

The puzzle of East and Southeast Asia's persistent smallholder



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ABSTRACT

With economic progress, it was expected that smallholders would fade into history. This has been the experience in much of the global North and it was expected to occur as development proceeded in the global South. In East and Southeast Asia, however, smallholders have persisted in the face of rapid and profound social and economic transformation. This presents the core puzzle that the paper addresses: why has the farm-size transition not occurred in much of East and Southeast Asia? Why have smallholders stubbornly resisted the tide of economic history? The first half of the paper defines the smallholder and smallholding, sets out the historical evolution of smallholdings in the region, and explores the role of smallholders in national development. The second half of the paper explains the persistence of the smallholder through three explanatory lenses: the economics of smallholder farming; the role of farm policy; and the logics of smallholder-based livelihoods in a context of global integration. The paper concludes by setting out four possible rural futures for the wider East Asian countryside and smallholder.

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'The land is the only thing in the world worth working for, worth fighting for, worth dying for, because it's the only thing that lasts ...' Gerald O'Hara in *Gone with the Wind* (See <https://youtu.be/YSOYTFw0JaA?t=2m6s>).

"Why have smallholders been ignored or regularly stigmatized as old-fashioned, resistant of innovation, inefficient, and a barrier to modernization?" (Netting, 1993: 9).

1. Approaching the 'problem' of the smallholder in East Asia

This paper explores a puzzle evident across East Asia,¹ in many different national contexts and under varying agro-ecological, socio-cultural and developmental conditions. The puzzle is simply stated: farming is becoming progressively less important for

sustaining rural livelihoods yet a surprising proportion of households maintain ownership of their land.² On paper and at a general level, the smallholder seems to be remarkably resilient in the face of deep and rapid social and economic transformation. People are becoming less dependent on land and farming for their livelihoods, they are engaging more deeply and significantly with non-farm activities and non-rural spaces, they are often farming with less intensity and, seemingly, less enthusiasm, and they are spending longer away from their rural homes. And yet they appear stubbornly to cling to their small farms. Why are we not seeing more people leaving farming altogether with the subsequent amalgamation of smallholdings into larger units of production? Why, in other words, are we not seeing, in Kautsky's famous formulation, capital "seizing hold of agriculture, revolutionising it, making old forms of production and property untenable and creating the necessity for new ones"? (Kautsky, 1988 [1899]: 12). While 'deagrarianisation' (see Rigg and Vandergeest, 2012) may be underway in many areas – although there are important exceptions – this is occurring without widespread land disposal, dispossession, or

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¹ For simplicity, and following the World Bank, East Asia is used here to encompass the geographical regions of both Southeast and East Asia, unless stated otherwise.

² Some scholars (see Hart, 2002, 2006; Arrighi et al., 2010; Glassman, 2006: 615) have taken this to argue that in East Asia accumulation has not been by dispossession, but *without* dispossession.

abandonment. Indeed, Hazell et al. (2010: 1349) claim that a growing proportion of agricultural land across the global South, including in Asia, is being cultivated by smallholders.

Small farms not only continue to dominate the Asian rural landscape, but they are getting smaller by the decade. Smallholdings in Asia today are thought to be half the size they were in the 1960s and 1970s (Hazell and Rahman, 2014c: 3). Rather than disappearing, the role of the smallholder in rural spaces appears to be growing. As both a class and a unit of production, the smallholder in East Asia appears – on paper and at a general level – to be remarkably persistent and surprisingly resilient. This is all the more unexpected in East Asia where structural change has been so rapid, and where wage rates in the non-farm sector have out-stripped returns to farm work.

This puzzle of the persistence of smallholdings is rarely addressed directly; it sometimes seems to be assumed that Asia is a continent of smallholdings and smallholders and that this is somehow an invariant condition and inviolable cultural value across the region. As Falvey (2000: 17) writes with regard to Thailand, “agriculture has created Thailand and continues to shape the Thai identity, support Thai lifestyles, and portray the Kingdom to the world. ... the tenacity with which Thai farmers have clung to planting at least enough rice for their own family [testifies] ... to the deep association of wet rice culture and the peoples who are Thai”. A second background factor may be the view – dating back to the 1960s – that smallholder-based development has a disproportionate effect on poverty reduction (see Deininger and Byerlee, 2012: 701). Thus, for many development planners, policy-makers, practitioners and scholars, investment in and the sustaining of smallholder agriculture is taken as the best means to promote rural development, sustain rural livelihoods, and ameliorate rural poverty. As Hazell et al. state, “Asia’s green revolution demonstrated how agricultural growth that reaches large numbers of small farms could transform rural economies and raise enormous numbers of people out of poverty” (2010: 1351; and see Bullion, 2003: 12).

While there may have been a long-standing view among some sections of the rural development community that supporting smallholders has positive direct and indirect impacts on rural livelihoods and poverty, for others the ‘failure’ more latterly to modernise Asian farming, not least through land amalgamation, is of serious concern. Otsuka et al. (2014) in a recent review state that “this study strongly argues that unless drastic policy measures are taken to expand farm size, Asia as a whole is likely to lose comparative advantage in agriculture ...” (2014: 1; and see Otsuka, 2013), with significant negative consequences. The farm-size transition may have empirical traction in the guise of the experiences of many countries in the global North, but suffers from all such transition models in its implied teleology. The transition is simply stated:

“As per capita income rises, economies diversify and workers leave agriculture, rural wages go up, and capital becomes cheaper relative to land and labour. It then becomes more efficient to have progressively larger farms. Economies of scale in mechanized farming eventually kick in, accelerating this trend. The result is a natural economic transition towards larger farms over the development process, but one that depends critically on the rate of rural–urban migration, and hence on the growth of the non-agricultural sector” (Hazell and Rahman, 2014b: 3).

This need to push through the farm-size transition in the global South is a key theme of the World Bank’s *Agriculture for development* (2007) report. For the grouping of ‘transforming countries’, which includes many of the countries of East Asia, concerns are

focused on widening rural-urban disparities, persistent rural poverty, and declining farm sizes. As regards the latter, the World Bank is fearful that landholdings might become “so minute that they [will] compromise survival if off-farm income opportunities are not available” (World Bank, 2007: 21). While the report does see scope for increasing rural incomes and productivity through promoting high-value products (dairy and horticulture, for example), the key to rural development is “the transfer of labor to the dynamic sectors of the economy” (World Bank, 2007: 22). This would not just raise returns to labour for those ‘exiting’ farming but also permit the modernisation of agriculture, moderating political pressures to protect farming through subsidies and other means.³ Modernising farming is thus assumed to be reliant on the re-organisation of farms and, particularly, the amalgamation of smallholdings into larger, and tacitly more efficient, units of production. The reallocation of rural labour to non-farm work is essential to this process.

Whether the persistence of the smallholder in East Asia can be viewed as a ‘good’ or a ‘bad’ thing – for national (and global) food security, for poverty reduction or, more broadly, for the sustaining of rural livelihoods – is self-evidently important. We, however, begin by approaching the puzzle of the persistence of the smallholder taking a rather different angle. Rather than asking ‘what are the effects of the persistence of the smallholder on food production/poverty/rural livelihoods?’ we instead pose the question: ‘why and how have smallholders persisted in the face of often deep and rapid social and economic transformation?’ Only by answering this second question, we suggest, is it possible to *understand* the persistence of the smallholder and therefore shed light on this apparently perverse and counterintuitive situation. It also permits us to speculate on the future direction(s) of the agrarian transition in the East Asian region and the texture of human development in the countryside.

The persistence of the smallholder is not peculiar to East Asia; it has been noted for South Asia and is also a feature of Sub-Saharan Africa (SSA) (see Table 5). World-wide, it has been estimated that there are 450 million farmers cultivating holdings of less than 2 ha, supporting a population of around 2 billion (Hazell and Rahman, 2014b: 2). Of these 450 million a large majority – some 87 percent – are to be found in Asia (Conway, 2014: 2) with China accounting for 193 million, Indonesia 17 million, and Vietnam 10 million. This paper’s focus on East Asia therefore captures more than half of the world’s smallholders. In addition to the significance of East Asia in terms of sheer smallholder numbers, an additional reason for focusing on East Asia is because of the coincidence of rapid social and economic transformation – typically encapsulated in notions of the East Asian ‘miracle’ – alongside smallholder persistence. It is in East Asia, in other words, where the survival of the smallholder appears on first reading to be most puzzling.

This paper covers a good deal of geographical and thematic ground and there are obvious hazards in casting our net so widely. While we make the claim that the paper addresses an issue that transcends countries and cases, we do realise that the devil often is in the detail. Four areas are particularly worthy of note. To begin with, East Asia, from Myanmar to Korea, presents hugely varied human and ecological environments. In particular there is the distinction between long-settled, lowland, wet rice growing areas and upland, frontier zones where estate crops predominate. This paper largely addresses the former. Second, there is an important distinction in terms of histories and patterns of land ownership between the transition economies of East Asia–China, the Lao PDR

³ There have been numerous trenchant critiques of the World Bank’s report (see, for example: Hall, 2009; Murray Li, 2009; Veltmeyer, 2009).

and Vietnam – and the market economies. Third there is the (inescapable) tyranny of teleology: the temptation to see the high income economies of East Asia (Japan, South Korea, Taiwan) as somehow ‘further on’ in terms of the evolution of their agrarian conditions from the middle (China, Indonesia, Malaysia, Thailand ...) and low (Cambodia, Lao PDR, Myanmar ...) income economies. And finally, it is clear that while smallholdings may persist across East Asia they vary from semi-subsistence farms where living conditions leave households in or close to extreme poverty, to intensive agribusinesses, farms that are nested within pluriactive household economies, to the hobby farms of urban elites. Each will have its own logic.

