2019), our systems „have the potential to nurture human health and support environmental sustainability; however, they are currently threatening both“ (Willett et al., 2019, p. 447). In the current complex polycrisis situation, reconsidering and changing our dietary choices can help alleviate some of these pressures while allowing access to better food. Dietary changes can help bring the global food system into equilibrium and increase its resilience allowing a smoother transition in the other aspects of the polycrisis (Lawrence and Shipman, 2024).

Dietary transformation for a sustainability transition

At the core of the current food systems are people's preferences for animal-based products and red meat in particular. This is the foundation of western diets considered to be synonymous with progress and development. With the westernization of traditional and local diets across the globe, livestock-sourced foods have become the desired options in wealthy societies as well as for wealthier sections within poorer countries. There has been a long-established link between economic development, e.g. represented through increased levels

of income, and the quantities of consumed animal-based foods, including meat. This dietary transition towards increased intake of animal proteins has replaced the consumption of healthy foods containing carbohydrates and fibre generally from plants, such as cereals, roots and fruits (Drenowski and Poulain, 2019; Poulain, 2021). The associated negative consequences are both environmental through the inefficient use of resources and increased levels of pollution, as well as for population health with the rise in non-communicable diseases, such as diabetes type 2, cardiovascular disease, overweight and obesity (Marinova and Bogueva, 2022).

Such excessive consumption of animal-based foods is unsustainable and largely responsible for many of the aspects of the current global polycrisis. A study by Whitton et al. (2021) showed that a direct correlation between income and meat intake is valid up to US\$40,000 per capita gross domestic product (GDP). Even above that level, only a few countries, namely New Zealand, Switzerland and Canada, have managed to decrease their per capita meat consumption. A sustainability transition requires consumption levels of animal-based products to be such to allow nature regeneration. The planetary diet outlined by the EAT-Lancet Commission (2019) recommends halving meat consumption globally and in places where current levels are very high, for it to be reduced by 80 to 90% (Willett et al., 2019). As part of a sustainability transition, there is need for a new dietary shift that encourages increased intake of vegetables, fruits, legumes, nuts and other plant-based options and reduced consumption of animal-sourced products.

Bulgarian dietary preferences

Bulgaria is not an exception from the global trend of westernisation of diets with economic development. Although there have been some fluctuations between the years, between 1961 and 2021 the per capita daily meat consumption in Bulgaria has increased by 91% from 88.5 g to 169.33 g (Our World in Data, 2024b) which is much higher than the recommended healthy limit by the reputable World Cancer Research Fund of 50 – 70 g of cooked weight (WCRFI, n.d.) and Bulgaria's own dietary guidelines which recommend up to 300 g per week or 42 g per day (Ministry of Health, 2006). The 2021 respective levels of per capita daily meat consumption in Bulgaria's neighbouring countries are similarly high (see Table 1) with only North Macedonia and Türkiye having a more moderate consumption, but still above the recommended limit. Added to that is the consumption of milk and dairy products, which has similarly increased throughout the years (see Table 1).

By comparison, during that same 1961 – 2021 period the consumption of vegetables in Bulgaria has decreased (see Table 2) to 271 g per day which is just

above the daily recommended minimum of 250 g. In reality, Bulgarian vegetable consumption is highly likely to be below the recommended minimum as the reported figures do not account for waste at the household level. Such a reduction seems to be typical only for Bulgaria as all of its neighbouring countries have increased and have higher consumption of vegetables (see Table 2). Furthermore, fruit consumption in Bulgaria, has similarly declined (see Table 2) and is the lowest within the European Union (World Obesity, 2024).

Table 1: Daily per capita meat and milk consumption, 1961 and 2021

Country	Meat			Milk and dairy, excluding butter		
	1961	2021	% change	1961	2021	% change
Bulgaria	88.50 g	169.33 g	+91%	30.42 g	47.71 g	+57%
Greece	56.75 g	210.43 g	+271%	27.19 g	63.91 g	+135%
North Macedonia	–	112.42 g	–	–	40.48 g	–
Romania	77.04 g	183.96 g	+139%	29.67 g	59.93 g	+102%
Serbia	–	212.68 g	–	–	51.15 g	–
Türkiye	46.35 g	117.90 g	+154%	49.09 g	57.33 g	+17%

Source: Our World in Data (2024, b and c).

Table 2: Daily per capita consumption of fruit and vegetables, 1961 and 2021

Country	Vegetables			Fruit		
	1961	2021	% change	1961	2021	% change
Bulgaria	285.6 g	270.8 g	-5%	217.0 g	209.0 g	-4%
Greece	308.7 g	428.9 g	+39%	359.8 g	352.2 g	-2%
North Macedonia	–	784.1 g	–	–	288.4 g	–
Romania	230.3 g	462.0 g	+101%	95.6 g	296.0 g	+210%
Serbia	–	294.3 g	–	–	396.9 g	–
Türkiye	407.7 g	680.9 g	+67%	356.8 g	381.9 g	+7%

Source: Our World in Data (2024, a and d).

Dietary shifts in Bulgaria are clearly manifested with strong preferences for animal-based foods at the expense of healthier fruit and vegetables. A large proportion of carbohydrates generally obtained from plants has been replaced in the Bulgarian diet by lipids of animal origin, including energy-dense fats described by Poulain (2021) as food transition. The health effects of this dietary transition are high prevalence of non-communicable diseases. Obesity rates among adults in Bulgaria have reached 26.3% for women and 28.3% for men, which is higher than the regional averages of 25.3% for women and 24.9% for men (Global Nutrition Report, 2024). In addition to obesity, overweight in Bulgaria is at 48.8% among men and 34.4% among women (World Obesity, 2024).

