

Chapter 2

Family Farming: At the Core of the World's Agricultural History

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The diversity of agriculture in the world reflects the immense variety of societies and natural environments on the planet. Indeed, agricultural systems range from various types of shifting slash-and-burn practices – sometimes very similar to those of the first sedentary human groups – to quasi-automated agricultures in some regions of the world. These systems present huge gaps in terms of modes of exploitation of natural resources, levels of capital use, productivity and market integration. They reflect various stages of transformation of agriculture depending on their technical level, their integration into globalized markets and the structural changes of national economies around the world. They also echo the transition from agrarian societies – organized around the relationships between rural communities and with their natural environment –, to predominantly urban ones characterized by a high degree of division of labor, where agricultural production is increasingly implemented through processes of artificialization of cultivated areas and the industrialization of the food chain. And yet, in absolute terms, there have never been as many farmers globally as there are today.

A historical perspective is necessary to understand the multiplicity of agricultural situations existing today and the very specific and central role of family farming systems. Family agriculture is embedded in agrarian history, a history that has played a key role in the overall evolution of economies and societies. In recent centuries, it has been intrinsically linked with the major agricultural and industrial changes that have taken place, at very different speeds in different parts of the world.

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This chapter¹ discusses the major stages of technological advances that have marked the world's agricultural history. It then shows their inclusion in broader processes of structural change that have characterized the world's different economies and societies. Finally, it addresses the emergence of agricultural policies and the way they have dealt with peasantry and then family farming. This review is intended to help better understand the origin of the gaps of productivity between world's agricultures, gaps which lead to growing asymmetries contributing to increasing challenges related to poverty, employment and use of natural resources. These challenges will be addressed later in the book.

When limited to a few pages, such a goal is necessarily extremely reductive. Therefore, this chapter is primarily intended to provide a useful overview of the different analytical perspectives that will be developed in later chapters of the book. It also seeks to encourage questions and challenge our beliefs on technical and organizational configurations which are considered achievements and models to be replicated, but which are, above all, the result of economic and social power relations built over time, and whose local and global sustainability remains open to question.

In this regard, the emphasis we place in this chapter on the process of modernization of European agriculture, inseparable from the industrial revolution and its gradual global spread, is not due to any tropism or analytical bias of the book's authors. It is a matter rather of a specific choice to suggest keys to help interpret current challenges facing family farming systems around the world. This does not imply that the history of other agricultures elsewhere in the world – long viewed through the prism of a Eurocentric historiography – are any less important (Goody 2006; Bertrand 2011).

2.1 A Brief Review of Agriculture's Long History

Access to nutrients necessary to meet the physiological needs for survival and reproduction is a fundamental imperative that the human species cannot avoid. The manner in which this access is organized has helped structure the functioning of the first human groups, initially through direct extractions from ecosystems, later by the domestication of plants and animals. The origins of agriculture are part of this process that has contributed to the gradual settling down of nomadic hunter-gatherers. The domestication of species and cultivation of the land have, in fact, involved localized management of productive assets and harvests.

The organization of the family is the core of social dynamics, and today's diversity of family types contributes to and shapes the many forms of family

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farming (Chap. 4). Indeed, the very basis of family agriculture expresses the embeddedness of agricultural activities with family dynamics (Chap. 3).

Over time and in different regions, family types have taken very different contours. In Eurasia alone, Todd (2011) identifies 15 types which he groups in three main classes: nuclear family, stem family, and community family. In ancient Rome, the *familia* included the entire household: parents, children, servants, slaves and “clients.” This family configuration went beyond the direct line of descent, which also raises the question of its scope of reference: that of the founding ancestor of the clan or lineage, or in the most restrictive version, of the direct ascendants and descendants. Thus, as shown in particular by the work of Godelier (2004) or Meillassoux (1975), the family is shaped by diverse practices and references. It manages activities and assets whose outcomes and transmission are at the heart of complex rules and alliances. Depending on the context, its actual functioning often results from the overlapping of different units whose contours and organization (including decision making) are dependent on specific objectives: residence, consumption, production, or even accumulation. Single or multiple family affiliations induce rights and obligations related to moral or economic solidarity.

Thus, there are numerous “family variations.” They range from the parental-couple type which has developed in urban societies by updating a sort of genuine nuclear family² – itself now challenged by single parenting and blended families – to extended families, with, for example, more than 50 members in Sahelian Africa. Family forms, just like those of farming, have historically been at the heart of civilizations whose “grammar,” as Braudel (1993) reminds us, expresses the embeddedness of spaces, societies, collective mentalities and economies – a process where population density has long shaped regularities, provided the tempo to changes and triggered ruptures.

2.1.1 Major Steps in the Evolution of Productivity

The history of agriculture belongs to the great process of technical change of human societies.³ These advances have deeply transformed their ecological impact, their economic performance and their social and political identities. They have consisted of combinations of innovations, triggered by multiple drivers of change, which have led to many technological and organizational changes (Chauveau and Yung 1995).

²Todd (2011) develops the idea of the nuclear family as the original model for all humanity, which subsequently led to more complex forms, including the appearance – in certain specific circumstances and in an unsystematic way – of patrilineality, a form involving the coexistence of several nuclear families from different generations. According to Todd, patrilinearity places severe constraints on individuals and is less stable than the original nuclear forms.

³This section provides an overview of numerous studies on the evolution of agricultural productivity. It relies in particular on the work of Mazoyer and Roudart (1997) and of Bairoch (1989).

Agriculture was invented in the Neolithic era. It appeared 8,000–10,000 years ago, depending on the region, and spread from a few population centers: Central America, the Andes, Mesopotamia, China, and New Guinea. Depending on the natural environments and population conditions, it has developed along three main forms. Where demographic pressure was high, slash-and-burn cultivation systems in temperate and tropical forest areas have led to a complete deforestation resulting in new anthropized environments (including, however, ebb and flow movements of forest cover). Pastoral systems spread over savannas or steppes (high-altitude regions, Central Asia, Middle East, the Sahel). Irrigated systems were developed in the drier regions (oasis and large valleys: Nile, Euphrates, Indus). At the historical scale, these original forms have changed extremely slowly, like the civilizations from which they spring, which “take an infinite time to emerge, to develop their habitat, to bounce back” (Braudel 1993).

If long time periods and progressive shifts are the rule, the major agricultural regions have, however, experienced extremely wide-ranging rates of change. Major farming systems with favorable natural conditions and sufficient labor have been able to improve performance in terms of crop yields and labor productivity. But more marginal areas, often subject to higher physical stresses, were also able to engage in their own processes of change. At all latitudes and altitudes, whenever faced with excess water, drought or steep slopes, the creativity of farmers has also helped invent “extreme agricultures” which are surprisingly varied and unique (Mollard and Walter 2008) and which have been able to adapt over time.

