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“For my health and for my friends”: Exploring motivation, sharing, environmentalism, resilience and class structure of food self-provisioning

Abstract

This article aims to supplement the growing understanding of the specificities of food self-provisioning (FSP) practice in Eastern Europe with deeper understanding of the class structure and broader environmentalist motivations of the self-reported practitioners. FSP and sharing of ‘garden produce’ is a long-term socioeconomic phenomenon in Croatia but so far there has been no research on the whole population in regard to FSP. We explore how widespread FSP in Croatia is, based on a survey of a nationally representative sample (N=1000), within a broader social stratification project. We further explore the class structure of FSP practitioners and compare it to their reported motivations for engaging with the practice, and their pro-environmental behaviour, resilience and personal flourishing. Previous research in CEE has shown that FSP is characteristic of between 35% and 60% of national populations (Smith and Jehlička, 2013a), whereas our findings show that a little over 50% of respondents claim that they have a garden, field or orchard, they *use to* produce food for themselves and part of their social network. As a practice it is more situated in smaller settlements and rural areas, but it is not a principally rural phenomenon. Slim majority of people involved in FSP in Croatia are identified as working class, however, FSP is not a coping strategy focused on the poor and low-income households in Croatia and food self-provisioners report higher level of personal wellbeing, more pro-environmental behaviour and higher level of self-perceived resilience.

Key words: food self-provisioning, food sharing, pro-environmental behaviour, social class, wellbeing, resilience, Croatia

Introduction

“Neither need you tell me,” said Candide, “that we must take care of our garden.” “You are in the right,” said Pangloss; “for when man was put into the garden of Eden, it was with an intent to dress it: and this proves that man was not born to be idle.” “Work then without disputing,” said Martin; “it is the only way to render life supportable.” (Voltaire, Candide)

Research on survey data of the European Quality of Life Survey for 15 mostly Western EU countries shows that “growing your own food” has increased significantly and that it could contribute to personal wellbeing, but the overall narrative of practices of food self-provisioning (FSP) is set within the discourse of economic hardship (Church et al., 2015). Even more recent research on the household coping or resilience strategies in Western and Central Europe following the economic crisis of 2008 names the FSP, plot-gardening, sharing and gift exchange as the hardship coping strategies of working and lower middle classes, even if it is sometimes reported as a hobby (Promberger, 2017). Sociological research hitherto, though, has not connected the FSP practice with pro-environmental behavior (PEB) and sufficiently robust class positioning of respondents. The researchers explored some of FSP dimensions related to environmentally friendly and socially inclusive practices of food production and sharing (Smith and Jehlička, 2013b), but also altruism-driven, and social-networks facilitated sharing of commodities, skills, and labor.

In Croatia, following over two decades of rough neoliberal adjustment and the more recent post-crunch stagnation, it might be questioned if FSP appears as a coping strategy, similar to household resilience research reported in Western Europe after the financial crisis (Promberger, 2017). Hence, this paper focuses on sustainable food-related and other resilience boosting practices being intertwined with changing class structures in a post-conflict and late-transition context of Croatian society. Analyzing class structure of FSP in Croatia might have significant relevance for further cross-national comparative researches of pro-environmental and socio-economic conditions and resilience strategies among different social strata in other Central and Eastern Europe (CEE) and South-eastern Europe (SEE) societies, and also for contribution to under-researched topic of FSP and PEB through the optic of social class analysis. Thus, we explore the class structure of FSP practitioners in Croatia and compare it to their reported motivations for engaging with the practice, and their PEB, personal flourishing and community resilience.

In the first chapter we discuss intersections of class, PEB, sustainability and consumption, while in the second we dwell on role of FSP in resilience to diverse, both environmental and economic crises, focusing mostly on situation in CEE. Third chapter brings contextualization of class, FSP and environmentalism issues in Croatian case, followed by presenting research design, methodology and

analytical concerns. Results section begins with depicting of Croatian food self-provisions profile, together with analysis of their motivation for FSP, PEB and environmentalism, followed by concluding remarks.

FSP the quiet way: class, sustainability and consumption the Eastern European way

There has been notable connection between FSP and class, namely disassociation of FSP from the working class' austerity coping strategy and its prevalence as middle class recreational activity in Eastern Europe. In their analysis of FSP as a 'quiet sustainability' practice Smith, Kostelecký and Jehlička (2015) find significant and very high levels of FSP and food-sharing in post-socialist late-transition societies of Czechia and Poland, especially amongst the middle class. Their results stand against the argumentation of some Western scholars (Alber and Kohler, 2008) that FSP practices should be understood first and foremost as a coping strategy of socio-economically deprived 'urban peasantry' in areas of CEE. In their study on informal food production Alber and Kohler concluded that in the case of post-socialist societies this is mostly a 'coping strategy of the poor', while it is a 'recreational activity' of the urban post-materialists in the Western democracies (Alber and Kohler 2008: 114). Going beyond the dichotomous and overtly simplifying model of Alber and Kohler (2008) Jehlička et al. (2013) criticize many of the premises and conclusions of their research, most notably the idea that in Eastern Europe FSP is merely an outcome of habits stemming from productive scarcities of low productivity socialist economies and related economic downturns, or from a leisure and social status activities of urban middle and upper classes (Schupp and Sharp, 2012).

Specifically concerning FSP in Czechia Jehlička, Kostelecký and Smith (2013: 230) suggest that "food self-provisioning is an affordable hobby for older members of middle classes living outside large cities rather more than a coping strategy of the poor", finding that FSP is practised by 43% of citizens and it is considered a "hobby by all people involved in this activity regardless of their financial situation" (ibid: p. 231). They also show that women are more involved in FSP than men are, and that respondents living in rural areas and small to medium sized towns are more often involved than those in big cities. Similarly, by measuring the levels of FSP in five EU countries and the effects of sociodemographic factors Vavra et al. (2018b) conclude, in a comparative study including North-Western, and CEE countries, that likeliness to practice FSP is greater among people who own their own residence (preferably outside dense urban area), have a family, are retired, or live on a low income.

