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Title Page (with Acknowledgements, Declaration of Interest, and Author Details)

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None.

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Abstract

The breakdown of socialist agriculture in post-Soviet countries generated a large number of smallholders, of which only a minority turned to entrepreneurial agriculture. With the largest number of family farms per capita in Europe, Moldova represents an exemplary case study to explore the livelihood trajectories of these land recipients. Relying on an original smallholder survey, we analyse the role of farming in their livelihoods two decades after land privatisation. Two groups are identified: 'peasants', who represent a large majority, and 'entrepreneurial' farmers. The former tend to diversify their livelihoods off-farm; the latter turned agriculture into a proper full-time business but maintain a small-size compared to the corporate farms that succeeded the Soviet *kolkhozy* and *sovkhozy*. The two groups are found to share similar goals and values, but while 'entrepreneurs' pursue profit maximisation, 'peasants' set their working pace based on family needs. Still, some 'peasants' invest part of their off-farm income in agriculture to intensify production and commercialise 'niche' products. De-commodification, internalisation, mutual aid mechanisms, and reliance on 'traditional markets' emerge as strategies to preserve autonomy *vis-à-vis* risky modern markets, rather than a mere outcome of necessity. Despite such aspirations of most smallholders, EU-driven rural development policies require them to behave as 'entrepreneurs'.

Keywords

Post-socialist agriculture; smallholders; rural livelihoods; commercialisation; autonomy; farmer values.

1. Introduction: post-Soviet smallholders facing markets

The economic transition paradigm, applied to the agricultural sector of post-socialist countries since the 1990s, foresaw the liberalisation of prices and trade and the privatisation of collective farms and agri-

food industries (Wandel, Pieniadz and Glauben, 2011). Neoliberal reformers expected 'efficient, independent, market-oriented' (Humphrey, 2002: 136) farms to emerge gradually through land market transactions, thus moving towards a farm structure similar to Western Europe that could trigger rural development (Burawoy, 2001). Instead, most countries saw a polarisation between large-scale corporate farms and small family farms focused on self-provisioning (Chaplin et al., 2004; Small, 2007; Lerman and Sutton, 2008; Lerman, Serova and Zvyagintsev, 2008; Varga, 2017). These two groups correspond to the categories of 'agricultural enterprises' and 'households' generally used in CIS statistics, while market-oriented 'individual farms' are emerging only recently (Wegren and O'Brien, 2018; Lerman and Sedik, 2018).

The emerging of 'individual farms' is a result of the diversification of land recipients' livelihoods. While some turn their farm into a business, others may complement their farm income with off-farm employment, and possibly end up exiting agriculture (Davidova et al., 2013). Many studies tried to identify the livelihood trajectories of smallholders, including entrepreneurial farming, off-farm and on-farm diversification, continuation as a traditional 'semi-subsistence' farm[1], and disappearance (Davidova, Fredriksson and Bailey, 2009; Sutherland, 2010; Mamonova, 2015). Besides elderly smallholders who keep farming due to the lack of alternatives (Petrick and Weingarten, 2004), 'semi-subsistence' farms proved very persistent despite household members having decent off-farm incomes (Piras et al., 2018; Piras and Botnarenco, 2018). This implies that farming still plays a role in their livelihoods.

The choice not to exit agriculture, and to maintain the property of land cannot be motivated simply by standard economic drivers, like negative, 'pushing' factors. While many features and practices of 'traditional' family farms (small size, subsistence orientation, limited permeability to technological innovation, etc.) are deemed undesirable by the neoclassical theory of farm production, they may be efficient *vis-à-vis* alternative objectives (Ellis, 1993). However, these practices result in disengagement from markets, reducing smallholders' responsiveness to policies aimed at stimulating 'commercial' agriculture (Ellis, 1993).

[1] Here we use 'semi-subsistence' to indicate smallholders who do not pursue commercialisation as the main goal of their farm activity, although we are aware of the (negative) normative meaning associated with this term, in particular when compared to 'self-provisioning' (Varga, 2018; Ploeg, 2010).

A key practice to explain the diversification of smallholders' livelihoods is, indeed, 'commercialisation', often used as a synonymous of 'market integration'. While agricultural producers may also engage with input and credit markets, farm sales are generally seen as the main indicator of being a proper 'business'. Smallholders are defined 'commercial' when they sell over 50% of their production (Varga, 2019), or over 25%, depending on the context (World Bank, 2008). The literature on post-socialist agriculture has shown that most smallholders do engage in commercialisation (see, among others, Kuns, 2017; Varga, 2017, 2019; Mincyte, 2011); however, their transactions are usually informal, and take place in 'traditional agricultural markets' (Varga, 2017; 2019). International organisations like the World Bank (Varga, 2018), or the EU (Mincyte, 2011), and the national development strategies they inspired, see these as 'vast grey markets' where smallholders remain unresponsive to signals like 'price fluctuations' and enjoy 'unfair' competitive advantages thanks to the absence of food safety checks and taxation (Varga, 2018: 7-8). Notwithstanding their 'diverse endowment set' of informal food practices makes East European food systems 'remarkably resilient compared to the societies in the 'centre'' (Jehlička et al., 2020: 293), West-originating development strategies dismiss semi-subsistence farming as 'backward and unworthy of state and European protection' (Mincyte, 2011: 113), and promote smallholders' integration in the 'modern procurement system' (Varga, 2017). The latter implies 'coercive state interventions' and 'increased dependence on markets' (Varga, 2020: 2), or on 'the EU's regulatory regime' (Mincyte, 2011: 111), thus reducing smallholders' autonomy.

The concept of 'autonomy' is central in the peasant studies literature. Despite the seminal role of Russian scholars, primarily Chayanov (1996), in the analysis of the peasantry, this literature has had only limited application in the understanding of post-Soviet smallholders. This is also the case of Southeast Europe, despite the relevance of the peasant economy for this region (Dorondel and Serban, 2014). Post-socialist socioeconomic processes have been rather framed in terms of 'transition' from planned economy to functional markets. The land reform and the survival strategies of rural people have been depicted as a very unique period of 'change from above', and scholar's interest for the post-Soviet rural society started declining after some years in the spotlight (Mamonova, 2016). This probably happened because a transition without economic, social, and political transformation (Burawoy, 2001) inhibited the process of social diversification which is at the core of critical agrarian studies.

Nevertheless, there have been some attempts to look at post-Soviet agriculture through a peasant studies lens. Literature showed that Soviet collective (*kolkhozy*) and state farms (*sovkhozy*) survived the reforms by turning into large capitalist farms (Visser, 2008), and their 'symbiosis' with rural smallholders has also persisted, with the latter benefiting from low-cost farm inputs and employment opportunities (Spoor and Visser, 2004; Jehlička et al., 2020). Mamonova (2015) argues that, in this framework, the approaches adopted by farming households range between 'adaptation' – accepting the current power relations and pursuing strategies aimed at achieving personal gains within these conditions – and more or less open 'resistance' – putting in place alternative development plans to resist pressure of the dominant agri-food regime (Schneider and Niederle, 2010). Different approaches result in different livelihood outcomes: 'individual farmers', 'peasant-workers', 'independent peasants (*odnoosibniks*)', and 'subsistence farmers' (Mamonova, 2015). Kuns (2017) shows that some households in southern Ukraine managed to intensify their production and achieve autonomy even without the support of large-scale farms, though they represent a minority and their ecological sustainability is doubtful. Dorondel and Serban (2014) highlight that the figure of the 'peasant-worker' is widespread in Southeast Europe thanks to the differentiation of family roles, and is characterised by minimal farm investments and production for self-consumption. Thus, there is a recognition in the literature that, although peasants had been wiped out by land collectivisation, a process of '*repeasantisation*' has been taking place since the 1990s, driven by land de-commodification (Burawoy, 2001) and by the 'activation' of smallholder plots and *dachas* (Humphrey, 2002). The 'peasantry' is not a mere economic category but 'a lifestyle with its own logic' (Dorondel and Serban, 2014: 15) whose 'practices' can be understood as 'modes of action and thinking' (Humphrey, 2002: 153). Hence, adopting this socio-economic category allows to link the processes of rural livelihood diversification to underpinning goals and values.

According to Chayanov (1966), the key characteristic of the peasant is that they employ no waged labour: the family represents an indivisible production and consumption unit, and the size of farm activities evolves with its labour-consumer ratio, ensuring reproduction but not accumulation. Based on observations from around the world, Shanin (1971) identifies four defining features: again, the family as the basic unit of a 'multi-dimensional social organisation'; land as the main source of livelihood *directly* providing

most consumption needs; a traditional culture linked to the 'way of life of small communities'; and 'domination by outsiders' (pp.14-15). Moving to *Western* Europe, Ploeg (2009) develops his 'repeasantisation' theory by observing how farmers caught in a vicious cycle of size enlargement resort to internalisation for reducing dependency on technology and powerful market actors. This theory has been then applied, among others, to the analysis of family farmers in Latin America (Schneider and Niederle, 2010). Ploeg sees the categories of 'peasants' and 'commercial farmers' as part of a continuum, and defines the peasant condition as characterised by a '*struggle for autonomy* that takes places in *a context characterised by dependency relations, marginalisation and deprivation*', aimed at the '*creation and development of a self-controlled and self-managed resource basis*' which allows for '*forms of co-production of man and living nature*', and 'might be *strengthened through engagement in other non-agrarian activities*' (p.23). Mamonova (2016) argues that by looking at post-Soviet smallholders using Ploeg's (2009) lenses, 'we observe the persistence and even partial re-emergence of the peasantry in Russia and Ukraine' (p.25). The categories of 'agricultural enterprises', 'individual farms' and 'households' used in CIS countries can be equated to Ploeg's (2009) 'capitalist', 'entrepreneurial', and 'peasant farms'.

