

Family Farms: Survival and Prospect

A world-wide analysis

Harold Brookfield and Helen Parsons



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Family Farms: Survival and Prospect

Marx, Lenin and Kautsky all regarded family farming as doomed to be split into capitalist farms and proletarian labour. Most modern economists regard family farming as an archaic form of production organization, destined to give way to agribusiness. *Family Farms* refutes these notions and analyses the manner in which family farmers have been able to operate with success in both developed and developing countries, using examples wherever these are illuminating.

This book begins by reviewing theoretical arguments about agricultural structures, and defines family farming. This is followed by five vignettes about farming in the first half of the twentieth century. The authors analyse the conditions of access to land and water, labour, livestock, tools and seed and review marketing arrangements and how they have changed since 1900. A three-chapter review of evolving policies in the North Atlantic countries, in the communist states, and in the developing countries, leads to a discussion of the impact of neo-liberalism. New issues of the farmer as steward of the environment are then explored, as well as modern ideas about de-agrarianization and a discussion of land reform, tracing the experience of Mexico and Brazil. In two final chapters the more positive approach of pluriactivity is discussed and followed by a review of organic farming as a principal modern innovation. New political organizations representing family farming are described and their demands are discussed with empathy, but in a sceptical manner.

Family farming is an adaptable and efficient form of production organization, and these qualities have allowed it to survive. The future will be no easier than the past, yet family farming continues to flourish in most contexts. This book will be useful for researchers, students and lecturers interested in Development Studies, Rural Studies and Geography and Anthropology, as well as general readers who have an interest in farming.

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**For our partners and sons
Muriel, George, John, Max and Eddy**

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Preface

‘You are writing a book about small family farms world-wide? Historical, is it? Surely the family farm is almost extinct?’ The speaker was a city-dweller in a developed country, albeit in a small city surrounded by family farms. He was also an academic historian, well aware that Marx and Lenin predicted that capitalism would dissolve the peasantry into capitalist farmers on the one hand and proletarian workers on the other. Most surely, he had read Eric Hobsbawm’s (1994: 289–93) summary account, backed up by employment data from many lands, of the ‘death of the peasantry’ between the 1940s and 1980s. He was less likely to have read Franklin (1969), who predicted that the European peasantry would have ceased to exist by about the end of the twentieth century. We have read several more recent obituaries for the small family farmer. They are written in advance of their actual demise, but there is a widespread belief that globalization has finally destroyed the basis for their independent existence so that, to cite one example, ‘North American family farmers now seem to be on the cusp of virtual elimination, both as direct producers and as social actors’ (Adams 2003: 11). Their replacement is seen to be industrially organized ‘factories in the fields’ enjoying all the economies of scale. Many believe that something very like this has already taken place in the United States, that only a massive structure of subsidies has slowed the transformation in Europe, and that it is rapidly occurring in other developed countries.

In part, this book springs from reaction to all this gloom. Small- to medium-scale family farmers have not disappeared nor do they show any immediate sign of doing so. The 1980s and 1990s, the decades in which Hobsbawm consigned them to the dustbin of history, in fact saw the emergence of small farmers’ political movements on an unprecedented scale. The agro-industrial corporation, of which the real prototype was probably the tropical crop plantation, staffed by slaves or indentured labourers, has become important in certain fields of activity, but has not become the dominant mode of rural production. There are certainly many company farms, but a lot of these are family companies, incorporated for taxation convenience. In Europe, Canada, Australia and New Zealand, and even in much of the USA, the great majority of farms continue to be operated by families. They have not survived unchanged, and for most farmers in most lands, the twentieth century was a traumatic era. Although we do not set out to write a rural history of the twentieth

century, the changing conditions of farming through the past hundred years are the subject of most of our chapters. We cannot fully understand the present, nor try to predict the future, without knowing how the present came about.