When it comes to rural and urban development trajectories and patterns of ethical consumption Smith et al. (2015) assert that in the post-socialist CEE context FSP is almost equally spread amongst all classes, but report differences among classes in motivation for the practice. The post-socialist small-

towners and retirees seem to take FSP as a habit, a cultural trait in the logic of Gramscian *sensi communi* (Rehmann, 2013). Although they find that financial savings play an important role in FSP, access to fresh and healthy food as well as hobbyist/recreational reasons for FSP surpass coping livelihood strategy in their findings. They argue that FSP promotes ‘quiet’ sustainability, an environmentally and socially beneficial practice and lifestyle, despite the middle class in Czechia and in Poland not reporting these benefits as their motivation. In CEE, rather than being an alternative or supplementary economic activity, FSP is seen more as a parallel and complementary system that fosters resilience and quietly promotes sustainability (Smith and Jehlička, 2013: 30). Thus, ‘quiet sustainability’ practices are not financially driven for their marketable value, and whilst they might have environmental benefits and promote social inclusion, they don’t seem to be driven by the pro-environmental goals *per se*.

The FSP in CEE, as a part of informal household economies rather than creation of alternative economic networks explicitly opposed to the global food economy, refers to practices of growing one’s own food with further environmental benefits as an invisible addendum, given that alternative food production practices provide a paradigm of lessening the environmental burden at little or no overall cost (Garnett, 2011; Wittman, 2009). However small-scale the production volume, FSP also involves sharing the self-provisioned food with others creating and fostering social bonds and networks (Smith and Jehlička, 2013: 2). As to the willingness to share self-produced food and natural products there is no difference between working and middle classes in Poland and Czechia, even though the latter share slightly more food (60% in comparison to 46% in Poland) (Smith et al. 2015: 229).

In the narrower national context, in a study of community gardens in the Croatian capital through a diachronic approach Slavuj Borčić et al. (2016) describe urban gardening practices as restructured livelihoods strategies of the local urban population. According to their findings, these practices serve various needs from health (homegrown food), economy (supplementation for low pensions), hobby (recreation), to communal involvement and social cohesion (socializing, grassroots self-organizing). Research on active gardening practices in Czechia recently shows that motivation for FSP is not primarily driven by environmental protection, and is not associated with basic PEB (Vávra et al., 2018a), even though FSP comprises environmental friendly practices.¹ The bottom line of this recent research

¹ Stern (2002) recognizes three modes of PEB: environmental activism, support for environmental regulation in the public sphere, and private-sphere environmentalism of an individual. Very often this perspective misses to recognize FSP as a part of PEB. This might be because of the heavy orientation of mainstream environmental sociology on consumption preferences and practices, lacking an ‘egalitarian environmentalist’ perspective that is more prevalent in Eastern Europe (Krüger et al., 2016), or due to underestimation of the nutritional role played by the hobby-grown food (Pungas, 2019). We opt to understand generalized PEB as a part of complex pro-

in Eastern European localised instances is that expecting positive health and economic outcomes of these practices overruled the expectation of positive environmental results, as explicitly reflected by respondents.

Role of FSP in resilience to environmental and economic crises

Previous research comparing Croatia and SEE to North-western Europe and the globe has shown a particular attitude to environmental risks among the general population (Ančić et al., 2016), and comparative analyses on international social attitude datasets have indicated this to be a common position among the countries of the European semiperiphery (Balžekiene and Telešiene, 2017; Domazet and Ančić, 2017). The former is the strong concern for the ecological stability of the current global metabolism, but low social activation in addressing these issues through the instruments of higher payment for environmental services or Western-style civil society activation (Brajdić Vuković, 2014; Krüger et al., 2016; Schaffrin and Schmidt-Catran, 2017). Moreover, there is a greater propensity for redistribution of economic gains among the Eastern European populations, when compared to the West (Brajdić Vuković, 2014; Krüger et al., 2016; Schaffrin and Schmidt-Catran, 2017). Motivations for environmentalist sentiments in Eastern Europe seem to have a materialist foundation, as a response to clashes between economic growth and environment as source of livelihoods and community resilience (Domazet and Ančić, 2019; Martinez-Alier et al., 2014).

In that sense, environmentalist sentiments and associated activities are not expected to be post-materialist in the style of Inglehart (Inglehart, 1990), including the difference in class position of FSP practitioners. Whereas Inglehart's post-materialism would indicate greater higher and middle class participation in certain activities perceived as inclined to environmentalism, an explicit materialist orientation should be reflected in respective participation of working class practitioners as well. The research reported on here attempts to shed light on motivations for FSP practices, as well as their cross-over with class and (pro-)environmental orientations. It therefore, supplements the investigation of assumptions about class, resilience and sustainability-supportive practices that Smith et al. (2015) report on for the case of Poland and Czechia (CEE) with novel findings from Croatia.

FSP is sometimes connected to an interdisciplinary field of researching multifaceted notions of 'resilience', which is an ubiquitous concept referring to the ability of individuals, groups, households or communities to anticipate, adapt, or cope with external stresses and disturbances as a result of social, political, and environmental change, and to recover of effects of the change (Adger, 2000). We

environmental self-reported activities oriented towards intentional reduction of the negative impact one's action can have on the environment (Kollmuss and Agyeman, 2002).

understand resilience as the combined individual, social and material means for adaptive capacity, including assets, capabilities and activities of households to retain basic structure and functions in order to overcome environmental risks and disturbances, and to obtain means of livelihood and well-being.