The paper is structured as follows. We open by briefly addressing the question of definition: who is a smallholder and what is a smallholding? This then leads into a discussion of the role of the smallholder in East Asia’s modernisation and, following this, a section that provides a historical overview of the evolving status and position of smallholders across East Asia. We then seek to account for the persistence of the East Asian smallholder through three explanatory lenses: the economics of smallholder farming; the political economy of agriculture; and the grounded logics underpinning smallholder livelihoods. We then, in a final section, outline the possible future trajectories of rural change in East Asia and ask the question: what possible rural futures present themselves for the Asian smallholder?

2. The lie of the land

2.1. Delineating the smallholder

Various, overlapping terms are used to describe farms that are limited in their extent, and these focus on different aspects of the social, economic and physical (spatial) determinants of the farm context (Table 1). The terms *smallholding* and *smallholder* pay attention to farm size, often denoting those farms that are less than 2 ha in extent (see Hazell and Rahman, 2014c), although the definition of smallholder/smallholding used in national censuses varies considerably.⁴ Many smallholdings are also family farms. The term *family farm*, however, directs our attention toward considering issues of land ownership and labour relations. In addition to culturally determined expectations of collective ownership and inheritance based on kinship, the majority of labour on family farms is provided by the family (or, more accurately, household). A common assumption is that because hired labour is limited, farm size must be limited as well. Mechanisation can challenge such an assumed link and some mechanised family farms may be quite large. This is clearly the case in many countries of the global North but is also beginning to have purchase in countries of the global South where mechanisation has made inroads. Finally, *peasant farms* are likely to be subsistence or semi-subsistence holdings where market integration and the profit motive are limited. There is also an assumption here of the peasantry as a subordinate class.

In this paper we use the terms *smallholding* and *smallholder*, mainly because the comparative national data that we have (limited though it is) do not distinguish between farms in terms of their level of market engagement and integration, the nature of ownership, or the origins of farm labour and the nature of labour relations. We recognise, however, that what constitutes a *smallholding* varies considerably according to environmental

conditions; that even quite large holdings, made even larger by the opportunities afforded by mechanisation, may be family-owned and operated; and that smallholders need not be a subordinate class, so that size cannot be used as a simple proxy for subordination.

Furthermore, what constitutes a viable smallholding will vary according to factors beyond the farm; for example, the availability of non-farm work to subsidise farming. In other words, all these possible attributes of the small farm – market integration, labour relations, ownership and class identity – can change even while holdings remains small.

Of particular importance is the question of ownership and whether smallholdings are owner-occupied, tenanted or part-tenanted. Three broad approaches to the ‘problem’ of tenancy have been enacted across East Asia since 1945 (Lipton, 2009: 162–3):

- Revolutionary redistribution by collectivisation in Cambodia, China, North Korea and Vietnam (and failed collectivisation in the Lao PDR), followed by de-collectivisation since late 1970s
- Radical redistribution of land in Japan, South Korea and Taiwan in the immediate post-WW2 era
- Modest land reform and resettlement in Indonesia, Malaysia, the Philippines and Thailand

Three points are worth noting with regard to tenancy in East Asia. First, while there have long been pockets of quite high tenancy, such as in Luzon in the Philippines and parts of the Central Plains of Thailand, most smallholders were – and are – owner occupiers (see Table 2).⁵ Second, partial tenancy is more common than pure tenancy. And third, and most significantly, the fact of tenancy should not be taken as necessarily deleterious to smallholder interests or inevitably exploitative. Molle, in his historical account of tenancy relations in the Central Plains of Thailand, states that: “All [the evidence] points to a relatively balanced relationship [between landlord and tenant], except for a few historical periods when more lopsided terms of trade emerged, only to be rebalanced by a new [economic] crisis” (Molle, 2002: 537). Given the shift in the centrality of farming to rural livelihoods, as discussed below, and the limitations of using land ownership as a proxy for wealth (e.g. Gödecke and Waibel, 2011), the need to be careful about what we read-off from tenancy rates and relations has become ever more important.

2.2. The smallholder in East Asia’s modernisation

Modernist interpretations of farming in East Asia sometimes frame the smallholder as an impediment to growth. In taking this stand it is too easy to overlook how the countries of developing East Asia arrived at this point in their agrarian transitions, and the role of the smallholder in this process. In their seminal 1961 paper, Johnston and Mellor argue that economic development, particularly in the early stages, is dependent on the simultaneous progress of both the agricultural and industrial sectors (‘balanced growth’).⁶

The smallholder has been a critical component in Asia’s ‘miracle’ growth (Kay, 2002; Francks, 2000). Not only have impressive

⁴ In Bangladesh, a smallholding is defined in the most recent 2008 agricultural census as being between 0.05 acres (0.02 ha) and 2.49 acres (1.0 ha); in Sri Lanka’s 2002 census, holdings of less than 20 acres or 8.1 ha are smallholdings. In Sri Lanka the smallholding sector is also termed the ‘peasant’ sector.

⁵ In Thailand’s Central Plains in the 1970s up to 50 percent of paddy land was tenant cultivated (Molle, 2002: 519). In addition, notions of ‘ownership’ have themselves been historically and legally variable (in the Malay peninsula for example, planting of certain trees was historically and culturally equated with claims to land ownership).

⁶ For a concise summary of the literature on the role of the smallholder in economic development, see Wiggins et al., 2010.

Table 1
Delineating the smallholder.

Term	Focus	Definition
Family farm and family farmer	Ownership and source of labour	This term is close to 'small farm' but pays attention to the fact that the bulk of labour is provided by family members; the farm, in this instance, maps quite neatly onto a social unit, namely the 'family' or, often, 'household'. In the global South most family farms are small farms although with mechanisation that link may break down.
Peasant farm and peasant cultivator	Motive (subsistence)	'Peasants' and the 'peasantry' are defined in various ways but generally they are a farming class who produce largely to meet their own subsistence needs. A subsistence ethic is said to shape their decisions. They have limited assets and limited engagement with market relations. There is also a political gloss to the notion of the peasantry; they are a subordinate class
Small farm and small farmer	Size of landholding and motive (profit)	Small farms are usually defined, in the literature, as those farms with less than 2 ha of crop land (see Thapa, 2009 : 1). The small farm and small farmer are different from the peasant cultivator in their deeper engagement with market relations, although this distinction is not always noted in the literature. Rather than harbouring the subsistence ethic of the peasant, they are entrepreneurial with a stronger profit motive. The nature of ownership and labour provision is not explicit; a small farm may be tenanted. A challenge here is the application of this definition across very different agro-ecological contexts. Two hectares of irrigated, tripled cropped rice land might constitute a relatively large farm; 2 ha of marginal dry land, a sub-livelihood holding.
Smallholding and smallholder	Size of landholding	Like the small farmer, the smallholder operates a limited land area, usually less than 2 ha. In this case, however, farming for sale and farming for subsistence are combined and most labour is provided by the family (or household).

Table 2
Distribution of farmland by ownership status in Asia and selected countries.

	Date	Owner occupier (% farmland)	Pure tenancy (% farmland)	Partial tenancy (% farmland)	Total tenancy (% farmland)
Asia	1970	84	6	10	16
	1990	87	3	9	12
Indonesia	1973	76	2	22	24
Philippines	1971	67	21	12	33
Thailand	1978	84	6	10	16

Note: Asia includes both South and East Asia.

Sources: data extracted from [Hayami 2001](#), [Otsuka, 2007](#): 2675.

increases in agricultural production been delivered by smallholders, but the smallholder family, through the willingness of its members to migrate and engage in non-farm work, has been an equally critical direct (as well as indirect) component in the industrialisation process. While “for the most part, migration data remain patchy, non-comparable and difficult to access” ([UNDP, 2009](#): 28) and the transition from temporary sojourn to permanent relocation is rarely neat and obvious, the growth of manufacturing has been based on the often temporary, usually circular migration of – quite literally – hundreds of millions of young men and women to mostly urban and industrial work.⁷ The smallholder family, then, has played far from a walk-on part in the East Asian industrial development story; they have been leading actors in the drama.⁸ The transfers from agriculture that helped to drive industrialisation were not just in the form of production, often twisted further against farming through various price controls and export levies, but also labour. Arguably, it was the squeeze on agriculture in countries like Japan, South Korea and Taiwan which provided an impetus for labour to leave the countryside, thus fuelling development ([Francks, 2000](#); [Kay, 2002](#)). Much the same has occurred in the later industrialising countries of Southeast Asia and China.

In their comparative review of development trajectories in sub-Saharan Africa and Southeast Asia, [van Donge et al. \(2012](#): s9–s10) write that “... state-led rural and agricultural development, leading to higher incomes for peasant farmers, has been crucial to South-East Asia's success”. Shared, pro-rural and pro-poor policies,

based on sustained support for smallholders have, in their view, underpinned the region's economic success. Much the same argument has also been made for wider East Asia ([Studwell, 2013](#)) and the World Bank's (1993: 32–38) influential report on the *East Asia miracle* similarly highlighted the role that dynamic agricultural sectors played in the growth of the High Performing Asian Economies through to the early 1990s.⁹ The argument is that agricultural growth both preceded and permitted industrial growth and that rather than being an exemplar of foreign-investment driven *industrial* growth, the countries of Southeast Asia should be taken, instead, as demonstrating the efficacy of *agriculture-led* industrial growth ([Henley, 2012](#)). These debates highlight the importance of examining the interactions and interrelationships between farm and non-farm, and agriculture and industry. As [Henley \(2012\)](#) writes, development in Southeast Asia:

“... has emerged not primarily from the 'trickling down' of wealth derived from the rising incomes of an already prosperous few, but rather from simultaneous improvements in the productive and earning capacity of very large numbers of poor people. In an underdeveloped economy dominated by peasant agriculture, simple arithmetic dictates that the most effective way to achieve this is by making investments which enable smallholder farmers to raise their productivity and sell more of what they produce” ([Henley, 2012](#): S41–S42).