There exist several periodizations of agricultural transformations. Historians and specialists of agrarian systems have identified several “revolutions” that have marked milestones of technical progress, organization and agricultural performance. Some authors such as Gordon Childe (1949) consider the Neolithic the first revolution, whereas others like Duby (1962) highlight the revolution of the Middle Ages. Mazoyer and Roudart (1997) focus on the agricultural revolution of the early modern period, which they consider started consolidating in the 1700s – the century in which a veritable jump in productivity occurred (Bairoch 1989).

This accelerated process of agricultural change in the eighteenth and nineteenth centuries cannot be understood in isolation from what constitutes the real revolution in the history of human societies: the transition from a system founded on solar energy (based on biomass, wind and water) – which represents the cornerstone of agrarian societies – to a system based on fossil fuels, which has led to the emergence of industrial and urban societies (Wrigley 1988). While the energy regime of agrarian societies was constrained by biomass production (land availability, vegetation’s seasonality and fertility), the one of industrial societies has access to abundant resources, without annual limits and available at very low costs⁴: all that is necessary is to extract underground resources (Krausmann 2011).

⁴ Concerns about the depletion of fossil-fuel resources will only make a hesitant and late appearance in the last quarter of the twentieth century.

2.1.1.1 Before the Energy Revolution

While agricultural performance improved only slightly over the long term in all the great centers of agricultural development, technological advances were significant and kept pace with the slow population growth. The domestication of animals, selection of species, use of equipment and persevering land management resulted in significant accumulations of capital (infrastructure and know-how), as exemplified by the rice terraces of Asia or Madagascar.

In the case of European agriculture – which will later experience the most spectacular developments –, animal draught cultivation with light plowing practiced since antiquity, based on the use of the swing plow with fallow and biennial rotation, gradually gave way to heavy plowing in the Middle Ages (between the end of the tenth and thirteenth centuries). Its use permitted rapid tillage, helped fight weeds and significantly increased the cultivated area per worker. It was accompanied by the dissemination of other tools, such as the harrow, the widespread use of the wain for transport of hay, litter and manure, the development of stalling and a better integration of animal husbandry in farm activities. These changes in technologies and practices led to a transition to 3-year crop rotations and improved yields.

But these advances, which lacked the sophistication of Asian rice systems, remained spatially uneven and always precarious. There were periods of instability and decline (wars or pandemics), sometimes resulting from agricultural crises caused by the overexploitation of the environment, as was the case for example in France in the fourteenth and fifteenth centuries.⁵ Globally, despite heavy investments in labor and improvements in technology, productivity gains did not exceed a rate of 0.01 % per annum from the Neolithic to the seventeenth century (Bairoch 1989).

Changes that started taking place in the eighteenth century in the temperate regions of Europe were characterized by a rapid increase in yields and especially in productivity. They were the result of a hybridization of multiple processes of change rooted in earlier periods, which were self-reinforcing and relied both on market dynamics – with the gradual development of cities which changed the fundamentals of agricultural demand⁶ – as well as on the evolution of ideas, which challenged the social and political order and slowly modified the economic balances of power.

⁵ In this regard, the population/natural resources ratio has often been presented as a major determinant of technological change. Boserup (1965) has thus highlighted demographic pressure as a driver of innovation, challenging the position of Malthus who postulated, on the contrary, a constraining determinism founded on the relationship between population level, resources and technical systems. The history of agricultural change reveals mechanisms which are much more complex.

⁶ The ratio between the agricultural and non-agricultural populations continues to fall. On the whole, each producer is responsible for feeding an ever-increasing number of mouths.

Changes of a legal nature, such as the progressive abolition of livestock grazing on common land,⁷ the reduction of various taxes related to manorial rights⁸ or the removal of other barriers to full use of the land (collective rotations, joint ownership),⁹ unlocked technical progress and gave a strong boost to accumulation and investment processes. This was a matter, in particular, of the development of continuous crop rotation facilitated by the replacement of fallow by forage crops (legumes mainly), thus contributing to the development of animal husbandry. Performances were boosted by the use of improved seeds and animals and development of farm equipment.

Born in the Netherlands and the United Kingdom, this vast movement spread all over Western Europe in the period leading up to the early nineteenth century as well as in the English colonies of America (Taylor 2001), soon to become the independent United States. It then developed more slowly in Central and Eastern Europe (mid-nineteenth century).

The productivity gains achieved during this period (about a century and a half) – relatively short on a historical scale – were phenomenal. They were as large as those made in the previous eight or nine millennia.¹⁰ Growth of productivity outstripped that of the population; it facilitated the trend towards urbanization and allowed allocation of labor to other economic activities – two of the most significant changes in the world's long history.

2.1.1.2 The Energy Revolution and Its Consequences

The energy revolution was not a sudden occurrence. It smoldered in the background during the eighteenth century and then started by facilitating various changes before emphatically causing new ones. With energy efficiency per surface unit of fossil resources in the order of 10,000 times greater than that of biomass (Smil 1991), it brought about an upheaval for human society. The industrial revolution took place and agriculture in the industrializing countries took full advantage. The advent of the steam engine revolutionized human labor and the transport of merchandise.

A second agricultural revolution resulted. It took over from the first and was characterized by mechanization and the use of fertilizers (mineral fertilizers and

⁷ Grazing on common land (or on the “commons”) was the right of access of herds from the entire community on fallow land and also on post-harvest cropland.

⁸ For example, in France before the 1789 Revolution, and depending on region, manorial land rights were as high as 10–25 % of agricultural produce, to which the tithe due to the clergy (7–10 %) had to be added. Furthermore, there were various royal taxes of 10–20 % (Moulin 1992) such as the “taille.”

⁹ Reference is often made to the enclosure movement in England (gradual appropriation of open fields and communal lands by fencing) to illustrate the beginnings of this general trend. This movement stretched from the sixteenth to the nineteenth century.

¹⁰ Productivity increased almost a 100-fold, growing 0.9 % per year with the adoption of new techniques (Bairoch 1989).

new organic fertilizers). It began in the middle of the nineteenth century and progressed slowly until the Second World War, spreading by varying degrees in different regions of the first agricultural revolution, i.e., mainly in Europe and the United States as well as in European settler colonies (Canada, Australia, New Zealand, the southern part of Latin America).

The development of agricultural machinery, which started in the 1850s and made rapid progress in the early twentieth century, was characterized by the mechanization of animal traction. New tools (reversible plows, seeders, hoe-cultivators, etc.) and harvesting equipment (harvesters, reaper-binders, threshers) removed, one by one, the main bottlenecks of the most time-consuming operations in the agricultural cycle. Mechanization progressed rapidly in the “new” countries, where large farms made possible by the expropriation of land belonging to indigenous peoples and the relative scarcity of labor favored its spread. Its development was markedly slower on the Old Continent, where the conditions were reversed, i.e., small farms and abundant labor.