Moreover, as a low-intensity resistance to murky health risks in industrially produced food FSP as resilience is not just an insurance for preservation of the status quo, but a ground for creation of alternative futures (Jehlička et al., 2018). Hitherto, social research has not explored the connections between FSP and PEB as practices, with strategies of different classes to secure resilience to environmental disturbances beyond the ability to bolster security through the market of goods and services. In today's market society it appears that those most resilient to environmental hazards are the well-off, with higher socio-economic positions, those with more financial resources, social capital, and technical information on the nature of risks (Pelling, 2011). However, in prolonged economic and/or environmental crises, higher class position may not guarantee durable resilience, so that access to autonomous food production and distribution networks across social strata can play an increasingly important role.

When it comes to extended environmental instability, FSP and resilience self-perception there is much emphasis on importance of food production and ethical consumption as a sort of PEB, as a behaviour and practice that might positively affect resilience and coping potential against environmental threats (Smith et al., 2012). In the previous research in Eastern Europe, this resilience has not been named as the motivation of FSP practice, in line with generally lower prioritisation of environmental concern (Domazet et al., 2014). For example Czech and Polish FSP practitioners are engaging in this practice not out of "fulfilment of environmental obligations, an attempt to achieve 'resilience', or a response to limits", but due to association of FSP with "with joy, exuberance, generosity, care and skill" (Smith and Jehlička, 2013:34). FSP as such could be recognized as the way of lessening the contributions of food industry to pollution and environmental change, either because it is more ecologically acceptable, less invasive to the soil and nature, or because it consequently leads to more ethical standard of consumption, sustainable lifestyles and access to more nourishing food. It would be more easily culturally mainstreamed if not differently perceived by different classes, as superficially resilience-enhancing practice by some (those already better off) and a necessary livelihood-enhancing by others (those hard done now). We therefore explore the resilience self-perception against class and FSP in Croatia.

Class, food, economy and environmentalism in the Croatian socio-metabolic context

Croatia is a small country at Europe's south-eastern semiperiphery (Domazet and Marinović Jerolimov, 2014; Wallerstein, 1979), seceding from federal Yugoslavia in 1991 through a war for independence, which joined the EU in 2013. The concurrent economic transition process and war destruction induced significant structural changes in society and social metabolism (Domazet and Ančić, 2019). Whilst Croatia shares socialist heritage with other Eastern European countries, the structure of its economy and society was markedly different, which can be expected to lead to somewhat different outcomes in sustainability-supportive practices such as FSP, as well as general environmentalism compared to the former Warsaw Pact members of Eastern Europe. On the other hand, there is much shared experience of socialist development and post-socialist transition.

One of the most significant changes in economic structure in post-socialist Croatia was the intensive deindustrialisation, leading to an increase in tertiary sector (especially focusing on tourism) (Cvijanovic and Redzepagic, 2011; Peračković, 2012). The collapse of industry coupled with war atrocities in the 1990ies brought high unemployment, rise in inequalities, poverty, and depopulation of rural areas. The transition from a state-led socialist type of economy to neoliberal market-oriented economy, has been characterized by wide-reaching economic downturn and GDP stagnation coupled with poor salaries and relatively high rate of unemployment and a clientelistic sort of crony capitalism (Stubbs, 2007). Industrial farming was reduced as well as the attendant supplier monoculture production on family farms (the so-called 'cooperative production', somewhat of a misnomer). This has resulted in different food supply available through the market, with increase in imported foodstuffs, as well as changed long-term occupational perspectives of the working class and middle class population. Moreover, war atrocities, transition, and high rates of emigration together jeopardised the long-term stability of the national pension scheme destabilizing working and middle class retirement perspectives (Werding and Primorac, 2016).

Collapse of industrial production, including food production for former federal Yugoslavian market, tourist industry and export brought with it de-agrarization, a collapse of a competitive family farm and greater urban proleterisation with economic focus on servicing the tourist sector and state administration. In a socio-political sense, the young parliamentary democracy of 1990s and early 2000s has suffered from many fallacies such as poor governance within the public sector, noticeable levels of bribe and corruption as well as high levels of distrust in governmental structures. All these processes have had an impact on further deterioration of class structure within Croatian society, with loss of middle management in the productive sector and introduction of precarious employment at low-income scale of the service sector. In the preceding generations, under socialist modernization project,

accelerated industrialization, internal migration and urbanisation changed the class structure of the post-WWII society, but the alternative forms of informal household micro-economies persisted to play an important part of environmental friendly means of livelihoods, recreation or social bonds. Thus, FSP in some form, and the connection to peri-urban subsistence farming, predate the socialist Yugoslavian stagflation of the 1980s and the Croatian transition of 1990s and 2000s.

FSP and sharing of 'garden products' is therefore a traditional socioeconomic phenomenon in Croatia, as in many other post-socialist societies. Its cultural roots date to agrarian, pre-industrial phase preceding socialist modernisation imperatives, but it has continued fostering social interactions, communal assistance and solidarity among primary social networks of individuals and households throughout the industrial era of the last century. Moreover, FSP has not been exclusively conditioned by tradition and by economic perspectives. New trends in home-grown, self-provided, ecological-friendly organic food took off from that foundation, and have been fostered by an existing environmental movement advocating 'greener economies', sustainability or even degrowth (Domazet and Dolenec, 2016; Pungas, 2019; Slavuj Borčić et al., 2015). A deeper understanding of these practices, motivations for their implementation within different classes in Croatia, and correlation with their inclination to PEB, resilience potential and overall well-being of practitioners is missing, though. Specificities of Croatian development path promise not only to add to a better understanding of FSP in Eastern Europe, expanding the geographical range of research like Pungas, 2019, and Sovová, 2015, but also proffering a nuanced characterization specific of the environmentalism and resilience in European south-eastern semiperiphery.

