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Family Farming Around the World

Definitions, contributions and public policies

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À Savoir

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In view of the International Year of Family Farming declared by the United Nations for 2014, Agence Française de Développement (AFD) and the French Ministries of Foreign Affairs and International Development, and Agriculture, Agrifood and Forestry, asked the Centre for International Research on Environment and Development (CIRAD) to specify the concept of family farming and its relevance compared to the other categories of agriculture, analyse the economic, social and environmental contributions of family farms, and put in perspective the way in which they are taken into account in the public policies of various countries. This publication is an enhanced and revised version of the report published in May 2013.

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Foreword

This publication is a resumption and revised version of the report published by CIRAD in May 2013 with the same title, on behalf and at the request of Agence Française de Développement (AFD), the Ministry of Agriculture, Agrifood and Forestry (MAAF) and the Ministry of Foreign Affairs and International Development (MAEDI).

The commission given to CIRAD, which was entitled *"Study on the contribution that family farming makes to food security"* was intended to prepare the United Nations International Year of Family Farming (2014) and aimed to *"clarify the terminology used, the reality covered by family farming in developing countries and its impact on food security and sustainable development",* based on an analysis of the institutional and scientific literature and case studies in various countries concerning the *"implementation of family farming policies".*

The May 2013 report comprises:

- A first part concerning the summary of research – the subject of this publication – with the same authors and contributions from Vincent Baron (CIRAD) and Jacques Loyat (CIRAD, associate researcher);
- A second part devoted to ten case studies (Brazil, Cuba, France, Hungary, India, Mali, Morocco, Mexico, South Africa and Vietnam), conducted by some of the authors of the summary, and Jacques Loyat, Vincent Baron, Pascal Chevalier (University of Montpellier III), Gilbert Etienne and Christine Lutringer (IHEID, Geneva), Nicolas Faysse (CIRAD) and Eric Léonard (IRD).

The entire process for the preparation of the report and the subsequent publication was coordinated by Marie-Cécile Thirion (AFD) on behalf of the ordering parties and by Pierre-Marie Bosc for CIRAD, who also handled the final publication. This steering committee also received contributions from Jean-René Cuzon, Alexandre Martin, Damien Barchiche, Marine Renaudin, Philippe Pipraud, Frédéric Courleux, José Tissier, Véronique Sauvat, Jean-Luc François and Valérie Vion.

The production of the publication benefited from proofreading and comments by the steering committee and AFD's Editorial Committee. It drew on the discussions and exchanges during the many presentations of the report, particularly at a parallel session at the 40th session of the Committee on World Food Security (CFS) of the United Nations Food and Agriculture Organization (FAO) (October 2013) in Rome,

with the Organisation for Economic Co-operation and Development (OECD) (October 2013) in Paris, the French Academy of Agriculture (January 2014), and a seminar of the French Society for Rural Economics (SFER) at the University of Saint Quentin (February 2014).

As usual, the errors or omissions are the sole responsibility of the authors.

Introduction

In December 2011, the sixty-sixth session of the United Nations General Assembly decided to designate 2014 as the *"International Year of Family Farming"*. The resolution *"encourages member States to undertake activities within their respective national development programmes in support of the International Year of Family Farming"*.

This publication responds to a request from AFD, the Ministry of Foreign Affairs and International Development (MAEDI) and the Ministry of Agriculture, Agrifood and Forestry (MAAF)[1]. It provides an overview of the debates about and around family farming, its place, its roles in the issues and challenges of agriculture at the beginning of this 21st century, and its inclusion in public polices. It aims, more modestly, and following on from the declaration of the International Year of Family Farming, to determine some of the knowledge acquired in order to gain a better understanding of this category of "family farming", which is multifaceted and much less defined than its mobilisation in current debates might suggest.

Indeed, one might assume that everything has already been said and written about this form of farming, as it has been widely analysed and discussed by professional and trade union organisations, research, public administration, development actors and political bodies and, as a result, find the renewed interest in it surprising. Yet it has to be recognised that the changes taking place in agriculture and agrifood systems worldwide – some of which figure prominently in the media, such as large-scale land grabbing or the restructuring of agrifood chains – raise the question of its viability. They call for a re-examining of family farms in all their diversity and ultimately invite us to gain a better understanding of what they represent.

This publication responds to these new needs for knowledge by analysing:

- The definition of family farming and similar terms used in the literature;
- The contributions that family farming makes to employment and income generation, the management of climate or market risks, diversification, the adaptation of production to the diversity of territories and climate change, local democracy (governance), natural resources management ... ;
- The role that family farming plays in the agricultural policies of several countries.

[1] This publication takes up the study report published in 2013, which it reviews and completes: *« Les agricultures familiales du monde. Définitions, contributions et politiques publiques »*, AFD, CIRAD, MAAF, MAEDI, Montpellier.

The publication is divided into four parts.

The choice of the term "International Year of Family Farming" for 2014, rather than small-scale farming or peasant agriculture first of all calls for clarification of this category. In the first part, we give a positive definition to family farming, with farms organised on the basis of family work and underpinned by organic links between the domestic and productive spheres. But we also define the other forms of organisation which, with the family forms, make it possible to discover the entire agricultural productive sector: the forms in terms of family businesses and entrepreneurial forms. Finally, we reposition them with regard to other categories, which are often wrongly qualified as synonyms and encountered in international debates and used by research, civil society and policymakers alike. Finally, the diversity of family farming is explored by proposing several differentiation criteria that make it possible to renew approaches to their diversity.

The second part provides a review and clarification of the main controversies over the contributions to global development challenges expected from family farming. The importance of family farming in agricultural production and employment is assessed, and the preponderance of this form in the world's main agricultural markets is emphasised. In this part, the contribution that family farming makes to food security and natural resources management is also addressed, as well as the internal social tensions, particularly with regard to the situation of young people and women. The need to contextualise analyses is highlighted, as it makes it possible to avoid the pitfall of entrenched positions, which often alter the realities. Our analyses emphasise the diversity of contributions and economic, social and environmental impacts of the different types of family farming, as well as the complexity of mechanisms at work and their subordination to dynamics that go beyond forms of production alone. The contributions made by family farming are generally perceived as being significant and positive, but the literature invites us to address the considerable methodological challenges related to the objective measurement of these contributions and impacts.

The third part looks at the "politicisation" of family farming at national level. It uses case studies (concerning 10 countries) that allow a diversity of situations to be described, taking account of the power relations in the national arenas, the level of dependence of countries on external macro-actors to define their development orientations, as well as their economic, political and institutional trajectory. The bibliographical review once again stresses the diversity of cases and, beyond the influences of global references, the importance of contextualising references. It shows that it is often difficult to unravel, in the body of policies, those that are specific to family farming, insofar as the latter

benefit jointly from sectoral, territorial, social and environmental policies. While the recognition of the virtues and potential of family farming runs through civil society and political discourses in most cases, few countries specifically target the category of family farming and actually implement specific programmes and instruments that promote its potential. The segmentation and fragmentation of policies predominate, *de facto* favouring sectoral approaches, a rationale of supply, the modernisation of structures and specialised forms of production. Finally, a last point summarises the public policy instruments to support family farming, with an observation on the disjuncture between policies and instruments and the proposal to extend agricultural policies to rural policies, promoting all the functions and dimensions of this type of agriculture.

Finally, the fourth and last part proposes themes to be examined in more depth, which appear necessary in order to more effectively meet the challenges of food security and sustainable development. It particularly emphasises the importance of gaining a better understanding of the impacts of production models and new, emerging technical models, the analysis of forms of organisation, both in labour relations and collective action, and the need for a holistic approach to the development of agriculture based on a renewed vision of family farming.

1. Definitions and diversity of family forms of agricultural production around the world

In this first part, the scope is mainly conceptual and cognitive, and our questions focus on the relevance of the concepts used today to account for the agrarian realities and their transformations. Where appropriate, we shall use the normative register, *i.e.* the way in which concepts are used by actors in the political field.[2]

Family farming is one of the forms[3] of organisation of agriculture around the world. In reality, it is implemented *via* a multiplicity of concrete forms that can be identified in the agricultural holdings.[4] With no standardised and operational definition of family farming for surveys, the fact that this term is used little in many regions – particularly for linguistic reasons, for example, in English, "smallholder agriculture" is a common reference and yet it is not comparable – leads to a certain confusion,[5] which implies the need for a proposal for clarification.

1.1. Conceptual framework and definitions

The diversity of forms of agriculture reflects the extreme heterogeneity of economies and societies. Between slash-and-burn agriculture, which is similar to that of the first sedentary human groups, and agriculture that is almost entirely automated in certain regions with a high level of technology (or the high-tech enclaves disseminated in the rest of the world), the differences in capital intensity, the level of market integration, of artificialisation, and in the level of productivity are abyssal. They express various stages in the transformation of agriculture, which are inherent to technical progress

[2] This aspect will mainly be addressed in the third part of the report.

[3] "Form" is understood here as a general category with common characteristics.

[4] See Section 1.2 for a presentation of the key differentiation factors.

[5] In English, the terms "Family Farming" and "Family Agriculture" are used, whereas to our knowledge there has been no in-depth and comparative analysis of the two terms.

and the development of the globalised market economy, and the transition of agrarian societies. The latter are predominantly urban and specialised, where the agricultural production activity tends to be increasingly disconnected from the ecological and social context *via* processes to artificialise cultivated environments – hydroponic cultivation on inert substrate or industrial livestock farming – in the most advanced technological situations.[6]

While these different stages clearly have a temporal dimension, which corresponds to the gradual transformation of economies and societies, they are not necessarily exclusive. Indeed, while the state of economic and social structures often determines the existence of a dominant form of agriculture at national level, several concrete and different types of agricultural holding can coexist in the same territory.

Agricultural holdings (see FAO definition below, 2007) are basic units for agricultural production in the broad sense (crops, livestock, fishing, forestry, harvesting). It is in these units that decisions are taken for the allocation of factors for agricultural production, but also for the factors that are implemented. Depending on the type, these units coincide with other socioeconomic functions, such as consumption, residence and accumulation. This intertwining makes it difficult to analyse the behaviour of units with, in addition, production strategies and decisions that may relate to the other functions. It is in this context that the proposed definition for family farming takes on its full meaning.

> FAO definition for conducting agriculture censuses: *"An agricultural holding is an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form, or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation, cooperative or government agency. The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more territorial or administrative divisions, providing the parcels share the same production means, such as labour, farm buildings, machinery or draught animals.* [...] *There are two types of agricultural holdings: (i) holdings in the household sector – that is, those operated by household members; and (ii) holdings in the non-household sector, such as corporations and government institutions. In most*

[6] It is an observation and not a value judgement.

countries, the majority of agricultural production is in the household sector. The concept of "agricultural holding" is therefore closely related to the concept of "household". (FAO, 2007, p. 21).

This definition of agricultural holdings is insufficient to characterise family farms. With a view to the International Year of Family Farming, a study group coordinated by FAO is working on the operational and statistical definitions of the term "family farming" (FAO note [2013]).

Box 1 *Definitions used by FAO*

Substantive definition: *Family farming is "a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family capital and labour, including both women's and men's. The family and the farm are linked, co-evolve and combine economic, environmental, social and cultural functions"*

Statistical definition: *"A family farm is an agricultural holding which is managed and operated by a household and where farm labour is largely supplied by that household".*

This choice leaves a qualitative dimension and therefore does not allow a homogeneous distinction to be made between countries of the holdings that fall under family farming and those that fall under other forms of production organisation.

1.1.1. *The main forms of organisation for agriculture*

Before defining more specifically what family farming is and putting into perspective the way in which it is understood in different contexts, it is useful to build an initial overall picture of the main forms of agricultural production. We make a distinction, schematically, between farming of a family nature, on the one hand,[7] and farming of an entrepreneurial nature on the other hand. The distinction is made depending on the position occupied respectively by the family organisation and by the control modalities for the productive capital.

[7] Understood here in its different configurations, characterised by the social and cultural context (from the mononuclear family to extended family structures).

These two main forms obey logics that make them two main "poles" for the organisation of agriculture. Due to the possible overlap of criteria, it is necessary to take an intermediary form into account, that of large-scale farming, which has its place as it is characterised by specific behaviour.