The other reason we had for writing this book is what we have learned from lifetime experience among farmers in many lands. This is the commonality of the conditions of family farming over a wide range of social and political conditions in the modern world. Whether we are among farmers in New Guinea, Latin America, China, Africa, North America or Europe, we are among people practising the same basic trade of producing a livelihood from the earth and its biota. All have to deal with people who have power over them as persons, over their land, over the disposal of their produce, or over all three of these. The form changes from place to place and time to time, but the basic structure does not. To say this is not to ignore the great contrasts in the world between conditions in the wealthy countries and those in the developing countries. It does put the atomized population of farmers into their widely replicated relationship of subordinate dealing with the more powerful who can control their access to markets, to the means of production and, to a greater or lesser degree, their freedom of individual decision making. Despite the radical differences in the way in which these constraints are imposed, this unequal relationship has, in the twentieth century, applied under pre-capitalist, capitalist and communist forms of governance. We show this in our chapters that follow.

This book discusses the changing conditions of family-scale farming comparatively across these different politico-economic systems, principally from the standpoint of how the conditions impact on farmers' livelihoods and, in turn, of the adaptations that farmers have been able to make. We write of family farmers in both developed and developing countries, and also of those in Russia and China. One group that would certainly agree with our view that all family farmers share a common set of problems is the membership of the international small-farmers' movement, *Via Campesina*, discussed in Chapter 14. Clearly, our approach is unusual. Few writers have attempted to compare actual farming conditions in such a varied set of lands. Bayliss-Smith (1982) is one of our few precursors down this road. His small book uses the tools of energy input/output analysis, very popular in the 1970s and 1980s, to compare the efficiency of both production and distribution systems in seven case-study communities ranging from pre-industrial to fully industrial in their production modes. Our approach, like his, seeks to avoid the perils of overgeneralization by the use of case-study material, our own and that of others. This means that we are inevitably selective. But we lack Bayliss-Smith's means for quantified comparison, and our discussion is qualitative. Our purpose is not to seek efficiencies but to understand how a very large proportion of the world's farmers obtain and allocate their resources, dispose of their products, and relate to other sectors of society and economy around them.

These related sectors are of major importance to our analysis. While it is statistically right to point to the declining role of agriculture in the national economies of all developed countries, this is to isolate the farm from those who supply the means of production, and those who buy and often manufacture from the farm product. While farming itself accounts for only around 2 per cent of gross domestic

product (GDP) in these countries and much is made of this in general economic literature, the true comparison with other sectors should include all associated activities, even down to the worker on the supermarket checkout who performs much the same role in the system as the farmer's wife or daughter selling produce by the roadside or in a village market in an African country. The farm and food sector as a whole makes up from 10 to 20 per cent of the whole economy in a range of countries, including Britain, the USA and Australia. Farmers and their staffs, as the production workers in this system, have a central place in very large economic sectors.

There is a number of ways in which our subject could be approached. We are grateful to anonymous referees for the publishers who dissuaded us from persisting with one that was clearly inappropriate. Although the material is presented as a continuous flow the better to facilitate backward and forward reference, there are fairly distinct sections in the presentation. After two initial chapters which face the 'agrarian question', define the family farm and provide a backward glance at farming in the early twentieth century, chapters 3, 4 and 5 set out the basics of working the farm and marketing its produce. Chapters 6, 7 and 8 then introduce the relationship of farmers with the state, successively in what we call the 'North Atlantic' countries, then Russia and China and third, more generally, in the developing countries. In Chapter 8 we specifically introduce neo-liberalism. Chapters 9 and 10 next review some modern trends and the new role for farmers as environmental custodians for their fellow-citizens. In Chapter 11 we look at the question of land reform and in Chapter 12 the large question of de-agrarianization. Chapter 13 examines the more positive approach of pluriactivity, and we discuss the recent growth of organic farming. Finally, in Chapter 14, we examine prospects through a generation span in the twenty-first century. Our conclusion is mixed, but not pessimistic.