Ploeg (2010) argues that the peasantries of the twenty-first century 'should be conceptualised in terms of resistance', which 'takes multiple forms that link rural livelihoods with external contexts' (p.21). The choice to keep cultivating the land and maintaining its property can be characterised as a 'quiet' resistance to market pressures for relocating labour and assets to more productive uses. Visser et al. (2015) speak of 'quiet food sovereignty'. While smallholders' disengagement from formal markets can be explained with negative 'pushing' factors, like exclusion from resource distribution (Allina-Pisano, 2004) or policy incentives favouring large-scale commercial agriculture (Aliber and Cousins, 2013), it may also be that they reject the terms of their inclusion in the 'new economies' (Murray Li, 2009).

Given these premises, this article explores the patterns of diversification in the livelihoods of post-Soviet smallholders two decades after the breakdown of socialist agriculture and *vis-à-vis* Europeanisation, and identifies the goals and values underpinning such trajectories. We rely on an original survey implemented in the Republic of Moldova in 2015. We focus on 'individual farms' and 'households', letting out 'ag-

ricultural enterprises', as they are not linked to a specific family. Quantitative results are presented alongside detailed qualitative insights, turning smallholders into subjects continuously shaping their own existence.

We hypothesise that, although with different nuances, a large majority of smallholders can be ascribed to the category of 'peasants' and have goals and values in line with this group. Full-time 'entrepreneurial' farming is avoided because it would increase market risk and expose them to indebtedness and 'socio-cultural losses' (Hepp, Bech Bruun and Neergaard, 2019). We also hypothesise that such goals and values do not preclude low-scale intensification and commercialisation through 'traditional markets', as well as off-farm diversification – all of which are aimed at increasing resilience while preserving the farm as a 'niche' of autonomy.

Moldova represents an exemplary case study for several reasons. First, lying far from important trade routes and lacking resources different from its fertile land (*chernozem*), this country has the largest share of rural population in Europe (66.1% according to the 2014 Census (National Bureau of Statistics of the Republic of Moldova [NBS], 2020); 57.3% according to the World Bank (2020)). Second, a 'low key' urbanisation resulted in a 'takeover of the urban by the rural' even in the capital (Livezeanu, 1981: 337), and the small size of the country has allowed first- and second-generation city-dwellers to maintain strong ties with their families and villages of origin. Accordingly, the debate around land distribution played a central role at the end of the 1980s, with nationalists hoping to return to a 'peasant society' and a supposed interwar 'golden age' (Gorton and White, 2003: 316). Fourth, despite the persistence of the 'dual farm structure' inherited from Soviet times, Moldova was judged a quite 'successful' reformer by the World Bank (Wandel et al., 2011; Lerman, 2009; Lerman and Sutton, 2008): land privatisation generated the highest number of family farms per capita of all European and post-Soviet countries (one per every 3.9 residents; our elaboration of data from the FAO (2014) and the NBS (n.d.a)). Finally, being a small CIS country located at the EU border, it has been subject to strong, contrasting political pressures (with limited leverage compared to, e.g., Russia), which have affected agricultural trade and the farming sector heavily. Many national and supranational development organisations – firstly the EU, but also the World Bank (Möllers et al., 2016) or the FAO (2013) – have targeted its rural areas with financial incentives and

policy recommendations (Piras, 2016). In particular, in 2014 the Moldovan government signed an Association Agreement with the EU, which includes a so-called Deep and Comprehensive Free Trade Agreement foreseeing EU assistance in trade-related reforms, especially those aimed at improving food quality and safety (Piras, 2016). The rural development strategy designed by the Moldovan government is part of the broader goal of EU integration, and is centred on the promotion of commercial agriculture and the improvement of the rural transport network (EU, 2014).

Instead of developing their own vision for Moldovan rural areas, national policymakers tend to merely align to the recommendations of international organisations. Focusing on Lithuania – another European post-Soviet country – before and after EU accession, Mincyte (2011) shows that 'semi-subsistence small-scale farming […] has been defined [in the EU-inspired *Rural Development Plans*] as being unsustainable and, thus, without a future' (p.112), resulting in its slow marginalisation and dismissal. In Ukraine, another country that has recently undertaken the Europeanisation path, Kuns (2017) found evidence of successful though circumscribed intensification of small-scale household farming, but the question remains open whether such experiences can survive in the framework of 'a pro-EU policy that entails a greater degree of formalisation of the economy' (p.499). To ensure that smallholder practices, aspirations and potential are not neglected during the Europeanisation process, and to avoid a mere reproduction of the 'Western concepts of ascendant neoliberal policy […] based on ethical consumerism, food commodification, certification and marketisation' (Jehlička et al., 2020: 288-289), there is a need to provide visibility to these practices, aspirations and potential.

2. Historical and geographical background

Moldova lies at the border between the post-Soviet area and the Balkans. Bessarabia (the region west of the Dniester river considered in this article) belonged to the Russian Empire during the Nineteenth century but was part of Romania in the interwar period, and thus experienced collectivisation later and for a shorter period compared to Russia or Ukraine. Nevertheless, Soviet Moldova became a net exporter of agri-food products to the rest of the USSR. Its agricultural sector was dominated by huge *kolkhozy* and *sovkhozy*. The only form of family agriculture was represented by the household plots allocated to rural

and urban workers to fulfil their family needs, which in 1990 accounted for 126,000 ha out of 1,733,000 ha (State Department of Statistics [SDS], 1991). Households were also breeding animals, covering a large share of the national production of meat, milk, eggs, and sheep wool.

The Moldovan national movement considered land redistribution a necessary step to recover the people's 'original' identity, and inspired the 1991 Land Code, which provided for extensive land privatisation. Gorton and White (2003) provide an overview of the political positions *vis-à-vis* land privatisation in that years, ranging from preservation of collective farms (reform communists), to their reorganisation (agrarian nationalists), to radical privatisation (neoliberals). However, the liberal (pro-privatisation) nationalists[2] lost the following elections to the agrarian nationalists, and the dismantling of socialist farms started only in 1998, when the National Land Program was passed by an alliance between the former and market-oriented factions of the latter in the new Parliament. Land privatisation was one of the conditions included in the adjustment package negotiated with the International Monetary Fund. The land was divided into 'small shares' (the plots already farmed by households) and 'big shares' (the land farmed collectively) (Möllers et al., 2016). The 'big shares' were formed by combining different types of land: arable, orchards, and vineyards, depending on the local endowment. Other farm assets (buildings, machines, etc.) were also privatised, representing the so-called 'share of value'. The shares were distributed at municipality level to all workers and former workers of the local Soviet farm, plus landless households.

In 2001, over 500,000 people had received their shares, and over 200,000 had registered their farm, the average size being 1.8 ha (Gorton and White, 2003). While reformers believed that the land market could foster the emergence of mid-sized commercial farms, less than 2% of the land changed owner before 2008, the average transaction being just 0.1 ha (Cimpoies, 2010). The share of agriculture on GDP shrank from 43% in 1991 to 12% in 2015 (World Bank, 2020); agricultural employment peaked 51% in 2001, then started decreasing until reaching 26.5% in 2012, and recovered to 34.2% in 2015 (FAO, 2019).

The 2011 Agricultural Census drew the first picture of the farming sector after the land reform. About 3,500 'holdings with juridical status' and an average area of 369 ha (mostly corporate farms) were using

[2] The strong link between the Moldovan and the 'peasant' identities is shown by the fact that the nationalists contested the first free election in 1994 as the 'Bloc of Peasants and Intellectuals'.

57% of the national farmland. These correspond to 'agricultural enterprises' in the post-Soviet classification, 'capitalist farms' using Ploeg's (2009) typology. In turn, almost 900,000 'holdings without juridical status' and an average area of 1.1 ha had access to the remaining 43% of the land (NBS, n.d.a). These include 'farming households' and 'individual farms'. The NBS (n.d.a) seem to suggest that 'farming households' differ from 'individual farms' because they do not farm a 'big share', since registration as a farm and commercialisation levels are not defining elements. However, our survey did not find this to be a key element of diversification; hence, we identify a relevant partition endogenously.

The share of land used by family farms in Moldova is much larger than in Russia or Ukraine, where corporate farms controlled around 80% of the land at the end of the last decade (Lerman and Sutton, 2008). In 2011, 94% of the almost 900,000 Moldovan family farms were active, but only 3,083 had a size above 10 ha. In the agricultural year 2010, 1.6 million people worked in their family farm (1.3 times the total labour force), compared to 60,000 permanent and 315,000 temporary workers in corporate farms (NBS, n.d.a). These numbers give an idea of the importance of farming for Moldovan households.

Today, despite the large number of smallholders, there are no political groups representing their interests or expressing a vision for this sector. National policymakers are split between the successors of reform communist who, like in Russia (Visser et al., 2015), hold an enduring bias against smallholder farming dating back from Soviet times, and advocate land consolidation to achieve scale economies[3]; and free-market liberals, who devote even less space to agriculture in their programs, advocating modernisation, efficiency and competitiveness, to be achieved by means of liberalisation and investments, in close collaboration with international partners[4]. In line with international advisors (Varga, 2019; Mincyte, 2011), they see no future for smallholder farmers if not as part of cooperatives or as agricultural entrepreneurs.[5]

[3] 'Stimulating in all ways the consolidation of agricultural land and the integration of producers of agricultural goods' (Party of Socialists, https://socialistii.md/despre-partid/programul-psrm/ [accessed 30 October 2020]); 'helping rural dwellers who detain shares of agricultural land to unite and create efficient agricultural cooperatives' (Party of Communists, http://www.pcrm.md/main/index_md.php?action=program [accessed 30 October 2020]).

[4] 'Traditional, non-competitive agriculture […] cannot offer high enough incomes. […] We will support modernisation and industrialisation of agriculture through increased access to agricultural subventions, and through attracting European funds for agriculture' (Action and Solidarity Party, https://unpaspentru.md/wp-content/uploads/2017/05/Program-PAS.pdf [accessed 30 October 2020]).