In order to disentangle the layers of concrete situations, it is possible to use some criteria that allow three forms of agriculture to be identified, understood *via* the agricultural holdings they include (see Table 1). [8]

Table 1 *Characteristics of the main forms of farming*

	Corporate agriculture ⟷ Family farming		
	Entrepreneurial forms	**Business forms**	**Family forms**
Labour	Exclusively paid employees	Mixed, with permanent employees	Family predominance, no permanent employees
Capital	Shareholders	Family or family association	Family*
Management	Technical	Family/technical	Family
Consumption	N/A	Residual	Partial on-farm consumption predominant
Legal status	Public limited company or other forms of company	Status of operator, forms of association	Informal or status of operator
Land tenure status	Ownership or indirect formal tenure	Ownership or indirect, formal or informal tenure	

* Including holdings that have very little capital, such as landless holdings.
Source: Authors.

[8] The same form of agriculture comprises several specific types embodied in agricultural holdings that vary greatly, but which can easily be compared with the three ideal types presented here.

Five differentiation criteria are proposed here. They are not exclusive, but take into account the various aspects of the activity: origin of production factors (capital and labour), decision-making methods (management) and legal status. They also focus on the use of production, *i.e.* the share of on-farm consumption and the economic independence of the technical system (in particular the share of self-supply).

It should be noted that the size (surface area) of holdings is not used as one of the distinctive criteria, whereas the "small size" is often wrongly associated with family farming (Losch and Fréguin-Gresh, 2013). We consider, on the contrary, that reference size is generally a source of confusion. We shall see later, when we address the case of smallholders (IFAD, 2011), that this criterion – used alone – is not discriminatory, as each type of farming includes agricultural holdings with both small and large surface areas, depending on the history of the agrarian systems, the level of mechanisation and the production system. In addition, this notion is eminently relative and, intuitively and implicitly, it carries a bias that devalues or even "disqualifies" compared to the large-scale agricultural holdings, which, for their part, would be the custodians of modernity and efficiency.

Consequently, it is possible to identify three forms of organisation of agriculture, which include agricultural holdings divided up depending on a gradient of situations ranging:

- From the exclusive role of the family in mobilising production factors and their management, up to its complete disappearance in the entrepreneurial forms;
- From the informal legal status, which corresponds to an exclusive family or community order to the various formal legal forms, including the recognition of the status of farmer by public policies;
- From autonomy in consumption (intermediate consumption required for the production cycle and final consumption of products from the agricultural holding related to the lifecycle of families) to exclusive recourse to markets for supplies (*i.e.* a transition from a non-market order to an exclusively market-based order).

As shown in the following sections, the use of family or paid labour is a common thread that makes it possible to identify three different forms of organisation of agriculture:

- Family forms correspond to an effective use of family labour (exclusive or partial use, temporarily combined with a proportion of non-family labour);
- Enterprise-based forms correspond to an exclusive use of paid labour;

- Business forms, which are intermediate, correspond to a situation with variants that are also multiple, but whose business aspect is due to the use of permanent paid labour, which has a structural nature.

In reality, each of these forms covers a wide variety of types of agricultural holdings, which is reflected in the abundance of variants. Other categorisations are possible according to other criteria.[9] However, our proposal, which is based on the family/entrepreneurial gradient and built around the issue of labour, has the advantage of a certain robustness that transcends productive systems and such a controversial and biased issue as the size of agricultural holdings.

It makes it possible to interpret the dynamics of the changes in farming and the effects that policies have on these changes, using a grid that is applicable to all situations. It also makes it possible to get away from normative definitions adopted depending on the countries and contexts, yet without impeding the definition of typologies that are more specific to local situations, within each of these ideal types.

1.1.2. *A "positive" definition of family farming*

Beyond the diversity of productive systems and national contexts, family labour is the central criterion that allows the family form of agricultural production to be defined.

If we place ourselves in the perspective opened up by the rural economist Chayanov (1923, 1990) in the early 20th century, family farming refers to forms of organisation of agricultural production characterised by (i) organic links between the family and the production unit and (ii) the mobilisation of family labour excluding permanent employees.

These organic links are reflected by the inclusion of the operating capital in the family assets and the combination of domestic and operating logics, both market and non-market:

- For the assignment of work and its remuneration;
- In choices for the allocation of products between final consumption, intermediate consumption, investment and accumulation.

[9] These include the recent proposal by Hervieu and Purseigle (2011) who, by comparing several aspects (territorial foothold/relocation, inclusion/exclusion, family assets/financial capital), come up with three forms of organisation and seven types of farming: family (small-scale, modern and group-based); enterprise-based (multinational or sovereignist); subsistence or relegation. It should, however, be noted that this latter type is fundamentally of a family nature, but characterised by the sale of part of its labour force.

It is the production unit that allows us to define the family nature, using the robust criterion of the exclusive mobilisation of family labour, excluding permanent and structural employment.

(i) This "organisational" component, which closely links the family and the agricultural holding, indicates the close relation between the social (domestic) sphere and the economic sphere. This type of relation partly explains the capacity for resilience of family forms. The porosity between the operating budget and domestic budget, and the fungibility of the operating and asset capital – in both directions in each case – allow adjustments to be made to limit the effects of shocks.

In the allocation decisions, once the intermediate consumption has been paid and any loan interest, the first priority is family consumption, then accumulation of a social nature and, finally, productive accumulation. Conversely, however, family assets may be mobilised to overcome operating difficulties, depending on economic, social or climatic vagaries.

This organisational link also accounts for the complexity of relations within the family when it is a question of making economic decisions that affect the assets, power relations, the organisation of the division of tasks and the remuneration for the work. There are tensions in relations within families, in agriculture as elsewhere.

When this family-holding link is weakened or disappears, other forms of production emerge that obey non-family logics, as we shall see.

(ii) The second criterion is the use of family labour. In the literature, we find a whole host of qualitative expressions to describe the proportion between family labour and employed labour: mostly, essentially, almost exclusively, predominantly, etc. All these expressions[10] emphasise the importance of family labour, but they leave too many possible interpretations between what falls within the scope of the family form and what does not. Admittedly, they do allow the definition to be adjusted to different national contexts, but we feel that the resulting definitions lead to two elements being masked.

Firstly, it is important to make a distinction between periodic or temporary paid labour (but which may become regular over time) and permanent paid labour. An initial analysis shows that only the latter has a structural nature in the sense that it

[10] For example: *"Non structurally based on wage labour" (Friedmann, 1978), "A Substantial Amount of Family Labour"* (USDA, http://www.ers.usda.gov/topics/farm-economy/farm-household-well-being/glossary.aspx), *"This form of agriculture mainly relies on the human resources of the family"* (Toulmin and Guèye, 2003).

permanently alters the productive structure of the agricultural holding, for example, in the case of a workshop being opened or the extension of cropland that would not be possible without this permanent labour force. However, in terms of certain productive systems, and depending on certain "contextualised" thresholds, it is possible to consider significant volumes of work by temporary employees as being equivalent to permanent employment (Darpeix *et al.,* 2014).

Secondly, permanent agricultural paid employment refers to the creation of a wage ratio in the production unit. This ratio significantly changes the productive rationale, because it becomes necessary to ensure there is a fixed and priority monetary income in order to be able to pay this/these worker(s). The rationale for this fixed remuneration deviates significantly from the remuneration of family workers, which can be adjusted, upwards or downwards, depending on the level of income obtained. This remuneration relates to the notion of flexibility mentioned above and declines with the increase in the number of paid employees.[11]

Box 2 *Definition of family farming*

Family farming refers to one of the forms of organisation of agricultural production and includes holdings that are characterised by organic links between the family and the production unit and by the mobilisation of family labour, excluding permanent employees. These links are reflected in the inclusion of the productive capital in the family assets and in the combination of domestic and market and non-market operating logics in processes to assign family labour and for its remuneration, as well as in choices for the distribution of products between final consumption, intermediate consumption, investments and accumulation.

This precise definition follows on from the one previously used by some of the authors of this report (CIRAD-TERA, 1998), who recalled *"the central and privileged link between the agricultural activity and the family organisation, more specifically concerning the assets, means of production, mobilisation of labour and decision-making".* Faced with the diversity of situations, it was decided to not so much focus on an ideal type as stated by Chayanov, but on a multiplicity of configurations where the organic family-activity link

[11] Assuming that there are a minimum of rules in terms of labour law, which is far from being the case everywhere.

remained central, even if the characteristics in terms of organisation, factor endowments or property were highly variable (CIRAD-TERA, 1998).[12]

This approach, which involves defining a form with reference to others, corresponds to the one adopted by Otsuka (2008) when he defines peasants, or by Hayami (2010) when he defines the plantation following the definition of Jones (1968), in opposition to smallholders.

In the analysis and the way of assigning terms, this definition of an ideal type makes it possible to get away from preconceived notions and functional considerations, which could obscure the fundamental characteristics of family farming: the size of the unit (small-scale farmer) does not allow the comparison, as it is too dependent on productive systems and contexts. In reality, the objectives (of the subsistence farmer, commercial farmer) are not exclusive and can change depending on the structure of incentives. The economic logics and rationalities (farmer or capitalistic) only refer to the economic and financial dimension and are not very analytical. The multifaceted sociological figure of the farmer also relates to both an economic autonomy and a non-generic foothold in the community, as it depends too much on the socio-economic and cultural contexts.

This definition does not avoid the debate that results from the relative proportion of family labour and paid labour (Hill, 1993), but it sets a clear limit related to the introduction of the wage ratio in the production structure. Indeed, the fact of whether or not there is a wage ratio, even if it is limited to a small number of permanent employees, makes it possible to make a clear distinction between the family types and the family business types or enterprises.

Indeed, what is important is to be able to interpret the dynamics of the change in farming, and the political effects on these changes, using a grid that is common to all situations, and which makes it possible to get away from normative definitions adopted in different countries and contexts. This in no way impedes the definition of "infra" typologies, which go beyond these main categories depending on needs and national choices.

[12] It should be recalled that CIRAD's Territories-Environment-Actors Department (TERA) had set up a research programme on family farming back in 1998. This programme ran until 2005. For a review of the research, see Bosc *et al.* (2005).

1.1.3. *The family*

The family business is made up of holdings that fall within family forms because they have many characteristics in common with them, but what makes it different is the structural use of paid labour. Consequently, the family business refers to forms of organisation of agricultural production where the holdings combine family labour and permanent paid labour, which introduces the wage ratio in the operating of the agricultural holding.

The family holds the majority of the capital and (at least) one of its members manages the production unit. The capital mainly comes from the family assets, but a shareholding external to the family sphere must not be excluded, provided that the latter retains control of resource allocation decisions.

The management logic refers to the search for forms of production that allow the remuneration of the permanent employees, the acquisition of inputs in the market sphere, and an overall remuneration of the family labour with a view to productive accumulation, yet without necessarily seeking to maximise the return on the capital invested.

Consequently, this type of farming has certain characteristics of the corporate forms. Accumulation may result in a development of production facilities, but the economic and social diversification strategies are often outside the agricultural sector.

1.1.4. *Corporate agriculture*

Corporate agriculture refers to forms of organisation of agricultural production where the holdings exclusively use paid labour. The operating capital is held by private or public actors who are disconnected from family logics.

In this case, there is a disjuncture between family logics and corporate logics, and the corporate side dominates. The wage ratio in the latter is exclusive, with a marked differentiation between the level of skills, hierarchy, and the remuneration between management staff and lower levels of qualification, down to workers and labourers. In addition to the remuneration of employees, the logic focuses on seeking a return on investment, without this necessarily including systematically maximising profit.

The production unit may be autonomous or, on the contrary, be made up of a larger set of productive units, which can have an influence on the manager's decision-making capacities.

Corporate farms correspond to the types of agricultural holdings that are fully integrated into the market sphere.

The reality of corporate forms is obviously much more complex and relates to a multitude of management methods in the agricultural sector observed over the last two decades, in connection with the development of financial capital – particularly the role of investment funds – and the increased artificialisation of agriculture, coupled with a growing sophistication of production and management techniques ("precision" agriculture).