We make very limited use of the term 'peasant' in this book. This is because of the unfortunate pejorative implications of the term 'peasant' in colloquial English, absent from other languages. Lehmann (1996) reviewed the several meanings of 'peasant' in English and advised that the term be dropped. All our farmers would in French be *paysans*, in German *bauern* and in Spanish *campesinos*, but in English they have to be family farmers, or just farmers. In Chapters 8 and 11, where we are writing of Latin American farmers, we use *campesinos*.

Although we have written this book in a department of anthropology which has been very kind to us, we are by training a geographer and an agricultural scientist. One of us was both brought up on a farm and lives on one now, while the other has only some teenage experience of actual farm work. Both of us, however, have had extensive experience of work with and among farmers in the developing countries and this, probably, is the experience that comes through most strongly in our writing. From the early 1990s until its end in 2002, we were intimately involved in the work of a UN project on farmers as guardians of biodiversity, entitled People, Land Management and Environmental Change (PLEC), referred to at several points and described in Chapter 10. Most of our work has been concerned with what farmers do, with their management practices in relation to the environment. Most recently, we have written, edited or worked on three books concerned in one way

or another with the diversity of what they do and of the landscapes that they produce (Brookfield 2001; Brookfield *et al.* 2002; Brookfield *et al.* 2003). In none of these books, nor in the UN project, did we deal adequately with the social and political contexts in which their work is embedded. This book addresses that gap.

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Canberra, Australia and Quillabamba, Peru, July 2007

Abbreviations

AES	agri-environmental scheme
ASERCA	<i>Apoyo y Servicios a la Comercialización Agropecuaria</i>
AUD	Australian dollar
BSE	bovine spongiform encephalopathy
CAFOs	concentrated animal feeding operations
CAP (EU CAP)	Common Agricultural Policy of the European Union
CBD	Convention on Biological Diversity
CCC	Commodity Credit Corporation
CIDA	<i>Comité Interamericans de Desarrollo Agrícola</i>
CONASUPO	<i>Comisión Nacional de Subsistencias Populares</i> (Mexico)
CPE	<i>Coordination Paysanne Européenne</i>
CRP	Conservation Reserve Program
DDT	Dichloro-Diphenyl-Trichloroethane
EAFRD	European Agricultural Fund for Rural Development
ECLA	Economic Commission for Latin America
EQIP	Environmental Quality Incentives Program
EU	European Union
FAO	Food and Agriculture Organization
FELDA	Federal Land Development Authority (Malaysia)
FMD	Foot-and-mouth disease
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GEF	Global Environment Facility
GM	genetically modified
GNP	gross national product
GTV	<i>Gestion des Terroirs Villageois</i>
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
IPM	integrated pest management
IUCN	International Union for the Conservation of Nature and Natural Resources (The World Conservation Union)
LFA	less favoured areas (in the European Union)

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MAB	Man and the Biosphere Programme
MST	<i>Movimento dos Trabalhadores Rurais Sem Terra</i>
NAFTA	North American Free Trade Agreement
NFFC	National Family Farm Coalition (United States)
NGO	non-governmental organization
NPK	Nitrogen:Phosphorus:Potassium
OECD	Organization for Economic Cooperation and Development
PAN	National Action Party (Mexico)
PLEC	People, Land Management and Environmental Change
PRI	Party of the Institutionalized Revolution (Mexico)
PROCAMPO	<i>Programa de Apoyos Directos al Campo</i>
PROCEDE	<i>Programa de Certificación de Derechos Ejidales y Titulación de Solares Urbanos</i>
TVEs	township and village enterprises
UK	United Kingdom
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNU	United Nations University
USA (US)	United States of America
USDA	US Department of Agriculture
USSR	Union of Soviet Socialist Republics
WHO	World Health Organization
WTO	World Trade Organization

1 Asking agrarian questions: defining the family farm

The total disappearance of the family farm has been confidently predicted for almost a century and a half, and is still predicted today. While a great number have not survived into the twenty-first century, the fact that so many have done so, and in so many different lands, is remarkable. In what is now termed ‘late capitalism’ the continued existence of these non-corporate units of production seems anomalous, even archaic, to many observers. An integrated explanation is offered at the end of the book, but in this first chapter we show why they were expected to become extinct in a much earlier phase of capitalist evolution. Then we define what we mean by ‘family farm’. Some other issues of importance are introduced, to be more fully developed in later chapters.