Dramatic advances in land and sea transport caused by the rapid development of steamships, railways and the cold chain had profoundly transformative effects on European economies and their overseas offshoots. Agricultural products benefited from potentially unlimited outlets since they could be sold on local or rapidly integrating national markets – stimulated by urban growth – as well as on faraway international ones. Remote areas were opened up and the “new” countries very quickly turned into significant actors in international agricultural trade by becoming major suppliers of raw materials. At the same time, there was an expansion of tropical export crops in Latin America and the new European colonies, located mainly in Africa and Asia. This process led to an explosion of trade with the tropics – regions whose contribution to agricultural markets had been limited to sugar since the seventeenth century, with the sugarcane specialization of the Caribbean and Indian Ocean islands.

New transportation systems also made it easier to bring labor to cities and to new countries by facilitating both rural depopulation and European migrations. Starting in the late nineteenth century, they also led to improved soil fertility and yields by bringing mineral and organic fertilizers (nitrates, phosphates, potash and guano) to the farms.

This second revolution intensified with further modernization of techniques. The development of the process for the industrial synthesis of ammonia at the beginning of the twentieth century ushered in the era of chemical fertilizers. Similarly, the development of the automobile led to the appearance of the first tractors and their gradual popularization after the First World War. The rapid increase in motorization, chemicalization (fertilizers, pesticides) and selection of species (varietal improvements and, more recently, genetic modifications) after 1945 is often considered a third agricultural revolution. It is, in fact, primarily an intensification of processes previously unleashed. It gradually spread from its origins in Europe and the former settler colonies and is progressively taking hold, most often partially (geographically and technologically), in the rest of the world through national

agricultural policies which promote modernization programs supported by international institutions.¹¹

A study of the progress made by motorization is illustrative of the magnitude of technological leaps that agriculture has taken. There has been a rapid growth of traction power, which went from 10 to 30 HP after Second World War to between 150 and 300 HP today. This growth in power was accompanied by the modernization of tools and the development of self-propelled equipment (such as the combine harvester) and flexible multitasking tools which allowed a large increase in cultivated areas. Meanwhile, modernization of farm buildings equipped with new tools (such as milking machines) has helped rationalize farming activities, especially for animal husbandry. This meteoric technological progress has put agriculture at the forefront of sectoral productivity gains.¹²

Consequently, between manual cultivation without any fertilizers and the most sophisticated levels of motorization and chemicalization, cultivable area per worker increased from 1 ha to between 150 to 200 ha and labor productivity from 1 to 1,500 t of grain-equivalents per worker. Productivity growth, which struggled to reach 1 % per year during the first agricultural revolution, a threshold it barely crossed in the second, reached 5 % during the third (Bairoch 1989). These successive gains were achieved in increasingly shorter time periods (respectively about 150, 100 and 50 years).

2.1.2 Specialization, Differentiation and Widening Global Disparities

These dramatic changes in technology have taken place in progressive shifts, whenever conditions have been favorable. While natural and demographic conditions and opportunities for accumulation of capital and investment have played a key role, the adoption and development of new technology were also largely driven by the role of States. Governments were sometimes clever enough to create favorable economic and institutional environments, not only in terms of organization of markets, relative prices, information, training and advice, but also with respect to incentivizing credit and insurance schemes – an essential step in encouraging investments (see Sect. 2.3.2 later in this chapter).

¹¹ These include international research centers specialized in major field crops, established after the Second World War in the context of the Cold War, and coordinated by the Consultative Group on International Agricultural Research (CGIAR), established later in 1971. These centers, whose original purpose was to fight world hunger, were the main vectors of the “Green Revolution,” based on the generalization of the use of inputs and improved seeds.

¹² In France, between 1950 and 2010, hourly agricultural labor productivity increased 32 times, whereas the corresponding increases for industry and services were 14 and five times respectively (INSEE data).

This radical change in farming techniques has had a significant impact on family farming – and global agriculture in general – at two levels: radical changes in the nature and characteristics of agriculture of the most technologically advanced regions, and a widening disparity between world regions.

2.1.2.1 Integration and Specialization of Modernized Agriculture

Wherever it has taken place, agriculture's rapid modernization has resulted in its integration with the rest of the economy and the generalization of the division of labor. The traditional downstream connection to the market for products finds itself reinforced by the development of the agro-industrial sector and is complemented, upstream, by markets supplying equipment, inputs and services.

This process, often driven by public policy and the reorganization of food systems, tends to push family farms towards specialization. Farmers become less pluriactive and the supply of goods and services in rural economies become more professional, focused and relocated to rural towns and small cities. Indeed, it then becomes possible to acquire intermediate and other farm-consumption products without having to resort to self-supply (manure, equipment, fattening of young animals, fodder and feed). This change reflects the progressive giving up of growing food for home consumption, a pattern common to agricultures engaged in a rapid market integration. This withdrawal from self-consumption is also linked to increases in purchasing power and changes in lifestyles of farmers and their families.

Through this specialization, family farms lose autonomy and become part of new value chains. On the upstream side, new methods of production (materials, inputs) are conceived and implemented, as well as related activities of training, extension and financing. Downstream, there is an explosion of the agrifood sector (with activities of initial, secondary, and even tertiary processing) and of agrochemistry (pharmaceutical industry and now biofuels). This is accompanied by the development of the modern retail sector, with the gradual worldwide spread of the "supermarket revolution" (Reardon and Timmer 2007).

In this movement for agriculture's industrialization, multi-tasking peasants become farmers. This radical change is accompanied by a new mix of agricultural production factors resulting in more capital and less labor.¹³ The nature of farm work undergoes profound change, evolving towards a sort of Taylorization.

Over the last 60 years, in industrialized countries, this gradual shift has resulted in first the marginalization and then the phasing out of farms that lack the investment capacity to adopt technical improvements and be sufficiently profitable to ensure labor income comparable to that in other sectors. It has increased agriculture's financing needs, resulting in a gradual decline of family contribution and an increasing role of other stakeholders (association with other farmers or other

¹³ Which is itself becoming more expensive in high-income countries due to labor regulations.

economic agents). In most cases, the outcome has been a shift towards a managerial type of agriculture (Chap. 5). Finally, there has been an acceleration of the exit of workers from the agricultural sector. A movement of progressive concentration of production structures and increased surface areas per farm are the consequences.

Agricultural production itself has also been subject to specialization, since farmers can focus on the most profitable activities allowed by local conditions (climate, markets, economic environment, relative prices). It has resulted in a gradual regional specialization at the expense of multipurpose crop-livestock systems which had long existed. Consequently, in regions with the least favorable natural conditions and often poorly developed infrastructure, rural households have become impoverished and rural depopulation has become the rule. This has led to new challenges of territorial development. At the same time, the global demand for agricultural products has been met through the intensive use of new transport networks – including very long distance ones¹⁴ –, the global integration of markets that their liberalization has allowed and the increasing role of processing and distribution macro-actors. This globalization is accompanied by the widespread dissemination of food quality norms and standards.

2.1.2.2 A Profoundly Asymmetrical Global Agriculture

However, this final stage of agriculture's motorization and chemicalization, which has led to a radical change in methods of agricultural production, concerns only a small part of the world's agricultural population today. The majority of farmers still exclusively use manual equipment and "modern agriculture is far from having conquered the world" (Mazoyer and Roudart 1997).