Research design

Research questions

There are few researches on FSP practices in Croatia, mostly as ethnographic accounts and diachronic perspectives on urban gardening in Zagreb (Biti and Blagaić Bergman, 2014; Slavuj Borčić et al., 2015; Gulin Zrnić and Rubić, 2018), on social aspects of urban agriculture (Bokan and Lay, 2018), and on students' attitudes toward urban gardens and their multifunctional character (Ursić and Krnić, 2018). In her research on "community-supported agriculture", done in broader surroundings of Croatia's capital, Orlić (2014, p. 88) conceives it as one form of diverse "solidarity economy practices", that for the author has wider meaning than "alternative network of food provisioning", because "it contributes to equal partnership relations between buyers and producers as well, thus creating solidarity and trust among people". Sarjanović (2014, p. 1) writes about functioning of "community supported agriculture (CSA)" groups in Croatia, referring to people "who pay for fresh, untreated and locally grown food

directly from farmers”. Study shows that those prone to CSA “are younger and highly educated persons who live in large cities or urbanized regions (...) and are driven by eco-social motives (ecological consciousness, healthy food, cooperation with group members)” (ibid), but it does not say much about their class backgrounds.

Hence, we find that so far there has been a lack of wider research upon FSP in regard to class in Croatia. Therefore, our primary research goal is to explore how widespread is FSP in Croatia, according to a nationally representative sample. In addition, what are the basic socio-demographic differences between those engaged in FSP and those that are not? Since there has been occasional research on the social class perspective on FSP (Smith et al., 2015), we are interested how is FSP structured through class division in contemporary Croatian society? If FSP could be noticed in Croatian society and due to similar research conducted in Czech Republic and Poland, we are interested if food self-provisioners share their food and with whom? We have seen some research accentuates that FSP is a merely a coping strategy of those living in scarcity due to collapse of socialist economy (Alber and Kohler, 2008) and some try to refute that assumption by providing social science evidence (Jehlička et al., 2013), so it is our research goal in this article to explore what is the motivation of food self-provisioners. FSP is often being highlighted as an environmentally beneficial action and resulting in providing healthy food. Our data provide us with an insight into connection between FSP, PEB and class, but also if FSP could result in increased personal wellbeing or in self-perceived household resilience.

Data and Analytical strategy

Our data stems from the project *Social stratification in Croatia: structural and subjective aspects* whose objective was to revive class analysis in Croatia since there has been a gap in this research field in Croatia since the late 1980s. Part of the project was a fielding a questionnaire survey. A thousand face-to-face interviews were carried out with a stratified random multi-staged² sample of adult respondents over age of 18 and living in private households. Response rate was 45 per cent while the survey has been fielded in December of 2017. The purpose of the questionnaire was to explore the class division of Croatian society from the neo-Marxist, neo-Weberian and Bourdieu’s class perspective in regard to social networks and engagement, education and working conditions, knowledge and values, health and wellbeing and access to natural and public infrastructure.

² Stratified random multi-staged sample was used by operationalizing level of settlements, level of household, and level of individuals. Two-way stratification was done, by six regions (defined as the traditional groups of counties in Croatia) and four settlement sizes (defined by the number of residents). The size of each stratum is based on the proportion of the number of 18+ residents within the stratum in the total 18+ population.

Part of the questionnaire relating to accesses to natural and public infrastructure tackled some of the issues of economic and environmental resilience including the issue of FSP, while some questions (items in the questionnaire's scale) were taken and adapted from the study of Jehlička et al. (2013: 231) and Smith et al. (2015: 230), thus enabling us to compare some of results for Croatia with those for Czech Republic and Poland. Respondents were asked if they have a garden, field or orchard for producing food either next to the house where they live or somewhere else (i.e. near their holiday home, near the city they live or somewhere else) and could answer the question with a yes or no option (FSP indicator). If yes answer was chosen, the respondents were asked with whom do they share or exchange the food that they produce. Respondents could choose multiple answers among the options of members of nuclear family (children, parents, siblings, grandparents, and grandchildren), extended family (cousins, aunts and uncles, nieces and nephews), neighbours, friends, co-workers; or if they do not share or exchange it. In addition, food self-provisioners were asked to choose the most important reason for producing the food. The answers were: (1) application of skills and knowledge; (2) it is my hobby; (3) I am continuing family tradition; (4) I can get the food that is not on the market; (5) I could get healthy food; (6) I am saving money; (7) protecting the environment by using methods with limited influence on the environment; (8) fulfilling family obligations; (9) getting fresh food. For the purpose of the analysis in this article we have recoded this question to 4 outcomes: (1) hobby, application of skills and knowledge (1+2); (2) family tradition and obligations (3+8); (3) economic reasons (4+6); (4) natural food reasons (5+7+9). Those respondents that do not have a garden, field or orchard to produce food were asked if they receive food from their members of nuclear family, extended family, neighbours, friends, co-workers.

Since this is one of the first research on FSP on national population, FSP indicator was tested upon basic socio-demographic characteristics presented in Table 1. Social class indicator employed in the research was constructed as a neo-Weberian research tool based on the occupation of the respondents. Neo-Weberian class analysis empirically is grounded on the Erikson-Goldthorpe-Portocarero (EGP) class schema from 1979 (Erikson et al., 1979), and since then its theoretical principles have contributed to development of subsequent cognate schemes like CASMIN, United Kingdom's NS-SEC and the European Socio-Economic Classification – ESEC (Connelly et al., 2016). For that matter ESEC was developed as a new social class schema for the purpose of EU comparative research since it uses International Standard Classification of Occupations (ISCO), which is a harmonized classification used across the EU for reporting occupational statistics (Harrison and Rose, 2006; Rose, David; Harrison, 2010). New and improved version of ESEC was introduced as part of ESSnet project under Eurostat supervision in 2011-2014 period and is called European Socio-economic Groups (ESeG) (Franco, 2016; Franco et al., 2014; Tijdens, 2016). In our research we have used the