New agricultural models are emerging, like the trends observed in Argentina, Brazil and Ukraine, where associations between landowners, equipment owners, technical service providers, and management service providers lead to extremely flexible, mobile and multifaceted combinations, in echo to the high volatility in markets (Deininger and Byerlee, 2010).

Production pools (planting pools) are developing alongside the development of integrating and listed multinational macro-firms, such as ADECOAGRO in the Southern Cone or AgroGénération in France,[13] which has recently invested in Eastern Europe and Argentina. These pools are neither land owners, nor owners of the operating capital, and use different service providers for the various crop operations (sowing, crop protection, harvesting), but they provide their technical and management skills and their networks, which can facilitate the mobilisation of international capital – generally investment funds (for Argentina, see Savanti, 2012).

In family businesses, and even more so in corporate agriculture, we are clearly in a context of more or less vigorous accumulation dynamics, but which tend to dominate – even if family farms are also within this type of dynamic.

Between the last two types – the family business and corporate agriculture – the wage ratio tends to become dominant. It thereby makes the productive system more rigid, seeking to mobilise employees who work on the basis of schedules or, more often, with a daily task to accomplish (unlike family labour, which is generally present on farming areas). This leads to supervision costs that do not exist in family forms.

These factors relate to the historical superiority of family forms over holdings that exclusively use paid employment. In several cases, the superiority of family forms over companies with employees has been demonstrated, such as the case of wheat

[13] http://www.lemonde.fr/economie/article/2013/05/04/charles-beigbeder-cede-le-controle-d-agrogeneration_3171034_3234.html

production in the USA between 1873 and 1935, with the success of family forms over "capitalist enterprises" (Friedmann, 1978), the wiping out of large-scale holdings with employees on the large farm estates in Eastern Europe (Koning, 1994), or the triumph of family farms over large-scale plantations in tropical countries (Daviron, 2002). This historical perspective, based on a comparative analysis of the forms of mobilising labour, strengthens the argument for the choice of labour as a central factor in the differentiation of holdings.

As we have mentioned, our approach does not intend to deny that in many situations, holdings and households with one or several permanent employees classify themselves and are perceived as falling within family farming; see in particular Toulmin and Guèye (2003) for West Africa, Hill (1993) for Europe, Caron and Sabourin (2003) for Brazil.

We also agree that certain recent forms of corporate organisations (Hervieu and Purseigle, 2011) or joint ventures (Lahiff *et al.,* 2012), complicate the representations and lead to hybrid forms, which call for a re-examination of the family nature of production units (Sourisseau *et al.,* 2012).

Similarly, the notion of permanent employee could be discussed further, as certain forms of presence in the family come under domestic just as much as informal employment, but are remunerated in one form or another, particularly in Sub-Saharan Africa (Ancey, 1975; Gastellu, 1980; Barbedette, 2004).

The current period is characterised by a clear disparity between the structural importance of family farms at global level and the representations of elites and policymakers, which are founded on the model of the agricultural holding operating on the basis of paid employment. It is as if the culmination of a long agricultural transformation process was confined to the tip of the iceberg of rural society, *i.e.* less than 10% of the total of agricultural holdings in industrialised countries.[14] Ignoring 90% of agrarian realities cannot provide a universal model. Yet this is what occurs, due to the fact that among the elites, decision-makers and politicians, the representations remain so strong of what "modern" and "developed" agriculture should be. Confusing the process that leads to modernising agriculture with its culmination – which, furthermore, does not necessarily guarantee its sustainability – is quite a widespread misconception.

[14] If we consider the USA, which in the agrarian imagination is the country of large-scale holdings or corporate agriculture, it is instructive to refer to the figures of (2007), which show that 91% of the total number of holdings in the USA are in the category of small farms, *i.e.* holdings with a turnover of less than USD 250,000.

1.1.5. *Perspectives on other ways of attributing names and underlying questions*

a. Peasant agriculture

This terminology has been widely used in the research of historians and has subsequently been mobilised by social sciences, mainly in political economy, rural sociology and human geography (for a review, see Mintz (1973), or the compendium by Shanin (Ed.) (1988) used in this section).

This notion has become polysemous, but its origin stems from a past marked by a non-exclusive dominance of self-supply for food and other non-food goods (for accommodation, clothing, heating…), and the preference given to using the family labour force, as well as relations based on kinship and proximity within the community. It also relates to a social category that has the characteristic of being widely subordinated, historically and in various forms, to various types of power (Wolf, 1966). The research of historians[15] also sheds light on the fact that a category based only on on-farm consumption would constitute an error (Aymard, 1983), because there is a great historical depth to the exchange (monetised or not), and it is closely intertwined with the related levies and non-market exchanges.

The outlines of the term "peasant" depend on the context in which it is used – and just as much on the historical period and situation that it contributes to analysing, as well as the discipline in question. We propose an assessment of the definition produced by a limited number of authors, mainly in economics and political economics and in sociology from the 19th century to today.

Table 2 provides an analysis of twelve conceptual differences *via* a grid made up of the following criteria: the labour force used, the type of land tenure, the size of the agricultural holding and its equipment, the relationship with markets, (local) community integration and, finally, the modalities of the relationship with society in general. This short review is not intended to be exhaustive, but we feel that the choice of the authors guarantees the robustness of the analysis. We address Lenin's vision (1899) separately, for whom the peasantry was to disappear to the benefit of very large State agricultural production units.

[15] One could also mention Le Roy Ladurie (2002), who shows longstanding employer-employee relationships, monetised or in kind, in working exchanges under the Ancien Régime.

Family labour as a common reference

The only common aspect to all the definitions concerns the use of family labour, whatever the disciplinary field of the authors in question.[16] For Chayanov (1990), the peasant family is central: *"Our aim is to make an organisational analysis of the economic activity of the peasant family which does not have recourse to hiring an external labour force, which has a certain useable agricultural area, which has its own means of production and which is sometimes obliged to use its labour force for non-agricultural activities."* [page 53]. He continues: *"…we understand by economic activity all activities, both agricultural and non-agricultural in their entirety. Any other approach to the economic activity of a family would be erroneous, as the main economic problem of a family farm consists in a correct general organisation of its work throughout the year, work stimulated by a need, common to all the family to balance its annual budget and the desire, also in common, to make savings or investments when conditions allow this."* [page 62/63].

This definition, which was formed in the early 20th century on the basis of empirical research and on which Lenin also founded part of his reflection on Russian peasantry, not only corresponds to an historical reality, but we feel that it has a very contemporary conceptual and operative value. It refers to family units that exclusively use family labour (possibly with the periodic use of external workers) and clearly opens up the field of analysis to pluriactivity, which has been a dominant feature of peasant and rural societies throughout the course of history, and which we find in contemporary agrarian societies, particularly in the South. In substance, the other authors we refer to in Table 2 say the same thing as Chayanov by focusing on family labour: *"A peasant family household as a socio economic unit which grows crops primarily by the physical efforts of the members of the family"* (Thorner, 1962) or Janvry (1987): *"One [constant in peasant behaviour] is the family based nature of production motivated by the rationality of insuring the reproduction of the production unit itself"*. The difference between these authors concerns whether or not the possible use of paid labour can be explained (in proportions defined in a qualitative manner, but low compared to family labour), or whether or not recourse to pluriactivity is explicit.

Recent developments in "modernised" and "highly specialised" farming, with segmented productive systems in the second half of the 20th century (Chatellier and Gaigné, 2012, in the case of France), have tended to erase discourses and representations, and

[16] One can mention Wolf (1966), but also Redfield, whose research between 1930 and 1950 concerned Mexican peasants (*Peasant Society and Culture,* 1956).

the issue of the non-agricultural employment of the labour force, by focusing on the farming profession, with the full-time employment of a family labour force, which is paradoxically declining, as the social and political norm. These trends have particularly been explored in the case of Europe by research conducted since the second half of the 1970s (Delord and Lacombe, 1984; Gasson (1967, 1986; Collective, 1988; Laurent and Rémy, 1998; Laurent and Mouriaux, 2001). This consideration of agriculture as one of the activities of rural households, far from being a "romantic " return to the past, indeed corresponds to huge realities in contemporary farming in developing, emerging and "developed" countries. It covers forms and modalities that are thoroughly contemporary and could not be compared with the forms of the past. We feel it is relevant, or even essential, to include this analytical dimension in the study of current family forms.

Table 2 *Analysis of some definitions of the peasant "concept"*

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
Marx (1988): *"Their field of production, the smallholding, admits no division of labour in its cultivation, no application of science, and therefore no diversity of development, no variety of talent, no wealth of social relationship. (…) Each individual peasant family is almost self-sufficient; it directly produces the major part of its consumption and thus acquires its means of life more through exchange with nature than in intercourse with society (publications from 1850)."*	Family labour.		Smallholding.	Mainly self-sufficiency.	Very few "social" considerations – "no wealth of social relationship". Comparison with "potatoes in a sack" to emphasise the highly individualistic and disorganised nature of peasantry.	Isolated and dominated position within global societies.
Chayanov (1924): *"Our aim is to make an organisational analysis of the economic activity of the peasant family which does not have recourse to hiring an external labour force, which has a certain useable agricultural area, which has its own means of production and which is sometimes obliged to use its labour force for non-agricultural activities."*	Family labour, no use of external labour, except temporary. Non-agricultural activities taken into account in the family's employment decisions.	Direct or indirect owner farming ("disposes of" does not make it possible to specify).	Equipment owned. Family ownership of means of production.			

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
Thorner (1988): *"We define a peasant family household as a socio economic unit which grows crops primarily by the physical efforts of the members of the family. The principal activity of the peasant households is the cultivation of their own land, strips or allotments. The households may also engage in other activities: for example, in handicrafts, processing, or even petty trade. Some members of the family may work, perhaps forced to work, outside the household from time to time. The household may include one or more slaves, domestic servants or hired hands. But the total contribution of these non-family members to actual crop production will be much less than of the family members. (…) the first concern of the productive unit is to grow food crops for themselves (...) in one way or another they must hand over, surrender or sell to others part of their food crops" (publication from 1962)*	Socio-economic unit based on family labour to which non-family workers may be added (including servile) in lower proportions than those of the family labour. Possibility of additional income, either by the diversification of activities or by working outside the production unit.	Issues of ownership are not addressed, except to note that peasant families farm their "own land" without further precision on the type of tenure.	Makes explicit reference to the physical efforts made by peasants (*c.f.* Chayanov with arduousness).	Production mainly destined for family consumption, but explicit link with the urban world or dominant classes for which part of the production is destined.	Other types of holding taken into account *(hacienda, estates or capitalist farm…),* with which there are exchanges, particularly for labour.	Thorner defines the peasant as an element of a "peasant economy" conceptua-lised at the level of a country according to the proportion of the working population employed in agriculture.
Shanin (1988) defines peasants *"as small agricultural producers, who, with the help of simple equipment and the labour of their families, produce mostly for their own consumption, direct or indirect, and for the fulfilment of obligations to holders of political and economic power."*	Family labour.		Small size. Equipment simple.	Production mainly destined for on-farm consumption – directly or indirectly.		Obligations to meet towards those who hold economic and political powers.

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
Mendras (1976) defines the peasant by his belonging to a peasant society, which is defined using five criteria (relative autonomy, importance of the domestic group, relative autarky, face-to-face relationships, mediation of nobles). *"It is the fact of belonging to a peasant society that identifies the peasant and nothing else."*	Family labour of the domestic group.			Produces both for the market and for family consumption. Relative self-sufficiency but connection with the market.	Strong sense of belonging to the local community. Role of intermediation of notables with global society.	Relative autonomy with respect to the global society.
Deere and de Janvry (1979): *"…the peasant household (…) is both a unit of direct production and a unit of reproduction of family labour power on both a daily and generational basis. (…) Household labour power is used in the home production process or sold as wage labour on the labour market (…). Household labour dedicated to home production generates a gross product which is either retained as a use value by the household for home consumption or sold on the market as a commodity."*	Household labour. Labour force outside the holding.			Integrated in markets, but produces for family consumption.		