Not only has rural and agricultural development importantly underpinned the wider growth process across East Asia, this has also meant, [Henley](#) argues, that the fruits of growth have been shared quite broadly. This is certainly true if we take the trajectories of extreme poverty reduction as measures of shared development

⁷ There is an extensive literature on temporary or circular migration in East Asia. The 2009 *Human development report* 'Overcoming barriers' provides a global overview ([UNDP, 2009](#); see also [Newland, 2009](#)); see also [Fang et al., 2009](#) and [Cai and Ng \(2014\)](#) (on China); and [Kelly, 2011](#) (on Southeast Asia). For detailed, ethnographic examples, see: [Mills 1997](#) (Thailand) and [Thompson 2007](#): 68–88 (Malaysia).

⁸ We return later in the paper to the pluriactive nature of rural livelihoods.

⁹ The World Bank's eight HPAEs were Hong Kong, Indonesia, Japan, Malaysia, Singapore, South Korea, Taiwan and Thailand.

Table 3
Rural, urban and national poverty rates for selected countries of developing East Asia, earliest and latest years.

	% Population living in poverty			Year	Rural poverty rate as ratio of urban poverty rate
	Rural	Urban	National		
East Asia and Pacific	67.5	24.4	–	1990	2.8
	20.4	4.3	–	2008	4.7
Cambodia	54.2	28.5	50.2	2004	1.9
	23.6	8.7	20.5	2011	2.7
China	39.1	3.3	29.1	1993	11.8
	22.4	0.8	14.0	2002	28.0
Indonesia	19.8	13.6	17.6	1996	1.5
	14.3	8.4	11.4	2013	1.7
Malaysia	45.7	15.4	37.7	1976	3.0
	3.4	1	1.7	2012	3.4
Thailand	74.1	43.4	65.3	1988	1.7
	16.7	9	13.2	2011	1.9
Vietnam	26.9	6	20.7	2010	4.5
	22.1	5.4	17.2	2012	4.1

Notes: the country poverty data are headcount poverty rates as % percentage of urban, rural and national populations. These are based on national poverty lines with the exception of China which uses a \$1.08-a-day poverty line. These data should not be used to compare levels of poverty between countries as national poverty lines vary considerably. The East Asia and Pacific poverty data are calculated on the basis of the international \$1.25-a-day poverty line.

Sources: World Development Indicators (<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#>); Mathur 2013.

success. In 1981, the extreme poverty rate (measured at \$1.25 per day) in East and Southeast Asia stood at 85 and 58 percent respectively; by 2010 the figures were 11.6 and 14 percent (ADB, 2014). It is projected that by 2025 extreme poverty in East and Southeast Asia will have fallen to 2.5 and 1.3 percent, implying an effective eradication of extreme money-metric poverty.¹⁰

If, however, we look at the changing distribution of rural and urban poverty, then the case that growth has been shared is not quite so clear cut. Studies show that poverty rates are higher in rural areas – generally between two and four times higher – and, moreover, that this gap has usually widened rather than narrowed (Table 3). While there is little question that rapid aggregate economic growth from the 1970s raised the real incomes and material standards of living of the great bulk of the rural population of East Asia, leading to dramatic falls in extreme poverty, these falls would have been even steeper had growth been more equally shared (see Kuhonta, 2011; Rigg, 2015). Furthermore the *relative* gap between rural and urban poverty has widened in most countries (see Table 3). There is, however, a significant wrinkle in this observation about the distributional nature of growth in East Asia: namely, the tacit assumption that rural poverty is tied to rural activity. This overlooks the increasingly spatially distributed and mixed nature of ‘rural’ household livelihoods, an issue to which we return.

A second issue concerns whether this historical role of the smallholder can be sustained. This, of course, is where the World Bank’s view noted above about the need to modernise farming begins to gain traction. Increases in farm productivity have been critical in reducing absolute poverty across East Asia over the last four to five decades, because such growth is powerfully pro-poor and spatially and socially inclusive – for the very reason that the smallholder has been the dominant farm type. In Asian countries like Cambodia, the Lao PDR and Myanmar, and in regions of Indonesia, there is considerable remaining scope to pursue agriculture-based strategies for development and poverty alleviation. In middle-income countries such as Malaysia, the Philippines, Thailand, Vietnam and, increasingly, China the potential is less while in high income economies such as Japan and South Korea, the countryside becomes, arguably, a realm of consumption rather than production, even a place of retirement.

For middle-income countries, the question is how smallholders will negotiate a set of intersecting processes, namely:

- The declining size of smallholdings;
- the persistent and in some cases growing income gap between farm and non-farm activities;
- the declining competitiveness of smallholdings compared to larger units;
- the growing political pressure exerted by the rural population for governments to protect and subsidize smallholders; and
- the opposing need to reduce transfers to farmers to be in accord with international agreements.

Smallholders in East Asia may have been critical components in past development successes; they may also continue to be so in some of the region’s poorer countries. But for those countries that have negotiated one part of the agrarian transition – they have industrialised – what about the recalcitrant second: the modernisation of agriculture?

2.2.1. The role, place and persistence of the smallholding and smallholder in developing East Asia

The role of farming in the national economies of the countries of developing Asia has declined markedly, in terms of agriculture’s contribution to GDP and to employment (Table 4). The former, however, is generally more pronounced, reflecting a decline in labour productivity in farming through to around 2000.

The general reduction in *relative* agricultural productivity until the early to mid-2000s is also reflected in rural wage rates and levels of poverty in the countryside. If we view wage rates in agriculture as an indicator of productivity, then studies show that these, after declining for much of the period of rapid East Asian economic growth from 1960 to 2000, began significantly to increase from the turn of the Millennium (Wiggins and Keats, 2014: 14), although there have been exceptions.

These data, then, seem to reinforce some of the questions posed at the beginning of the paper. Productivity in agriculture seems to have fallen, relatively speaking, to that in non-agriculture, at least until the early to mid-2000s; wage rates in farming also relatively declined until roughly the same point; and poverty rates in rural areas have declined more slowly than they have in towns and cities such that the urban/rural poverty gap has widened (see Table 3).

One key reason for these trends, arguably, lies in the persistence

¹⁰ The World Bank considers poverty to be eradicated when the poverty rate falls below 3 percent.

Table 4
Urban population, agricultural GDP and agricultural employment, 1960–2013.

		1960	1970	1980	1990	2000	2010	2013
Cambodia	Rural population (%)	89.7	84	90.1	84.5	81.4	80.2	79.7
	Agriculture (% GDP)					37.8	36.0	35.6
	Agricultural employment					73.7	54.2	51
China	Rural population (%)	83.8	82.6	80.6	73.6	64.1	50.8	46.8
	Agriculture (% GDP)	23.4	35.2	30.2	27.1	15.1	10.1	10.0
	Agricultural employment			68.7	60.1	50.0	36.7	34.8
Indonesia	Rural population (%)	85.4	82.9	77.9	69.4	58	50.1	47.7
	Agriculture (% GDP)	51.5	44.9	24.0	19.4	15.6	15.3	14.4
	Agricultural employment			56.4	55.9	45.3	38.3	35.1
Lao PDR	Rural population (%)	92.1	90.4	87.6	84.6	78	66.9	63.5
	Agriculture (% GDP)					61.2	45.2	28.0
	Agricultural employment							
Malaysia	Rural population (%)	73.4	66.5	58	50.2	38	29.1	26.7
	Agriculture (% GDP)	34.3	29.4	22.6	15.2	8.6	10.4	9.3
	Agricultural employment			37.2	26.0	18.4	13.3	12.6
Philippines	Rural population (%)	69.7	67	62.5	51.4	52	54.7	55.4
	Agriculture (% GDP)	26.9	29.5	25.1	21.9	14.0	12.3	11.8
	Agricultural employment			51.8	45.2	37.1	33.2	32.2
Thailand	Rural population (%)	80.3	79.1	73.2	70.6	68.6	55.9	52.1
	Agriculture (% GDP)	36.4	25.9	23.2	12.5	9.0	12.4	12.0
	Agricultural employment			70.8	64.0	48.8	38.2	39.6
Vietnam	Rural population (%)	85.3	81.7	80.8	79.7	75.6	69.6	67.7
	Agriculture (% GDP)				38.7	22.7	18.9	18.4
	Agricultural employment					65.3	48.4	47.4

Source: World Development Indicators (<http://databank.worldbank.org/data/views/variableSelection/selectvariables.aspx?source=world-development-indicators#>).

of smallholdings and smallholders. It is in part because farming and farms have remained small that productivity has not increased relative to other sectors and this, in turn, may be an important contributing factor explaining falling relative wage rates and, therefore, the further concentration of the poor in rural areas. It also deepens the puzzle set out at the start: why have we not seen a more dramatic restructuring of farming if, as these data seem to show, this would result in higher productivity, higher returns and wages, and lower poverty rates? There is a certain circularity to this line of argument and the implicit way to break the cycle of rural poverty – and this underpins the World Bank's modernisation agenda – is by getting some of the rural poor to abandon their smallholdings and exit agriculture for higher return non-farm occupations and activities. This would, in turn, provide those who remain with scope to accumulate land and pursue a farming-centred path out of poverty. Or that, at least, is the way in which the modernisation logic is sometimes applied to smallholder farming. In his Presidential Address to the International Conference of Agricultural Economists in Brazil in August 2012, Keijiro Otsuka suggested that "... farm size expansion *must* be promoted in East Asia to prevent the socially and 'globally' excessive reliance on food imports" (2012: 4 [emphasis added]).