ESeG-2014 classification which uses the two core variables ISCO08 occupation and employment status (employee/self-employed), and two additional variables for people not in paid employment, notably status (retired/student/disabled) and age (Tijdens, 2016). Rational for ESeG is to divide the overall population to socio-economic groups that are coherent to an extent using a criterion of the autonomy in employment and the human capital (Holý and Stražilová, 2015). ESeG groups on 1st level of division are: ESeG1-Managers, ESeG2-Professionals, ESeG3-Technicians and associate professional employees, ESeG4-Small entrepreneurs, ESeG5-Clerks and skilled service employees, ESeG6-Industrial and agricultural employees, ESeG7-Less skilled workers, ESeG8-Retired persons, ESeG9-Other non-employed persons. For the purpose of our analysis in this paper we have used a 3 class variant: higher salariat (ESeG1+ ESeG2); middle class (ESeG3+ ESeG4+ ESeG5); working class (ESeG6+ ESeG7)³.

In addition, since the research shows that growing groups of environmentally conscious consumers and healthy lifestyle followers are engaged in alternative food networks (Sovová, 2015: 13; Gulin Zrnić and Rubić, 2018), we wanted to explore to what extent do food self-provisioners differ in terms of personal wellbeing and PEB in comparison to those that do not engage in FSP. Therefore, we have used composite measures for personal wellbeing and PEB. As a measure of personal wellbeing we have used the conceptual approach of Huppert and So (2013), the flourishing index, which combines feeling and functioning, i.e. hedonic and eudemonic aspects of well-being: competence, emotional stability, engagement, meaning, optimism, positive emotion, positive relationships, resilience, self-esteem, and vitality (Table 1.). Composite measure of PEB consists of six single item indicators that tackle PEB patterns concerning recycling, consumerism, transportation and energy use (see also Table 1.)

Table 1. Composite measures of Flourishing index and Pro-environmental behaviour (PEB)

Composite measures	WORDING
Flourishing index	<i>"To what extend do you agree with following statements" ^a</i>
Cronbach's alpha 0,802	Most days I feel a sense of accomplishment from what I do (competence)
	I feel calm and peaceful (emotional stability)
Range of index variation 16 do 45	I love learning new things (engagement)
	I generally feel that what I do in my life is valuable and worthwhile (meaning)
M=34,81; SD=5,01	I am always optimistic about my future (optimism)

³ Innovation with ESeG in comparison with previous cognate schemes is that it includes retired persons in the analysis since they are coded using the same 1st level division logic (from ESeG1 to ESeG7). In our analysis, retired persons are also included since being a part of a certain social class in Neo-Weberian context of market provision of life chances continues after the retirement.

	There are people in my life who really care about me (positive relationship)
	When things go wrong in my life it generally takes me a long time to get back to normal. ^c (resilience)
	In general, I feel very positive about myself (self-esteem)
	I have a lot of energy (vitality)
Pro-environmental behaviour	<i>"How often do you..."^b</i>
Cronbach's alpha ,839	Make a special effort to sort glass, or cans, or plastic, or newspaper for recycling
	Make a special effort to buy fruits and vegetables grown without pesticides and chemicals
Range of index variation 6 do 30	Cut-back on driving a car for environmental reasons
	Reduce the energy or fuel consumption at home to protect the environment
M=16,30; SD=5,34	Reduce water consumption for environmental protection
	Avoid buying certain products for environmental protection
^a Scale: 1=completely disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; 5=completely agree	
^b Scale: 1=never; 2=seldom; 3=sometimes; 4=often; 5=very often	
^c Scale reversed.	

Finally, since FSP is often being put within the context of resilience, we have explored to what extent food self-provisioners differ in terms of self-perceived prospect resilience due to environmental changes. Therefore, the respondents had to answer to a question to what extent do they agree with the statement – if the frequency and intensity of extreme weather conditions (i.e. floods, heat waves and droughts) increase significantly over the next five years, their households will be able to successfully adapt to new threats.

Results

Who are the food self-provisioners in Croatia?

In order to depict a profile of household representatives that grow food for their own use in Croatia, and to explore to what extent they differ from those who do not, we have explored some of the differences in terms of residential status, age, educational attainment, gender, household size, marital status, personal income, employment status and belonging to a social class (Table 2.).

Table 2. Socio-demographic and socio-economic characteristics of FSP

		Use of garden, field or orchard for growing food		
		Yes	No	
		%		
Residential status	Urban	43,3	81,7	
	Rural	56,7	18,3	
Size of settlement	< 2000	56,7	18,3	
	2001 – 10 000	18	14,3	$\chi^2=206,788$;
	10 001 – 100 000	14,6	25,4	$p<0,001$
	> 100 000	10,8	42	
		M		
Age		49,83	45,99	$t=3,350$;
				$p<0,01$
		%		
Education	Primary level	19,1	11,3	$\chi^2=18,029$;
	Secondary level	65,7	65,6	
	Tertiary level	15,2	23,1	
		%		
Gender	M	50,1	46,2	n.s.
	F	46,2	53,8	
		M		
Household size	N. of household members	3,19	2,45	$t=8,068$;
				$p<0,01$
		%		
Marital status	Married	59,7	44,3	$\chi^2=33,887$;
	Civil partnership	1,5	2,4	
	In a relationship	2,8	6,2	
	Divorced	4	8,8	
	Widowed	11,9	10,8	
	Single	20,1	27,5	
Income		M		
		7,88	8,31	$t=-2,352$;
		(HRK3400-4499)	(HRK3400-4499)	$p<0,02$
		%		
Employment status	Employed	34,5	47,5	$\chi^2=20,223$;
	Self-employed	4	3	
	Unemployed	16,5	12,3	