[5] For example, an officer of the EU Delegation in Chisinau, interviewed in 2015, highlighted that most Moldovan smallholders lack the resources and the skills to comply with the stricter food safety requirements required in the EU market area; therefore, their destiny is either to join into producer groups, or retreat towards pure subsistence and, in the long-term, disappear.

3. Material and methods

The survey discussed in this article was implemented in 2015 across Bessarabia, involving a total of 126 smallholders from 37 villages. Most interviews were taken in the districts of Orhei (60) and Telenesti (25). Although the family farms in these districts are slightly larger than the national average, they do not present extreme values in terms of size, age of the 'farm manager', and mechanisation[6]. These districts are neither too close to Chisinau (so that their agricultural and labour markets are not distorted by the presence of the capital), nor too peripheral; their population does not include sizeable ethnic minorities; and their post-independence history was not disrupted by specific events, or political conflicts with the national government. Therefore, they represent the country well. Nevertheless, to detect other local dynamics, 19 interviews were taken in areas with peculiar conditions: Gagauzia (populated by a Turkish-speaking minority); the northernmost district of Briceni; and the city-district of Chisinau. Overall, 19 interviews were taken in the North, 99 in the Centre, five in the South, and three in Chisinau's city-district. In line with the 2011 Agricultural Census, which did not require the households to be registered as a 'family farm' to be included in the population (NBS, n.d.a), we defined 'family farms' as households using land and possibly growing animals to obtain farm products.[7] No additional defining features (size of production, share commercialised, incidence of farm income, self-identification as farmer, etc.) were introduced, letting differences emerge endogenously.

To improve representativeness, we defined sample strata in terms of farm size and age of the household head[8] and calculated their relative size among family farms in the 2011 Agricultural Census (NBS, n.d.a). Then, potential respondents were identified through snowballing. Participation was voluntary; the interviews were taken by a two-people team either in public locations (libraries, shops), or in the respondent's

[6] The average *available* farm area is 1.08 ha at national level (ranging from 0.45 ha to 1.99 ha depending on the district), 1.29 ha in Telenesti, and 1.36 ha in Orhei. The average *used* farm area is 0.83 ha at national level (0.35-1.38 ha), and 1.06 ha in both Orhei and Telenesti. The average age of the household members working in the farm is 48.8 years at national level (46.1-52.0), 48.4 in Orhei, and 49.4 in Telenesti. The share of family farms owning a tractor is 2.8% at national level (0.9-4.6%), 2.6% in Telenesti, and 2.7% in Orhei (NBS, n.d.b).

[7] Humphrey (2002) argues that 'peasant has become a fully operational category in post-socialist Russia' (and, by extension, in the post-Soviet space), yet 'self-identification with the peasantry is […] fragile and changeable' (p.136), and smallholders tend to define themselves as rural labourer. We did not investigate the issue of 'self-identification', yet when recruiting smallholders, we observed that many tended to refuse the definition of 'manager of a peasant farm' (*conducator gospodariei taranesti*) despite spending most of their working time on-farm and the pace of their life being articulate around farm activities.

[8] The household 'head', both in the 2011 Census and in our survey, is the self-identified manager of the farm, and is usually the husband, or the lone parent in single-parent households.

house, and lasted between 30 and 60 minutes. The questionnaire included closed-ended questions, tables, open questions, and a Likert scale. It was read to an adult member of the household or to the married couple, and the answers were registered on paper. Family features were registered as at the moment of the interview, or referring to the 12 months before; farm activities, referring to the previous agricultural year (November 2013 to October 2014).

The Likert scale aimed at detecting smallholders' goals and values. In turn, these goals and values can be related to the elements constituting the peasant condition: the building and strengthening of a *self-managed resource basis*, primarily the land (Ploeg, 2009); 'de-commodification' of food consumption and 'internalisation' of inputs (Schneider and Niederle, 2010: 391); focus on 'survival' as a time- and space-bound concept, of which self-sufficiency is only one expression; patterning relations with markets that allow for autonomy; co-production, including the recognition of a strong relation between farm activities, the traditional 'way of life of small communities' (Shanin, 1971; 15), and the family's life cycle (Chayanov, 1966); attitudes towards diversification, including off-farm employment; patterns of cooperation such as 'socially-regulated exchanges' (Ploeg, 2009: 34). We also included statements assessing smallholders' willingness to quit agriculture and move to urban areas in search for jobs, to understand to what extent their practices are shaped by negative, 'pushing' factors.

To identify distinct groups of smallholders with homogenous characteristics, we implemented a cluster analysis. Six of the 126 interviews were excluded from this analysis due to the large number of missing quantitative data. First, we created a set of variables describing the farm and its running family. Besides the age of the household head (representing the stage in the family's life cycle; Chayanov, 1966), and the ownership of a tractor (proxy for market orientation), these variables capture characteristics defining the peasant condition, namely: 1) the '*resource basis*' (Ploeg, 2009: 23) – land available, abandoned, leased out, rented, and farmed; owned cows, sheep, goats and pigs (animals representing an 'investment', differently from poultry or rabbits); 2) '*patterning relations with markets*' that 'allow for contraction or expansion when appropriate' (Ibid: 27) – whether more or less than half of the food consumed is homegrown; whether the household engages in farm sales; whether they have asked for farm credit during the year; whether more or less than half of the household monetary income originates from farm sales; and the days of hired farm labour; 3) *diversification* and the presence of off-farm incomes – share of hours

worked off-farm on a theoretical total of 40 hours per week per adult; presence of family members earning a pension; whether at least one family member moved abroad or to a city (and is thus sending remittances). The variables were standardised to avoid those with a large variance from dominating the analysis. We used different clustering algorithms and assessed the goodness of fit of each partition for each algorithm, retaining the number of groups identified as optimal in most settings. Smallholders were assigned to the groups using the Ward's linkage method. We tested the difference in the value of the clustering variables and of the variables measuring smallholders' goals and values across groups using Wilcoxon rank-sum tests, which are well-suited for small samples.

4. Results and discussion

The survey highlighted a close interrelation between the family as a unique and indivisible economic unit (despite role differentiation as shown by Dorondel and Serban, 2014), the farm, and the social environment of the village. This is in line with two key elements defining the peasant condition, i.e. 'the, family farm as the basic unit of a multidimensional social organisation', and 'specific traditional culture related to the way of life of small communities' (Shanin, 1971: 14-15). The median household size was three members, and the median age of the head was 58 years, compared to 53 of the farming households in the Agricultural Census (NBS, n.d.a). Twenty-eight people from 23 households were abroad, and 56 had moved to an urban area (mainly Chisinau). Over half of the household heads were aged 55 to 70; more than 60% had started farming before the collapse of the USSR, and more than 80% before the land reform, thus showing continuity with the activities implemented on the household plots in Soviet time.[9] The median area of land owned was 1.9 ha, but since almost half of the respondents were leasing some, and only 10% were renting, the median farm size was 1.1 ha and the average 2.1 ha, compared to 0.5 ha and 1.1 ha in the Agricultural Census (Ibid). Most of the land leased was represented by the 'big shares',

[9] Although we lack a time series to test this hypothesis, we observed a strong impact of the household life cycle on the size of farm activities, in line with the *labour-consumer balance* principle enunciated by Chayanov (1966). Maximum production was observed in the presence of dependent children, including university students (see e.g. Piras, 2020). The few young respondents had started with a small land area, and the elderly were gradually dismissing their land-based activities. Of course there was another layer of differentiation due to market competition, and the adoption of an 'entrepreneurial' farming approach; however, this did not totally obfuscate the previous dynamics.

thus reinforcing the continuity with Soviet-time farming on household plots. All respondents were growing vegetables for self-consumption, usually in their home garden or in the 'small shares'. 'Small shares' were also used for growing corn to feed farmyard animals, and vineyards. 'Big shares' (when not leased out) were used for commercial crops like cereals and oilseeds. Almost all respondents were growing poultry, around two thirds pigs, and one third cows. Further details on land access, farm inputs, outputs, and their uses are provided in Supplementary material.

'Peasants' and 'entrepreneurs'

The cluster analysis identified two distinct groups of smallholders of very different size. Based on their characteristics, presented in Table 1, we label the first group (105 respondents) 'peasants', and the second (15) 'entrepreneurs'. This is in line with the dynamics highlighted in the literature that only a limited number of smallholders turn into 'individual farmers' (Lerman and Sutton, 2008; Lerman, Serova and Zvyagintsev, 2008; Varga, 2017), and with our hypothesis that most smallholders presents the characteristic of the 'peasant' farms, though, as detailed below, the two groups are more similar than expected in terms of practices and goals. Moreover, 54% of the 'peasants' earn over half of their monetary income off-farm, and can thus be ascribed to 'the powerful category of 'peasant-worker' inherited from socialism' (Dorondel and Serban, 2014: 15). This provides a first confirmation of our hypothesis that off-farm diversification and peasant ways of farming can coexist, and suggests that diversification, achieved via some family members starting waged jobs or small businesses, is not necessarily a step towards exiting agriculture. The differences between the two groups and the rationale behind their names are discussed below.

'Peasants' run smaller farms (their available land is 0.89 ha on average); grow a small number of 'investment' animals (one pig but less than one cow, sheep, and goat), show a low level of mechanisation (only 13% own a tractor); and hire almost no labour (five days in the last twelve months).[10] While 54% of them earn most of their monetary income off-farm, only 11% sell absolutely no farm products, showing that it is not 'commercialisation' itself that differentiates the two groups. Off-farm labour accounts for 43%

[10] These workers were usually hired for specific tasks during peak seasons (e.g., harvesting corn), and were often paid in kind, so we do not see a violation of Chayanov's (1966) assumption that peasants hire no farm labour whatsoever.

of their available working time; hence, farming activities are still a majoritarian component of the daily life of the household members who did not move abroad or to a city. Indeed, one fifth of these households have at least one member abroad, and one third at least one member in town. The average age of the household head is almost 58 years, so two thirds of these smallholders have access to pension income, which can be used on-farm.