Capitalism and farms: the classic ‘agrarian question’

The model

In Britain, between the fifteenth and eighteenth centuries, the characteristic farmer became no longer a peasant working strips of land received in return for services or quit-rent to a lordly holder, but a tenant, paying rent on leasehold land and working it himself or with the aid of hired labourers. Meantime, land had become the property of a growing class of persons who included descendants of feudal lords, but were also operators of a range of businesses. Labour was no longer tied to the provision of services to the lords but now dependent on wages and became ‘free’ to move into other fields of activity. This process took a long time, but it advanced faster and further in Britain than in other countries. The dissolution of the old feudal bonds, and the creation of a ‘free’ population of workers, also created a population of capitalists who accumulated that part of the product of labour not necessary to be paid to the workers for their survival needs, called the ‘surplus value’ of labour. They were themselves free to invest the accumulated surplus in new industries, and to compete with one another in the market. Adam Smith (1776: 155) had already noted that the ‘surplus produce of the country . . . over and above the maintenance of the cultivators . . . constitutes the subsistence of the town’. This necessary relationship, reinterpreted by Marx (1867), provided the basis for

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explaining and (imperfectly) predicting the future of the world-wide capitalist economy.

From Marx, via Lenin and Kautsky, to the scale of farms

To Marx, who was simultaneously economist, sociologist and historian, the initial basis of capitalism was ‘primitive accumulation’ of capital. Following the English model, as he not altogether accurately interpreted it in the famous Chapter 24 of *Capital I* (Marx 1867), this was done through enclosures, in the context of a growing market economy, involving the separation of the worker from control of the means of production, whether as owner or renter. This, in turn, required production of commodities traded on the market, using paid labour. On the land, therefore, capitalists acquired the means of production, and labour became proletarian.¹ The competitive discipline of ‘market dependence’ led to the growth of productivity of both labour and land, by means of improvements and innovations. This same growth in productivity lowered the costs of providing food and other raw materials for the growing urban and other non-agricultural population created by capitalist transformation. The ‘agrarian question’ of the nineteenth century concerned how surpluses earned from agriculture are transferred to investment in other economic sectors, specifically industry (Kautsky 1899; Lenin 1899). Capital acquired from farmers by merchants and usurers was one major channel. Another was ‘unequal exchange’, being the difference (in labour value) between returns for agricultural and industrial goods. A similar basic question came to dominate much non-Marxist economic thinking about developing countries in the twentieth century. The most common solution was to enlarge primary produce exports, taxed to provide the foreign exchange needed to fund industrial development.

While accumulation provided the resources needed for industry, and the labour ‘freed’ from the land also provided the labour for industry, there were important consequences among the agricultural population. These consequences happened whether formerly feudal lords converted themselves into capitalist large farmers, or whether such farmers arose by differentiation among the rural landowners. All aspects of the capitalist economy are competitive.² Following the internal differentiation approach, and elaborating greatly on Marx, Lenin (1899) argued that competitive success would raise the wealthier peasants to the status of capitalist farmers while the less successful would fall to the level of proletarian labour. In the process, the ‘middle peasant’ would disappear over time. He illustrated these arguments from a large body of original data on Russian farming. The principal data were from inquiries carried out for local and provincial councils (*zemstvo*) set up in 1864 after the emancipation of the serfs in 1861. Lenin made principal use of data from ten of these inquiries. His research in the *zemstvo* data demonstrated that substantial differentiation had arisen among Russian peasant farmers, in land held and worked, livestock owned and farm machinery employed. He found what seemed clear evidence of ‘capitalist contradictions’ within the Russian village economy.