2.3. The historical evolution of smallholdings and smallholders in East Asia

The only source of comparable data on trends in farm size is the Food and Agriculture Organisation's (FAO's) World Census of Agriculture (WCA), which has been compiled in 1990, 2000 and 2010 (Lipton, 2010; and see <http://www.fao.org/economic/ess/ess-wca/en/>).¹¹

¹¹ Data sourced from FAO on line resources including main results and metadata by country from World Census of Agriculture (see <http://www.fao.org/docrep/013/i1595e/i1595e00.htm>). Details on how national agricultural censuses are undertaken, definitions used, enumeration periods, and geographical and statistical coverage are also available (see <http://www.fao.org/economic/ess/ess-wca/wca-2010/countryinfo/en/>).

Table 5 sets out the regional distribution of landholdings by mean size. The three Asian regions foot the table with the smallest average landholdings and among the highest proportion of smallholders (defined here as those with land holdings of <2 ha). Furthermore, as Table 6 shows, the trend in farm size in East Asia has been resolutely downward. Of the countries listed, with the single exception of Japan, all have seen a decline in average farm size between the earliest and most recent available data. Furthermore, and excepting Thailand, the average farm size is now 2 ha or less. Finally, for Indonesia, Myanmar and the Philippines the proportion of farms of 2 ha or less has increased between 1960 and the data from the latest available censuses. Small, invariably family-owned farms continue to dominate East Asian agriculture. Far from disappearing, the evidence is that small farms appear to have tightened their hold on the East Asian agricultural landscape and that over time smallholdings have become ever smaller.

3. Explaining the persistence of the smallholder

We now turn to the core of the paper, namely providing explanations for the persistence of the smallholder in East Asia. Clearly, countries vary a very great deal and there is always the danger of reductionism in stretching an argument across countries and regions. Our rationale for doing this, however, is that we propose there is a higher level issue here – reflected in the data presented above – that requires a similarly high level approach. The apparent persistence of the smallholder across such varying national settings, environmental conditions and development contexts is altogether surprising and there are, we propose, some explanatory resonances.

We divide this main section of the paper into three lines of argument and explanation. First we focus on the changing economic logics of the smallholder and the smallholding; second, on the political-economy of farming in East Asia; and finally, on the livelihoods of East Asian smallholders. In each instance, the central question that we pose reflects these different starting points:

Table 5
Mean farm size and proportion of landholdings of <2 ha, by world region (1990s).

	Mean size (ha)	% Landholdings < 2 ha	% Area < 2 ha
US	178.4	4	0.0
South America	111.6	36	0.9
Europe	32.3	30	3.8
Central America and Caribbean	10.7	63	12.4
West Asia/North Africa	4.9	65	24.7
Sub-Saharan Africa	2.4	69	32.0
Southeast Asia	1.8	57	23.6
South Asia	1.4	78	40.1
East Asia	1.0	92	59.0

Source: data extracted from Eastwood et al., 2010: 3330.

Table 6
Trends in mean farm size (ha), East Asia (selected countries).

	Date	Mean farm size	
China	1980	0.56	
	1985	0.51	
	1990	0.43	
	1995	0.41	
	1999	0.40	
Indonesia	1960	1.0	
	1973	1.1	
	1993	0.9	
	2003	0.8	
	Japan	1960	1.00
1970		1.01	
1980		1.17	
1990		1.37	
2000		1.55	
2002		1.57	
2010		1.96	
Korea (Republic)		1960	2.06
		1970	0.88
		1980	1.02
	1985	1.11	
	1990	1.19	
	1995	1.32	
	2000	1.37	
Philippines	2003	1.46	
	1960	3.6	
	1971	3.6	
	1991	2.2	
	2002	2.0	
Thailand	1960	3.5	
	1978	3.7	
	1980	3.7	
	1993	3.4	
	2003	3.2	

Sources: data extracted from Lipton 2010: 1402, Nagayets 2005: 7, Fan and Chang-Kang 2005, Klatt 1972: 240, Thapa 2009, and Thapa and Gaiha 2011, Hayami 2001: 174, USDA (<http://www.ers.usda.gov/topics/international-markets-trade/countries-regions/japan/basic-information.aspx>); and calculated by the author based on the World Census of Agriculture 2010 (<http://www.fao.org/economic/ess/ess-wca/wca-2010/en/>).

- (i) What are the economic forces and logics that have permitted the smallholder to survive, if not to prosper, in conditions of deep socio-economic transformation?
- (ii) What have been the policies, and the policy contexts, that may have retarded the 'natural' progression of the farm-size transition?
- (iii) From a smallholder perspective, what are the attractions of remaining *with* the farm, if not necessarily *on* the farm and why have smallholdings persisted, seemingly against the economic odds?

3.1. The economics of the smallholding

One of the reasons often suggested for the dominance of smallholders in East Asian farming is the sheer competitiveness of small family farms, especially in rice-based systems. Not only do small farms generate higher yields – because of the care and attention that family labour devotes to farm work – but there are also additional competitive advantages that arise directly from small-scale, family-based farming.

The competitive edge that comes from farming being family-based has been noted in many contexts, since the publication of Theodore Schultz's *Transforming traditional agriculture in 1964* (Masters et al., 2013; Lipton, 2010; Deininger and Byerlee, 2012: 706; Johnson and Ruttan, 1994; Hazell, 2005; Netting, 1993). Family labour does not need to be supervised, it rarely shirks, cannot hide, and it does not need to be paid (see Hazell et al., 2010: 1352–3). Children and the elderly can also be called on to contribute to farm tasks, especially during peak periods in the farm cycle. This gives the family farm a flexibility and competitive advantage that large, non-family-owned farms cannot wield, even in developed economies such as Japan: “For most field crops, the most cost-effective farm sizes are those cultivated by resident farmers in a household enterprise, relying primarily on self-motivated family members” (Masters et al., 2013: 158).

With mechanisation, it is possible for family-owned farms to be quite large. Nonetheless, for East Asia there is commonly a coincidence between family ownership and small size. In other words, most family-owned farms are also small farms: they are smallholders. It has also been said (Ahn, 2005: 76; Bray, 1986: 55–61) that the economies of scale that come from mechanisation are less easily applied in wet rice-based systems common in East Asia where fields are characteristically small and spatially distributed. So it is not just that family farms are more competitive, but that small farms in the East Asian context are also more productive. This view can be traced back at least as far as Amartya Sen's 1962 paper in which he first proposed an inverse relationship between farm size and productivity (Sen, 1962; Netting, 1993: 322; and see Lipton, 2010; Conway, 2014). Finally, and until quite recently, many rural dwellers had few easily available alternatives to family farm-based work.

When large-scale farm experiments have been tried in the global South the experience has often only reinforced the belief that small, family-owned farms have an advantage over larger units of production. In their review of large-scale farm experiences in Africa, the Middle East, Latin America and Southeast Asia, Johnson and Ruttan (1994), for example, “provide a virtual catalogue of farming disasters – shortage of inputs and support services, lack of infrastructure and skilled labor, friction between labor and management, nonexistent distribution and transportation systems, land of inconsistent quality and poor condition, plant pests and diseases, inappropriate technology and the spectacular failure of the

machinery that was expected to be the key to the projects' success" (1994: 699–700; and see). The rationale of these projects was, in their view, based on the erroneous assumption that large-scale farming is more efficient and profitable than small-scale agriculture.¹²

In the uplands and (formerly) forested areas of Southeast Asia there have, admittedly, been some notable large farm successes. Oil palm and rubber, in particular, are highly profitable estate crops, driving a remarkable process of land conversion. In 2012, the world's three largest producers of palm oil were Indonesia, Malaysia and Thailand; and the four largest producers of rubber were Thailand, Indonesia, Malaysia and Vietnam. The recent expansion of oil palm has been particularly striking. In 1967, the area planted to the crop in Indonesia was just 100,000 ha. In 2000 the area under oil palm was 4.2 million ha and by 2010 it had reached 8.4 million ha. While a proportion of this area of oil palm is under smallholder production,¹³ a figure which is likely to grow in relative terms, large estates have been central to these two agricultural 'success' stories. Critics, however, have argued that the expansion of rubber and oil palm has often been inimical to smallholder interests, undermining livelihoods, as well as having, in the case of oil palm, severe environmental repercussions. As Rist et al. say (2010: 1010; and see McCarthy, 2010; and McCarthy et al., 2012), "oil palm has been accused of negatively affecting human health, destroying cultural heritage and leading to the loss of autonomy and self-sufficiency, in addition to impoverishment as a result of debts and low wages". Notwithstanding such critics' doubts about the wider developmental implications of such large-scale estate crop initiatives, the core and long-settled lowland areas of Southeast and East Asia remain dominated by smallholder agriculture.

It is possible that the economic logics of smallholder farming are losing their purchase in many East Asian countries and contexts. The education imperative and the extension of childhood connected to this imperative has meant that children are no longer a 'free' and available resource to be allocated according to need. Heightened levels of mobility coupled with a degree of rural industrialisation have accentuated the opportunity costs of remaining on the land and in farming. This applies particularly to young people who, by farming, are compromising their ability to engage with other work opportunities and garnering a return on their education. This gap and the de-skilling that continuing to farm implies is widening with each decade. While it may be true that options beyond farming were scarce and hard (and risky) to access in the early development decades, by the turn of the Millennium that was rarely the case for most countries of East Asia. The real costs of devoting family labour to family farms have grown and we see this reflected in rising real rural wage rates as the wage rate in other sectors has rippled back to the farm (Wiggins and Keats, 2014). In addition, in some countries there have been quite sustained efforts to support farm prices and the farm economy and, therefore, rural incomes (see the next section).