On average, 'entrepreneurial' smallholders run farms of 4.8 ha, and grow one cow, three pigs, and nine sheep and goats; they hire 19.7 days of farm labour per year;[11] and two thirds of them own a tractor. Their livelihoods are farm-centred: 80% of them earn over half of their cash income from farm sales, and they use around three quarters of their available time on-farm. In turn, the average age of the household head is 47 years, so only one fifth of them have access to pension income; and only about 13% have a family member living abroad or in town. It is important to highlight that these 'entrepreneurial' farms are still small compared to commercial family farms in Western countries; indeed, we are not dealing with 'capitalist farms', which are not an object of this analysis.

An interesting difference concerns how these two groups achieve their desired land endowment. Indeed, the area of land owned is similar (1.5 and 1.8 ha respectively) but, differently from Southeast European peasants, who do not lease in or out their land (Dorondel and Serban, 2014), Moldovan 'peasants' lease out a larger share,[12] rent almost nothing, and leave more land unused compared to 'entrepreneurs'. Therefore, livelihood diversification does not result in land sales: land redistribution is rather achieved through *rental* markets, in line with two elements defining the peasant condition: 'the construction and *maintenance* of a *self-controlled* resource basis', and relationships with markets that 'allow for *contraction or expansion* when appropriate' (Ploeg, 2009: 25-27). In turn, food self-provisioning is an equally widespread practice, with around two thirds of both groups covering over half of their needs. High prevalence

[11] This does not include the working day of a permanent worker hired by one of them to take care of their pigs.

[12] Leasing (discussed more in depth in Supplementary material) emerged as controversial for some reasons: this was the default option when Soviet farms were dismantled; contracts are prolonged by default after their expiry; and subletting seems common. Anecdotal evidence collected during the survey suggest that 'big shares' are leased to the successor of the local Soviet farm (generally a farm 'with juridical status'), or to local 'entrepreneurial' smallholders who want to increase their size; but especially the former may sublet the land to large, modern 'corporate farms' whose manager is not locally based. Not all respondents knew who was actually using their land, but they were not concerned as long as they were receiving their small rent in kind.

of food self-provisioning is common in Eastern European countries compared to their Western counterparts, and characterises not only the countryside (Smith and Jehlička, 2013; Visser et al., 2015; Jehlička et al., 2020) but also urban areas (Jehlička et al., 2019).

'Peasants' and 'entrepreneurs' reside in the same villages, and instead of competing, they were interacting peacefully, e.g. through labour exchange and, possibly, land leases. Although most 'big shares' were leased by smallholders to the successors of the local Soviet farms, some had withdrawn these plots and leased, or even sold them to emerging local 'entrepreneurs'.[13] Such dynamics were facilitated by the non-conflictual relationship between the two groups. This situation seemed to change when an entrepreneur became 'too' successful: a village's respondents spoke of a vegetable farmer who had grown a lot recently as someone with opaque connections, and from whom they wanted to stay apart.[14]

Despite the large prevalence of 'peasants', their older age, and the large number of household members who left the village, suggest that their number will shrink in the following decades, as shown by the analysis of farm succession in Piras and Botnarenco (2018).

Table 1. Average value assumed in the two groups of smallholders by the variables used in the cluster analysis.

Family and farm characteristics	Peasants	Entrepreneurs	Wilcoxon
Group size (% of respondents)	87.50	12.50	-
Average age of the household head (years)	**57.93**	**46.27**	**0.001**
At least one household member abroad (% of households)	20.00	13.33	0.541
At least one household member in town (% of households)	33.33	13.33	0.118
Proportion of family labour used off-farm (% of households)	43.49	25.81	0.101
At least one pension-earner (% of households)	**65.71**	**20.00**	**0.001**
More than half of income from farm sales (% of households)	**30.48**	**80.00**	**0.000**
More than half of income earned off-farm (% of households)	54.29	20.00	0.013
More than half of the food self-produced (% of households)	63.81	66.67	0.830
More than half of the food purchased (% of households)	17.14	6.67	0.301
Average number of cows owned	**0.35**	**0.80**	**0.055**
Average number of sheep and goats owned	**0.39**	**9.07**	**0.000**
Average number of pigs owned	**1.06**	**3.40**	**0.001**
No farm sales at all (% of households)	11.43	0.00	0.169
Average number of hired labour days in the last 12 months	**4.98**	**19.66**	**0.000**
Tractor ownership (% of households)	**13.33**	**66.67**	**0.000**
Requested a loan in the last 12 months (% of households)	10.48	20.00	0.285

[13] Assessing the relationship between smallholders and large farms (both the successors of *sovkhozy* and *kolkhozy*, and the new corporate farms emerging from international investments) is out of the scope of this article. However, in some villages respondents showed acrimony towards the former director of the local *kolkhoz* or *sovkhoz* (called '*lider*'), who had become a 'capitalist farmer', was renting their 'shares', and in at least two cases was also the village's mayor. A respondent admitted openly that he was gathering the corn for his chickens from the *lider*'s fields because 'it is OK to steal from those who have built their fortune by stealing from the people'. In turn, in a village where there was no large farm, people mentioned that its presence would have improved their economic conditions, and that such a farm would have kept the land abandoned by elderly and emigrated people 'in good order'. Concerning international investments in land, we detected some tension (acrimonious comments against foreign land acquisitions) when moving away from the capital, towards the fertile North, suggesting that institutional control, population density, and land quality both play a role in driving land control.

[14] 'Independent private farms [require] large capital loans and equipment to get established, and hence [are] restricted to those with powerful connections' (Humphrey, 2002: 146).

Available land (ares)	**88.25**	**480.32**	**0.000**
Abandoned land (ares)	0.81	0.23	0.258
Owned land (ares)	149.55	178.98	0.546
Leased land (ares)	**9.28**	**0.00**	**0.001**
Rented-in land (ares)	**0.07**	**51.54**	**0.000**
Used land (ares)	**79.34**	**480.15**	**0.000**

Livelihood strategies

Smallholders' livelihood strategies may result in alternative evolutionary paths for their farm: disappearance, transformation into a business, or continuation without changing their production practices (Davidova et al., 2013). Ploeg (2009) argues that the resource basis 'might be *strengthened through engagement in other non-agrarian activities*', and that the concept of 'survival' should not be equated to that of '*subsistence*' or '*food self-provisioning*', as 'peasants' constantly adapt to particular conjunctures. Therefore, we expect to observe *evolving* and *dynamic* livelihood strategies, located in a 'bidirectional' continuum from 'peasantness' to 'entrepreneurship'. This Subsection illustrates the trends observed during the survey, with a focus on smallholders' commercialisation; off-farm diversification; and the strategies adopted to preserve the autonomy of their farms.

Smallholders and commercialisation

As observed earlier, turning the farm into a viable, market-oriented business is generally equated to 'commercialisation' in the form promoted by mainstream policies, which implies accepting the 'moral order' of the market (Schneider and Niederle, 2010: 386). This type of 'formal' commercialisations was most common among growers of export crops like cereals (corn, wheat, barley) and oilseeds (sunflowers, rape). Apart from a respondent who was renting and farming 36 ha and represented a clear outlier, most of the respondents pursuing such strategy were farming 6-10 ha. Due to the presence of external demand, also 'capitalist farms' grow these low value-added crops (Moroz et al., 2015); therefore, 'entrepreneurs' must compete with them, as also shown by Mamonova (2015) for Ukraine. However, producing cereals and oilseeds on small surfaces was not competitive: first, few private firms held the concession for exporting such crops, and could thus act as price-makers; second, yields were low due to the lack of irrigation facilities and recurring draughts, and production costs high due to the need to hire contractors. The fruit

sector (apples, cherries, plums), in which Moldova had a competitive advantage in the CIS, is even more prohibitive for smallholders due to the sizeable amount of labour required.[15]

The unreliability of external markets increased the risks for smallholders of engaging in commercial agriculture. On the one hand, most Moldovan agri-food products cannot access the EU market; on the other hand, Russia – their main historical destination (NBS, 2020) – repeatedly resorted to bans. The first ban hit Moldovan wines in 2006-2011; new bans have affected wines, fruits, and meat since 2013-2014. A young 'entrepreneurial' respondent who had started a pig farm using remittances had accumulated losses due to the drop of prices caused by the Russian ban on pork.

Instead of competing with 'capitalist farms', most of the respondents engaged in commercialisation were taking a 'free market niche' (Mamonova, 2015: 621). Some of these niches (like milk and dairy) had been covered by households already in Soviet time (SDS, 1991); others (potatoes, berries, walnuts, and honey) emerged more recently. Due to the lack of irrigation, large-scale cultivations of potatoes and berries were detected only in two peculiar locations: a respondent was growing 2 ha of black currants in his plot bordering the Raut River; three others had started growing potatoes after their village had been involved in an international project to develop horticulture.[16] This confirm Kuns' (2017) conclusions about 'the role of micro-environments and other specific territorial aspects in the creation of conditions suitable for sustainable and intensive smallholder agriculture', and that 'such [type of] production is the exception' (p.498).

Walnut kernel was very profitable in the year of the interview because it can be freely exported to the EU. Therefore, two respondents had purchased respectively 8.4 ha and 22 ha of land to plant walnut orchards; another had used his 'big share'; and three others were planning to purchase some land for this purpose. Honey was easily marketable, with beekeepers regularly selling it in open-air markets. Using remittances,

[15] Some respondents pointed out that it was difficult to find farm workers due to the emigration of the youth; and that only 'lazy' people were willing to work in someone else's farm for a wage.