Kautsky (1899) cast his net more widely over Europe and found that the liberal economic revolution of the nineteenth century had not widely led to the breakdown

in peasant societies that Marx had anticipated. Following Marx in treating the emergence of capitalism as primarily in manufacturing, he viewed the emergence of capitalist/ proletarian division in the countryside in the context of already-established rural–urban trade. Market competition would favour the larger-scale producer who was better placed to adopt the many technical innovations employing wage labour. The smaller peasant would be squeezed out by this competition. But this would take time because farms grow larger and smaller for a variety of independent reasons. Kautsky, and many others who have used the same argument, saw the great advantage of the large farmer as lying in the economies of scale in production, in agriculture just as in industry where Marx and other earlier writers had seen them already. A capitalist farmer could afford to mechanize, deploy labour most efficiently, attract and apply credit, and make better use of scientific advances than a small farmer. Given these advantages, the large farmer could produce more efficiently. These competitive advantages, widely perceived to this day, also underlie the strong preference for capitalist farming exhibited in the modern era of neo-liberal free-market economics. But there have been long and profound debates on the question of the comparative efficiency of large and small farms. Yields per hectare are often higher on small farms than on larger farms. While a lot of the modern argument rests on a now outdated comparative study by Berry and Cline (1979), the yield advantage of smaller farmers has more recently been argued again, principally from modern data in Brazil, by Griffin *et al.* (2004). As Byres (2004) argues in response, it is necessary to distinguish between yield per hectare and yield per unit of labour, and on the basis of the latter the capitalist farm would seem to have clear advantage. Writing of a modern form of agrarian question, that we come to only toward the end of the book, Bernstein (2006) is at pains to point out that scale by itself no longer seems a major consideration in – at least scholarly – debate.

Friedmann, Chayanov and the viability of the commercial family farm

In a series of papers arising out of her doctoral research on the social history of modern wheat farming, Harriet Friedmann (1978a, 1978b, 1980) called attention to an aspect of events in the late nineteenth century and subsequently that had been surprisingly neglected. Kautsky (1899) had noted that the non-capitalist ‘middle peasant’ in Europe had shown considerable resilience in the last quarter of the nineteenth century, but regarded this as only temporary. It was not. After American wheat started to flow substantially into the European market in the 1870s, and prices declined worldwide, capitalist farms in both Europe and America gave way to family-operated farms, not the other way around. By 1935, after the second major period of low prices, the vast majority of commercial wheat production throughout the world was organized through household rather than wage labour. Yet by the 1870s capitalism had reached all wheat producing regions involved in trade, and in most of them there were already capitalist farms dependent on wage labour for production. Household and wage labour farms were therefore in direct competition, and in all this long period, it was the latter that yielded ground.

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Friedmann’s complex explanation is in part technical.³ In the great plains of the USA, harvesting and, later, threshing machinery were rapidly being introduced, reducing the labour requirement on farms. As family farms grew in area by purchase and rental, so machinery suitable for the new average area (about 140 ha after 1920) also became available, making mechanized farming feasible for a family labour force averaging 1.5 male persons; data on female workers were, and usually remain, insufficient. While new land remained available, and with it credit, labourers were drawn off the large capitalist farms of the 1870s and 1880s to set up family farms. The large farms, requiring both to pay rising wages and to earn profits, were unable to compete with household farms that experienced neither of these constraints.

Capitalist farmers in Europe had to compete with American, Canadian and later also Australian and Argentinian producers using household labour at received wheat prices, which converged rapidly between countries and all moved together after the mid-1890s. German capitalist farmers, who for the most part had been feudal landlords in earlier days, sought to survive by coercive labour management and importation of Polish labourers; like French farmers, they were assisted by tariff protection. British farmers, who were not assisted in this way, mostly shifted out of arable production into livestock specialization, reducing their need for labour. In the British case, unlike the German, most farmers were already tenants and the decline in land values was borne by the non-farming owners of the land.