	Retired	35,1	27,7	
	Domestic work	4	2,6	
	In education	5,8	6,9	
		Yes	No	
		%		
Social class	Higher salariat	12,7	12,7	$\chi^2=13,585$; $p<0,001$
	Middle class	24,8	37	
	Working class	62,5	50,3	
N		529 (52,9%)	468 (46,9%)	

Overall, previous research in CEE has shown that FSP is characteristic of between 35% and 60% of the populations (Smith and Jehlička, 2013a). Our data shows that Croatian population falls within the ratio as just over 50% of respondents claim that they have a garden, field or orchard, either where they live or somewhere else, and *use it* in order to produce food. From the residential status of the respondents and from the size of settlement, it is obvious that FSP takes place more in rural areas and smaller urban settlements, but it should not be connected only to the rural way of living as 40% of food self-provisioners report living in urban settlements (in a nation that is approximately 60% urban). It is probably also part of the urban gardening phenomena reported in Croatian capital and largest city (Slavuj Borčić et al., 2015), but since the question posed in the questionnaire included a garden, a field or an orchard that could be away from the respondent's place of living, this research does not give a straightforward insight into the extent in which *urban* gardening is present among Croatian population. We were not able to ask about the distance from the garden and modes of transport to and from it, as is possible in some closer ethnographies (Pungas, 2019).

Compared to the part of population that does not have garden, field or orchard for growing food, those who practice FSP differ to a certain extent due to the socio-demographic background and socio-economic status. FSP respondents tend to be little bit older, with little less share of those with tertiary educational attainment and bigger share of those with primary educational level, living in larger households, and traditional spousal arrangements. Although having a similar level of personal income in comparison with those that do not do FSP, those doing FSP significantly differ in terms of employment status since there is less of those with employment and more of those that are retired or unemployed, suggesting a greater time-autonomy. Despite the differences between the groups registering as statistically significant, it does not mean that overall FSP is an activity of those that are either without job or retired because 38% of those practicing FSP are in full time employment. However, objectively, respondents practicing FSP are mostly from working class (62,5%) thus following

the overall class structure of Croatian society where the majority of population belong to a working class (58%).

FSP motivation

So it seems from the socio-demographic background and socio-economic status that FSP could be entangled with material and economic situation, but the sociodemographic data alone does not provide a clear picture in which FSP could be interpreted as an unambiguous material and economic procurement for lower income households (cf. Church et al. 2015 for Western European post-crisis analysis). Therefore, we have directly explored the self-professed motivation for practicing FSP (Table 3.). Is the cost-effectiveness (Pungas, 2019) really driving the practice, does this motivation differ across classes, is it a matter of social inertia (continuing the tradition), or is it perceived as intrinsically beneficial or environmentally beneficial activity?

Table 3. Social class and FSP motivation

	Food self-provisioning motivation				
	hobby, application of skills and knowledge	family tradition and obligations	economic reasons	natural food reasons	
	%				
Total	12,2	12,0	16,8	57,1	
Higher salariat	23,9	13,0	6,5	56,5	$\chi^2=16,612$; p<0,01
Middle class	10,9	12,0	12,0	65,2	
Working class	10,4	11,7	23,9	53,9	

The dominant motivation for having a garden, field or an orchard to grow one's own food seems to stem from the natural food reasoning since the strongest motivation is *gaining healthy food* (44,7%) and *food that is fresh* (12,7%), or even for 0,8% respondents as main motivation to *ensure environmental protection* through the use of methods with restricted environmental impact. The survey did not permit us to test the respondents' general attitudes to agrifood business, to global sustainability or economy-environment trade-offs, but we know from previous research that critical attitudes are as much or even more prevalent among the Eastern European populations than among the Western European ones (Ančić and Domazet, 2015; Domazet and Ančić, 2017; Pungas, 2019). Natural food motivation here then covers the distrust of the market procured foodstuffs and environmental protection to a small degree, under the assumption that closer to nature and fresher

correlates with healthier in foodstuffs. This is the main motive across the population and classes, though even more pronounced among the middle class FSP practitioners.

Economic reasoning (motivation) for FSP puts an emphasis on saving money (10,4%) or producing food that cannot be procured through the market at all (6,4%) – though it is not specified whether because of its rarity, distributional scarcity or particular freshness and health-bearing. This reasoning suggests an activity that supplements the market, either due to price or the general availability and quality of the food commodity, rather than the intrinsic superiority of the own garden produce. Thus, those who explicitly report to involve in FSP primarily for its cost-effectiveness are only 10% of those practicing FSP, most of them from the lower income, working class. The remaining two motivation groups separate into opposing positions, since for some respondents the motivation is to practice FSP as part of hobby-like recreational activities (11%) or as an application of one's own particular skills and knowledge about gardening (1,5%) – forms of individual self-expression; while for other respondents it is a continuation of family tradition (9,8%) or a fulfilment of family obligations (2,4%) – thus a community imposed expectation. In the total segment of population practicing FSP these two groups are of equal size and smaller than either economic or natural food reasons. As Table 3 shows preponderance of hobbyist FSP practitioners is disproportionately present among the higher salariat.

Regarding motivation for FSP there are overall class differences to it. Within the higher class, in comparison with middle and working class, there is a bigger portion of respondents whose motivation for FSP is more of performative individual expression in a sense that it is a hobby and a way of applying personal skills and knowledge in growing food. Although for all three classes, gaining healthy and fresh food is the main motivator for FSP, to an extent it is a little bit more prevalent among middle class than among higher and working class. Distinctly, within a working class economic reasoning for FSP is comparatively more highlighted, but is still not the dominant reason overall by far.