[16] These activities, which require farm growth and can grant relevant profits, were implemented by 'entrepreneurial' smallholders. Most respondents had stopped growing potatoes because they were reducing the fertility of the soil, and because of the presence of the Colorado potato beetle that required considerable expenditure in pesticides. However, many respondents mentioned that 'in the North' farmers were 'making much money' with potatoes, as also found by Kuns (2017) in Southern Ukraine. Noteworthy, seven out of 15 'entrepreneurs' were growing and selling potatoes (from 1.2 ha to 3 ha).

a household had recovered six greenhouses dating back to Soviet times (0.5 ha), and was producing vegetables for sale.[17] However, the lack of storehouses and refrigerators was a weakness for small vegetable producers. Finally, the milk and dairy 'niche' emerged as particularly promising: cow breeding was usually performed by women in late adulthood, and over 80% of the producers of cheese and sour cream were selling these products. With the exception of an 'entrepreneurial' cow breeder, all the commercialisation activities just listed were implemented by 'peasant' farmers in 'traditional markets', relying on consolidated personal relationships of trust with customers;[18] and their discourse focused more on enjoying the concrete production process than on profit-making.[19]

These commercialisation activities were often part of more diversified livelihood strategies where off-farm incomes were used on-farm to intensify production, as shown in the next Subsection.

Smallholders and off-farm diversification

Rather than engaging in full-time farming, most respondents, especially 'peasants', were resorting to off-farm employment. In the previous 12 months, 51% had earned more money off-farm than through farm sales, and 13% had earned around the same sum.[20] Hence, Shanin's (1971) condition of 'land husbandry as the mean means of livelihood' (p.15) is violated. Household livelihoods were highly diversified: only 3% of the respondents relied exclusively on farm income, 40% had an additional type of income (between wages, remittances, and welfare transfers), 44% two, and 13% three.[21] Elderly and disabled people were receiving pensions, while young family members were looking for job opportunities locally, in town, or abroad. Hence, many households belonged to the category of 'peasant-workers' observed both in other post-Soviet countries (Mamonova, 2015) and in Southeast Europe, where usually one partner works on-farm and the other has an off-farm job and works part-time on-farm (Dorondel and Serban, 2014). Compared to full-time entrepreneurial farming, this diversification strategy helps attain a stability *vis-à-vis* the

[17] This smallholder accused the abovementioned local vegetable farmer *with opaque connections* of having destroyed his greenhouses one night to eliminate competition.
[18] Experienced milk producers were implementing regular veterinary controls and quality checks, and had a stall in the open-air market in town, showing that small-scale, traditional commercialisation does not necessarily imply poor food safety.
[19] 'The peasant loves his work, the [entrepreneur] his income' (Koznova, 1997, cited by Humphrey, 2002: 147).
[20] The households earning more money from farm sales were 30% among 'peasants', and 80% among 'entrepreneurs'.
[21] Four fifths of the 'entrepreneurs' relied only on farming or on a single additional type of income, while none of the 'peasants' relied exclusively on farming, and 38% on a single additional type of income.

contingencies of farming, or possible failure to access output markets (Schneider and Niederle, 2010). Dorondel and Serban (2014) argue that 'peasant-workers' may invest part of their wages on-farm, but their investments are minimal as agricultural production is aimed at self-consumption, and they do not rent land in or out. Thanks to the diversification of family employment, in our sample off-farm employment was not necessarily associated to a smaller scale, or a downscaling of farm activities: the resulting income was used by some 'peasants' respondents to cover current farm costs (e.g., mechanisation works, seeds), and their production commercialised in 'traditional markets'. This dynamic was even stronger in the presence of remittances, as detailed below.

The group of 'peasant-workers' was large: 75% of the respondent households included at least one employed or self-employed member, for a total of 161 people working off-farm (compared to 296 who had worked on-farm).[22] Almost 80% of the household members working off-farm were employed either in the village or in a close-by town. Women had more stable jobs in the service sector (e.g., teacher, seller, accountant, etc.), while many men had seasonal jobs and were working several hours a week for about six months a year.[23] Thirty-tree men's jobs were in the agri-food sector, including 22 tractor drivers, two shepherds, and six jobs in local food processing firms (wineries, bakeries, fruit canning). Most tractor driver jobs were provided by local 'capitalist farms', a phenomenon that Mamonova (2015) calls 'subordinate inclusion', and that recalls the 'symbiosis' already existing in Soviet Union between households and the local *sovkhoz* or *kolkhoz* (Visser, 2008).[24] These jobs could be considered a form of 'assistance' received from large 'capitalist farm'.[25] However, in most cases their seasonal nature required smallholders to look for other jobs during the year, while the growing mechanisation and the drop in agricultural prices caused by the Russian bans had reduced the number of jobs available – from 125 to 47 per corporate farm in 2004-2012 (Moroz et al., 2015).

[22] The average number of off-farm employees was 1.4 per household among 'peasants', and 0.9 among 'entrepreneurs'.
[23] Humphrey (2002: 152) argues that 'young people in employment hive off, leaving the old generation to subsists on its own account'. While situations of young family members not interested in farming were detected, we found that family ties, as well migrants' links to the village, were generally strong. The preservation of the ties between city-based migrants' and their village-based families is favoured by the small size of the country, differently from the Russian case analysed by Humphrey (2002).
[24] While Shanin (1971: 15) speaks of 'domination by outsiders' characterising the peasants condition, the '*lider*' who manages the former Soviet farm is an insider in the village.
[25] Kuns (2017: 485) points out that 'many collective farms were held together as a pragmatic social welfare measure', and that they provide rural households inputs, as well as assistance in marketing their produce. We did not systematically detect evidence of such type of assistance, and did not verify if the contractors providing mechanisation works were, indeed, corporate farmers and their workers, or these works were paid 'at cost recovery rates' (Kuns, 2017: 494). However, smallholders were receiving the in-kind rent for their plots from large farms which in many cases were the successors of the Soviet ones.

Welfare transfers and international remittances played a role similar to wages and profit from self-employment in strengthening smallholders' autonomy. Due to their old age, almost 60% of the respondent households were receiving at least one pension – all below €100, the average being around €40. By comparison, in the first semester of 2015 the 'minimum living subsistence' for a lonely pensioner in rural areas was €69.60 (NBS, 2020). In turn, 30% of the households had received remittances in previous the 12 months, although not regularly. In 2015, remittances accounted for 20% of GDP – the seventh highest share in the world (World Bank, 2020). Two thirds of these recipients[26] had used them to cover farm costs and, in some cases, to purchase land (e.g., 'big shares' of fellow villagers to plant walnut trees), or farm tools (e.g. rototillers, small greenhouses, drip irrigation systems). Thus, remittances allowed smallholders to make small investments without accessing farm credit, as discussed in Piras et al. (2018).

Besides off-farm employment, a second, less frequent but noteworthy type of diversification was represented by *pluri-activity*. A respondent was preparing to open an agritourism; a second one had gathered traditional objects to open an ethnographic museum; a third one had created a small lake in his plot, and was offering the possibility of fishing for a fee; and an 'entrepreneurial' cow farmer was operating a village-based milk collection point on behalf of a processing firm. Finally, since contractor works were well-paid, three households were obtaining most of their monetary income from the provision of mechanisation services to fellow smallholders.[27]

Smallholders and the building of autonomy

While entertaining patterning relations with output markets and diversifying their livelihoods off-farm, smallholders were implementing a set of other practices that resulted in disengagement of farm activities from markets. Some practices were detected through *ad hoc* questions; others emerged from smallholders' comments, or during a following visit to their plots. These are an expression of smallholders', primarily

[26] Nineteen out of 32 'peasants' and all the three 'entrepreneurs' who had received remittances.

[27] In these cases, mechanisation works are provided by 'entrepreneurial' farmers which, as noted by Kuns (2017), are replacing Soviet farm successors in some villages. Since this dynamic was detected in villages where Soviet farm successors were still operating, we can argue that (1) the latter do not provide services at cost recovery rates; or (2) 'entrepreneurial' farmers provide mechanisation works at cost recovery rates too; or (3) some smallholders are trying to escape the 'symbiosis' relations.

peasants', *way of farming*: 'ingenious adaptations' (Ellis, 1993) to '*a context characterised by dependency relations* [from 'capitalist farms' if they sell them their labour, lease them their land, or require their low-cost mechanisation services], *marginalisation* [from mainstream development], *and deprivation* [in terms of access to technology or consumption goods]' that allow them to create a '*self-controlled resource basis*' and build *autonomy* (Ploeg, 2009: 23).

First, respondents were using their 'idle time' (Schneider and Niederle, 2010) intensively. Being generally poor in money and rich in labour, they were hiring contractors only if unavoidable (usually to plough their 'big share') and resorting to labour-intensive practices otherwise. For example, only 10% had harvested their corn by combine. Second, they were managing their scarce land intensively, yet sustainably. Intensive production, typical of smallholder farming, indicates an increased 'utilisation or productivity of the land' achieved by using 'more labour or other inputs' or by increasing 'the number of cultivations per unit of territory' (Kuns, 2017: 484).

While environmental issues where not a focus of the survey, the theme of healthiness of one's own food emerged clearly, and was usually linked by respondents to their limited or no use of chemical fertilisers and pesticides. Furthermore, over one third of them were doing multiple cropping in their 'small shares', by growing vegetables or watermelons within corn-fields or vineyards; those farming their 'big shares' were performing crop rotation by alternating corn (generally used to feed farmyard animals) with alfalfa or legumes; and most of them had stopped growing potatoes after realising that these were depleting the soil. Such practices were not motivated by awareness of environmental issues, which was instead limited, but rather by cost concerns, or day-by-day experience. Their behaviour was thus 'sustainable by outcome rather than intention' (Jehlička et al., 2020: 294).