The technical conditions were important, but needed to be considered in conjunction with the contrasted social conditions of production in capitalist and household labour farms. Here Friedmann drew on the work of Aleksandr Chayanov (1923, 1925, 1966), who had used the same *zemstvo* data as Lenin, but relied also on inquiries by himself and his colleagues and students. Chayanov found the demographic stage of a household, as it first grew and then declined after the young became independent, to be dominant in bringing about differentiation between family farms, whatever their degree of commercial orientation.⁴ He concluded that the balance between consumers and workers within the household was the main determinant of the scale of production. In Table 1.1 we adapt his oft-quoted (and oft-misunderstood) table summarizing results in the district of Volokolamsk, west of Moscow.

Chayanov’s explanation relied on the fact that household workers consume the product of their work, whether as food and clothing or as money, but are paid no direct wages. Chayanov isolated the family farming household from its surrounding

Table 1.1 Productivity and intensity of work in relation to household composition at Volokolamsk, 1910

	Consumers per worker			
Consumer/Worker ratio	1–1.2	1.21–1.4	1.41–1.6	over 1.6
Worker’s output (roubles)	131.9	151.5	218.8	283.4
Working days per worker	96.8	102.3	157.2	161.3

Note: Based on data for 25 household farms, after Chayanov (1966: 78, table 2–8).

partly capitalist economy for theoretical purposes. He treated it as 'a family that does not hire outside labour, has a certain area of land available to it, has its own means of production [i.e. tools, etc.], and is sometimes obliged to expend some of its labour force on non-agricultural crafts and trades' (Chayanov 1966: 51). There is no structural requirement for the farm to make a profit. The household is treated as a single, undifferentiated, producing and consuming unit. It will produce, or earn from work off the farm, what is needed to pay its rent (if any) and taxes, keep the farm functioning (in Marxist terms 'reproduce' it) and satisfy its own demands, but will not willingly do more than this. The consumer/worker balance of the family farm will change primarily through demographic process as families enlarge, grow old and are replaced. In effect, Chayanov was relying on the marginal analysis of neo-classical economics, so that an equilibrium level will be found where the marginal utility of outputs equals the marginal disutility of work (Hunt 1979).⁵

Collantes (2006a) usefully points out that, in comparing costs, returns and responses among farms operating under different production systems, Kautsky and Chayanov were in fact both using a neo-Darwinist evolutionary approach, formalized by Lawson (2003) as a population–variety–reproduction–selection model, in which market competition leads to selection of the 'fittest varieties'. Kautsky worked with the commodity market, and saw the wage-paying capitalist farm as the fittest; Chayanov, also considering ability to compete in markets for the factors of production, saw the peasant farm as the fittest, and Friedmann essentially agreed with him. Commenting only on Chayanov, Ellis (1988a) drew attention to revisions introduced by the 'new home economics' which arose in the 1960s and 1970s, initially through recognizing that households not only farm or refrain from farm inputs to seek leisure, but they also produce their own utilities, the use values being obtained ultimately from their final consumption. In the presence of a labour market, inputs are determined not so much by preferences but by the going wage rate and price level, which yield opportunity costs of time spent on different activities. Contrary to Chayanov's model, this allows decisions with respect to labour use to be separated from decisions with respect to income. For example, a rise in the going market wage will lead to a decline in hired labour use, a rise in farm work performed by the family and a rise in the proportion of output consumed at home. The presence of a labour market alters the internal logic of the household model and, not least, the way the household interacts with the wider economy. Ellis (1988a: 139) concludes that 'the unique mode of economic calculation proposed by Chayanov disappears'.