The distribution of tractors by major regions is a useful – even though reductive – indicator of the magnitude of the differences between the very diverse agricultures of the world. According to the FAO, there are fewer than 30 million tractors in the world for 1.3 billion agricultural workers (Fig. 2.1).¹⁵ Sixty percent of the world's tractor fleet is used in Europe and in the European offshoots (United States, Canada, Australia, New Zealand), nearly 10 % in Japan and South Korea, and the rest of the world sharing the remaining 30 % (23 % in Asia, 6 % in Latin America, and less than 1 % in sub-Saharan Africa).

Reducing the diversity of situations in the world to a few major types of agriculture classified according to their technical characteristics, Mazoyer (2001) points out that two-thirds of the world's agricultural workers are still using manual techniques. This effectively limits cultivation to a maximum of 1 ha per worker per

¹⁴ This long-distance trade of agricultural products, which allows, for example, the consumption of strawberries from Chile during the European winter, has been made possible by the low cost of energy. As the cost of fossil fuels rises, such trade is likely to suffer.

¹⁵ FAOSTAT data are derived from national agricultural censuses. As far as tractors are concerned, the last year with complete information for all countries is 2003.

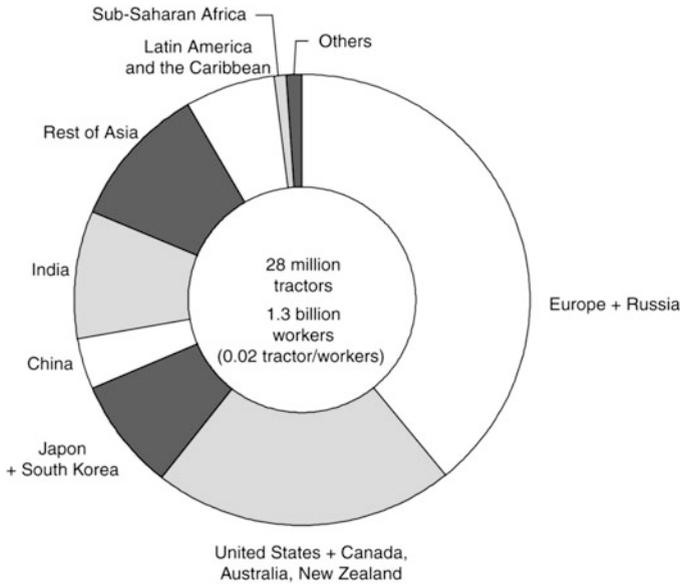


Fig. 2.1 Geographical distribution of the world’s tractor fleet in 2003 (Source: FAOSTAT 2013)

Table 2.1 Stylized productivity gaps across technical systems

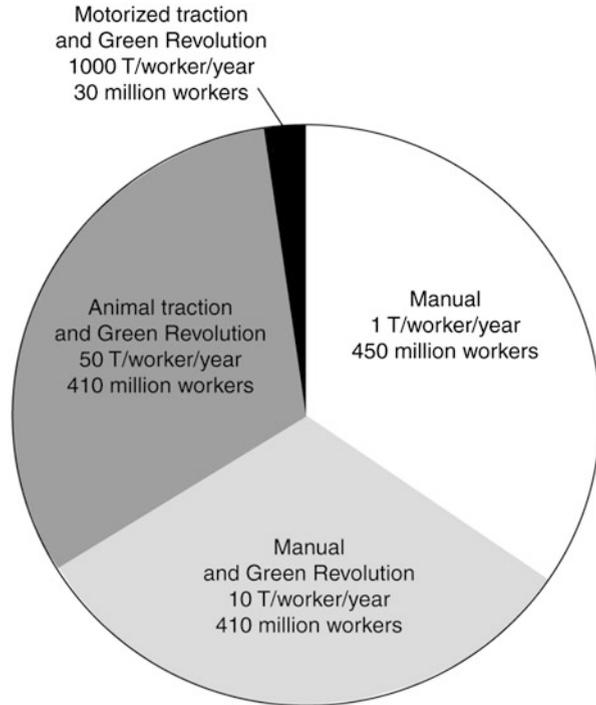
Type of agriculture	Hectares/worker	Production in tonnes ^a /hectare	Production in tonnes ^a /worker
Motorized traction and Green Revolution	100	< 10	1,000
Animal traction and Green Revolution	5	< 10	50
Manual and Green Revolution	1	< 10	10
Manual	1	< 1	1

^aIn grain-equivalent tonnes. This table is a stylized representation of differences in global productivity. Yield per hectare and surface area per worker have no statistical value; they are only used to indicate orders of magnitude and refer to the highest values of each technical system Source: Author (based on Mazoyer 2001)

year for yields of, at best, one grain-equivalent tonne¹⁶ per hectare per year. Half of these farmers have adopted the technical package of the Green Revolution (improved seeds and chemical inputs), allowing up to a five-fold jump – even as high as ten-fold in some cases – in the level of per-hectare yields and per-worker productivity (Table 2.1 and Fig. 2.2). Only one-third of workers have the benefit of animal traction, an asset that can multiply by about five the cultivated surfaces and

¹⁶ Grain is the food category that is most consumed in the world but it only forms part of human diet. Short of conducting an analysis for all productions, in kilocalories for example, the use of grain-equivalents still provides extremely useful orders of magnitude.

Fig. 2.2 Distribution and productivity of various types of agriculture worldwide. (Source: Author, based on Mazoyer 2001)



productivity per worker (at the same level of intensification). For these manual farming models or those using animal traction, the use of irrigation can often allow two crops a year – sometimes three – and significantly reduce climatic risks. But because of the sharp increase in working time, the arable land per worker diminishes greatly and the productivity per worker taken over the entire year improves but does not change dramatically.

Only a very small proportion of the world's farmers, some 2–3 %, use motorized equipment. The cultivated area per worker varies depending on the power level of the traction (and, of course, the topography), but by assuming 100 ha cultivated per worker without changing the yields, the difference with manual agriculture without technical package is already 1,000 to 1. On the Great Plains of North America, the surface areas cultivated per worker can reach 200 ha but with much more extensive practices. In parts of Europe and Japan, yields can exceed 10 t/ha.¹⁷ In both these situations, the productivity gap with the most rudimentary agriculture can reach 1,500 (or more) to 1.

¹⁷ Maize (between 9 and 10 t/ha in the United States and Western Europe) and rice (between 7 and 10 t/ha in China, the United States and Egypt) have, for cereals, the highest average yields. Wheat yields are lower: 8 t/ha in Western Europe, 3 t/ha in North America and less than 2 t/ha in Australia or Argentina (FAO data).