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
de Janvry (1988): *"(…) there are a number of constants in peasant behaviour that are rediscovered among social formations and that unify the field of peasant studies. One is the family based nature of production motivated by the rationality of insuring the reproduction of the production unit itself. This gives peasant agriculture features that are markedly different from those of commercial farming, such as an absolute commitment to the productive use of family labour; indivisibility of factor incomes; partial market orientation of the product; incorporation in production of family members (such as children, elders and women in the reproductive phases of their life cycles) with, eventually, zero opportunity cost on the labour market; and behaviour toward risk dictated by safety-first objectives."*	Family labour as a constant allowing the peasant to be defined beyond differences in contexts. Incorporation in the family work of the family's different social components: elderly people, young people, women… Opportunity cost of work often zero (few alternatives for non-agricultural employment).			Partial market orientation.		
Ellis (1993): *"Peasant are households which derive their livelihoods mainly from agriculture, utilise mainly family labour in farm production, and are by partial engagement in input and output markets which are often imperfect or incomplete"*	Mainly family labour. Family work may be outside the agricultural holding.			Partial involvement in markets upstream and downstream (imperfect or incomplete).		

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
Otsuka (2008): *"Peasants are regarded as subsistence-oriented, full-time, and small-scale farmers, many small-farmers are part-time farmers engaged in both cash- and food-crop farming and non-farm jobs. Therefore, peasants may be defined as small-scale, family based farmers, including both owner cultivators and tenants."*	Family farmers. Full-time on the holding or pluriactivity.	Direct owner farming and indirect owner farming.	Small size.	Crops for sale or for family consumption.		
Van der Ploeg (2008): *"Peasant agriculture (…) is basically build upon the sustained use of ecological capital and oriented towards defending and improving peasant livelihoods. Multifunctionality is is often a major feature. Labour is basically provided by the family (or mobilized within the rural community through relations of reciprocity), and land and the other major means of production are family owned. Production is oriented towards the market as well as towards the reproduction of the farm unit and the family".*	Family labour and exchanges in the context of exchanges based on local reciprocity.	Family ownership of land.	Family ownership of means of production.	Production destined for markets and the family. Production determined according to the reproduction of the holding and of the family.	Exchanges of labour force on the basis of reciprocity.	

Definitions / Analytical criteria	Labour force	Land tenure	Size / Equipment	Relationship with markets	Integration in the local community	Relations with global societies
Bernstein (1979): Bernstein uses and repeats former definitions, but especially to criticise their limits. *"The limitations of a general definition of peasants are not overcome by attempts to theorize a peasant mode of production, which are sometimes combined with ideas about the articulation of the peasant mode with other modes* c.f. *production,* e.g., *the feudal or the capitalist."* Yet throughout his texts there are elements of definitions of the base unit of the organisation of peasant agriculture.	Family-based, even after capitalist investment, in order to maintain the adaptive flexibility required for reproduction. Possibility (sometimes crucial) of temporary labour.	Family-based with risk and vulnerability in the capitalist investment.	Smallholding but greater differentiation than in pre-capitalist societies. Gradual and incomplete separation between the producer and the means of production.	Essential and explains the nature of forms of production. Generally variable, but with priority given to subsistence.		*Via* power relations brought about by *"commoditisation"* in particular. Very important.

Source: Prepared by the authors.

Lenin (1899) does not define "the peasant". However, he uses a description of his different evolutions to build his anticapitalist theory. In his early writings, he fully understands the peasant in his family dimension, with limited use of paid labour. His position subsequently changes to demonstrate the need to destroy individual land ownership; peasantry consequently covers diverse realities. It is in terms of the use of paid employment that he bases peasant differentiations. He even seeks to demonstrate, by adding temporary work and even by assuming that a self-managed holding could even be considered as an employment relationship, that the large State holding must dominate.

Lenin ultimately constantly criticises the different peasant forms, either for their domination and their inability to escape from these dominations (and thus assimilates peasants with workers, even if they own their land), or when they reach a greater level of autonomy, for their conversion to the side of the exploiters. His theory emphasises the need for "depeasantisation", by explaining its breakdown between:

- The rural proletariat (the class of paid workers who have been granted a plot);
- The rural bourgeoisie or affluent peasantry (it includes independent farmers, who practice commercial agriculture in all its forms, then owners of industrial and commercial establishments, commercial companies, etc.);
- The average peasant (this group varies between the upper group – which it gravitates around and where only a small minority succeed in entering –, and the lower group which it is pushed towards by all the social development).

According to Szurek (1977, page 161), the rural proletariat must not continue: *"…the smallholding is unable to throw off the shackles of humanity, throw off the shackles of the masses of poverty… We need to consider moving to the large-scale holding working for society and to go about it immediately…"*

The figure of the average peasant is emblematic of his theory of "depeasantisaton",[17] because it can develop towards the rural proletariat or bourgeoisie: *"The average peasant produces more food than he needs and, therefore having a surplus of grain, becomes an exploiter of the hungry worker. It is* […] *the fundamental contradiction. The peasant as a worker, as a man who makes a livelihood from his own work* […] *is on the side of the worker. But the peasant as an owner, who has a surplus of grain, is used to considering it as his property, which he can sell freely. All peasants do not, by any means, understand that the free trade of grain is a State crime. 'I have produced the grain, it is the fruit of my work, I have the right to trade it" – this is how the peasant reasons, out of habit, in the old way. And us, we say that it is a State crime."* (Lenin, texts quoted by Carr [op. cit.], V. 2, p. 168, in Linhart (1976), page 47).

Peasant structures, whatever their form, will ultimately disappear. The largest because they represent capitalist forms, the smallest because they maintain poverty and dependence.

The other analytical dimensions

The other analytical dimensions are not systematically present in each definition and depend on the authors (disciplines and period when the concept was produced).

Concerning the means of production, the focus may be placed to a greater or lesser extent on the size (rather "small"), even if this very relative notion is not very informative (Marx, 1988; Bernstein, 1979; Otsuka, 2008), or the mode of tenure – which can vary

[17] On these issues, see a summary of research between 1945 and 1990 proposed by Araghi (1995).

between more or less precarious forms, from indirect tenure to individual ownership, with a variable use of resources managed by the community to which they belong. The level of equipment is addressed little, except to mention its family nature (Chayanov, 1924*a*; Van der Ploeg, 2013), but does, however, underline the arduousness of agricultural work as a justification for the use of forms of mechanisation (Chayanov, 1924a; Thorner, 1988; Van der Ploeg, 2013), which is, here again, still valid when we consider that the vast majority of holdings worldwide function on a manual basis (Losch, 2014).

The issue of the market is firstly addressed by default by emphasising the self-sufficiency aspect or non-market production which, historically, have characterised peasants, even if market relations in the majority of societies, including in their pre-capitalist forms, have existed for a very long time. Contemporary authors (Otsuka, 2008; de Janvry, 1988; Ellis, 1993, for example) clearly consider a distribution between market production and on-farm consumption, the respective proportions of which can vary. For Van der Ploeg (2013), the distribution of investments between market crops and production for consumption is subject to the reproduction of the family group.

Autonomy with respect to markets may have more or less importance depending on the contexts. The issue of seeking a certain food self-sufficiency would appear to be more marked in tropical agriculture, where the peasantry is often the cornerstone of the national debate, as is the case in Latin America[18] (Bartra, 1995), whereas agriculture elsewhere focuses on the quest for autonomy from the markets (Van der Ploeg, 2008), including in their most current and concentrated forms, as a way of gaining back economic and social leeway with respect to the dominant actors: downstream industries and large-scale distribution. These various strategies of taking a distance from markets, which can well be combined, and explicitly taking into account the non-market aspects (Polanyi Group, 2008),[19] are strategic factors which give them a competitive advantage compared to other types of farming: peasant farming can produce all or part of its food and can, from a technical point of view, use alternative techniques to the conventional intensification model based on the use of chemical inputs (Aubertin, 2006).

[18] *Cf.* the constant references to *Agricultura campesina* or *camponesa.*

[19] And this is true the other way round. Farmers in their family business forms (for example, in the case of Brazil) or in the case of companies, are also based on non-market aspects, starting with the support policies they benefit from – *c.f.* in particular the interactions of lobbyists in the context of the negotiation of the Farm Bill in the USA, or in the context of the negotiations for the Common Agricultural Policy (CAP) in Brussels for the European Union (EU).

Finally, for certain authors, particularly for the various streams of sociology and anthropology, the collective dimensions are indissociable from a definition of peasant families. These collective dimensions are addressed at two levels. The first is that of the family's integration into the local community (family relationships, marriage alliances and simply geographical proximity). The second is that of the place the peasant society has in its relations with other actors in society, the recurrent characteristic of peasant societies throughout the course of history being constantly in a dominated position. For Mendras (1976, 2000), this is even central as it defines the peasant through the fact that he belongs to a rural society, which is conceptualised in counterpoint to the industrial society of Raymond Aron[20] *via* the combination of several criteria: his relative autonomy with respect to the global society, the structural importance of domestic logics, the relative self-sufficiency, and the strength of face-to-face relationships within society.

A peasant who loses one of these characteristics would thus become a "farmer". The figure of the "peasant" therefore gradually gives way to that of the farmer, who is increasingly integrated into trade. Indeed, in its cognitive dimension, the characterisation proposed by Mendras no longer makes sense today, except perhaps in a few rare agrarian situations, given the importance and multiplicity of the market integration of "peasants", wherever in the world (input, labour, common consumer goods, financial markets… and agricultural product markets…). It is for this reason that the use of this terminology, on the part of those who employ it today, particularly in a political context, relates to the quest for a little more autonomy with regard to market integration (upstream and downstream), but also to the family's food.

Thorner (1988), for his part, also uses a collective dimension by defining the peasant as an element of a "peasant economy", which is itself at the country level according to the proportion of the working population employed in agriculture.

Peasants and relations of domination

Yet it is the relations of domination that peasant societies have historically been subject to and in a recurrent manner which run through all the historical, sociological and anthropological currents. These relations of domination have in particular been analysed by Wolf (1966), who differentiates between peasant production depending on the

[20] Ideal type of R. Aron on the industrial society with five characteristics: radical separation of the enterprise from the family, division of labour, capital accumulation, rational calculation and concentration of workers on the worksite.

functions performed between the needs of the family (reproduction of the labour force) with the "replacement funds", which are intended for the reproduction of the labour force, the needs related to the inclusion of families in the community with the "ceremonial funds" and the "funds for rent" for levies (land rent, for example) by the dominant sectors or social groups. Wolf (1966: 50-53) identifies three dominant sectors or "domains" whose hold over the peasantries are not mutually exclusive:

- The "patrimonial" domain concerns domains which are owned by lords who control the occupants, have the right to take duties for this use and transfer this right on a hereditary basis. In terms of the lords, there can be hierarchies but *"The peasant is always at the basis of such an organizational pyramid, sustaining it with its own surpluses, which are developed in the form of labour, in kind or in money";*
- The "prebendal" domain differs from the previous one as it cannot be transferred by inheritance, but it is attributed to personalities chosen by the power who derive the legitimacy to collect duties in the same manner as in the case of patrimonial domains;
- The "mercantile" domain, which corresponds to the commoditisation of the land and from which a duty referred to here as rent can be levied.

These three domains or forms of domination are not presented as being exclusive, but the third domain in which land becomes a commodity corresponds today to the contemporary phase of the commoditisation of agriculture within which market relations and mechanisms preside over the capture of peasant surpluses, no longer in the form of taxes or levies, but particularly *via* the capture of a significant proportion of the added value on the basis of "commodities", for which the prices are on a downward trend, despite the recent crises. In opposition to these situations of domination, there are forms of resistance conceptualised by Scott (1976), among others.

Bernstein (1979) emphasises that a distinction should be drawn between a pre-capitalist world and a world in which capitalism has penetrated. What matters now are the relations that peasants and peasantries have with capital, taking account of States' specific role of mediation in these relations. The way in which the pre-capitalist modes of production were destroyed is important for understanding the realities of today. Bernstein also suggests that we should not focus on relations within families, on which most definitions are based, but define peasant and peasantries according to their relationship (often of domination) with the other production methods and other social groups. If we only consider the internal components, there is the risk of ahistorical and decontextualised definitions.