Environmentalism and sharing

Therefore, it would be interesting to see to what extent are FSP practitioners ecologically aware and does it manifest on some other patterns of their behaviour. For that purpose we have analysed if there is a difference between those engaged in FSP and those not in terms of PEB (Table 4.).

Table 4. FSP and PEB

Pro-environmental behaviour						
N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		
				Lower Bound	Upper Bound	
						MinimumMaximum

Food self-provisioning	Yes	441	16.9771	5,56198	,26488	16,4565	17,4977	6,00	30,00	F=15,183; p<0,01
	No	393	15.5447	4,98783	,25158	15,0501	16,0393	6,00	30,00	
	Total	834	16.3020	5,34409	,18505	15,9388	16,6652	6,00	30,00	

As a composite measure PEB signals environmentally friendly patterns of behaviour in everyday life. This includes making a special effort in recycling, buying fruits and vegetables without pesticides and chemicals, cutting back on driving a car, reducing energy consumption, reducing water usage, and avoiding buying certain products, all that for environmental reasons. Analysis show that there is a small but statistically significant distinction between respondents practicing FSP and those that are not in a way that the former are more engaged in environmentally friendly activities, despite dependence on infrastructure and a potential consumption-based practices bias (Krüger et al., 2016; Smith et al., 2015).

Table 5. FSP and sharing or exchanging food

	Food self-provisioning	
	Responses	
	N	%
Nobody	49	4.8
Family	587	57.3
Neighbours	173	16.9
Friends	185	18.1
Colleagues	30	3.0
Total	1024	100

Although this research did not explore the intensity of FSP, the time-investment, diversity and quantity of production, it did ask whether those practicing FSP share their produce or use it as an exchange good (Table 5.). Since it was a multiple response question the frequencies and percentages of the responses (N=1024) and not of the respondents (N=529) are presented here (Table 5), albeit a clear and coarse classification of proportions of respondents is self-evident. As can be seen, only 49 respondents out of 529 do not give or exchange the food they have provided for themselves which is only 9,26 percent. So, 90% of food self-provisioners unidirectional share or exchange their food, primarily within their extended families. Beside the family to a lesser extent they share or exchange with their neighbours and friends and quite rarely with their work colleagues. Interestingly, for those that do not provide food for themselves, those who do not practice FSP nevertheless receive it. Majority of respondents (71%) that are not engaged in FSP claim to have received food as a present, mostly from the members of their family or from friends and neighbours.

Resilience to environmental change

Table 6. FSP and self-perception of resilience

		Resilience self-perception							
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.Max.	
						Lower Bound	Upper Bound		
Food self-provisioning	Yes	482	3.58	.907	.041	3.50	3.67	1	5
	No	419	3.42	.946	.046	3.33	3.52	1	5
	Total	902	3.51	.928	.031	3.45	3.57	1	5

F=6,688;
p<0,01

One of the issues explored in this survey concerned the self-perception of future resilience. Respondents were asked to estimate whether with the increase in frequency and intensity of extreme weather conditions (i.e. floods, heat waves and droughts) in the next five years their household would be able to successfully adapt to those new threats. Comparison between home food growers and those that are not indicates that those engaged in FSP have a slightly higher perception that they will successfully adjust to new conditions to a greater extent than do those that do not produce their own food. Across classes, FSP can be a personal contribution to the resilience of one's social group, though through the existing sharing networks it is focused on kinship and residential networks in Croatia, sidelining social hierarchies and professional structures. But more importantly, following Jehlička the positive motivation to enhance wellbeing rather than guards against adverse effects, and dense social relations fostered through sharing with friends and family, provide for greater social resilience through diversification of portfolio of food sources (food entitlements) and the hold "the possibility for future transformation and social innovation" (Jehlička et al., 2018, p. 12) that counters the hegemonic drivers of the global environmental change.

Table 7. FSP and personal flourishing (wellbeing)

	Flourishing index							
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
FSP motivation					Lower Bound	Upper Bound		
hobby, application of skills and knowledge	62	34.4275	5.637	.714	32.99	35.85	24.00	45.00
family tradition and obligations	61	33.5340	5.037	.644	32.24	34.82	16.00	43.00
economic reasons	87	34.1493	4.589	.492	33.17	35.12	23.00	45.00
natural food reasons	294	35.6600	4.530	.264	35.13	36.18	17.00	45.00
Total	504	34.9896	4.808	.214	34.56	35.41	16.00	45.00

The main motivator among those having a garden, field or orchard in order to grow food is to have access to healthy and fresh nutrition. This would indicate care and concerns for one's physical (possibly also mental) wellbeing, and efficacy to act on that outside the market consumption patterns. Therefore we were interested is there any relation to personal wellbeing, personal flourishing, due to the motivation of being active in a garden, field or orchard and to grow food. Analysis of variance traces small but significant difference among those having natural food reasons for FSP (healthy and fresh food) on one side and those having economic reasons or continuing with family tradition and obligations on other. Those having a more orientation towards natural food in FSP tend to express a little bit higher level of personal wellbeing. Analysis *per se* does not provide us with a clear conclusion whether natural food motivated FSP drives personal wellbeing, but a deeper exploration of the possible common causes and the differences from those respondents with self-reported low personal wellbeing could be the first port of call for subsequent research.