This stark diversity of world agricultures pits, at first glance, the old industrialized countries – high-income countries in Europe, North America and Oceania – against the rest of the world. But agricultural realities are much more nuanced since highly technical agricultural systems also exist in many Asian, African and Latin American countries. In most cases, though, the number of farmers concerned is not significant, especially when compared to the total farm population. They are usually large companies, mainly agro-industries, which are enclaves within existing farming systems, or a small proportion of farms that were able to access the capital required for modernization. But this relatively atypical character of these highly technical agricultural systems does not mean that they have no impact on their socio-economic environment. On the contrary, they are often associated with land expropriation or capturing the market share of certain products, especially when they do their own processing and have their own marketing channels. However, they can also create synergies and facilitate the access of other producers to market networks and certain techniques (Chap. 5). Furthermore, through their use of modern techniques based on chemicalization and by reducing access to certain resources, these new farming systems can have significant impact on the physical environment and on the production and living conditions of family farmers. Nevertheless, some regions have seen this “modern” agriculture develop considerably. Notable examples are Brazil and the Southern Cone of Latin America, the northern and western regions of Mexico and also parts of southern Africa, where the development of the entrepreneurial sector has resulted in a dual agriculture with composite effects of boosting some parts of the farm sector while marginalizing others.

These differences in technical levels and the consequent increase in productivity gaps lead to a profoundly asymmetrical global agriculture. The diversity of factor endowments, of government support and of performances provides unmatched capacities to adapt to evolving natural and economic environments. However, the increased integration in the value chain and the amount of capital invested also brings with it weaknesses, whereas the most “rustic” agricultures have a much greater resilience when compared to agriculture that depends on hypermotorization and chemicalization.

2.2 Agricultural Changes Embedded in the Many Economic and Social Transitions

The acceleration of the processes of change and the growing divides between countries and regions represent a situation which is unprecedented in world history. Not only is agriculture impacted but so is, more generally, the entire economic system. At issue is the management of the new imbalances that have been and are being created locally, nationally and internationally. Putting in perspective the diversity of mechanisms of structural change across countries will help us better assess the extent of the challenges that different regions of the world – and their farming systems are facing.

2.2.1 *The “Statistical Evidence” of the Exit of Workers from Agriculture*

A study of the processes of economic change in different regions of the world and the continuation of trends observed during the last two centuries would theoretically allow the hypothesis of a world “without agriculture” (Timmer 2009) or one “without farmers” (Dorin et al. 2013). In fact, the trajectories followed by today’s richest and most technologically advanced countries after the energy revolution of the nineteenth century reveal the transition from an agriculture which occupied a predominant place in their economic aggregates to one that is now marginal. The proportion of the labor force working in agriculture in European countries in 1800 – at the time of the first agricultural revolution – ranged from 65 % to 80 % (Bairoch 1989). Today, the share of agricultural workers in the total labor force stands at less than 5 %. The agriculture sector’s share in national GDPs shows even sharper decline in the majority of high-income OECD countries (Organization for Economic Cooperation and Development): it is below 3 %.¹⁸

Such a trend was mirrored in other regions of the world, although at a generally much faster pace – a few decades instead of two centuries – due to technological and organizational leaps stemming from the adoption of innovations from the most economically developed countries. Thus, in many Latin American countries, the contribution of agriculture to GDP is less than 10 % (5 % in Brazil and less than 5 % in Chile and Mexico). The change is slower in Asian countries, where for most countries this figure ranges between 10 % and 20 %.¹⁹ But in Africa, agriculture is still prominent in national economies: in 17 out of 53 countries, agriculture’s contribution to GDP exceeds 30 %; in 10 countries it is between 20 % and 30 %; in Egypt, Morocco and Senegal it is around 15 %; and it is 10 % in Tunisia. African countries with economies dominated by mining or oil exports are a special case, with agriculture’s contribution to GDP being below 10 % or even 5 %.

The declining share of agriculture in national wealths is only one dimension of structural change since the decline in agricultural workers is much slower than changes in GDP. Indeed, even though the OECD countries can be viewed as having structurally “exited” agriculture – a meaningless perception since agriculture still retains its economic,²⁰ social and environmental importance – agriculture remains the world’s largest employer (Chap. 3). According to FAO data, it still accounts for – on average and with significant national differences – 15 % of the workforce in

¹⁸ Less than 2 % for Western Europe, the United States and Japan, and even less than 1 % for some countries such as Germany, the United Kingdom and Belgium. The data presented in this section are taken from *World Development Indicators* (World Bank).

¹⁹ About 10 % in China, Malaysia and Thailand; 15 % in India and Indonesia; and 20 % in Vietnam and Pakistan.

²⁰ Even though agriculture’s economic importance has declined drastically in numerical terms, the activities upstream and downstream of production (agrifood industries and services) have developed rapidly since the 1960s and the agrifood sector currently accounts for around 15 % of the European Union’s GDP.

Latin America, about 50 % in Asia and 60 % in sub-Saharan Africa. In Africa, particularly in the Sahel, more than 75 % of the workforce is employed in agriculture in some countries. South Asia too is a major agricultural region in terms of agricultural employment. The case of China is less precisely known due to statistical shortcomings, but there too agricultural workers could still represent between 50 % and 65 % of the total labor force.

These differences in agriculture's contribution to national GDPs and employment can be explained by productivity gaps between agriculture and other sectors, but also by the fact that, in many rural societies, livelihoods are also, partly at least, based on agricultural activities which are not taken into account by strictly economic criteria. As shown by the analysis of the modernization process, agricultural work is not very productive when it is largely manual or has a low level of mechanization. It then becomes quickly decoupled from other types of activities and results in lower agricultural incomes. The phenomenon is exacerbated by changes in relative prices between agricultural and non-agricultural goods. Consequently, the value addition of other sectors rises much faster than for agriculture which, nevertheless, continues to employ a significant proportion of the working population (McMillan and Rodrik 2011). Given the importance of agriculture in rural areas, these processes explain the income gap between towns and the countryside and the extent of rural poverty (Chap. 10). This process is illustrated in Fig. 2.3 where the change of each country can be considered its "signature" illustrating the diversity of trajectories of structural change.

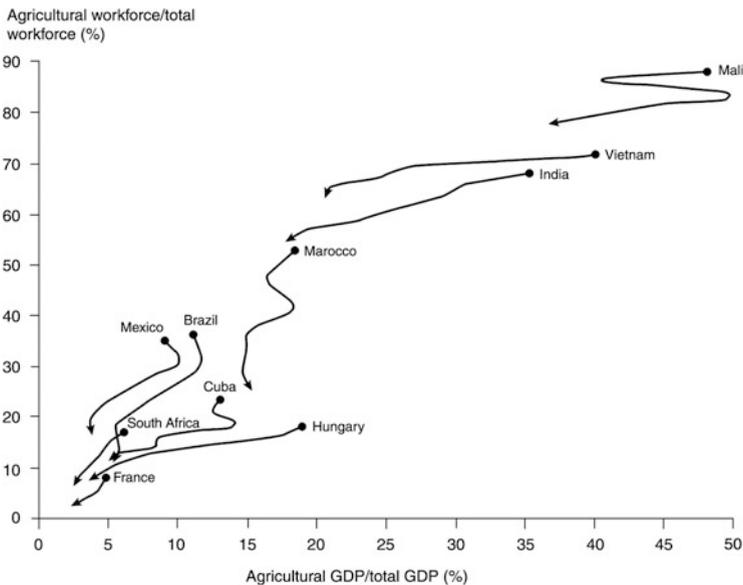


Fig. 2.3 Changes in economic shares of agriculture and trajectories of structural change (1980–2010) (Source: World Bank, *World Development Indicators 2013*, for GDP; FAOSTAT, 2012, for the labor force. Note: up to 2005 for France and Mali, starting from 1985 for Vietnam)