Thanks to the presence of wells and closeness to the house, which facilitated supervision, home gardens were used for growing high-value crops, primarily vegetables; small, handmade greenhouses, sometimes associated with drip irrigation systems, were built to intensify production, and obtain limited marketable surpluses. Noteworthy, such equipment was home-made and home-repaired, primarily by 'peasants'.

Another important strategy to reduce reliance on markets was to resort to mutual aid mechanisms. Almost all respondents (91%) had either received or provided free labour to fellow smallholders. Over half of them had been assisted by village-based relatives, 27% by relatives from other localities, 25% by local

friends, 4% by friends from other villages, and 37% by 'neighbours'. For some respondents, working with others was not aimed at 'being faster or more efficient' but 'at spending a good time together', thus supporting Chayanov's (1966) point that the concept of 'wage', including the imputation of a value to unpaid labour, is meaningless in this context, and Smith and Jehlička's (2013) observation that food production is associated with 'feelings of exuberance, joy, […] rather than with constraints, necessity or a sense of obligation' (p.155). Labour exchange was particularly used for grape harvesting but also for the weeding and harvesting of cornfields.[28] Moreover, if no cowmen and shepherds were available in a village, owners were supervising their village's animals in turn. Apart from helping labour-scarce households overcome seasonal shortages, reciprocal transactions represented a sort of insurance for vulnerable people, primarily the elderly, who were not expected to return the aid received. Thus, co-operation and reciprocity operated beyond household and kin networks, with the 'village' as a fundamental unit; however, many respondents warned that this system was breaking down due to massive outmigration.

A fourth, widespread strategy was 'the internalisation of productive resources through farming with low-cost external inputs' (Schneider and Niederle, 2010: 380), or self-produced inputs. We have already mentioned tools like greenhouses, and drip irrigation systems. A similar discourse applies to farm equipment like tractors, which were maintained and home-repaired even if they dated back from Soviet times and spare parts were not available, thus reducing dependence from external expertise.[29] 'Peasant' smallholders were very proud of showing the results of their maintenance skills, in contrast to 'entrepreneurs', who presented the purchase of 'Western tractors' as a big achievement, and lamented inefficiency and lack of spare parts for Soviet or 'Belarusian' tractors.[30] The use of modern technology, especially required when the farming strategy implies growth, is a key sign of a switch towards 'entrepreneurial' farming, because it implies high upfront costs and thus an expectation of increased returns, as well as dependence from international markets for spare parts, and from technical non-family expertise.

Concerning input internalisation, most respondents were growing their seeds and bulbs (except chives and tomato seedlings), and raising their own poultry; they were feeding their animals with self-produced

[28] The share of smallholders who helped or were helped by other households did not differ significantly between 'peasants' and 'entrepreneurs'; nevertheless, 'peasants' tended to receive help for a larger set of tasks.
[29] Chayanov (1966) includes craft and trades among indivisible family production activities.
[30] This attitude was similar for 'entrepreneurs' and the manager of a corporate farm of 2,500 ha interviewed in the same period.

crops (usually corn), or with grass gathered in fallow lands; and around one fifth of them were producing their own cow or, more rarely, chicken manure. Some smallholders were exchanging food with labour, e.g. by paying hired workers (or supplementing their daily salary) with wine. As argued by Varga (2018; 2019), money is a resource earned outside the household and not under its control; therefore, reducing monetary needs is key to maintain autonomy.

Internalisation of resources is associated to 'de-commodification of food consumption', i.e. using the land to *directly* provide for (the majority of) the household's needs (Shanin, 1971). This was the most widespread 'economising strategy': in the previous 12 months, 64% of the respondents had covered over half of their needs, and 20% about half.[31] The basis of subsistence was represented by vegetables, beans, poultry meat, eggs and, more rarely, pork. Beans, onions, garlic, carrots, and other root vegetables were sufficient for the entire year for most respondents, while there was a deficit of tomatoes and cucumbers (for storage issues), and potatoes (due to parasites). Those growing wheat and sunflowers were covering their needs of flour and oil, respectively. The risks associated with plant or animal disease, and adverse weather (e.g., draughts) was reduced through output diversification: rather than pursuing specialisation, over 100 respondents were growing corn and vegetables and fruits of different types, and breeding chickens. To this basis, over 50 added grape, legumes, and the breeding of ducks, rabbits, or pigs.[32] The purchase of tomato seedlings, chives and potatoes is not in contradiction with the pursuit of 'survival', but is rather aimed at reducing risk or dependency from costly pesticides, thus showing peasants' capacity to adapt to specific conjunctures.

A common strategy of the smallholders engaged in commercialisation, and primarily of 'peasants', was to rely on the 'traditional market system', characterised by fragmentation rather than concentration, and importance of personal ties (Varga, 2017). Home sales were preferred for regular surpluses (e.g., eggs), or processed products (e.g., wine or sheep cheese): 53% of the respondents were receiving buyers at home, 28% were looking for buyers in their homes.[33] These 'casual' sales allowed smallholders to earn

[31] The share of smallholders covering over half of their needs did not differ significantly between the two groups.
[32] Based on the surfaces farmed and on the number of living animals declared, respondents were growing on average 5.9 different crops, and 3.7 different types of animals. Interestingly, these figures are higher for 'entrepreneurs'; this result can be due to 'peasants' failing more often to declare their actual surfaces and animal numbers.
[33] These figures and the number of sale strategies used are not significantly different between the two groups.

cash with limited drudgery if production was exceeding family needs. For example, 42 respondents had taken some walnut kernel to town-based collection points; 47 had sold a few eggs; and nine some kilograms of fruits (apples, cherries). Home-made wine was often marketed, and its price was very similar across villages (about €0.50 a litre). The sale of piglets, lambs, kids, calves and foals, whose meat exceeded family needs, was not implemented on a large scale, but could generate a good monetary revenue. In economic terms, many of the above strategies are the expression of a 'satisficing behaviour' (Simon, 1957). According to this principle, also discussed in Sutherland (2010), instead of focusing exclusively on maximising their monetary profits, smallholders seek a solution that satisfies their objectives given environmental and economic uncertainty and diverse aspirations of different household members, which can result in reducing one's labour input once a certain threshold is met. Rather than a mere manifestation of 'drudgery aversion' (Ellis, 1993), satisficing is a rational behaviour to cope with risk by making better use of family resources, primarily labour, and does not preclude commercialisation or on-farm investments. Ploeg (2009: 27) speaks of 'external relations [with markets or political authorities] that allow for contraction or expansion at moments deemed appropriate', and thus for a working pace in line with one's own desires and needs. A key manifestation of this attitude is the preference for minimising costs, and thus monetary needs (Varga, 2018). For example, to save on feed, most smallholders were killing their fowls before winter, when egg production decreases, and storing their meat in jars. Others were leaving part of their land provisionally fallow if their needs could be met farming less land, like an old 'peasant' who was benefiting from high selling prices in nearby Chisinau.[34] Finally, casual sellers were arranging informal selling spaces near open-air markets to avoid paying market fees.

In the following, we show how such practices are reflected in smallholders' discourses around their goals and values. Here, it is worth mentioning that many of these practices were possible thanks to the *public goods* (knowledge, social networks, infrastructures) produced in Soviet times. For example, 11 smallholders had worked as agronomists in a *kolkhoz* or *sovkhoz*, and were using their expertise in crossbreeding or grafting to improve plant quality and obtain marketable surpluses (e.g., berries). Others were benefiting from the enduring reputation of the products grown in the local *kolkhoz* or *sovkhoz* to sell them

[34] This is the case of smallholders who could not lease their plots because of their small size or location.

in town (e.g., 'the cherries from Truseni'). Another example are the walnut trees planted along field margins, which were generating income opportunities for many.

Smallholders' goals and values

Humphrey (2002) understands practices as 'modes of action and thinking' (p.153). To complement the previous discussion, this Subsection presents smallholder goals and values based on the statements of the Likert scale grouped into broad themes. Smallholders' responses, and the difference between 'peasants' and 'entrepreneurs', are presented in Table 2.

The first theme is the attitude towards self-provisioning. Home production of food and wine emerged as a cornerstone of smallholders' identity: respondents considered that capable housemasters should produce them even if they own enough resources to purchase them. The ability to provide home-made food and wine to one's family and guests was a reason for self-reward and social appraisal. The food purchased from fellow smallholders was considered safe and tasty, while 80% of the respondents declared to distrust supermarket food. This echoes Ploeg's (2009: 28) remark about the 'institutionalised distrust' for complex organisations whose production process is not visible, as opposed to 'trust as far as the local, social and material resources embedded [in labour processes] are concerned'. This distrust was less prevalent among 'entrepreneurs', showing a more instrumental attitude towards food, and more familiarity with depersonalised production processes. Accordingly, 'peasants' were more suspicious of purchased food, and assigned greater importance to self-provisioning.

A second theme is the ownership of land, i.e. the main element of the *self-controlled resource basis*. In principle, there was widespread disapproval for both land sales (75%), and abandonment (67%), which may be related to the need to preserve it in good conditions but also to a productivist attitude dating back to the work in the *kolkhozy* or *sovkhozy*. However, when elderly smallholders are concerned, respondents argued that land abandonment is mostly due to the lack of manpower. Some would sanction the owners (farming one's own land is a legal requirement, although not enforced), but most respondents considered giving their plots in use to active farmers a better solution to keep them 'in good order' (an expression of the 'symbiosis', as most tenants were local corporate farmers). In turn, the recipients who had sold their

shares for a paltry sum, and where working in someone else's farm for money (allegedly, 'drunkards') had a very low social status, as also pointed out by Humphrey (2002) for Russia. Leasing was largely preferred to selling: 59% of the respondents were against selling even their 'surplus' land (generally corresponding to their 'big shares'). Such attitude towards land ownership and sales confirms the 'almost spiritual relations to land, forest and food' of large sections of the Eastern European population (Jehlička et al., 2020: 289). Humphrey (2002) speaks of 'possessive ownership [as] distinct from, or even opposite to 'private property' in the Western legal sense (property that can be negotiated, alienated and used to market profit)', and highlights that 'possessive ownership was never market-oriented' (p.139). Burawoy (2001) argues that this de-commodification of land, observed as part of Russia's 'socio-political involution', prevents 'the environment [from being] destroyed, and agriculture [from] becom[ing] precarious' (p.280). Noteworthy, 'peasants' and 'entrepreneurs' showed similar opinions on these issues.