He thus agrees with the research of Lenin on his analysis of the economic and social relations in the peasantry (agricultural and community), which makes it possible to pinpoint all the *"contradictions which are inherent in every commodity economy and every order of capitalism: competition, the struggle for economic independence, the grabbing of land (purchasable and rentable), the concentration of production in the hands of a minority, the forcing of the majority into the ranks of the proletariat, their exploitation by a minority through the medium of merchant's capital and the hiring of farm labourers. There is not a single economic phenomenon among the peasantry that does not bear this contradictory form, one specifically peculiar to the capitalist system,* i.e., *that does not express a struggle and antagonism of interests, that does not imply advantage for some and disadvantage for others."* (Lenin, 1899).

And Lenin continues: *"It is these contradictions that show us clearly and irrefutably that the system of economic relations in the "community" village does not at all constitute a special economic form ('people's production', etc.), but is an ordinary petty-bourgeois one. Despite the theories that have prevailed here during the past half-century, the Russian community peasantry are not antagonists of capitalism, but, on the contrary, are its deepest and most durable foundation."* We can refer to the reflection of Servolin (1972) here, concerning petty commodity production as an essential element for the development of firms upstream and downstream. Kautsky *et al.* (1979) also analysed, in "the agrarian issue", the relationship of dependence between the proletariat and the agrarian capitalist production structures.

Peasant agriculture is, of course, fully anchored in the family form and it constitutes a sort of original crucible, since it is the family who intervenes exclusively in the patrimonial dimension and in the implementation of the production cycle through the use of family labour. The main objective is, as far as possible, to meet the household's needs by the on-farm consumption of production, with a gradual historical integration into markets using resources, owned or in free access, at community level. The major break concerned the relationship between peasants and upstream industries or, more generally, with owners of capital outside the farming world, at the time of the industrial revolution in Europe, or more so with the downstream actors in the context of colonisation.

Consequently, there are two main reasons for our decision to focus our analyses on family farming rather than on peasant farming:

- The term "peasant" refers to an organisation of society, characterised by a social, economic, or even political autonomy, of one of its components, which is less and less present, as Lenin, and nearer in time to us, Thorner or Mendras, had

already observed. In the context of rapid globalisation, it is perfectly logical that political organisations use this standard of peasant autonomy in political power relations or, in a pragmatic manner, for these principles of autonomy to be mobilised in order to restore the scope of action in terms of the logics of economic domination which family farmers are subject to (Van der Ploeg, 2008). However, this does not mean that it is a functional analytical category to describe the ongoing changes in world agriculture, which combines market integration and the persistence of non-market relations;

- The fact of focusing on the family and not the labour character makes it possible to both quantify this form of agriculture (we are currently unable to enumerate as it is not possible to correctly identify the realities), but also to make a more detailed analysis of the gradients of the various forms of family farming, which use various methods to substitute family labour with paid labour (thus giving rise to business forms of agriculture), or by capital by the mechanisation or outsourcing of certain work using service provision. This analysis makes it possible to understand the contribution that agriculture makes to the structural changes to the economy, particularly *via* the employment dimension.

b. *Smallholder agriculture/smallholder farming*

"Smallholder agriculture", "smallholder farming" and "small-scale farming" only represent an analytical category, with the "small" nature referring here to the size of the holding, which is generally expressed through the crop area, the herd size, or the economic dimension expressed as a gross margin, standard margin (recent change for the European Union), or the sales value (USDA, 2007). This positioning is certainly useful, but it comprises a number of limits when one wants to have information that is comparable beyond national contexts.

The term smallholder is, of course, used in English-speaking countries, where reference to family farming is much less frequent.[21] It was influenced by colonial history when the administration wanted to make a difference between "indigenous" farming, mainly dedicated to feed crops, and the plantations of colonial creation intended for export (Wickizer, 1960). This distinction was maintained after the independence for the projects to develop perennial crops (oil palm, rubber, coffee, cocoa, coconuts), of

[21] We can, however, mention the UK's Family Farmers Association or, especially, the USA's National Farmers Union created in 1902, which has 200,000 members in 33 States, making it the largest agricultural organisation in the USA!

"small-holder plantations" or "village plantations", in opposition to industrial plantations (or estates).[22]

Consequently, concerning tropical perennial cash crops, "smallholder plantations" and "village plantations" currently refer to non-industrial plantations. It is therefore a negative definition, which includes family farming, but is not confined to this form of agriculture.

Indeed, this distinction does not retain all its meaning today. While the large plantations (corporate farming) use paid labour, the smallholder category often includes family farmers and family business farmers. In the oil palm sector in Indonesia, it is not uncommon for smallholders to gradually find themselves at the head of plantations of a sufficient size to justify/allow the use of permanent employees who carry out the bulk of the work. Consequently, the term smallholder covers very different categories.

"The basic distinction between smallholding and plantation operations, therefore, becomes quite clear once the management/hired labour criterion is applied. Smallholder producers are defined as independent decision-makers who use family labour which works on its own, or in conjunction with some hired workers, on farms which are termed smallholdings. (...) In this definition the distinction between smallholdings and plantation is not based solely on scale of operations but on internal structure, management control and the employment of agricultural workers." (Goldthorpe, 1989).[23]

On this basis, there would therefore be a correspondence between smallholder agriculture and family farming. However, only the reference to the type of work is taken into consideration, with no discussion of the links between the domestic sphere and productive sphere and, depending on the contexts and sectors in question, there can be a great diversity under the term smallholder (even to the extent of including family business holdings).

Consequently, the notion of smallholder is quite ambiguous due to the relative nature of its use, which varies depending on the context,[24] but especially due to the variability of the qualitative nature of the criteria which are associated with it when it involves specifying the purpose of the study or the policies in question.

[22] The spontaneous development of family or managerial businesses, in particular through investment by urban executives, is an extension of this dynamic. However, the term smallholder plantations includes all this group, in opposition to industrial plantations, with a statistical mix that does not facilitate the analysis.

[23] On family farm plantations, see also Hayami (2002, 2010).

[24] See the example of the USA, note 14, where 91% of the country's holdings are small farms (USDA, 2007).

"The most obvious measure is farm size, and several sources define small farms as those with less than 2 hectares of cropland. In a similar but less precise vein, others describe small farms as those with "limited resources," a definition that includes land as well as capital, skills, and labour. Other authors emphasize, variously: the low technology often used on small farms, dependence on household members for most of the labour, and subsistence orientation, where the primary aim of the farm is to produce the bulk of the household's consumption of staple foods" (Hazell *et al.,* 2007).

Five practical difficulties can thus be identified:

- Firstly, we do not know whether the authors who employ the term "holder" are clearly referring to the notion of direct or indirect tenure. Consequently, it is sometimes difficult to know whether the holdings based on rental or share-cropping are taken into account *via* the use of this notion, and there can be many of them; [25]
- Secondly, this notion is relative and closely linked with the national or regional context in which the observations are made. As a first approximation, there are natural resource endowments, the dynamics of agrarian colonisation, the types of production system and the consequences of public policies to account for the size of the holdings observed;
- Thirdly, the size-based approach is particularly ill-adapted to holdings where all or part of the activities concern the development of resources under common ownership;
- Fourthly, this approach based on the size of the agricultural land area: (i) focuses on crop production without taking account of livestock raising, which is often associated with agriculture [26] and (ii) more broadly, emphasises the agricultural dimension to the detriment of taking account of pluriactivity on which the vast majority of smallholding strategies are based;
- Fifthly, by focusing on the surface area, one does not refer to the qualitative dimensions (soil quality) or those related to investment and land development (development of terraces, irrigation…), and the other types of capital – human, social, financial and physical – as well as the capacity to access them…

[25] In India, the proportion of smallholders or sharecroppers is estimated at 15%, which would represent some 18 million "peasant" families or family production units! (Madhura Swaminathan, personal communication, 2012).

[26] This term also contributes to marginalising production units based on livestock raising and particularly transhumant herding (Wane *et al.,* 2006), which is consistent with the difficulty of characterising production units, the viability of which is based on resources under common ownership.

As a result of all these reserves, what would be the limit between a "small" and "large" holding (Johnston and Kilby, 1975; Hubbard, 2009)? How would the threshold be defined? On the basis of which parameters? Including the other activities or not? The reference to the size of the agricultural area raises more questions than it provides useful answers for the analysis.

However, it is now recognised that the vast majority of agricultural smallholdings correspond to family forms defined as follows:

"Labour is a key feature of smallholder agriculture. We consider a smallholding to be an agricultural holding run by a family using mostly (or only) their own labour and deriving from that work a large but variable share of its income, in kind or in cash. The family relies on its agricultural activities for at least part of the food consumed – be it through self-provision, non-monetary exchanges or market exchanges. The family members also engage in activities other than farming, locally or through migration. The holding relies on family labour with limited reliance on temporary hired labour, but may be engaged in labour exchanges within the neighbourhood or a wider kinship framework. Reciprocal relationships are important here for product or productive factor exchanges." (HLPE, 2013).

c. On capitalist agriculture

In the literature, capitalist agriculture has often been opposed to peasant agriculture or to family farming. However, beyond this opposition, which seems obvious, a wide diversity of concrete situations and forms are concealed, which can be grouped together under the term capitalist agriculture.

Trying to define capitalist agriculture in a rigorous manner would require more in-depth research. As a first approximation, one could put forward three main characteristics to define this form of production using categories from classical economics:

- The private appropriation of means of production by a legal person;
- The employer-employee relationship between the owner of the means of production and the workers, whatever their level of qualification;
- The aim of achieving a certain level of return on the capital invested *via* the profit rate.

This definition does not imply that there is a unique rationality to maximise profit, which we find in much of the literature on capitalist forms.

It could be said that private production factors in agricultural smallholdings are managed by a legal entity which employs workers with the aim of making profits and obtaining a return on the capital invested by their owners/shareholders.

Once this definition has been made, it is possible to make the following remarks:

- Firstly, there is not just one form of capitalist agriculture. This type of agriculture has existed at various periods in the history of world agriculture since the 19th century, and has taken specific forms in relation to the social and political context of its development. Most of these forms could be defined with the first two criteria, as the aim of achieving a rate of return on capital is not always possible in reality (see below);
- Secondly, compared to other activities of a capitalist nature, agriculture has a number of specificities or "rigidities", which explain the lower performance compared to family farming, which has a greater capacity for resilience, often, moreover, to the detriment of the standard of living of the family, including in terms of food. The first of these rigidities concerns the imperative to jointly mobilise land and paid labour, with the recruitment of employees in regimes where there are social rights, imposing recruitment which cannot exclusively be temporary labour. The second rigidity resides in the reduced adaptation capacity which is, among other things, related to the level of investment, to the need to ensure that there is a certain level of revenue and to achieve, if not profits, at least financing capacities (depreciation and investments). In addition to the prominence and presence of paid labour, it is necessary to achieve sufficient production to be able to pay these fixed costs, which certainly give it a rigidity;

  Due to these rigidities, the management of productive risks has for a long time prompted agrifood companies to prefer to develop contractual relations between producers – often family-based – and their processing units. The situation would appear to have changed since the crisis in 2008, which revealed the fragility of this type of model, the profitability of which very directly depends on the cost of raw material supply and the actual availability of these raw materials on the markets. The price hike in 2008 – which remains marked today – gave companies a strong incentive to reconsider their position with regard to the production function, and to rapidly reposition themselves on this segment of activity, thus participating in the movement of large-scale land appropriation;
- Thirdly, capitalist agriculture can also be understood with reference to a productive agrifood system, the aim of which is perhaps more strongly of a capitalist nature – more attention paid to the profit rate – and which must

manage a number of risks. The two main risks concern, on the one hand, securing raw material supplies and, on the other hand, the risk of the quality of these raw materials. It may then be worthwhile, or even essential, for an agroindustry to develop its own crops in the form of a capitalist agricultural holding – owner of at least part of its means of production, the land possibly leased, according to variable and defined commitment periods, and depending on the needs of the industry of market opportunities. This is the very classic case of agroindustries which develop their own production and complete their supplies from often family-based producers, sometimes family businesses (more common in the case of oil palm). The profit rate is not necessarily sought for the gross production, but for the processed products;

- Fourthly, capitalist agriculture can now be understood with reference to the strategies of States which have the means to choose to outsource their quest for food security to third countries, participating just as companies in the race for land since 2008. In the case of many countries that are heavily dependent on markets for their food supplies, market uncertainties and fluctuations raise doubts among governments and national operators over the capacity of these markets to ensure their food security;
- Fifthly, the strictly capitalist aspect is also constrained by difficulties in conceiving the mobility of capital due to the investments and depreciations. A capitalist functioning would suppose a mobility of capital allowing the "land, labour, means of production" triptych to be recombined elsewhere, if the profitability and earnings appear more favourable. In addition to the rigidities mentioned above, it should be added that the biology of animal and plant production means that it is not possible to produce or raise whatever you like and under whichever latitude you like. Moving "forms of production" also supposes high transaction costs;

  In the current period marked by incentive-giving global prices and growth in global demand, these constraints are in the process of disappearing, at least partly. Indeed, we are witnessing the development of what we could consider as an accomplished form of capitalism in agriculture. In certain countries that receive foreign investments (Argentina, Ukraine, Romania, South Africa…), the capital deploys and implements forms of production based on a set of contracts driven by financial logic and in which the entrepreneur of the agriculture services is the dominant figure. The land is a support; in Argentina, the former family producer is transformed into a leaser of land, receiving a rent that allows him to earn a living outside the agricultural activity. Mobility can be

a means of adjustment. For example, Dutch flower producers in Kenya, after having depleted the water resources and seen the rise in agricultural salaries, move their farms to Ethiopia...