The selected examples show the different dimensions of these changes (Bélières et al. 2013). To begin with, the continuously decreasing share of agriculture in GDP and the labor force is reflected in the general move from the upper right quadrant to the lower left quadrant. In addition, the speed of change is expressed by the length of the trend line: the slower changes may reflect a structural inertia or the existence of older transitions (such is the case of France, for example, where intersectoral restructuring took place before 1980, i.e., outside the graph's time period). Finally, the comparison helps differentiate between countries according to their trajectories: countries engaged in a process of widespread economic diversification where the share of agriculture in GDP and employment is decreasing (Mexico and Brazil); countries on the path of diversification where the share of agriculture in GDP is declining but without a proportional transfer of labor to other sectors (Mali, Vietnam, India); and countries where agriculture retains an important macroeconomic role, but with a rapid decrease in agricultural workers, which illustrates the rapid gains in agricultural productivity (Morocco).

2.2.2 The Importance of Historical Sequences

This shift from agriculture-based economies to those that are more diversified is at the origin of an evolutionary vision of change, which postulates stages that can “naturally” be followed by all parts of the world. This vision goes hand in hand with the hypothesis of a certain standardization of lifestyles associated with urbanization and driven by globalization. These stages, apparently confirmed by the changes of the last two centuries, must however be assessed in a historical perspective which alone allows one to take the full measure of current global challenges.

The evolutionary approach, which was formalized after the Second World War (Rist 1996), is the source of mainstream thinking on development. It is based on the idea of a step-by-step catching up (Rostow 1960) with the most advanced countries in terms of technical, economic and social progress, progress that is generally measured through standards of living and often more prosaically reduced to per-capita GDP.

A stylized summary of the structural evolution of European economies (and of countries of European settlement) and their main determinants shows that the gradual transition from an agriculture-based economy to one based on industry and then on services, and hence from rural to urban areas, was made possible by the energy shift to fossil fuels. This shift is indeed the cause of profound technological changes and impressive productivity gains, which led to wealth accumulation and then the transfer of labor and capital from one sector to another. This process was accompanied by an increase in income and demand and of its diversification. It has benefited from the demographic transition at the origin of an improved ratio

between the working²¹ and non-working populations and was facilitated by mass education. In this process of change, agriculture played an initial role and was the first driver for accumulation (see the example of China in Chap. 10). Productivity gains have been accompanied by a massive exit of workers from agriculture, their migration to the cities, to other regions or to other countries.

This view of the stages of development is obviously mechanistic but it still finds prominent place in international discussions, development aid and public policy. It is reinforced by the similarities observed in the trajectories of some Latin American and Asian countries. Discussions and claims related to the “emergence” of some countries – i.e., their transition from underdevelopment to development – are a perfect illustration of the mechanistic visions underpinning the current debates (Gabas and Losch 2008).

This postulate that past transitions should be reproduced, however, tends to ignore history and the very specific paths followed by different regions of the world in their trajectories of transformation. Each region has undergone changes specific to not only its own endogenous combinations of natural, economic, social, political and institutional factors, but also to its relations with the rest of the world. And these relationships between internal and external processes, between national and international patterns, and the specific times at which they occurred are critical to understanding the dynamics of change and power relations (Losch 2012a). They are part of the historical construction of markets and the gradual spread of capitalism (Braudel 1979; Wallerstein 1989) and they underscore the point that identical replication of past sequences is not possible.

Thus, the European transitions that took place in the late eighteenth century benefited greatly from the hegemonic status of Western Europe, largely based on the “capture of America” at the turn of the sixteenth century (Grataloup 2007; Pomeranz 2000). Resources obtained from the Western Hemisphere funded European growth and its subsequent conquest of the rest of the world. Imperialism and colonization helped European accumulation based on the “unequal exchange,” while providing adjustment opportunities critical to the structural transformation of European economies through mass migration to the “new worlds.”²²

The transitions observed in Latin American and later in Asia are not of the same nature as European ones. While they do have some similar characteristics – their economic diversification and the changes in their labor forces, for example –, they do not duplicate European transitions, mainly because they took place at another “moment” of world history, a moment characterized by the implementation of proactive policies of modernization.²³ Indeed, from the inter-war period (when the transitions in Latin America began) to the liberalization phase initiated in the

²¹ The demographic transition is the result of improvements in health and lifestyles which translate into the reduction in mortality and birth rates.

²² Between 1850 and 1930, about 60 million Europeans emigrated, helping European nations overcome the problems of underemployment and poverty (Hatton and Williamson 2005).

²³ What Giraud (1996) calls “self-reliant national development.”

1980s, the international regime was characterized by the preponderance of autonomous national policies aimed at modernization through strong State intervention and import substitution. These transitions – in which a large part of Asia participated after the Second World War – benefited from the technical and organizational progress made earlier, but also from high levels of national protectionism. Often significant too were large amounts of capital transfers, especially to Latin America and Asia, in the particular context of the Cold War years from 1950 to 1980 between the United States and the USSR.²⁴

For those countries that are still agriculture-based – mainly in sub-Saharan Africa and a few in Asia – and which have not yet begun their effective transitions to more diversified economies, the challenge is to succeed in their structural transformations in the new international regime of a liberalized global economy where competition is the rule. These countries have to manage new constraints related to struggles over resources, but without benefiting from the same economic policy options that other countries before them did – a consequence of new international regulations.²⁵

2.3 Family Farming Emerges on the Political Stage

In this long history, the emergence of family farming as a political subject and object – as actor and objective of policy – happened late. Indeed, until very recently, due to the overwhelming share of the agricultural population in every society, family farming was never perceived as having a specific status; it merely expressed the ordinary position. In every corner of the world, as soon as the first forms of government appeared, decisions of the prince (mainly focused on collecting taxes) were directed primarily at the great mass of his “country dwellers” – namely the “peasants”²⁶ – who tried to make a living from both the natural environment and resources of the land they cultivated with their families (often without owning them fully).

In Europe, it is the slow emergence of nation-states from the mid-seventeenth century – consolidated over the next two centuries by the upheaval of the three orders of the *Ancien Régime*, i.e., the clergy, the nobility and the Third Estate (commoners) – which saw the gradual appearance of the first national public policies: on the unification of legislative and taxation systems and the development

²⁴ Funding for international agricultural research should especially be viewed in this specific context.