Returns to farming and farm work have, across East Asia, generally declined relative to non-farm work. While there are important differences between national contexts, terms of trade between farm and non-farm have turned against agriculture. Even with price supports and new agricultural technologies and

attendant higher yields and cropping ratios, these have not, across the piece, managed to offset the scissor effects of declining farm size, diminishing relative returns to farm work, and rising cash needs. Indeed, the evidence at a regional level is that the increases in farm productivity engendered by the first Green Revolution have plateaued as more marginal lands have been brought into production, accumulated environmental problems have taken their toll, and the effects of climate change have negatively affected production (Thapa, 2009: 5).¹⁴ While the years since around 2000 have seen significant increases in real farm wages, often reflecting labour shortages in rural areas, farm-based activities, on their own, are often insufficient to sustain rural livelihoods. As Wiggins and Keats write in their recent review paper of rural wages in developing Asia, "typical rural wages remain low, at levels that would barely allow households that depend on labouring for incomes to escape (\$2 a day) poverty" (Wiggins and Keats, 2014: 41). While we can expect the effects of low human fertility rates and demand for labour exerted by an expanding manufacturing sector to feed through into rising rural wage rates, as indeed they have been doing, it is unlikely that these will exceed those in the non-farm sectors of the economy and particularly for those where an education premium is at work. It seems that the long-standing rural-urban differential in returns to labour persists and rural wages remain relatively low. For many smallholders, it is a daily struggle to survive on farming alone (see below).

It is this shortfall in the ability of farming to support sustainable livelihoods that, at least in part, has driven the extraordinary mobility revolution across East Asia as rural migrants in their hundreds of millions have flocked to urban areas and non-farm work, whether seasonally, temporarily or more permanently. It is this labour, usually in places distant from their homes, which has done most to increase rural incomes, reduce rural poverty and sustain rural livelihoods. Farm households have persisted because some members of those self-same households have left.

The role of mechanisation in either driving an increase in farm size or, alternatively, in sustaining and protecting the logic and profitability of small farms is, like much else, disputed. It is often assumed that as capital, in the form of machines, replaces labour this bestows advantages on larger farms, providing a further reason why we might expect an increase in farm size as the profitability of such units increases (Otsuka et al., 2014). The increase in rural wage rates has also created an incentive to invest in labour-saving innovations. There is evidence from Indonesia that relatively larger farms are mechanising production as well as expanding their farmed area by renting in land (Yamauchi, 2014). Mechanisation is not only seen to bestow certain economies of scale but also to get around the problem of labour supervision by permitting the family management of larger units.

The seeming logic of this link between farm size and mechanisation can be disputed on empirical grounds, even on small rice farms. Japan has led the way in what is sometimes termed micro or scale-appropriate mechanisation and these innovations have been adopted in many other countries of East Asia, permitting the benefits of machines to be deployed on quite small units (Francks, 1996; Oshiro, 1985). This started with the power tiller, hand tractor or 'iron buffalo' (*khwaay lek* [Thai]), but has since extended to many other farm tasks including (for rice) transplanting and harvesting. Mechanisation does not just extend to agricultural tasks, but rural work and living more widely. The power tiller, for example, is used for transport as much as tillage (Biggs and Justice, 2015) while the motorbike is a veritable beast of burden across East

¹² "Is, then, the conclusion of this paper that farms are not likely to grow beyond the size of owner-operator and that small, labor-intensive farming units are the appropriate structure of agriculture in the developing world? To the former question, given human nature, perhaps" (Johnson and Ruttan, 1994: 702).

¹³ In Indonesia in 2009 one-third of oil palm area was under smallholder production (Rist et al., 2010; and see Cramb and Sujang, 2013 on Sarawak, Malaysia).

¹⁴ Rice yields rose at a rate of 2.5% per year between 1962 and 1982; in the years from 1992 to 2012 they rose at just 0.8% per year (Economist, 2014a: 22).

Asia. In essence, machines have become increasingly smallholder-friendly. In addition, for those farmers who cannot afford such machines or whose holdings are so small that investment makes little sense, there has emerged a vibrant rental market in most countries (Huang et al., 2012: 33). It is possible, in other words, for even small farms to harness the benefits of machines. The introduction and spread of the hand tractor has been remarkably rapid even in still-poor countries like the Lao PDR (Manivong et al., 2014: 372).

There are, therefore, important complexities to acknowledge in the relationship between mechanisation and farm size. Even so, as countries develop, the economic logic of farm size alters and the farm-size transition implies that farms *should* get larger over time (Hazell, 2005: 94–95). Wages in the non-farm sector increase and for farmers to maintain their standards of living in relative terms they need to operate larger units of production. In their simulation of the impact of increasing farm size and mechanisation on rural incomes and rice production in China's Zhejiang province, van den Berg et al. (2007) show that under existing farm sizes and rice prices, per capita income from rice production is less than a quarter of the non-farm wage. Only by moving into higher value crops (and thereby undermining the Chinese government's objective of sustaining rice production) or by increasing farm size and mechanising production can farm incomes begin to match non-farm incomes.

The matter of the economics of the smallholding is not only complex; it is a moving target. Tweeten, in a report for the US Department of Agriculture, said that to understand the small-farm sector in America it was necessary to appreciate that it was not “an anachronism of farmers destined to get big or get out”, but “rather a dynamic, growing part of agriculture” (quoted in Tweeten, 1983: 1041). This assessment of American small farms three decades ago is just as germane for understanding smallholdings in East Asia today. Indeed the ‘get on’ or ‘get out’ argument can be seen rehearsed in the World Bank's (2007) *Agriculture for development* report. This report (2007: 73) sets out three possible development scenarios for the transforming countries of East Asia: (i) to liberalise agriculture and make smallholders more market aware and responsive; (ii) to expand the rural, non-farm sector and provide opportunities in the countryside outside farming; and (iii) to support rural populations to migrate and ‘exit’ agriculture.

Despite the complexities of the processes underway and the shaping factors that intervene to make all cases, seemingly, idiosyncratic, there are some high level statements that we can make on either side of the debate regarding the evolving economics of the smallholding:

1. The family-owned smallholding often remains productive relative to large units; this applies particularly to wet rice-based smallholdings in East Asia.
2. Small-scale or micro-mechanisation, along with the emergence of machine rental markets, has enabled even small units to mechanise production and to glean some of the benefits of such new technologies.

But:

3. Wages in agriculture, although they have generally increased in real terms, remain significantly lower than in non-agriculture, and this gap has widened over time.
4. Many farms in East Asia are now sub-livelihood in extent and are unable, on their own, to deliver a reasonable standard of living for rural households even with yield-enhancing new technologies.

The economics of the smallholder as presented above would

seem to suggest that, *in toto*, the comparative advantage of smallholder farming in East Asia is declining, year-on-year. While it is far too soon to sound the death knell of the era of the smallholding, there would certainly seem to be good reasons to expect the tide to turn for many middle-income economies, and the development/farm-size transition to begin to operate as theory would suggest, namely towards larger units of production. But, as noted, the puzzle is that there is – as yet – very little evidence of this in long-settled lowland areas of East Asia, indeed quite the reverse. Even high income East Asian economies have a much larger small farm sector than economic logic would predict. The next two sections of the paper present explanations for why, beyond economics, this might be so.

3.2. The political-economy of the smallholder

In rich and poor countries alike, politicians, policy-makers and practitioners reiterate the value and importance of the small (family) farm. Tens of billions of dollars of public funds are annually allocated to the support of the small farm sector in the rich world, and as countries in the poor world become less poor this also becomes a feature of policy in these countries too. While land reform has often been more rhetorical than actual, with just a handful of notable exceptions, other means and mechanisms to support small farms have been extensively applied and this must act as a break on the farm-size transition.

Table 6 shows that of the countries of East Asia listed, with the exception of Japan, farm size has continued to decline even as these countries have developed in economic terms. The farm-size transition, in other words, seems to be proceeding in reverse, contrary to theory. In light of this, perhaps the answer to the persistence of (inefficient) small farms in rapidly growing economies lies not in any hidden economic factor at work but in the political economy of agriculture and farming (see Birner and Resnick, 2010)? The political-economy of the small farm, in other words, gets in the way and disrupts the economics of the farm-size transition.

In the 1960s and 1970s there was a good case in many parts of the global South, including in East Asia, that there was an urban bias in development policy (Lipton, 1977). That, through a variety of policies, taxes and price twists, urban populations engaged in non-farm activities were benefitting at the relative expense of rural populations engaged in farming. While elements of urban bias persist, and the political power of urban classes often continues to shape national policy agendas sometimes to the detriment of rural populations, the generic urban bias case is increasingly difficult to sustain. Indeed, in several respects twists are now in favour of farming. There is even a case for suggesting that the reasons for the lower incomes of farmers is less to do with policies of urban bias, than with policies of rural bias that have stunted the progress of the farm-size transition and therefore impeded farm households from taking advantage of the higher incomes than come with operating larger farm units. Even such rural bias, however, cannot offset the inherent productivity (and therefore income) gap between small farms and many non-farm activities. All such support mechanisms can do, arguably, is either postpone the inevitable or to lay the groundwork for the emergence of a post-productivist farm landscape (see Wilson and Rigg, 2003; Mather et al., 2006; Rigg and Ritchie, 2002).