Understandably, the attitude toward commercialisation and profit-making differed significantly between the two groups. The opinions on whether farming could represent 'a good business' were mixed: 59% of the respondents aimed at producing casual marketable surpluses, but if confronted with the opportunity of '*resting*' (i.e., spending time with family and friends), 48% would choose this option. Almost all 'entrepreneurs' strongly agreed that they want to maximise their output; 'peasants' preferred to '*rest*' rather than producing beyond family needs. While this may be due to 'drudgery aversion' (Ellis, 1993), it also shows that external relations (implied in the production of a marketable surplus) are 'expanded or contracted at moment deemed appropriate' (Ploeg, 2009: 27), through a more or less intense use of labour. Such responses suggest that peasants' livelihood diversification is driven by the adoption of 'satisficing behaviour' to cope with risk (Simon, 1957), opposed to profit maximisation by 'entrepreneurs' and in line with Shanin's (1971) observation that among peasants 'profit maximisation in money terms seldom appears' (p.15). For a large majority of 'peasants', farm activities should not be driven by external market forces. This was also reflected in their attitude to off-farm employment, with most of them looking for seasonal rather than permanent jobs, and quitting them once they felt that their monetary needs were met, to 'seek refuge' in their farm and the village.

Another theme is generational continuity. 'Farming' was seen as a lifestyle handed down from one generation to the next, in line with the 'traditional and conformist attitude' of peasants that results in 'justification of individual action in terms of past experience' (Shanin, 1971: 15). Therefore, respondents hoped that their children would keep cultivating their land even if finding a 'good' off-farm job. However, 54% of them stated that the latter had a negative attitude towards agriculture. This confirms Humphrey's (2002) points that urban off-farm employment is seen as a way to escape rural poverty since Soviet times, and that increasing differentiation is taking place *within* households. In turn, a large majority of respondents (78%) declared to *like* farming, and many considered it good for their health, though exhausting. While this discourses may have emerged *ex post* to deny a state of necessity, the exceptions confirm its sincerity. These exceptions were generally represented by former white collar workers; however, self-identification as 'peasant' was rare overall, and one's identity was often attached to off-farm work, as shown also by Humphrey (2002) for Russia. The answers of 'peasants' and 'entrepreneurs' on these issues did not differ significantly.

Engaging in agriculture is strictly related to residing in rural areas, where cooperation and mutual arrangements elevate the striving of individual households towards autonomy at a 'higher level' (Ploeg, 2010), represented by the 'village' (often smaller than the municipality and thus lacking formal institutions). One of the four facets characterising peasant societies according to Shanin (1971) is their 'specific traditional culture related to the way of life of small communities' (p.15). Life in the village was considered healthier and safer than in the capital (which exemplifies, instead, *urban lifestyles*): 79% of the respondents would not move to town even if finding a 'good' job there. However, 53% of them would consider commuting. Generally, younger respondents were more inclined to either commute or move to cities. This is another topic that divided 'peasants' and 'entrepreneurs', with the former more inclined to look for off-farm jobs in town and commute but also more sceptical of *urban lifestyles*. Answers reveal an instrumental attitude towards off-farm work, which did not extends to farm activities. Farming was considered a key element of Moldovan culture and identity, echoing the discourse of the national movement at the end of the 1980s, and was expected to continue to play this role in the future.

Table 2. Smallholders' objectives and values: overall distribution and average answer by group.

Statements	Totally disagree (%)	Partially disagree (%)	Partially agree (%)	Totally agree (%)	Peasants[1]	Entrepre-neurs[1]	Wilcoxon test (-value)
A good housekeeper must produce most of the food for his/her family.	5.6	7.1	15.1	72.2	3.58	3.40	0.261
If one does not produce her/his own wine, s/he is not a good housekeeper.	16.7	10.3	13.5	59.5	3.36	2.07	0.000
It is better to buy food than to produce it.	67.6	16.4	9.6	6.4	1.52	1.67	0.500
Farmers' products are always better than purchased ones.	0.8	1.6	13.6	84.0	**3.83**	**3.60**	**0.014**
Supermarket food is safer thank farmers' food thanks to safety controls.	61.9	18.3	10.3	9.5	**1.56**	**2.13**	**0.054**
I would sell the land that I do not farm if offered a good sum.	47.6	11.5	10.7	30.2	2.22	1.93	0.427
People who abandon their land should be fined or dispos-sessed.	15.9	16.7	22.2	45.2	2.97	3.13	0.429
Land should never be sold.	10.3	15.1	8.7	65.9	3.34	3.33	0.811
I farm because it allows me to earn a good profit.	27.8	23.0	24.6	24.6	2.41	2.53	0.712
I try to produce above my family needs to sell the surplus.	28.6	12.3	14.7	44.4	**2.71**	**3.73**	**0.002**
I produce only the necessary for my family, then I prefer to rest.	23.2	29.2	22.8	24.8	**2.58**	**1.53**	**0.001**
Farming is a good business for my family.	26.4	26.8	20.4	26.4	2.41	2.80	0.233
I farm because my ancestors were farmers.	7.3	6.5	16.9	69.4	3.52	3.27	0.327
My children are happy to help me in performing farm tasks.	28.8	25.6	19.2	26.4	2.45	2.4	0.852
I hope my child will not work in farming but will find a job in another sector.	4.8	22.2	20.6	52.4	3.19	3.2	0.948
I do not like at all working in agriculture.	68.0	10.4	12.8	8.8	1.64	1.64	0.886
Farming activities make people healthier.	12.7	21.4	13.5	52.4	3.01	3.33	0.208
Farming is an exhausting activity.	8.7	9.5	21.4	60.3	3.34	3.33	0.488
If there were better transports, I would look for a job in town and commute.	34.0	12.6	13.6	39.8	**2.71**	**1.87**	**0.022**
I move in town if I find a well-paid job there [save pensioners].	75.2	4.1	12.4	8.3	1.57	1.47	0.889
Life quality is better in Chisinau than in my village.	46.8	19.8	13.5	19.8	**1.98**	**2.53**	**0.078**
One of the main reasons why I farm is that I have no options.	17.5	7.9	21.4	53.2	3.12	3.13	0.572
If I had a big off-farm income, I would stop full-time farming.	34.1	19.0	11.1	35.7	2.44	2.60	0.650
Even if I had a big off-farm income, I would continue to farm in my free time.	8.0	4.8	15.2	72.0	3.55	3.40	0.536
Agriculture is the basis of Moldovan tradition.	6.4	12.0	17.6	64.0	3.38	3.67	0.195
The future of the country is in agriculture.	9.5	16.7	30.2	43.7	3.13	2.73	0.127
Agri-food products are the only thing Moldova can be proud of.	3.2	9.5	22.2	65.1	3.45	3.67	0.234
The government should create jobs in the industrial sector.	8.8	20.4	35.6	35.2	3.00	2.73	0.370
I farm mainly to provide food to my urban-based relatives.	20.8	8.0	20.0	51.2	2.99	2.87	0.596
I make food mainly because my urban-based relatives cannot survive without.	42.4	20.8	13.6	23.2	2.13	2.4	0.411
Without homemade food, my family could not survive.	15.4	7.3	13.8	63.4	3.28	3.07	0.261

Notes: [1] To compute averages and test differences, the answers are coded from 1 ('totally disagree') to 4 ('totally agree').

The above reflections are confirmed by smallholders' answers concerning their willingness to quit agriculture: 87% would keep farming even if earning a 'good' income off-farm. Many (54% of the 'peasants' and one fifth of the 'entrepreneurs') were already earning more cash income off-farm.

Finally, we assessed the role of 'pushing' factors, i.e. of necessity. Over three quarters of the respondents agreed that, without their farm, they would lack enough resources to survive. Almost the same proportion were also moved by the desire of providing home-made food to their urban-based relatives, confirming the importance of food sharing and of the networks built around this practice (Piras, 2020). However, for

63% of the respondents, recipients could survive also without these provisions. Thus, less and less smallholders will engage in farming out of necessity, pointing towards the role of non-economic factors.

Additional themes not included in the Likert scale emerged during the interviews. First, many respondents showed a 'fatalistic' attitude (typical of the post-Soviet rural population according to O'Brien and Wegren (2002), cited by Mamonova (2016)), but still preferred their success in farming to depend on the fate, i.e. primarily the weather, than on others: while employed and self-employed people are subordinated to an employer, to markets, or to both, non-entrepreneurial smallholders can choose their level of 'drudgery', and enjoy the product of their labour. Second, respondents were very risk averse when dealing with credit: a large majority would not accept farm loans unless non-repayable, and were thus unwilling to expand their farm activities if this meant putting their land at risk by using it as a collateral. However, some were borrowing money for current farm expenditures like mechanisation works or seeds, and much more were using remittances to intensify farm production without relying on corporate farms for input supply, similarly to what found by Kuns (2017) in Ukraine.[35] Third, the sometimes contradictory answers to related statements (disapproval for land sales but openness to selling one's own land; preference for both purchased and home-made food) unveil a gap between deep-rooted values and real behaviours induced by necessity, and that 'survival' is dynamically redefined based on particular conjunctures.

The above discussion confirms that most of today's Moldovan smallholders have goals and values – non-maximising attitude, distrust for purchased food, and community embeddedness – in line with 'peasants' as conceptualised in the literature. Smallholders' answers also show that 'peasants' and 'entrepreneurs' are more similar than expected, and particularly that the latter are quite 'peasant'-like in their approach to farming. This, together with the fact that most 'entrepreneurs' are not pursuing farm growth, and thus are neither competing for land, nor subordinating peasants, contributed to good intergroup relationships.