²⁵ Chang (2002) emphasizes the difference in status between countries according to their hegemonic or subordinate position. In particular, he recalls how the richest countries now wish to prevent others from applying the policies they had themselves implemented (especially those of protections and subsidies) and which they sometimes continue even today.

²⁶ From Old French *paisent* (country dweller) and *pais* (country), based on Latin *pagus* (country district).

of education and conscription. These policies contributed to the territorial consolidation of nation-states (Gellner 1989) and provided the basis for the implementation of targeted geographical and sectoral policies. This was the framework in which agricultural policies were developed, focusing then and increasingly on production and on producers.

2.3.1 *From the Peasant Question to Family Farming: A Slow Transition*

The peasant question was the guiding principle behind the development of family farming policy. Indeed, even though agricultural production was the result of the work of farmers and their families, for a long time family farming was rarely referred to as a category (Chap. 3) but indirectly or occasionally. On the contrary, the peasant has always held an important social position. Irrespective of his status – slave or colonist, serf, or even laborer or sharecropper –, the peasant has long been the backbone of economic activity. He has fulfilled the economic function, one of the three functions that are specific to the organization of most Indo-European societies²⁷ – the other two being the religious and military ones. The evolution of the peasant's status and its consideration by public policies is discussed here with a special reference to the case of France, whose characteristics, despite their specificity, find echo in other parts of the world.

The trilogy of *sacerdotes*, *bellatores* and *laboratores* of the Roman world, the monks, knights and peasants of the Middle Ages or the three orders of clergy, nobility and the Third Estate of the *Ancien Régime* in France established a permanent and historically dominated category. Peasants were commoners and farmed to feed the two noble orders, which in turn provided spiritual and military services but also required compensation in the form of taxes and free labor, especially because of their control over land. The Third Estate also encompassed other categories of workers –artisans, merchants, usurers, lawyers and administrators – and its representation remained urban in nature. This meant that peasants – who accounted for the bulk of the population – were doubly marginalized.

This dominated status did not preclude deep inequalities relating primarily to land ownership. Some were peasant-owners, others were tenants and sharecroppers (paying a rent).²⁸ These differences were reflected in livelihoods which ranged from situations of survival for the poorest peasants to those of relative opulence for

²⁷ This tri-functionalism, as a core common to Indo-European societies, was put forward by Dumézil (1968) from a comparative approach to history and mythology, and then taken up by Duby (1978) in his work on feudalism.

²⁸ In the France of the *Ancien Régime*, peasants owned between 30 % and 50 % of the land depending on the region, a much larger proportion than peasants in England did, for example (Moulin 1992).

large landowners at the head of farms of several tens of hectares and employing a large workforce. This differentiation led to a gradual social stratification which saw the emergence, alongside peasants, of rural notables with the attributes of “capitalist” bosses and exploited farm workers. Thus, and in particular due to the dispersion of the rural population, peasant protests took place only occasionally, usually in the form of limited revolts and rebellions when the tax burden became too high. However, these disadvantages did not prevent the European peasantry from participating in political revolutions and societal transformations at the turn of the nineteenth century which were, for the most part, initiated by the urban classes and the bourgeoisie (itself comprising many landowners). Peasants derived benefits from these transformations²⁹ but the gap between rural and urban incomes grew rapidly with the advent of industrial employment and wages, a significant step in the history of structural change.

In Europe, the history of the peasantry, which for very long formed the demographic majority, then merges fully with that of the process of agricultural modernization. As Moulin (1992) notes, peasants strove to improve their status by perfecting their techniques – often following in the footsteps of rural notables. The most successful earned the title of cultivator, then of agriculturist, echoing the development of agronomics. Meanwhile, governments started to pay attention and to offer support in order to facilitate technical changes and improve economic conditions. After all, peasants did form the electoral base of the new representative democracies. Peasant demands directed towards the State focused on the regulation of the new national markets and on prices of agricultural products. This is the case in France during the inter-war crisis where the protests arising from the collapse in grain prices led to the creation of the Wheat Marketing Board (*Office du blé*) in 1936.

The movement towards professionalization that accompanied the pursuit of agricultural modernization gradually formed the basis for a broad process of change broadly supported and encouraged by public policies. After the Second World War, the “farm” took center stage. The farmer gradually specialized from a technician to a manager-entrepreneur, a process that increasingly disconnected farming from the peasant’s way of life, rooted to his rural setting. This process led Mendras (1967) to proclaim the “end of peasants” and Shanin (1974) to advance the concept of “agriculturization” (in the sense of agricultural industrialization).³⁰ In that perspective, the loss of agriculture’s special status during the negotiations leading to the liberalization of international trade – ending with the creation of the World Trade Organization (WTO) in 1994 – corresponds to the culmination of a process of normalization that had been going on for the past two centuries. Agriculture was

²⁹ In the French case, it was on the milestone night of 4 August 1789 that, within a few hours, the nobility and clergy lost their privileges. The Civil Code of 1804 subsequently enshrined the “national ideal of a land-owning peasantry” (Laurent and Rémy 2000).

³⁰ Paradoxically, this process took place in the 1950–1970 period while an intellectual debate, in which Mendras and Shanin participated, “discovers” or rediscovers the peasantry, with amongst others Redfield and several Marxist economists (Chap. 3).

henceforth to be treated like any other economic activity for the purposes of international trade.

In this long history, the “family farming” category has only lately found place in the public debate. Its recognition is similarly recent at the international level, although in practice public policies often took into account – and even focused on – farmer families and family farms.³¹

The peasant question, however, is still present in the political debate and in policy concerns for three main reasons. The first is that the peasantry – and by extension, the family farm category – has resisted the processes of modernization and standardization, thus denying a complete victory to the agro-industrial business model. It has stood firm and has even partially assimilated these processes by demonstrating effectiveness and flexibility in the use of all resources (natural, technical, social and family-based ones) in a way that the employer wage-based model has been unable to (Chaps. 5 and 8). The second is that the peasantry, due to its demographic significance, has been an integral part of many liberation and independence struggles against colonial rule in Asia and Africa in the 1960s and 1970s (Friedmann 2013). Even though the “political expropriation of the rural masses” (Copans 1987) has often been the rule because of the balance of power and dominant influence of urban classes, this expropriation tends today to fuel movements of identity. It sometimes leads to the meeting of diverse indigenous movements (such as those in Latin America) which are challenging the dominant political and economic order. The third reason is that the peasant question has become part of the debate, at least in the richest countries with modernized agriculture, questioning the productivist model and its downward slide. Health problems, the ecological crisis, food quality, the dependence on the agro-industrial and modern retail sectors, the headlong rush for mechanization and the related bank indebtedness and Taylorization of agricultural activity are all leading to a search for a new place for agriculture in its rural territories and its local settings and to a reinvention of new social and environmental linkages.³²

Those rallying to the banner of family farming – endorsed by the United Nations which has dedicated 2014 as the Year of Family Farming – therefore form a composite group. Several social movements in different parts of the world, such as Roppa in West Africa,³³ declare themselves to be primarily advocates for

³¹ In the case of France, Laurent and Rémy (2000) show the emergence of the concept of the family holding in statistics and in law, starting in the inter-war period, and the first signs of the family farm model during the Vichy regime (1940–1944). Its consolidation had to wait until after the Second World War and, in particular, the advent of the 1960 and 1962 orientation laws for agriculture which established the keystone of the “two Man-Work Unit (MWU)” farm (i.e., with two full-time workers, typically a working farm couple) – as the basis for an alliance between “modernist family farmers” and the State.