Yet the Chayanov family always did operate in the presence of a labour market. It was optimizing conflicting utilities in a variable environment of nature and the market. In an entertaining discussion of Marxist work on transitions to capitalism among South American peasants, illuminated by his field work in Ecuador, Lehmann (1986) writes of 'capitalist family farms' which rely on family labour and supplementary labour recruited mainly through kinship ties, but also invest in machinery specifically to avoid the need to hire labour. He is describing modern family farms everywhere in this context. Sivakumar (2001: 42) prefers to regard Indian family farmers as continuously 'adapting themselves to changing objectives and

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constraints', as finding not the best but a satisfactory solution, that is as 'satisficing' in modern terminology. They are managing well within production-possibility limits. On this basis, Sivakumar finds Chayanov's arguments more persuasive than either Marxian reasoning or the modern complex of ideas arising from the application of classical and neo-classical economics to agrarian issues. Sivakumar does not discuss the 'efficient-but-poor' peasants of Schultz (1964), modified under risk to be following a 'survival algorithm' (Lipton 1968). Nonetheless, he absorbs these notions within a discussion of the deep uncertainties of agriculture. Coming from a background of life and research in southern India, Sivakumar (2001) reinterpreted the decision-making problem in the context of 'transaction regimes' in which dominance and dependence, hierarchy and location in regard to the geographical distribution of resources and their variability were the fundamental context of all decisions. Both the Marxist emphasis on conflict of interest between rich and poor, and the anonymity of the competitive market economy, became special cases of transaction market construction. He concluded, therefore, that a theory of non-capitalist economic systems, such as that sought (but only partly achieved) by Chayanov, 'might better explain the agrarian situation in much of the Third World today' (Sivakumar 2001: 54). Chayanov's explanation was lost in its day under a deluge of Marxist opposition, and latterly has struggled under neo-classical criticism, although taken up by some neo-marxists to help resolve contradictions in their own arguments (Lehmann 1986). Its simplicity is its strength, and it has been taken up in modern times in a large literature, some of it well outside the range over which Chayanov was arguing, as Box 1.1 shows. The real problem concerns the type of farm, and farming environment, to which Chayanov's argument refers.

The strength of the family farm type of organization can be explored further, following Friedmann's (1980) analysis. Fully commercial household farms benefit from price improvements in just the same way as capitalist farms, and are able to invest in labour-saving machinery and other innovations which can enlarge their production. Income declines, on the other hand, are absorbed in different ways. The family farm cannot readily reduce its labour force, although individual members may temporarily leave it to work for wages, or take jobs that can be reached from home. They can reduce investment in tools, machinery and structures, but at a long-term cost if any expansion is planned. They can and do reduce personal consumption, and/or increase their inputs of work – exploiting themselves in Chayanov's argument. They can also do both these things if they want to accumulate resources to enlarge their scale of operation, or buy new machinery. This flexibility gives them a major competitive advantage over farms with a wage bill to pay, and the need for a profit. To Friedmann, the international competition in the wheat market between the 1870s and the 1930s was a competition between capitalist and household farms wherever located, in which the household farms triumphed.

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Findings such as those of Friedmann, and the arguments of Mann and Dickinson (1978), who saw problems for capital on the land in the seasonal disjuncture of

BOX 1.1 SOME UNINTENDED CONSEQUENCES OF THEORIZING

Kautsky, Lenin and Chayanov were not writing for modern social scientists. However, in the 1960s and 1970s, the writings of all of them became of major importance to discussion about agriculture in both developed and developing countries. Particularly remarkable has been the manner in which Chayanov's theory has been used in regard to developing country farmers. Netting (1993: 297) described the attractiveness to anthropologists of 'Chayanov's model of a primarily self-sufficient subsistence farm without wage labour and a household dedicated to its own reproduction'. It is true that Chayanov did abstract such a 'natural' farm for theoretical discussion, but in his main text he wrote that 'the subject of our analysis is precisely [...] a farm which has been drawn into commodity circulation' (Chayanov 1966: 125) and elsewhere (p. 119) that 'the peasant farm is acquisitive – an undertaking aiming at maximum income'. His data and most of his argument concern such farms.