5. Conclusions and policy implications

[35] The instances of borrowing detected are limited and thus the data need to be considered carefully. Eleven 'peasants' and three 'entrepreneurs' had borrowed some money, with respectively five and three relying on formal loans from banks or local credit associations. 'Peasants' were using these sums for many purposes, and had difficulties disentangling the amount used for farm and household (e.g., reparation) needs. It is also noteworthy that five out of seven informal loans implied no interest rate, which instead ranged between 20-24% for all but one formal loans.

We provided a picture of the pathways through which post-Soviet smallholders diversify their livelihoods, and of the goals and values driving their approach to farming. Relying on an original survey implemented in Moldova in 2015, we identified a largely majoritarian group of 'peasants', who tend to diversify their livelihoods off-farm; and a much smaller group of 'entrepreneurs', who turned their farm into a proper, full-time business. The two groups share similar goals and values, primarily a high consideration for food self-provisioning; a desire to preserve the ownership of land; and appreciation for the *village way of life*. However, while peasants set their working pace based on endogenous family needs, including the desire to spend quality time with family and friends, the latter pursue profit maximisation in monetary terms.

The peasant literature has rarely been used to frame the practices of post-socialist smallholders: the transition from planned to market economy has been mainly approached as a matter of 'commercialisation' of entities facing market constraints, and thus in terms of building functioning markets (Varga, 2018). We showed that, instead, the practices of most Moldovan smallholders are similar to those conceptualised by the peasant literature (Chayanov, 1966; Shanin, 1971; Ploeg, 2009; Dorondel and Serban, 2014), and observed in other areas of the words, namely Latin America – despite differences in terms of socio-environmental conditions and farm sizes (Schneider and Niederle, 2010). De-commodification, internalisation, and mutual aid mechanisms allow them to preserve the autonomy of their farm. Similarly to Ukraine (Mamonova, 2015), and Southeast Europe (Dorondel and Serban, 2014), we found that many smallholders can be characterised as 'peasant-workers'. However, they do not simply engage in subsistence farming to supplement their off-farm income, as argued by Dorondel and Serban (2014), but rent land in or out, and some even invest in farm using remittances or wages. Thus, they manage to intensify their production, as observed by Kuns (2017) in Southern Ukraine, and can become more similar to the category of '*odnoosibniks*' described by Mamonova (2015). Nevertheless, this is not the full-time entrepreneurial farming seen as the optimal development outcome by international advisors. Rather, this low-scale intensification is achieved through differentiation of employment *within* the family, with salaries used to build an autonomy in the village. Like entrepreneurs, peasant smallholders engage in farm sales, but their commercialisation activity differs in terms of products – 'niche' products rather than cereals or

oilseeds – and channels – 'traditional agricultural markets' built on localised and personalised relationships rather than the 'modern procurement system' (Varga, 2019). This puts peasants at odds with ongoing efforts to 'modernise' the agricultural sector.

Moldovan smallholders do not resort to open individual or collective resistance against the dominant agri-food regime like in South America (Schneider and Niederle, 2010). Nevertheless, their attempt to maintain the ownership of their land and turn it into a space of autonomy – instead of putting it at risk through farm investments, or selling it to exit agriculture *tout court* – can be seen as a form of 'silent resistance', echoing the concept of 'quiet food sovereignty' of Visser et al. (2015). Ploeg (2009) argues that 'resistance is not only, or primarily, articulated through overt struggles', but 'is encountered in a wide range of […] *practices* through which the peasantry constitutes itself as *distinctively different*' (p.265). The refusal to take formal loans (despite credit being one of the main policy instruments to promote the modernisation of agriculture) is a key example. Livelihood diversification, internalisation, and de-commodification are much more effective to ensure a *steady* income flow than the official plans to improve smallholders' situation (Varga, 2019). The facts that a very small share of land changed owner in the first decade after privatisation (Cimpoies, 2010), and that consolidation of mid-sized farm businesses is proceeding slowly, show that this strategy is probably more successful than open confrontation.

Despite their label, 'entrepreneurial' smallholders share similar *lifestyles* and find themselves in a similar condition of 'peasants'. The qualitative description showed that, in the absence of 'powerful connections' (Humphrey, 2002), they must confront with serious constraints, including risky output markets both externally (due to trade restrictions and political conflicts) and internally (for the limited demand), and competition with large and well-connected 'capitalist farms' that can operate with lower unitary profits. However, the case of the 'entrepreneurial' potato growers in the North of Moldova shows that acceptance of the 'moral order of the market' (Schneider and Niederle, 2010: 386) at least puts them in the position of benefitting from the policy instruments developed by international donors, primarily the EU, to promote commercial agriculture. Public policies on financing and credit, like those advocated by Moldovan free-market liberals, tend to restrict autonomy as they require to 'produce in order to make money and pay the bank back', and assume that farmers will continue doing the same in the future (Schneider and Niederle,

2010: 401). In turn, the Moldovan left advocates land consolidation, possibly though the creation of co-operatives, thus replicating the 'symbiosis' that existed in Soviet time but still reducing the autonomy of individual producers. Therefore, smallholders find themselves in an 'hostile environment': they are expected to behave as 'entrepreneurs', and the aspirations of the majority of them do not find any political recognition or safeguard, not even by policies allegedly targeting smallholder needs. This happens despite them representing a large majority of the rural dwellers. Ironically for the Moldovan national movement, the current political context is less favourable to peasant farms than the symbiosis with *kolkhozy* and *sovkhozy* of Soviet times. National policymakers should acknowledge this shortcoming and develop a vision for the sector that is sensitive to smallholders' diverse aspirations, goals, and values.

Letting aside 'entrepreneurs', who can benefit from large amounts of national and international resources to pursue their farm modernisation goals, the survey showed that most smallholders highly evaluate food self-provisioning, the autonomy granted by working on their own farm, and their *village-based lifestyles*. Thus, a key priority is slowing down the drain of people to maintain striving and supportive rural communities. In 2018, 55.3% of all jobs in the public and private sectors (63.1% in the latter) were based either in the capital or in the second city of the country, Balti, up from 53.1% (60.1%) in 2011; and this despite they represent only 27.6% of the population (NBS, 2020). Stronger incentives for relocating non-farm jobs away from the centre should be introduced, so that smallholders can diversify their livelihoods locally, and preserve their link with land. Second, traditional smallholder farming, and the social and ecological benefits it generates, should be explicitly recognised by policy as a part of the national heritage, not as a mere economic activity. This implies considering smallholders not as bearers of 'unfair' benefits due to their informal transactions but rather as producers of positive externalities which deserve compensation. Accordingly, non-penalising incentives may be designed in terms of taxation and subsidisation.[36] Third, more dynamic rural villages would allow not only mutual aid mechanisms but also informal commercialisation to persist: since this is perceived by policymakers as a threat to public health, simplified safety regulations should be defined, and free training provided locally to the producers who do not want

[36] Differently from Romania, where 71% of the small farms are excluded from EU subsidies because of their small size (Varga, 2019).

to register their farm as a business.[37] In theory, the producers' and service cooperatives advocated by the Moldovan left and by some international advisors, would be effective instruments to achieve economies of scale, facilitate input procurement and commercialisation, and redistribute revenues while preserving the smallholding entities. The literature argues that they are unlikely to be successful in post-Soviet countries due to the long-term legacy of the Soviet system, primarily a tendency of cooperatives to act top-down, and lack of trust (Wegren and O'Brien, 2018). Instead, we found a very positive perception of the Soviet *kolkhozy* and *sovkhozy* among smallholders, though persistence of this opinion among the younger generation is uncertain.[38] Finally, even the above measures would not be enough to prevent the depletion of more remote villages. To ensure that young people who move to cities (mostly Chisinau) can access land and enjoy the benefits of self-provisioning, urban and suburban municipalities could use the 'reserve land fund' established by the Land Code, partitioning this into small plots, and loaning them to landless households for use for a certain period (Piras, 2020). It remains to be seen if such measures can be successfully implemented in an international context where even 'sustainable development policies are operating as agents of globalisation to draw ever more people, practices, things, and landscapes from the global peripheries' (Mincyte, 2011: 113).

A limitation of this study is the small size, and the territorial concentration of our sample. However, the broad patterns described can be reasonably generalised to the whole Moldova due to its relatively small area, and its geographical and cultural homogeneity.

While observing the evolution of smallholders' livelihoods *vis-à-vis* integration in the EU economic area, further research could focus on three aspects. First, the drivers of smallholders' livelihood choices in the presence of trade-offs, primarily better off-farm income opportunities. Second, the resilience proper of 'peasant' smallholders to exogenous shocks, such as extreme climate events, or the Covid-19 pandemic; e.g., the effects of input and output diversification on smallholders' food security could be investigated. Finally, the environmental benefits of smallholder farming in post-socialist countries, which have been

[37] Donation and exchange of food products is widespread in rural areas (Piras, 2020), and this could also raise safety concerns. Nevertheless, regulating all these transactions would be unfeasible and an improper interference in household interrelationships.
[38] In the years after the survey, a populist pro-Russian party, led by the businessman Ilan Sor, emerged as the dominant political actor exactly in the district of Orhei, where it secured an absolute majority of votes in many villages. Sor made very explicit his support for creation of 'modern collective farms' (Sor Party, http://partidulsor.md/program.html [accessed 10 December 2020]), which spread among smallholders as the 'recreation of *kolkhozy* and *sovkhozy*'.

qualitatively identified in the literature (Mincyte, 2011; Smith and Jehlička, 2013; Jehlička et al., 2020), deserve further focus, especially in the light of the sustainability concerns presented by intensified smallholders in Ukraine (Kuns, 2017).

6. References

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