One could give an outline of several figures of capitalist agriculture:

- Capitalist agriculture managed by agrifood companies, which need to guarantee a certain level of production, while respecting certain standards relating to integrated agroindustrial models, classically described in the literature (Rastoin and Ghersi, 2010);
- Capitalist agriculture through the absorption of family business forms, which lose the control of the capital to the benefit of capitalist companies, whose core business is not necessarily and historically agriculture;
- Financialised capitalist agriculture, managed by investment funds, which operate on the basis of contracts, in direct contact with stock exchanges for agricultural raw materials and with a "high tech" technical management by minimising fixed assets.

Yet capitalist agriculture does not exist in isolation and its functioning, or even its reproduction, is very directly linked with the existence of family forms, with which it develops relations ranging from complementarity to competition, or even dependence, subjugation...

1.1.6. *The mobilisation of the cognitive register in the context of public policies and debates*

In relation to our definition, family forms cover what, in the literature, is considered as a smallholder, peasant, or small producer, provided that only family labour is used on the agricultural holding (including the use of temporary paid labour, comprising in a recurrent/seasonal manner). Consequently, the family farms that have at least one permanent employee belong to the family business category. The holdings qualified as "capitalist" generally correspond to forms of enterprise.

In the political field, the various notions or concepts are taken up by certain organisations representing producers. For example, the concept of peasant was claimed by the *"Via Campesina"* (Via Campesina, 2010), the European Coordination *Via Campesina* and the Peasant Confederation in France. We are in a normative field in this case; the qualification or self-qualification relates more to the assertion of an identitary positioning in the political field than to the definition of a concept, even

if its use aims to reflect a marked change in productive practices referring to a certain autonomy.

The term *"peasant agriculture"* is used to differentiate from an agriculture engaged in processes of modernisation and conventional intensification (motorisation, fertilizer and chemical products), while sometimes seeking direct relations with consumers in Europe and focusing on food production for families in the South (Senegal National Council for Rural Consultation and Cooperation – CNCR[27] and Network of Farmers' and Agricultural Producers' Organisations of West Africa – ROPPA).

Similarly, the term *"family farming"* is taken up and used in public debates and agrarian policies by representative organisations (farmers' and trade union organisations) and national organisations. There has been real progress with this notion in Latin American countries, in particular for about 20 years now.[28] On the one hand, the objective is the desire to be recognised as a social, economic and political force and, on the other hand, to define appropriate public policies for this sector of the economy, which is not as easy to understand due to the complexity of its functioning between domestic units and economic units.

In fact, each country and each national situation has a specific trajectory, the result of a long-term agrarian history (the dualism of agrarian structures in Latin America), and more recent economic, social and political transformations (the democratisation of public life and opening up trade). The definitions that result from political processes lead to formal and sometimes legal definitions, which owe a lot to the bargaining relationships between the actors in question (farmers' unions, associations of women, the "landless" and "first" ethnic groups…) and States.

The definitions adopted by South American countries are highly illustrative of the different positioning and the variances between theoretical approaches and their political implementation, as shown in the following section

[27] http://www.cncr.org/spip.php?rubrique113

[28] Although "*in many countries, forms of organisation and representation of family farms remain largely inadequate and unsuitable to be able to have influence in order to make new public policies a reality*" (Merlet and Jamart, 2007).

1.1.7. *Multiple definitions of family farming by public policies in South America and Central America*

The political implementation of family farms is a question of natural sovereignty. Consequently, it is legitimate for States to adopt a way in which to define family farming in order to apply measures to support it.

The political implementation therefore requires a precise definition and criteria to allow the units concerned by the measures taken to be identified. We illustrate our argument here *via* the case of South America and Central America, where several countries have engaged agricultural policies that specifically address family farms. To do so, they have defined criteria intended to characterise this agricultural sub-sector. Based on the following bibliographic references (Marques and Ramos, 2012; [29] FAO, 2012*d*)[30] we present here some elements of the characterisation used.

Marques and Ramos (2102) review the criteria used and remind us that "*MERCOSUR*[31] *recognises that it is necessary to establish and develop specific policies for family farming that promote sustainable development in rural areas from a socioeconomic, cultural and economic point of view."* The approach explains the recognition of two production models (family farming and agroindustrial farming), which have coexisted for a long time and can be complementary, but which today are increasingly in competition to have access to natural resources and occupy space. Up until a recent past, only the agorindustrial model was taken into account for the definition of agricultural policies; the production units that did not fall within the scope of this model were considered as subsistence farming and consequently did not require public policies to improve their productive efficiency. Family farmers and, more specifically, small farmers – were only targeted by social policies, with grants to maintain them in rural areas and guarantee them a level of subsistence.

[29] This section has been drafted on the basis of a Marques and Ramos (2012) document, *Las políticas diferenciadas para la agricultura familiar en el MERCOSUR. Contribución del diálogo político al diseño de las políticas públicas y la institucionalización,* IFAD, 20 p. (URL: http://fidamercosur.org/site/images/BIBLIOTECA/ FaseIII_2012/DocumentosFaseIII_2012/Paper_Las%20polticas%20diferenciadas%20para%20la%20agricultura%20familiar%20en%20el%20MERCOSUR.pdf),
English translation: http://www.ifad.org/events/gc/33/roundtables/pl/pl_bg_e.pdf

[30] FAO (2012*d*), *Marco estratégico de mediano plazo de cooperación de la FAO en Agricultura Familiar en América Latina y el Caribe,* 45 p. (URL: http://www.fao.org/alc/file/media/pubs/2012/mecfaf.pdf).

[31] Mercado Común del Sur (MERCOSUR): Economic community created in 1991, comprising Argentina, Brazil, Paraguay and Uruguay; Venezuela became a member in 2012; Bolivia is in the process of being integrated. Chile, Colombia, Ecuador and Peru are associate members.

The MERCOSUR resolution endorses the key role assigned to family farming as a social group that contributes to an inclusive and balanced development of rural territories, food security and the development of a productive model to combat the causes of rural poverty. The criteria used to define family farming are as follows:

- The labour force employed in the holding must be mainly family-based; the employment of contractual workers remains limited;
- The family is directly responsible for the production and management of agricultural activities and resides on the farm or in a neighbouring town;
- The productive resources used are compatible with the family's working capacity, with the activity developed and the technology used, depending on the realities of each country (which supposes a direct relation between the capacity of farmers and the use of resources).

Landless men and women rural producers, who benefit from the agrarian reform or programs for access to land and tenure security, as well as communities of producers who share land, are also part of family farming, provided the criteria above are respected.

In addition to general characteristics, countries have defined specific parameters to determine the units that can claim to belong to the group of family farming and benefit from the special measures that are implemented. In MERCOSUR countries (Argentina, Brazil, Paraguay and Uruguay), a National Register of Family Farming (ReNAF) has been established where family agricultural holdings are registered. Table 3 summarises the parameters used.

Table 3 *Criteria used to identify family agricultural holdings*

Criteria / Country	Brazil	Chile	Argentina	Paraguay	Uruguay	Colombia	Central America
Size	X	X	X	X	X	X	X
Work	X		X	X	X	X	X
Management	X	X	X	X	X		X
Agricultural income and total	X	X		X	X	X	
Residence	X		X	X	X		
Capital		X					X

Source: Authors based on FAO (2012d); Marques and Ramos (2012).

All countries use size parameters to define family agricultural holdings, with a surface area that varies depending on the agricultural regions and production systems. For example, in Brazil, the maximum area owned must not exceed four tax "units" (*modulos fiscales*), with units that vary from 25 to 5,000 ha depending on the region (5,000 ha for Patagonia), but there is also a limit for the herd size, which must not have more than 500 units (cattle), this applying to all countries (Obschatko, 2009). In Uruguay and Chile, this area is related to an index depending on the region, and the upper limits can respectively go up to 1,000 and 750 ha. In Colombia, the criteria to determine the maximum size of "family agricultural units" are defined by the local authorities and reviewed regularly, according to trends in production conditions. In Central America, family farming is composed of units with limited access to land and capital.

The labour criterion is also widely used. Reference is made to a use of family labour for agricultural production, but the use of permanent paid labour serves as a criterion, with notably a maximum of two permanent employees in Argentina and Brazil. In Uruguay, the maximum is two permanent employees or 500 days. In Chile, this criterion is not used. In the other countries, reference is made to family labour, the main basis to conduct agricultural activities (Paraguay), with the use, where required, of external labour (Colombia). In Argentina, among the four subtypes in the breakdown for family farming, one is characterised by the use of permanent employees, to the upper limit of two (Obschatko, 2009).

The proportion of farm income in total income, but also total income, are widely used criteria. A large proportion of the income must come from the agricultural activities conducted on the holding: at least 50% of the family income in Argentina, Paraguay, Uruguay and Chile, with a maximum limit for income from outside the agricultural holding (*ingreso no agricola*) in Argentina. In Brazil, 70% of income must come from the agricultural holding, with a fixed annual income. In Colombia, a maximum income is set depending on local conditions. In Central America, although the notion of pluriactivity, and therefore of income from many different origins, is recognised, the income must mainly come from agricultural activities.

The criterion of the management of the holding is also widely used with a responsibility for the management the holding, which is assumed by the family farmer. He may be the head of the family or a member of the family, and Uruguay specifies that the farmer must devote over half of his time to the holding.

The criterion used by MERCOSUR countries is the family's residence on the holding or an area near the holding, Uruguay adds a maximum distance (50 km).

Chile is the only country to have set a maximum capital that a family holding can own. In Central America, reference is made to a low level of capitalisation.

Setting criteria to define family holdings appears to be a complex process. Among the various important points, it is necessary to emphasise the adjustment of criteria to regions, and therefore to production systems with, for example, in the case of Colombia, the active participation of local authorities and a review of the criteria depending on trends in the conditions for agricultural production in the territories. The size criterion is important, with the aim of targeting "small producers" in regions and according to production systems. The labour must especially be family-based, but ultimately it is the use of paid labour which serves as a limit and it may be permitted depending on national choices. The latter point highlights the gap between a scientific approach, based on the conception of ideal types for a better understanding of reality, and political implementation, based on easily quantifiable criteria, which must allow the production units to be "classified" into categories so that they can benefit from specific measures.

Consequently, the contextualisation of these definitions relates to the national political trajectories, which largely explain the differences observed. They are not inconsistent with our approach.

1.2. Family farming: A multiform reality

We define family farming in a positive manner, by the two criteria of a permanent, strictly family labour and close relations between operating capital and assets. However, even with a "strict" definition, the category represents a wide variety of situations. As already repeatedly emphasised by Lamarche (1994), Bélières *et al.* (2002), CIRAD-Tera (1998), Toulmin and Gueye (2003), Coordination-Sud (2007), Gafsi *et al.* (2007), Sourisseau *et al.* (2012), understanding family farming, beyond invariants and fundamental principles, which form the basis of the category compared to other forms of agriculture, involves understanding their diversity.