In Japan, South Korea and Taiwan, substantial price support and input subsidy programmes were put in place to narrow – although they never eliminated – the income gap between agriculture and non-agriculture (Otsuka, 2012). In her work on Japan, South Korea and Taiwan, while noting the differences in the policy environments of each, Francks maps out what she sees as a set of common features; these are: “the focus on the support and protection of rice

as the key crop, the role of the bureaucratic 'pilot organisation', the use of a whole range of more-or-less direct methods of guiding the market and the mobilisation of the network of producers' organisations ..." (Francks, 2002: 54; and see Francks, 2000). These, she argues, can be linked to notions of the East Asian development state. Less well-funded and orchestrated efforts have also characterised agricultural policies in Indonesia (McCulloch and Timmer, 2008), Malaysia (Henley, 2012: S32–S34) and, more recently, in Thailand with its controversial rice pledging scheme (Sawasdipakdi, 2014).

In addition to such support schemes, which have created market distortions and, arguably, kept small farms (more) viable and solvent, some countries – such as the Philippines – have imposed ceilings on farm size, restricted the land rental market, and used other policies and mechanisms to, in effect, further retard or delay the farm–size transition (Fan et al., 2013: 3). From a production – rather than from an equity – point of view, such policies are seen to limit the efficiency-enhancing accumulation of land into larger units of production (Fan et al., 2013: 3; Deininger et al., 2008).

In the Philippines, the 1988 Comprehensive Agrarian Reform Program (CARP) notionally set a 5 ha ceiling on land ownership. While the programme was not as comprehensive as its title suggests, it did play a role in causing average farm size in the Philippines to decline from 2.85 ha in 1981 to 2.01 ha in 2002, with a corresponding fall in productivity of some 8 percent (Adamopoulos and Restuccia, 2013: 34). It has also been suggested that such policies negatively affect poor producers by limiting the growth and diversification of the non-farm economy, and also by restricting the transfer of land from wealthier but inefficient households to poorer, but more efficient households. This equity argument has been made, for example, for China (Deininger and Jin, 2005; Jin and Deininger, 2009).

This issue of a constrained (or inefficiently functioning) land market is extended further in countries such as Vietnam and China, because in these countries the state ultimately owns all land and there are restrictions not only on the operation of the land rental market but also on land sales. This has operated as a brake on the transfer of land. In such contexts, where there is a risk that the state may requisition and reallocate land which is viewed as not being used, absent smallholders may be reluctant to allow their land to be farmed by anyone but their kin (see Anh et al., 2012).

The political economy of farming in East Asia does, in these ways, go some further way towards explaining the persistence of the smallholder against the backdrop of rapid economic growth and structural change. But it is by no means wholly satisfactory. In much of Southeast Asia, for example, non-farm wages remain considerably higher than returns to agricultural work, farm subsidies are modest, and the land and rental markets are not fundamentally constrained. And yet, the smallholder persists. The puzzle, in other words, that informs this paper also persists. We begin to get to the bottom of this in the final core section of the paper, where we consider the third element in the explanatory nexus: the construction and nature of rural livelihoods in East Asia.

Building on the generalizations made at the end of the last section, we can make the following broad observations about the contribution of the political-economy perspective to our overall aim of understanding the persistence of the smallholder and smallholdings in East Asia:

1. Urban bias has shifted, especially in many middle-income East Asian countries, to rural bias as farming is increasingly subsidized through a range of measures that have supported smallholder farm production.
2. To add to this, in some countries of East Asia restrictions on land sales and the land rental market as well as the natural

'stickiness' of land ownership have acted as a brake on the farm-size transition, impeding the 'rational' operation of the farm economy.

But:

3. These interventions have not counteracted the productivity and therefore income gap between farm and non-farm work.
4. With the result that smallholdings alone cannot deliver a sustainable livelihood given the growing pressure to earn cash and the ever rising level of needs required to achieve Adam Smith's 'creditable' existence.¹⁵

3.3. The livelihoods of the East Asian smallholder

In this third lens onto understanding the persistence of the smallholder in East Asia, rather than viewing farming either in the context of the political economy of agriculture or against aggregate data on returns to labour or the productivity of farms of different sizes, we begin from the perspective of the smallholder. In other words, rather than expecting the smallholder to conform to economic logic or their decisions to be shaped by the exigencies of government policy, we look to the livelihood strategies that farm households have devised in the face of the various opportunities and constraints – both within and beyond agriculture – under which they operate. We approach the argument, in other words, from the other direction, asking not (implicitly) 'why aren't smallholders doing what they should!' and instead 'what explanatory elements does a smallholder-focused assessment introduce that are overlooked taking an economic or political-economic approach?'

The key first characteristic of the smallholder in many countries of East Asia is that their livelihoods are not met only – or even mainly – from farming. This applies as much to relatively poor countries such as Laos (Manivong et al., 2014; Rigg, 2006b; Bouahom et al., 2004) and Cambodia (Marschke and Berkes, 2006; Scheidel et al., 2014) as it does to middle-income countries like China (Zhao and Barry, 2014; Hu and Rahman, 2015), Vietnam (Hoang et al., 2014), Thailand (Rigg et al., 2014; Funahashi, 2009; Thongyou, 2014) and Malaysia (Preston and Ngah, 2012; De Koninck and Ahmat, 2012). This means that we need to understand the persistence of the smallholder in much wider terms, and the smallholding only as one element in a household's livelihood repertoire. To put it succinctly, the economics of farming (as discussed above) and the economics of the smallholder are not the same thing. This also has ramifications for government policies which may not have the purchase (or effects) intended because the grounds on which smallholders make their decisions and the resource scarcities that shape those decisions are different from those expected by policy-makers.

Terms such as occupational diversity (Martin et al., 2013) or multiplicity (Rigg, 2006a), pluriactivity (Andriess and Phommalath, 2012), diverse and multi-sited livelihoods (Preston and Ngah, 2012), and diversification-for-survival all pay attention to this shift in the constituent balance of rural livelihoods (Rigg et al., 2012). China's national rural survey reveals that the proportion of the rural working population engaged full time or part time

¹⁵ "By necessities I understand not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without." Smith, *Wealth of nations*, <https://www.marxists.org/reference/archive/smith-adam/works/wealth-of-nations/book05/ch02b-4.htm>.

in non-farm work rose from 15 percent in the early 1980s, to 45 percent in 2000, and reached 62 percent in 2008, comprising some 310 million workers (Huang et al., 2012: 35). The share of agriculture in China's rural household income profile more than halved between 1985 and 2010, from 66 percent to under 30 percent (Fig. 1).

To be sure, growing occupational multiplicity or livelihood diversification are not limited to the East Asian region; it is a 'pervasive and enduring' characteristic of the global South generally (Ellis, 2000: 290; and see Wiggins, 2014). That said, it is particularly prevalent in East Asia because of a combination of rapid industrialization and the working opportunities that have arisen, dramatic improvements in physical infrastructure and attendant mobility, and the large numbers of rural households struggling to meet their escalating needs from farming ever smaller land holdings (see Rigg et al., 2012; Rigg and Vandergeest, 2012). In his paper on rural livelihood diversification in sub-Saharan Africa (SSA), Ellis (1998: 9–10) notes the greater reliance on non-farm income in rural Asia compared with SSA¹⁶ and, furthermore, states that the roots of this tendency are different in the two regions. In Asia, growing reliance on non-farm work and income is driven by lack of land, while in Africa it is lack of access to services and environmental constraints that are key in propelling livelihood diversification (page 10). Alongside the 'push' factor of land, East Asia has had – compared to SSA – the important 'pull' factor of burgeoning employment opportunities associated with fast-track industrialization (Alobo Loison, 2015). Overall for Asia, the rural non-farm economy probably accounts for 30 percent of total full time rural employment and generates 50 percent of total rural income (Wiggins, 2014: 3–4).

Livelihood diversification has been critical in making it possible for rural households with sub-livelihood holdings to keep hold of their farms even while they, relatively speaking, pay less attention to these farms. It is also the case that declines in smallholder poverty rates in countries such as China, Indonesia, the Lao PDR, Thailand and Vietnam are tied to the engagement of smallholders with non-farm work. Land holdings may be sub-livelihood but, for increasing numbers of farm households, that does not mean that they are facing an existential crisis. Farming is subsidiary or supplementary to living. This process of diversification may be *in situ* as farmers embrace growing local opportunities for non-farm work (Rigg et al., 2014) or *ex situ* as household members leave their homes and villagers in search of work in other places (De Koninck and Ahmat, 2012), and not infrequently in other countries (Barney, 2012).