Concluding remarks

Post-socialist transition has deepened social stratification, and through structural changes in economic sectors and nature of work, as well as increasing automatization in all economic and public service spheres, hit harder at the working class and segments of the middle class. With the concurrent war of independence's socio-ethnic shifts and divisions it created sudden disruptions of social strata and networking enhancing insecurity and precariousness of large social groups. In a positive view of resilience, as a source of adaptive capacity, proactivity and a potential for learning, as grounds for removing insecurity through creation of alternative futures (DeVerteuil and Golubchikov, 2016), rather than clinging on to status quo, Jehlička et al. (2018) map the widespread East European practice of FSP as a reinforcement of social resilience inimical to impoverished working class as well as to middle and higher classes. As Croatia followed a different socialist and post-socialist trajectory than societies of CEE we investigated the social stratification among Croatian FSP practitioners. Due to their classification of FSP as practice driven by positive motivations and thus a proactive and transformation-enabling form of social resilience, we investigated the motivations expressed for FSP in Croatia. This pro-active aspect means not only an effective response to a crisis that seeks to preserve the status quo, but also a ground for resistance to risk-inducing hegemony of centralised mass and industrial food provision. Furthermore, FSP strengthens individual and social metabolism, i.e. social capital, group trust and social networks crucial for social transformation away from the instability of global fossil capitalism, through self-perceived resilience and personal flourishing of the home food growers.

FSP is as widespread within the Croatian society as it could have been expected based on the previous studies reporting on Eastern Europe FSP. As a practice it is more situated in smaller settlements and rural areas, but it is not a primarily rural phenomenon due to the fact that 40% of food self-provisioners are living in urban areas. In their examples of Zagreb urban gardening communities Gulin Zrnić and Rubić (2018) see significant potential of urban gardening practices for a 'green transformation' of cities.⁴ Smith et al. based on their research state that "generally, people in CEE produce their own food in yards surrounding their own houses, in gardens next to their second/vacation homes or in allotment gardens in cities" (Smith et al., 2015; see also Uršić et al. 2018). A limitation of our study is the lack of unambiguous land location (rural/urban/semi-urban) and its proximity/distance to the practitioners' residence, as is the issue of land ownership, tenancy, illegal occupation or other modes of usage. The latter would provide greater nuances in understanding the role of social class in practicing FSP.

Our social class indicators were construed based on occupation, departing from Neo-Weberian class analysis asserting that class affiliation significantly influences life chances, wealth and well-being of individuals and families. Neo-Weberian class analysis tradition posits that relations in the job market shape and influence a person's life chances, which, among other include good health (Breen, 2005), and only under close scrutiny may we understand FSP as an indicator of (good) life chances for metabolic and nutritional well-being of its practitioners. It seems that in FSP, PEB and social resilience practices among working, middle and higher classes, point to fact that all three of them are utilizing FSP primarily for metabolic reasons, while middle class has slightly more propensity for gaining fresh and healthy food. This of course might be seen as just one of numerous factors in holistic understanding of individual metabolic health, yet not the one easily to discard, as our analysis shows. On the other hand, it is difficult to presume that we should understand inclination to FSP and PEB as mere lifestyles and habitus' of their practitioners, who by practicing them are reinforcing their social class positions, as Bourdieuan class analysis would suggest. The class perspective in the Croatian case tells us that a particular attitude to food safety and production is the dominant reason for FSP across classes, rather than being limited to the higher social class. This resonates with a particular materialist-based environmentalism characteristic of European semiperiphery, with a high dose of autonomy and separated from the market mediation, mapped previously by Domazet and Ančić (2019, 2017). Beyond that, there is an element of class separation, possibly a post-transition divergence between individual self-expression motivations among the higher class FSP practitioners and the economic motivations

⁴ Describing three concomitant processes that could transform cities, the authors contend that urban gardening practices could help in community building through social networking whereby food sharing heightens ones' social capital. Secondly, urban gardening may influence shaping of local governance through bottom-up initiatives, and thirdly, it helps in fostering sustainability, where it is seen as indispensable part of urban developmental strategies (Gulin Zrnić and Rubić (2018: 172-174).

among the working class. Finally, relation to tradition and FSP as the base of rural subsistence economy from which much of the Yugoslavian 20th century modernisation springs is evident in stable cross-class prevalence of 'family tradition' as one of the motivators for FSP. Overall, though, our results confirm the findings of Jehlička et al. (2013) and DeHoop and Jehlička (2017) that FSP is not a coping strategy focused on the poor and low-income households in Croatia. However, in recent study Jehlička et al. (2018) found that FSP and food sharing is widespread in Czechs society, across all geographical regions and social groups and they are not significantly conditioned by education and income level, nor class.

Our study has revealed somewhat similar, yet intriguing results, that having a garden, field or orchard for growing food is for most people in Croatia a way of providing healthy and fresh food which is beneficial to individual and social metabolic and nutritional well-being; and then more likely to be a cost-saving measure for working class practitioners, and self-expressional and recreational activity for higher class respondents. Unemployed and retired people are more represented among food self-provisioners which could be expected due to more time-autonomy, similar to cases of other studies of other Eastern European societies (Pungas, 2019). Nevertheless, a lot of FSP practitioners are in full time employment and it seems to be a private sphere activity, networked dominantly with those characterised as family and friends, rather than work colleagues. Due to disassociation from the professional connection sharing is most prevalent in kinship and neighbourhood circles. This makes it a resilience practice separated from the market interaction and social structures dependent on it. Food self-provisioners to a higher extent perceive themselves as more resilient, and register slightly higher wellbeing than the general population. Especially when considering the motivation for FSP practice, natural food reasons (healthy and guaranteed fresh food) are connected with higher well-being than the other stated motivations for FSP practice.

Food sharing as fostering social relationships and networks is an important part of FSP. Far from being a "survival strategy of the poor" FSP helps practitioners to nourish and represent their own identity, to cherish their hobby and well-being, and to care for their family tradition, relationships, friendships and networks. The overall environmental benefits are rarely considered explicitly by the practitioners of FSP. Further research is needed to explore the intensity of FSP in Croatia, what portion of the overall nutrition of FSP connected households is secured in this way. Data presented here identifies the motivations and social benefits of growing one's own food, but is insufficient to estimate the overall volumes of material and non-material inputs and outputs in individual process of food production.

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