In line with the choice of definition by the functioning and strategies rather than by the structures, our approach to the diversity does not aim to constitute a "restricted" typology of family farming. It is more a matter of identifying, then discussing, the differentiation criteria which appear essential to us, and which make sense with regard to the challenges that agriculture must face. In this respect, we adopt the approach of the World Agriculture Watch (WAW) (FAO, 2012*a*). This methodological positioning also relates to the literature review conducted by Coordination Sud (Coordination

Sud, 2007), which preferred not to make a conclusive decision by focusing on a unique typology, or the one conducted by Gasselin (2006), describing, using a similar approach, the diversity of agriculture in the Northern Andes.

We propose a means of interpreting, comprising key criteria and their possible ways of giving an initial idea of the main forms of family farming, but which can especially be set out in each local situation, depending on the specific priority issues addressing family holdings. Indeed, we have seen that the classifications/registers/standardisations, whether militant or political, take on forms that are adapted to historical and national contexts.[32] It therefore seems useful to have a strict definition, which can be used for statistical purposes and is generally comprehensive, and a set of criteria/modalities to build more precise characterisations.

Six first-level criteria have been identified (Table 4). While they may be improved upon and could certainly be completed with other criteria, they explain – by the functioning of families simply through their operating structures – the greatest proportion of the diversity of family farming. Some of these criteria may, of course, not be relevant in a given situation.

The first criteria are completed by two composite crosscutting criteria, which are particularly interesting to provide in the logic by the functionings we have chosen, but also in order to lead to considerations of public policies for these forms of agriculture.

[32] See part II of the report Bélières *et al.* (2013), *Les agricultures familiales du monde. Définitions, contributions et politiques publiques.*

Table 4 *Main differentiation criteria for family farming and possible methods*

Criteria	Methods
Security of access to resources	Insecure access Secure access (legal or not)
Investment capacity	Limited Extended
On-farm consumption	Yes No
Type of integration in downstream markets	Low level of integration/integration only on local markets Integration in supply markets with local standards Integration in international niche markets Insertion in international commodity markets
Pluriactivity/system of activity	Agriculture only Extra-agricultural activities in addition to agricultural activity
Level of agricultural diversification or specialisation	Specialised agriculture Diversified agriculture, including downstream
Additional composite criteria	
Replacement of family labour by capital	Family labour only with no replacement Moderate replacement with non-family labour High level of replacement with non-family labour
Strategies and objectives of the activity and use of results	Simple reproduction (family's final consumption the priority) Family and social accumulation Productive and social accumulation

Source: Prepared by the authors.

1.2.1. *Level of secure access to natural resources and particularly to land*

Following on from the research of Chayanov (1924 [1972]), access to land and natural resources (including "common" land for hunting, harvesting, fishing, other areas of direct collection) is central to the organic links between what provides the reproduction and what roots the family in its territory and its community, allowing it to produce. Consequently, the quality and stability of this access are decisive factors for its capacity to build itself and conduct a strategy.

Securing access to all these asset items and means of production is too often equated with access to private ownership or the legal formalisation of access to "common land". Yet there are possibilities to secure land that do not necessarily come under Roman or national law, and are managed locally *via* face-to-face relationships or through the mediation of diverse customary authorities, often with the concurrent use of registers and administrative authorities (Colin *et al.,* 2010), giving rise to secure use. Consequently, there may be countless forms of access at various levels of law and obligations and it may be more or less over time, be transferred or not, etc.

While this complexity must, of course, be examined in each local situation, it seems to us that two simple methods make it possible to clearly differentiate between the nature of the links between assets and operating capital and, as a result, two main functionings of production.

Modalities

- Precarious access concerns landless peasants[33] and other temporary or threatened occupants, as well as situations where there are short-term – often verbal – leases. For various reasons, they cannot rely on access to land from one year to the next. In certain cases, this situation can result in a decapitalisation with the sale of land assets, which is not always in connection with problems of agricultural production or a break-up of families/production units. Families in this situation have a reduced strategic horizon. Their capacity to build assets is generally low, since they tend to draw on the family budget if they do not have access to the means of production. The aim of achieving security is the focus for the strategic orientations even if, in certain cases, insecurity does not prevent activities with high added value that are integrated into international markets;[34]
- Secure access allows families to have a sufficient base to exist over the long term and envisage both social and economic accumulation or transfer strategies. As already mentioned, this security is not necessarily subject to an individual or family formal property deed. It is necessary to examine locally, within the range of possible conditions (including collective management), the levels that each can bring in terms of securing access. Hierarchies can be built depending on the contexts. Furthermore, one of the subcriteria concerns the level of separation between the family sphere and the tenure (particularly for land), which defines

[33] Access to land often conditions access to other natural or financial resources and to collection areas.
[34] This is particularly the case of landless onion producers along the roads in Southeast Brazil.

the linkages – possible or not – between the domestic world and the holding. The transition from family farming to a family business or capitalist agriculture also involves the nature of appropriations, beyond their level of security.

1.2.2. *Investment capacity of families*

This criterion relates to the level of the family's physical and financial assets, but addresses it in terms of flows and the capacity to increase them (which the family may or may not have), rather than in terms of stocks. What matters is the possibility for the family to be able to invest, should it wish to do so, and therefore increase both its operating capital and domestic assets. Consequently, in the family context, this capacity depends on the initial endowments and the economic and institutional environment,[35] but also on the activation of links between the family and the holding. It is built (or deconstructed when there is decapitalisation) over time and differentiates families.

In the very wide range of situations, what influences the field of possibilities in terms of strategies remains the possibility or not to invest. This leads to two main modalities being used, which can then be adapted. The capacities evolve by accumulation and investment or, on the contrary, by decapitalisation, with a fungibility of capital between agricultural production and other allocations/uses.

Modalities

- A reduced capacity constrains strategic choices and makes it necessary to give priority to simply the family's reproduction. The links between assets and capital are decisive and all the stronger because one is highly dependent on the other. Consequently, they are generally part of a defensive logic;
- An increased capacity can, on the contrary, make it possible to engage the unit in a greater separation between the production sphere and the domestic sphere. But the decision may also be taken to maintain the strength of the links by not investing or by giving priority to the security and fungibility of the assets. In any case, whether it is used or not, a capacity to invest widens the field of possibilities.

[35] See in particular Bainville (2000) on interaction processes between technical changes and institutional changes.

1.2.3. *The importance of on-farm consumption in the use of production*

French rural sociology defines peasant agriculture through its autonomy with respect to a global society, and therefore to a large extent in terms of its capacity to feed itself. While the situations of food self-sufficiency are today residual, the fact remains that the importance of production in the family's food is a major criterion to qualify the functionings and differentiate family farms. Depending on this importance, it could be assumed that the social relations at work, internally and externally, the needs for coordination, and the strength of the links between the domestic and market sphere, are very different and that one would be moving away from family farming by breaking the link between the family and the holding.

This criterion is often perceived as a result of the holding and agricultural management, and it may be surprising to see it used as a differentiation criterion. However, in many situations, the food dependence on family production is structural, in the sense that it directs strategies and confines objectives. Consequently, isolating the two following modalities – even if it is necessary, as previously to examine possible gradients – makes it possible to clearly distinguish distinct modes of functioning, particularly in terms of the links between the family and the holding, but also in terms of the production systems implemented and their dimensioning.

It should also be noted that for certain family farms (pastoral herders, producers of non-food products without access to other crops, certain nursery gardeners or others), the issue of self-supply is quite simply impossible, but is not necessarily a negative situation or a shift towards capitalist logics.

Modalities

- The bulk of the family's food consumption depends on its production. Consequently, the diversity of production and its availability throughout the year are important, the specialisation of tasks depending on the plants or animals and their utility is encouraged, and domestic social relations dominate in the organisation of production, the choice of certain forms of production, and even certain practices. They are disconnected from the market and related to cultural or social reference. Non-market exchanges with the community they belong to may be dense;
- The family gets its food from outside its farm, or only in a residual manner from its production. Market opportunities guide its production choices, the linkage between domestic and production relations declines, and the management of the bond (if it exists) is reasoned on a monetary basis.

1.2.4. *The type of integration of family farms into downstream markets*

For family farms, we consider that the conditions of participation in trade in a structural manner are based on the modes of functioning. Indeed, the types of market they have access to reveal their capabilities [36] (in the sense of Amartya Sen) in terms of marketing. These capabilities result from a long process of sedimentation and learning, depend on a number of criteria and in particular on asset endowments, and may or may not be activated (Chambers and Conway, 1991). We feel that it is particularly important to give attention to these capabilities and their implementation, alongside market considerations, in order to differentiate family farms in their market integration.

Here again, the four modalities proposed include a number of often contrasted situations that should be specified in the light of each local situation. However, they stress the idea of a gradient between an almost total autonomy towards agricultural and livestock markets (which does not exclude market connections for other consumer goods), and a dependence on external standards and regulations that are not controlled by rural families. These modalities may be combined with individual or collective modes or market integration. For example, participation in a cooperative or economic organisation builds the capacity to negotiate with other market players.

These different forms of market integration can, of course, coexist within the same holding. Here, we are making the assumption that in terms of functioning and strategy, integrating more distant markets has a decisive impact on the social relations within families and that they predominate in the differentiation between families.

Modalities

- Low level of market integration or integration only in local markets. Here we mean non-market holdings (*i.e.* exclusively oriented towards family consumption and gifts to third parties on the basis of a social logic), or holdings that only sell on markets dominated by face-to-face relations, for which the trade (and often the price setting) is firmly grounded in the social aspect;
- Integration in national or regional markets with local standards. Here we mean families that are mainly integrated (possibly local markets in addition) in distant markets (in particular supplies to cities), but products for which there is, strictly

[36] Understood as institutions that facilitate access to resources that will increase the different forms of capital or resources available to the families.

speaking, no international market.[37] The face-to-face relations between the industry segments combine, in varying proportions, classic encounters between supply and demand, with a reference price generally set by sectors downstream;

- Integration in international niche markets. Here, we mean families who are mainly integrated in markets with high-quality products, subject to international standards, and therefore with conditions of typicality that guide commercial relations;
- Integration in international commodity markets. Here, we mean holdings that depend to a significant extent on one or several markets for standard quality agricultural products, and for part of their activity are therefore subject to prices they do not control and a coordination that is less embedded in the local social environment.

1.2.5. *Nature and complexity of the systems of activity implemented*

Pluriactivity is today widely recognised as an essential (and longstanding) component of strategies for family farming (Chambers and Conway, 1991; Gaillard and Sourisseau, 2009; Gasselin *et al.,* 2012; Losch *et al.,* 2012; Paul *et al.,* 1994; Wiggins *et al.,* 2010). This diversification of activities and revenues, whether it is brought about by individuals or devised at family level, is one of the pillars of the strategic construction and management of social and working relations. The place and roles of agriculture in sometimes complex systems of activity must, in addition, contribute to rethinking the forms of production and the ways to support them.

Consequently, the divide between family farms specialised in agriculture and family farms that diversify their activities appears as an important differentiation criterion. Agricultural specialisation and non-agricultural diversification must be assessed over the long term, as a structural element of units, beyond cyclical behaviour, to face exogenous shocks or price effects on the income structure. It is then of course necessary to specify the different natures of specialisation and diversification. Depending on their defensive or offensive nature, the orientations and situations of vulnerability can in particular be very different.

[37] Millet in the Sahel region is an example of these markets where the standards are built at local level.

Modalities

- Families specialised in agriculture or livestock raising. Levels depending on whether or not there is a choice for this specialisation would merit particular attention.
- Families developing extra-agricultural activities in addition to agriculture and livestock raising. Levels depending on the nature and importance of non-agricultural activities could be examined in the various situations.

1.2.6. *Nature and complexity of the production and livestock raising systems implemented*

Whether or not the families are pluriactive, the specialisation or diversification of agricultural production or livestock raising systems is also a crucial factor in the social relations or the labour involved. In the logic of an overall organisation of the family/holding system, specialisation and diversification guide choices and technical needs, schedules and the division of labour among individuals, as well as the logics of redistribution internally or towards the exterior.