Academic interest in rural East Asia's mobility revolution has often not extended to its implications for farming and farm productivity. Nonetheless, there is growing evidence that many of the surprising features of farming in East Asia can be linked to the effects of migration. These include the planting of tree crops such as rubber (Thongyou, 2014; Scaria et al., 2014), teak (Newby et al., 2012) and eucalypt (Boulay et al., 2012) on crop land, even rice land; the substitution of transplant rice culture for direct seeding (broadcasting) (Kamoshita et al., 2009; Ogura et al., 2011); the expansion of the area of idle land in high population density regions (Leong Fee, 1985); and a more general dis-intensification of production and preference for labour-saving crops (Mertz et al., 2013). Notably, all of these are instances of declining land productivity largely independent of the effect of size of holding (as discussed in the last section). To understand how migration has wrought such changes, there are four particular issues that would

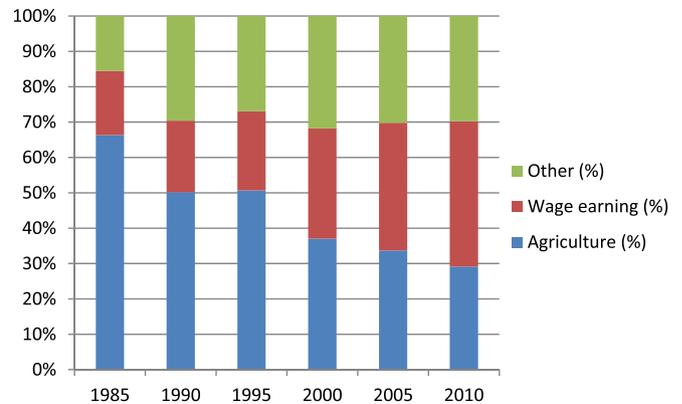


Fig. 1. Income share of Chinese rural households, 1985–2010. Source: data extracted from Huang et al., 2012: 17.

seem to be at work. First of all, migration has left some households, even some villages, in labour deficit, leading farm households to save labour either by planting labour saving crops (such as rubber or teak), or by dis-intensifying production (such as broadcasting their rice, rather than transplanting), or by mechanising production (see De Brauw, 2009). The second issue to note, is that farm households have become relatively cash rich (as well as labour poor), so that households have the option of buying their food rather than growing it (Downman, 2012: 65). The driving logic of cultivating sufficient rice (or other staple) to meet subsistence needs above – and before – all else does not operate in the way that it once did, providing the latitude to use land and allocate labour in new ways. The subsistence ethic of the smallholder has been eroded and the peasant is no longer “standing permanently up to the neck in water, so that even a ripple is sufficient to drown him” (Tawney, 1932: 77). The availability of cash also, but rather separately, provides the scope for investment in labour saving innovations (machines). Third, migrants are often young women and men who then leave households not only short of labour, but short of the labour needed for many of the more physically taxing farm tasks (He and Ye, 2014). It is not, therefore, just that households may be labour short, but they are short of a particular type of labour. Finally, migration has the effect, although it is also a cause, of making agriculture a low status occupation to be avoided (Rigg and Salamanca, 2011; Bulloch, 2014). Partly for this reason, land may stand idle even when labour is available.

McKay calls the new rural landscapes wrought by migration, ‘remittance landscapes’ (2005). Working in Ifugao in the Philippines, she writes how the “circular migration of female OCWs [Overseas Contract Workers] to and from ‘abroad’ can transform rural landscapes in material ways visible not just in housing and appliances, but also in crop and land-use decisions” (McKay, 2003: 293). While her focus is on the effects of financial remittances, we can think of this more broadly, extending it to include social and political remittances that serve to rework rural people's aspirations.

Migration is selective in that it is often particular subsets of the rural population who migrate. Fig. 2 shows the pattern of rural off-farm employment in six provinces in China over three time periods and seven age cohorts. Such employment has become increasingly common over time but is still concentrated among younger, working age cohorts. When this is broken down by gender then it becomes clear that young rural women have largely ‘caught up’ with men in terms of their proclivity to engage with such work away from the natal village. Beyond the observation that most off-farm migrant workers are young(er) – and even this is changing – the empirical evidence is mixed. In some contexts migration is driven by distress

¹⁶ Ellis (1998: 9) states that the balance between farm and non-farm incomes in Africa is of the order of 60:40 while in Asia it is 40:60.

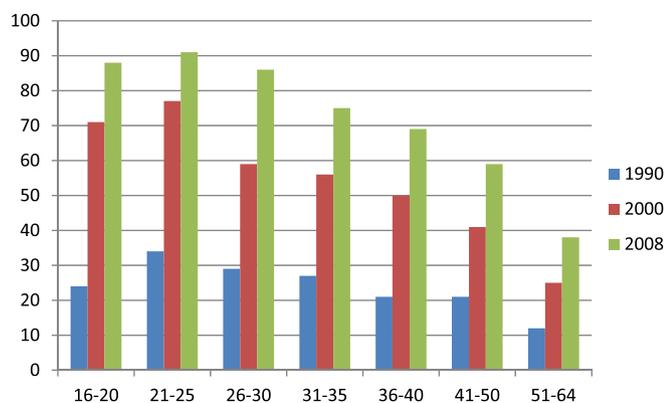


Fig. 2. Off-farm employment in six Chinese provinces by age cohort (%), 1990, 2000 and 2008. Data notes: data collected in six provinces (Hubei, Liaoning, Shaanxi, Hebei and Sichuan; 1160 household surveyed in 2000 and 2009). Source: data extracted from Huang et al., 2012: 36.

Table 7
Asia's greying farmers.

Country	Average age	Date of survey	Source
Japan	70 75% of farmers are over 60 years of age	2013 2010	Economist 2014b http://www.ers.usda.gov/topics/international-markets-trade/countries-regions/japan/basic-information.aspx
South Korea	56% of farm workers >60 years old	2010	http://ap.fttc.agnet.org/ap_db.php?id=324
Philippines	54	2012	http://newsinfo.inquirer.net/687731/college-grads-energize-ph-rice-farming
Thailand	55	2008	UNDP 2009: 71
Malaysia	53	2005	Shafiai and Moi 2015
Indonesia	(80% > 45 years old)	2011	http://www.reuters.com/article/2011/06/10/us-indonesia-farmers-idUSTRE7591FD20110610
Vietnam	37	2006	http://www.fao.org/docrep/012/k8499e/k8499e00.pdf

Sources: as noted.

and undertaken by the poor (Vutha et al., 2011), while in other instances it is a strategy of consolidation performed by the non-poor (Thao, 2013: 95–96); in some societies, migration is largely male (Maharjan et al., 2012),¹⁷ in others it is predominantly female (Elmhirst, 2007; Thao, 2013), and in other places it encompasses both genders (Koning, 2005). Furthermore, the 'rules' of engagement with migration change as the moral envelope of accepted practice is opened up. In the 1970s, women represented just 15 percent of the Filipino international migrant labour force; by 2010 they made up 55 percent of new hires (Cortes, 2015; and see Phouxy and Tollefsen, 2011 on the feminisation of migration in the Lao PDR).

Age-selective migration is an important contributory factor, along with declining fertility rates and growing life expectancy, behind the gradual geriatrication – or greying – of the farm household and labour force. This is, famously, most pronounced, in Japan. Here the average age of farmers stood at 57 years in 1970, 60 in 1998, and reached 70 years in 2013. While Japan may have the oldest farmers, the greying of farming is a feature across the Asian region (UNDP, 2010: 71; Yudelma and Kealy, 2000) and is driven not just by declining fertility rates but by the fact that young people are actively avoiding farming, sometimes for reasons of simple economics (returns to farming are poor) but also for socio-cultural reasons (the status of farming is low) (see Lahiri-Dutt, 2014) (Table 7). All this means, and as White (2012) says, that “thinking about youth, farming and food raises fundamental questions about

the future, both of rural young women and men, and of agriculture itself” (White, 2012: 16).

Once more it is worthwhile moving on from the details, to identify some general propositions:

1. Farming no longer occupies the central position it once did for many smallholders in Asia.
2. This is because smallholders construct multi-stranded livelihoods on the basis of multi-sited households and engage with a wide array of activities, many extra-local.
3. Smallholders have not, in consequence, had to sell or abandon their farms even when they are sub-livelihood in size.

But:

4. This still leaves only partially resolved the question of why smallholders do not abandon their smallholdings and exit farming altogether.

The general emergence of pluriactive livelihoods may mean that smallholders can survive on their increasingly marginal farms, shedding some additional light on the smallholder puzzle, but it still leaves unanswered the following question: If farming is often marginal, if returns are unattractive (in remunerative terms) relative to the alternatives, and if for the young farming is becoming a low status occupation to be avoided, why do we not see smallholders selling their land thus permitting the farm-size transition to take place? To understand this, it is necessary to leave the farm and the field and venture into the factories and streets of East Asia. An important part of the answer, we contend, to the smallholder puzzle requires that we examine the nature of non-farm work under conditions of late capitalism.

3.4. Land, smallholders and the precarity of late capitalism

In many of the countries of developing East Asia there is a weak market in land – land sales are few. This, as noted, is a surprise if the economic logic of the small farm is in decline, and that of the large(r) farm is growing. Four explanations offer themselves.

One possibility is that land is valued over-and-above its economic value alone; that having, often, inherited land themselves, smallholders expect to pass it onto the next generation. It has a cultural value in its social transfer value to the next generation which usurps its sheer economic value. In 2015 the first two authors interviewed an 83 year-old former headman in a Thai village overlooking the Mekong and he said this about the value of land:

¹⁷ In 2008 the Nepal Labour Force Survey recorded that while 15 per cent of the total male population were recorded as living outside the country the figure for women was under 2 per cent (Maharjan et al., 2012: 97).

No, I won't sell the land. It would turn out for the worse and my children would not have farm land. Here we are farming families, we still need to have the land to farm on. Abandon any land or sell it, is most foolish. ... selling the land is like getting rid of opportunities to make a living ... it's for your children and grandchildren's sustainability. Selling the land is such a ruin. With farmland, you can earn a living (forever) and it's a true happiness.

A second reason to hang onto land is that, with rapidly rising land values, it makes good financial sense. Land owners are, in effect, speculating that over time the value will continue to rise and that holding a relatively unproductive resource – in terms of returns to labour – makes sense in the medium term (see [Firman, 1997](#); [Han and Vu, 2008](#)). A third possible explanation is that with little in the way of savings and few other assets, land is the one form of collateral available to farmers who need to borrow money to fund, for example, the education of their children. A final explanation is that even though returns to smallholder farming may be low, there is security in continuing to have a foothold on the land. And, parallel to this, the non-farm work that has become such a feature of rural livelihoods is inherently precarious.