The environmental impacts of the Bulgarian food system are also significant and exceed major thresholds of the planetary boundaries beyond which humanity should not go (Richardson et al., 2023). Most worrying are the greenhouse gas emissions associated with the consumption of animal-based foods in Bulgaria, including beef, lamb, pork, poultry and milk which alone exceeds the planetary boundaries by more than 70% (Global Nutrition Report, 2024).

Bulgarian tourism offerings

While people's dietary preferences in Bulgaria have been changing, the country's cuisine remains relatively stable adhering mainly to traditional recipes. The Bulgarian cuisine shares many similar features with its neighbouring Balkan countries as well as with Middle Eastern food. It uses many vegetables, herbs and fruit but also lamb, pork, veal and poultry. Cheese and yogurt are widely used as separate dishes and as ingredients of pastries, salads and other meals. Traditional and religious customs require people to abstain from eating animal-based products during periods of lent throughout the year, which last for more than 200 days (Bogueva et al., 2021). This however changed during communist times when meat production and consumption were encouraged as manifestation of development, abundance and wealth and also influenced by the West (Neuburger, 2022). In late socialist years, there was a shift to vegetarianism at the highest levels of power under Eastern influence, but this did not become popular among the masses as high prices and shortage of meat products made them even more desirable for the populace. With the collapse of socialism, transitioning to a market economy and joining the European Union, meat and other animal-sourced products became firmly entrenched in the dietary preferences of Bulgarian people. This has resulted in the current unhealthy levels of consumption witnessed today.

The opening up of the Bulgarian economy and the improving income levels of its people have resulted in tourism being a popular and attractive activity. Since 2010, tourist numbers in Bulgaria have doubled and tourism has recovered after the slowdown during the COVID-19 pandemic (Statista, 2024). International

tourism is also on its way to a full post-pandemic recovery with Europe and the Middle East leading the trend (UN Tourism, 2023).

There is ample evidence across the globe that food is a crucial factor in developing and attracting visitors to particular tourist destinations. This is the case, for example, in China (e.g. Yang et al., 2024) as well as Indonesia (Park and Widyanta, 2022), and the synergies co-created between tourists and suppliers of gastronomic experiences contribute to the evolving foodscape generating memorable events and new destinations (Andersson et al., 2017). Certain places in Europe have developed particular reputation for offering vegetarian, vegan and other predominantly plant-based options. For example, Didim – a tourist town on the Turkish Aegean Seacoast and a UNESCO World Heritage site, has become the second vegan-friendly city in the world after Barcelona in Spain (Tekiner and Zaim, 2021). Didim hosts the Turkish VegFest which brings together many plant-based dishes from the traditional Turkish cuisine, folklore and other cultural experiences (Ergil, 2023).

Despite leisure tourism being very popular domestically and to a certain extent is also known internationally, Bulgaria so far has not developed a reputation as a tourist destination on the foodscape. Nevertheless, it is in an exquisite position to promote food-inspired tourism which combines the following three attractive features:

- exquisite plant-based dishes instigated by the Bulgarian traditional culinary
- the benefits of multiple mineral water springs and
- cultural and folkloric experiences, some of them unique to this country (e.g. Nestinar dances on burning fire).

This tourism can be branded as wellness tourism seen as an emerging area of high potential (WTO and ETC, 2018). In addition to the health and medical benefits such places can offer to their human visitors, they will also be contributing to the well-being of the planet and the overcoming of the current global polycrisis. It is however important to emphasise the extension of dietary option to include memorable plant-based meals, rather than promote only vegan or vegetarian places, as people, and men in particular, react very strongly against restrictions on their food choices to exclude animal-based options (Bogueva et al., 2022). If successful, a tourist experience based on healthy and tasty food will act as an intervention to nudge people towards improvements in their dietary choices.

Wellness tourism will need to be promoted as a way to improve relationships between people, places and the planet as well as improving the individual personal health of the tourists. Exposing tourists to well-organised, interesting, motivating and meaningful wellness tourism can be the first step for Bulgarian and other tourists to shift their daily food intake towards the increased presence of plant-based options. By doing so they will be part of the sustainability transition helping respond to the polycrisis.

Conclusion

The analysis in this paper shows that the Bulgarian population needs to make some positive changes in its dietary preferences as the current patterns are detrimental for both human health and environmental well-being. Such changes involve a shift towards more plant-based food options which would contribute towards finding ways out of the global polycrisis. Tourism can play a role in such a transition by offering opportunities for a unique type of dietary intervention or nudging technique that encourages the exploration of a wide variety of traditional and other attractive plant-based food options. These dietary choices should leave positive impressions on the consumers encouraging them to repeat and mainstream this experience. Such a type of tourism should be branded as promoting wellness for individual people and the natural environment and consequently improving many aspects of the global polycrisis.

There are many opportunities for further research associated with transitioning to plant-based food options by using tourism as an intervention and a nudging tool to push people towards a more responsible dietary behaviour. It would be good to analyse the performance of tourist destinations which brand themselves as vegan- or vegetarian friendly in order to understand what is done well and what can be improved. Surveys of existing tourist operators and their clients can generate some insights as to how attractive wellness tourism that encourages plant-based meals could be. Most importantly, research is also needed on understanding other levers which can entice people in Bulgaria, on the Balkans, in Europe and other parts of the world to conscientiously shift their diets towards making them more sustainable.

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