³² The creation of Via Campesina in 1993, which brings together farmers and farm workers in 70 countries from all regions of the world, is in line with these multiple perspectives.

³³ French acronym for *Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest* (Network of peasant and producer organizations of West Africa) (Roppa 2013).

peasants or for family holdings rather than family farmers' movements – though Brazil is a major exception. Family farming, despite the large audience of Via Campesina which promotes a peasant alternative to agricultural industrialization, could gain prominence over peasant agriculture, at least in international governance bodies. Because wording counts, this prominence in the way of naming reminds us the importance of family farming in global agriculture. But it is also a matter of perhaps, and especially, the result of a hybridization and a compromise between the desire of farmers to professionalize and the search for an alternative model to the excesses of market-driven productivism. Such hybridization is reflected in a widespread recognition of the importance of family forms of production (agricultural or otherwise) in the world. This family model, a priori threatened by and incompatible with industrial and commercial concentration – but nevertheless resistant –, seems able to provide alternatives to the deteriorating employment conditions and the distance which is growing between modes of increasingly artificialized and financialized industrial production and the consumer-citizen. Family farming is also promising in defending the interests of agriculture in the South, largely threatened by the growth of agribusiness.

2.3.2 Invention and Differentiation of Support Policies

Agricultural issues have always occupied a prominent place in government agendas. The strategic nature of food makes agriculture a true “affair of State.” Agriculture has, after all, contributed to the creation and rise of the State in its various forms. Agricultural policies were, indeed, along with fiscal policies, among the first interventions of modern States (Coulomb et al. 1990).

Several major objectives have historically structured State action, with obvious political aims: feed the people, accumulate for growth and development, and increase farmer incomes. The first objective concerns the primary function of agriculture: feeding of farmers and supplying food to the non-agricultural population, whose share in the total population has been growing with urbanization and economic diversification. It is a necessity for social peace and even for the State's very survival. The second objective is promoting the transfer of capital and labor from primary activities, foremost among which is agriculture, to other sectors of the economy through direct and indirect taxes and labor mobility. This objective goes hand in hand with the third objective of increasing farmer incomes. This was the compensation of the direct costs of modernization – i.e., the exclusion of some farmers resulting from productivity gains. But increasing farmer incomes also contributes to the reduction of rural poverty in contexts where the countryside has long been – and still is – the home to the majority of the population. Sometimes this third objective has required compromise between representatives of farmers and the State in establishing agricultural policies and defining their framework.

These three objectives have been grouped together in a broader context of economic and social progress. They have led to the implementation of wide-

ranging supply-side and modernization policies, without targeting any particular farmer category due to the wide initial homogeneity of technical levels (Bélières et al. 2013). The main objectives have focused on increasing the available supply – most notably through higher yields – and, at the same time, on improving labor income by means of productivity gains. Increased volumes and improved incomes were also a necessary step to offset the downward trend in prices resulting from growth in supply and transfers of value to other sectors.

The modalities and rates of implementation across countries were based on two main options: on the one hand, support for processes of change through market integration and competition and, on the other, a break with the existing economic order by changing the distribution and ownership of the means of production.³⁴ These transformational policies have had a more or less durable impact but, in historical terms, they were “moments” attempting to change the balance of power and trying to manage economic and social transitions. The range of instruments brought to bear was quite similar across countries. They aimed for a better functioning of markets (by more efficient movement of goods and management of supply), improved production structures and an increase in performance through technical progress. These instruments can be divided into two broad categories. The first pertains to public goods provision, namely the basic infrastructure, the rule of law (including land rights), education, training, information and research. The second concerns market support and protections to address the important issue of risk, which constitutes a major obstacle to investment, and the issue of the financial resources needed for modernization (Chap. 10).

Nevertheless, even though supply-side and modernization policies are the foundation of agricultural policies and their field of historical development, these policies have also diversified into two non-exclusive directions: their integration into a more comprehensive approach to rural and territorial development, and the emergence of policies targeted at specific categories of agricultural producers.

In the first case, the overall economic and social transformation has given rise to other requirements related to territorial balances and to the management of the dynamics between rural and urban areas. Policies have therefore focused on planning and on the diversification of rural activities, including looking for and encouraging intersectoral linkages. The negative impacts of the growth model on the environment and natural resources have also led to corrective interventions and a search for other “ways of producing.” This new outlook has taken the form of policies promoting the multifunctionality of agriculture,³⁵ going beyond mere agricultural production and taking into account the production of environmental

³⁴ This is the case of agrarian reforms aimed at redistribution of land with the objective of social justice and economic efficiency, undertaken in a more or less authoritarian manner, and, of course, of collectivization with the abolition of private ownership of the means of production.

³⁵ Multifunctionality and its development figured prominently in the political debates in the 1990s and 2000s, especially in European countries. This approach, however, was largely derailed by its instrumentalization in the context of the debate on agricultural liberalization. As a result, the search for alternative development models has suffered (Barthélémy et al. 2003).

services and the integration of activities in a broader territorial perspective – a process that has been strengthened in many countries by the movement towards decentralization. Also part of this vision are the “new rurality” approaches, especially in Latin American countries (Bonnal et al. 2004).

In the second case, the progressive countryside differentiation of agricultural structures and the growing performance gaps between different types of agriculture – a consequence of the unequal distribution of modernization and its technical packages – have led to targeted policies, specific to each farm type and dependent on regional settings. This movement has taken the form of dual policies, implicit or formal – as in the case of Brazil (Chap. 10) –, with the implementation of specific extension systems and support for boosting incomes and modernizing production structures.

This evolution, these inflections and diversification of agricultural policies should be analyzed in light of the economic and social patterns of each country, since sectoral and territorial policies are primarily the outcome of structural realities that are gradually evolving in tune with global changes. It is these realities that determine the priorities of public interventions.

Ultimately, the main agricultural and rural policy differences between the major regions of the world depend of course on the means available for their implementation, i.e., the ability of states to undertake actions. This has resulted in significant gaps between the richest countries, the “emerging” ones and the others. Differences also depend on the global economic and institutional environment and the international climate, which determine the types of policies acceptable between States. The current liberalized regime established by the WTO is unfavorable to market protections and extremely restrictive in terms of support: various types of support are either allowed, acceptable or banned – a matter that the WTO goes into in detail – according to market distortions they are expected to create. This observation obviously leads to the question of the difference in treatment between countries that have historically been able to use the full range of public interventions and others who came later but find that the former group has “kicked away the ladder” (Chang 2002) which they themselves used to facilitate modernization and manage structural change.



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