For farms to be amalgamated into larger holdings it is necessary for those who exit agriculture to find productive, secure and remunerative work elsewhere, in the non-farm sector, whether urban or rural. In addition, there needs to be surety that those who are left to age in their villages are secure in later life. There is no doubt that non-farm working opportunities have proliferated across East Asia with industrialisation ([Rigg et al., 2012](#)). Indeed, this has been a globally significant process. However while work has proliferated, whether it is secure is not so certain. Such employment is emblematic of the rise of precarious work associated with late capitalism.

Scholarship on 'precarity' and 'the precariat' is linked to Standing's work on the global North ([2011, 2013, 2014](#)), although it has since been extended to the global South.¹⁸ "A feature of the precariat", [Standing \(2013: 5\)](#) writes, "is not the level of money wages or income earned at any particular moment but the lack of community support in times of need, lack of assured enterprise or state benefits, and lack of private benefits to supplement money earnings". Related to this scholarship on precarious work is that which notes the way in which the informal sector has morphed into the informal economy ([Chen, 2007](#); [Chang, 2009](#) and [2011](#)). While rapid modernisation may have eroded the informal sector in many East Asian countries, the informal economy has often grown with the result that the "informal nature of work is neither a problem of certain groups of workers in specific sectors, nor that of developing countries alone" ([Chang, 2009: 176](#)). To add to this is the general absence of social safety nets and welfare systems protecting the most vulnerable across much of East Asia ([Kwon, 2005, 2009](#)). This leaves, even for the middle-income countries of East Asia, existential security lying in the hands – and on the farms – of individual families and households.

While more detailed and empirical work remains to be done on emergent, late-capitalist precarity in East Asia, we would contend that these broader contextual factors are important in helping to understand why small farmers across the region, despite the economic and other logics set out in this paper, retain hold of their sometimes tiny and often sub-livelihood farms. Factory workers

can be laid off at a moment's notice; severance pay is limited; unemployment and social security benefits are, often, negligible or zero; and social protection and universal health insurance absent for many of the most vulnerable ([Rigg, 2015: 70–84](#); and see [Askew, 2003](#)).

This last point means that the insecurities of much non-farm work ripples back to the farm spatially and sectorally, but it also does so socially in the guise of the inter-generational transmission of livelihood risk. The absence of a social safety net for many of the countries of developing East Asia means that there is a mutuality in the livelihoods of greying farmers and their children; livelihood security is, in other words, co-produced in the factories and the fields of East Asia. Factory work alone would not deliver security; and farming alone would not secure subsistence. For families that may be 'one illness away' from poverty ([Krishna, 2010](#)), the strategy adopted is consistent, not capricious.

All this leaves one final question to address:

1. What possible futures offer themselves for the East Asian smallholder and, therefore, for farming?

4. Conclusion: East asian small farming futures

"The history of agriculture in the last two centuries suggests two features of change in agrarian structure as economies grow. One, even if recent experience in developing countries still shows farms becoming smaller, at some point in economic development, farm sizes start to grow as holdings are consolidated. Two, the pathways along which agrarian structures evolve vary considerably" ([Wiggins et al., 2010: 1344](#)).

"Social scientists do not have a distinguished record as prognosticators, and anthropologists seldom even try to predict the future" ([Netting, 1993: 320](#)).

Traditionally, a strong case has been made for the positive equity-effects of small farm-based development ([Hazell and Rahman, 2014a](#)). When investments are made to boost the production of small farms this will do far more, unit growth for unit growth, than production increases based on large estates or manufacturing enterprises, for instance. Whether this remains the case in middle-income countries is an important consideration. The so-called middle-income trap pays attention to the failure of some countries to move up the technological, productivity and value added ladder. Part of the story is the apparent unwillingness of rural populations, which are increasingly well-educated, permanently to leave the countryside and their small farms (see [Rigg et al., 2014](#)). On the face of it, the logics of development, both personal and national, should be leading to just such a historical break. As [Hazell and Rahman \(2014c: 25\)](#) write, "the gathering forces of rapid urbanization, a reverse farm size transition towards ever smaller and more diversified farms, and an emerging corporate-driven business agenda in response to higher agricultural and energy prices, are creating a situation where policy-makers need to differentiate more sharply between the needs of different types of small farms, and between growth, poverty, and food security goals."

It is worthwhile noting, however, that the precarious future of the small farm and the smallholder has been on the agenda for many years:

- 'The economics of small farms' ([Tweeten, 1983](#))
- 'Why are farms so small?' ([Johnson and Ruttan, 1994](#))
- 'Is there a future for small farms?' ([Hazell, 2005](#))

¹⁸ For a collection of papers on precarity in Asia see *American Behavioral Scientist* (57[4], 2013). This includes separate papers on Indonesia ([Tjandraningsih, 2013](#)), the Philippines ([Ofreneo, 2013](#)), Thailand ([Hewison and Tularak, 2013](#)) and Vietnam ([Arnold, 2013](#)), as well as a general overview ([Arnold and Bongiovi, 2013](#)).

- 'Is small beautiful? Farm size, productivity, and poverty in Asian agriculture' (Fan and Chan-Kang, 2005)
- 'The future of small farms: trajectories and policy priorities' (Hazell et al., 2010)
- 'The future of small farms' (Wiggins et al., 2010)
- 'Is small farm led development still a relevant strategy for Africa and Asia?' (Hazell, 2013)
- 'The future of small farms in Asia' (Otsuka et al., 2014)

The fact that the smallholder is still alive and kicking in East Asia does raise questions about whether scholars have misconstrued the basis on which the survival or the demise of the smallholder rests.

Shedding light on the puzzle set out in the opening paragraphs of this paper is also valuable in development terms. Dercon (2013), with a focus on Africa rather than Asia, argues that "looking at agriculture in isolation is a recipe for misunderstanding the economic transformation in growing economies and the role of agriculture therein" (page 2). While the pluriactive nature of rural livelihoods has been acknowledged in East Asia rather more than it has in Africa, this discussion has highlighted a second level of misunderstanding to that posed in Dercon's paper. That is, to understand how land is used and why it is retained we need also to understand the nature and character of non-farm opportunities and employment. More particularly still, we need to seek to understand the role that such work plays not only in taking people off the land but also, and paradoxically, keeping them connected to the farm.

There are a range of reasons to think that the former advantages of smallholders are under pressure. The effects of climate change, the buying practices of supermarkets, the general direction of agricultural research (away from scale neutral or smallholder friendly innovations), and the pressure that international trade agreements underpinned by the logics of liberalization are having on the ability of states to subsidise and protect smallholders, all these trends are working against small farmers and in favour of larger units. But perhaps the most important of all is the role of rising wage rates.

And yet, as noted, these pressures do not – so far, at least – seem to be making noticeable inroads into the smallholder-dominated East Asian countryside. We suggest that this is because keeping a toe-hold in rural space continues to over-ride the apparent economic attractions of leaving the countryside altogether. The precarity of much non-farm work, the absence of a well-woven social safety net, and a certain emotional attachment to natal homes all play a role. The question is whether these factors will continue to retard the farm-size transition. Here we offer four possible scenarios, by which we mean possibilities, rather than forecasts.

First, and the scenario which accords most closely with mainstream perspectives of agencies such as the World Bank, the farm-size transition will finally assert itself. Most smallholders will sell their sub-livelihood farms and exit agriculture permitting those who stay to accumulate land and modernise agriculture, securing the efficiency and productivity gains – as they are seen – that to date have been so elusive. Behind this scenario is an assumption that governments will, to an extent, abandon the smallholder in the face of the exigencies of global trade while, perhaps, providing the off-farm securities that are absent in much non-farm work in developing East Asia. The scenario, in other words, sees the gradual end of the smallholder and the 'modernisation' of farming.

The second scenario sees an entrenchment of pluriactive smallholders but one where economic development means that smallholdings become increasingly post-productivist. In this schema, the class position of smallholders becomes less like that of the peasant, and more akin to that of a latter-day yeoman small farmer. These households will retain their land, but the role of that

land in livelihoods will be transformed. They will become akin to Europe and North America's part-time farmers.

The third scenario sees 'more of the same', at least in the medium-term. Smallholders will continue to innovate, embrace the opportunities provided by new value chains (green, organic, high value), and construct their livelihoods across spaces and sectors. With states limited in their interventions by international agreements and unwilling to put in place adequate safety nets smallholders, even in upper middle income countries, will continue to dominate the rural landscape at least in numbers even if not in terms of their contribution to the rural economy.

A final scenario sees the political power of farming populations assert itself to such a degree that policies designed to provide substantial support to farming and rural livelihoods are put in place. This will, at least in the medium term, protect smallholders as it has done, for example, in Japan, or at least until the logics of low fertility and ageing bite.

These scenarios will neither become realised neatly in the ways outlined here, nor inscribed in particular countries. But they provide a set of possibilities about how agriculture could look, and the place of smallholders in that vision.

There are reasons to think that the conditions for more thorough-going transformations in the countryside may be at hand. The diminishing size and greying of the farm household will force some to relinquish their grip on their landholdings. Others, having spent decades working away from 'home', may come to accept that their expected return will not be realised. And the economic and social costs of living between rural and urban may become intolerable, forcing households and individuals to make a choice, rather than to juggle livelihoods across space and sectors. That said, it is also likely that paths of agrarian change in East Asia will not correspond neatly to what theory suggests, governments desire, or scholars divine.

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