Marshall Sahlins (1972) used Chayanov's finding that intensity of input on an independent family farm varies with the consumer/worker ratio to establish a foundation for his 'domestic mode of production'. Ellis (1988a) is dubious about the 'domestic mode of production', arguing that a mode of production is something that emerges from the 'social conditions of production' as a whole, and hence arises from society, not from the assembly of individual and widely differing cases. Netting (1993) was more careful than Sahlins in his use of Chayanov, but he could have read more closely. He wrote of 'land abundance' in the Russian case, where Chayanov was writing mainly of land availability, and noted large contrasts between different regions. Netting (1993) went on to read other Chayanovian characteristics as being 'self sufficiency, little commodity production or market participation, and no hired labour' (Netting 1993: 311). To make their points better, both Sahlins and Netting reproduced a simple table from Chayanov (1966: 78, table 2–8), which we also reproduce as Table 1.1. But the data in this table do not represent any sort of primitive self-sufficient economy. They derive from 1910 data on a district which showed the highest average rate of net productivity (measured in money terms) per annual worker in 'labour agricultural economic units' of any of 16 Russian districts (Chayanov 1966: 85, table 2–14). We will return to this district in Chapter 2.

input from output, ought to have led to a reframing of the agrarian question. There have been further detailed analyses of how family farming manages its own 'reproduction' in the most capitalist of contexts, such as that of Roberts's (1996) analysis of the southern high plains of the USA. But Marx, Lenin and Kautsky are not that easily laid to rest. The original form of the question was spelled out again

in some detail by Bernstein (2004), responding with hostility to new proposals for redistributive land reform made by Griffin *et al.* (2002). Meantime, the squeezing of the farm has been viewed in the growing new dimension of agribusiness. Capitalists have found more attractive areas for investment than in agricultural production itself by providing inputs for farming and in manufacturing and dealing with outputs. They have therefore invested in agribusiness. Family (and small capitalist) farms survive as the producers who take the risks while trading with companies that are secure in more controllable fields of business. Increasingly, agribusiness controls farmers' activities (Goodman and Redclift 1985; Goodman and Watts 1994).

Chayanov, like Lenin, recognized the impact of what was then called 'merchant capital' and 'usury', both by merchants and wealthier farmers, on small-scale Russian family farmers. He proposed the vertical integration of cooperative marketing as a means of isolating the farmers from these pernicious effects, and simultaneously giving the farmers the advantages of scale in trading. In this, he drew on his own substantial experience of cooperative marketing in the difficult conditions of World War I. Processing and marketing cooperatives have proved to be an effective way of overcoming the weakness of the unsupported individual farmer in some European countries (Lamartine-Yates 1940). They have not succeeded everywhere, requiring a distinctive regime of transaction that cannot readily be produced where it does not arise spontaneously. In Russia, the horizontal integration of state and collective farming was the preferred approach, and under recent neo-liberal regimes cooperation smacks too much of a discredited socialism to be a popular path. Chayanov's analysis did not lack dynamism, but it took little account of classes. Writing only of the 'middle peasants', he treated the whole farming population as homogenous, other than the 20 per cent – Lenin's estimate – who operated in a capitalist manner. His preference for voluntary cooperatives as a way forward was contrary to the views of Stalin. It led to accusations that he was seeking to sabotage national farm production. He was arrested in late 1930 with several of his colleagues, including the distinguished Kondratieff of 'long cycle' fame, and died in 1939, still in the Gulag.

Collantes (2006a) drew on another source of ideas in discussing the competition for labour between agriculture as a whole and other economic sectors. Discussing the penetration of capitalism in the developing countries, Wolf (1982) shows how capitalist enterprises drew labour out of agriculture because the modern non-agricultural sector offered the prospect of higher living standards, easier work routines and the availability of leisure pursuits, rather than just higher incomes. Given this perception, a family farming society might be able to compete with capitalism in matters of commodity prices, capital and land markets, and yet break down due to its failure to retain labour. We see the effect of this force for change when we come to consider de-agrarianization in Chapter 12, and then in our concluding arguments. For now, the most significant modern agrarian question, quite simply, is how, and under what conditions, has the family farm survived? The next step is to discuss what might seem obvious and simple, but is not – to define the family farm.