Consequently, the two simple modalities (specialisation or diversification) show contrasting situations.

Modalities

- Specialised agriculture. The specialisation may be based (rarely, but possibly if there is pluriactivity) on a single plant/livestock. The specialisation may (most general case) be based on a commercial pivot, associated with secondary staple food and/or commercial speculations;
- Diversified agriculture, including the integration of activities downstream from production. In these holdings, there is no dominant speculation, but pluralistic and adaptive strategies concerning a group of production activities. The diversification downstream is an extension of the agricultural activity, which may be a way to escape from the extra-agricultural activities outside the holding from the previous criterion.

1.2.7. *Nature and scale of the replacement of family labour by capital*

In addition to the criteria above, we feel it is essential to introduce a specific differentiation criterion through the concrete practices of articulation and complementarity between family labour and physical capital. Here, we are at the centre of the issue of family farming and the preference for family labour in the main strategic orientations.

Maintaining family labour exclusively – and therefore maintaining an intrinsically limited labour force – may enter into conflict with the possibilities of expansion, through the aim of accumulation or to support the extension of the family. We feel that the way in which this tension is resolved marks specific strategic orientations.

Modalities

- No substitution of physical capital for family labour. When there are important constraints in the household/holding or opportunities for expansion, the families, by choice or constraint, increase the labour force they use and not the physical capital. This involves increasing the number of members through alliances or adoption, or controlling the break-up of households by more significant redistributions. Innovations are also possible in terms of work organisation or agricultural techniques, but without a significant increase in the physical capital. The financial constraint for investment, or the strategic choice to maintain the prevalence of family working relations, limit the physical accumulation;
- Moderate substitution of the physical capital for family labour. Families can decide to resolve the labour constraint other than by permanent paid labour by adopting, in a moderate manner, physical capital increases and innovations in mechanisation. This moderate substitution may be the result of a financial limitation, a preference for pluriactivity (redistribution of places and roles of agriculture in the activity systems), the level of incentives or the aim of limiting risks linked to an excessive investment.
- Strong substitution of family labour with physical capital. Families may decide to make a substantial investment in agriculture, which requires a shift towards production costs, towards a return on capital, while conserving family working relationships. This choice may depend on a number of factors, particularly opportunities or incentives implemented by agricultural "modernisation" policies.

1.2.8. *Organic links between the family and production*

Finally, the nature of organic links between the family and production must be a differentiation criterion. It expresses the use made of the operating result, once the fixed costs and irreducible expenditures have been deducted.

In this case, there is a typically composite criterion, which makes it possible to situate family farms on a gradient between the ideal of a peasant and the limit of the switch towards capitalist agriculture in terms of the objective for agricultural production. It is similar to the capacity to invest, by qualifying the realisation of this capacity. It can also be adapted by taking into account strategies to transfer the agricultural assets.

Modalities:

- Simple reproduction by the family. Priority is given to final consumption by the family in a defensive logic. Preference is first given to stabilising family assets;
- Family and "social" accumulation. A surplus may be created, but it is not affected by the increase in the productive capital, for which only the continuation is targeted. The accumulation concerns the "social" expenditure, which, in reciprocal relations, aims to anchor the family in its networks and the community;
- Productive accumulation. The surplus generated is used to increase the productive capacity and moves towards forms of management in which the return on capital becomes important.

The proposed definition of family farming focuses on the dynamics linking the family of farmers to its management of its labour force – in and/or outside agriculture – and the capital it has. This simplicity facilitates its use.

But these two main analytical introductions, when they are applied *via* the eight proposed criteria to characterise family farming, allow an understanding of the dynamics and diversity of family farming.

Moreover, the choice of a strict definition of family farming – without the use of permanent paid labour – has an operational objective, because it can allow agricultural censuses to count the number of family farmers and thereby facilitate the measurement of their contributions. Indeed, the preparation of the following part of this publication often required the use of a "proxy" (mainly of the size of the holdings) to estimate the proportions.

2. Contributions and controversial issues

Due to the number of holdings, the agricultural surface area and the world's working population, family farms have a strong position in terms of production from crops, livestock and the use of natural resources. They contribute to household incomes, participate in economic growth, and play a central role in the management of territories and economic and social dynamics.

This role has changed over the different periods of history and depending on the parts of the world, according to the transformation of economies and societies. Yet at the same time, family farms have played a decisive role in the the processes of change. Indeed, they are the starting point for developments that have marked the historical transitions of rural societies towards the urban world and agricultural economies towards more diversified economic configurations, where the share of agriculture in the structure of activity, employment and overall growth declines and gives way to new activities.

The historical reference model of this transition is that of Western Europe, where the growth in agricultural productivity from the 19th century onwards, resulting from technical progress underlying industrial and technical revolutions (Bairoch, 1965), gave rise to the transfer of capital and labour towards industry and subsequently services, and the population movements from rural areas to cities. These dynamics have simultaneously been fuelled by the improvement in standards of living, growth and the diversification of demand, which in turn have been accelerated by urbanisation (Johnston and Kilby, 1975; Chenery and Syrquin, 1975; Timmer, 1988, 2009). This process was renewed in other parts of the world, firstly in North America and in the rest of Europe, then was widely engaged, to very different degrees and with strong territorial disparities, in Latin America and Asia. Sub-Saharan Africa is the region in the world where the implementation of these structural changes is the most limited.

Today, a central issue is to know the reproducibility of this transition in a globalised world that comes up against limits – which are acceptable and supportable by societies – in its growth model, firstly in terms of natural resources and secondly, the asymmetries and inequalities that is has generated (Losch *et al.,* 2012).

Consequently, the contributions made by family farms to incomes, employment, food security, resource management and social change, just as the analysis of the related controversial issues, cannot be reasoned outside territorial contexts, their geographies and their history. By adopting this type of approach, the extent to which certain thematic areas are "situated" and only take on all their meaning in their specific context is very clear. This is the case, for example, with biodiversity conservation, a global issue that has different meanings, depending on the challenges faced by local societies and the resulting priorities. While biodiversity is completely and universally integrated into the micro-management practices of farmers on their plots, its rank in terms of social priority will vary considerably depending on the contexts, and first and foremost on whether the community can or cannot feed itself and meet its basic needs. This simple example also reminds us of the extent to which globalisation has led to a generalisation of benchmarks, imported into contexts that are different from where they developed, with tangible consequences on public debate, the practices of actors and the choice of public policies (Bonnal, 2010).

2.1. The economic importance of family farms

Following these initial considerations, but which are necessary to clarify the debate on the contribution made by family farms, the critical issue is that of their assessment and inventory.

In the first part, we have seen how to understand and define family farming. But how many family farmers are there and what is their weight in global agriculture? This is an important question, but for which there is no simple and unique answer, due to the fact that current information systems are imperfect and incomplete. Indeed, if agricultural statistics – when they exist and are not out of date – look at production structures (and firstly the surface area), it is above all to meet an objective of measuring quantities and yields. The data on agrarian structures are first directed towards gaining an understanding of the production facilities rather than the production units and, especially, of their operating methods, where we have seen the extent to which they are instrumental in identifying family farming. Consequently, information as basic as the number of agricultural holdings in the world today is not available and at the outset raises the difficulty of assessment.

2.1.1. *Initial attempt at an inventory*

In order to estimate the economic importance of family farms, it is first of all necessary to define their number. With the lack of accurate data, since there is uncertainty over the number of holdings in the world and family farms are not a statistical category (except in a few countries, including Brazil), we propose to combine two inputs: agricultural demographics and agrarian structures.

a. Agricultural demographics [38]

The agricultural population[39] today stands at 2.6 billion people, *i.e.* almost 40% of the world's population. It includes 1.3 billion active workers, making agriculture the first industry in the world, far ahead of all the other industry and service sectors, which are much more segmented and specific.[40]

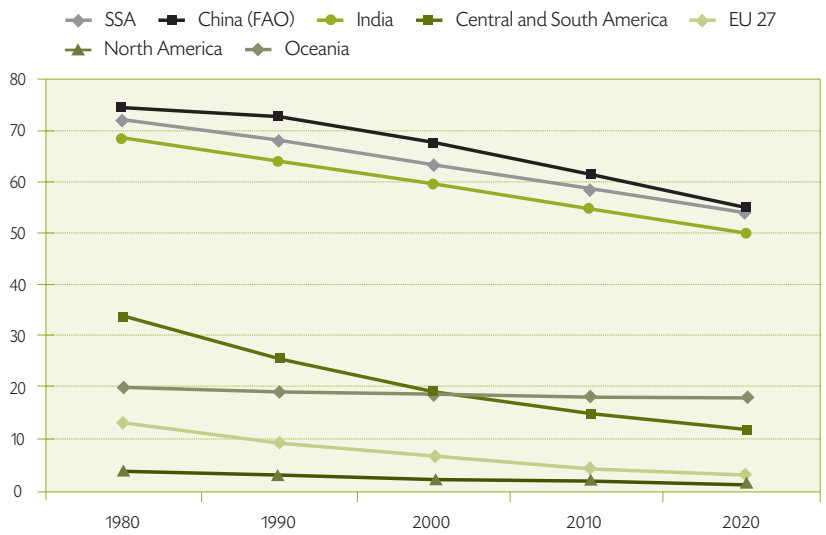
The place of agriculture in global activity differs considerably depending on the parts of the world and their situation in the economic transition process. While in Europe and North America, which were the first regions to initiate their structural transformation, have fallen below the level of 5% of active agricultural workers, there is a much more contrasted situation in the rest of the world (Graph 1).

[38] This section contains certain elements presented in Losch (2012).

[39] The agricultural population corresponds to all persons *"depending for their livelihood on agriculture, hunting, fishing and forestry. It comprises all persons economically active in agriculture as well as their nonworking dependents. It is not necessary that this referred population exclusively come from rural population."* (FAO, 2010*b*).

[40] According to the International Labour Organization (ILO), *"The economically active population comprises all persons of either sex who furnish the supply of labour for the production of goods and services during a specified time-reference period."* The population aged between 15 and 64 is generally considered as active. The active agricultural population corresponds to the *"economically active population engaged in or seeking work in agriculture, hunting, fishing or forestry."* http://laborsta.ilo.org/applv8/data/c1e.html (consulted on 15th January 2013).

Graph 1 *Trend in the share of active agricultural workers in the total working population*



Source: FAOSTAT.

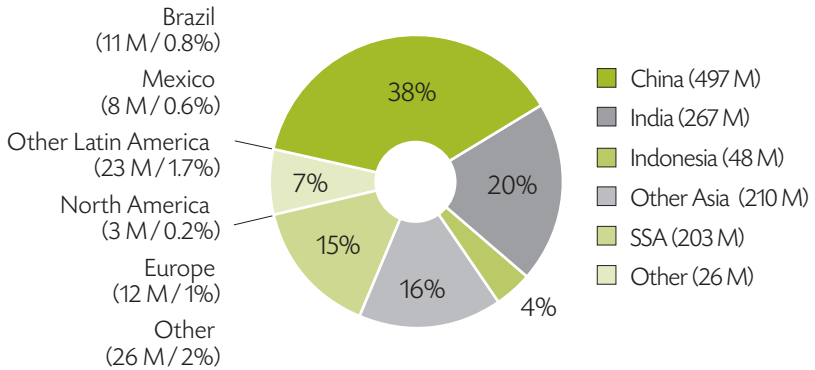
The number of active agricultural workers in Latin America has been divided by 2.5 since 1980 (-56%), while Sub-Saharan Africa (SSA) and Asia, particularly India and China, have experienced a much slower trend (between -15 and -20%), still maintaining a high proportion of active workers in agriculture (between 55 and 65%).[41]

Consequently, and due to the demographic weight of the vast Asian continent, agricultural workers are – massively – in Asia (Graph 2): 78% of the world total, *i.e.* over a billion, including 497 million in China, 267 million in India, 258 million in the other Asian countries. With 15% of active workers (203 million), SSA[42] is the other main agricultural region, whereas the "weight" of the rest of the word is only 7% of the global total (83 million active workers).

[41] The proportion of active agricultural workers is still much greter in certain sub-regions, such as the Sudano-Sahelian region where the rate can reach 85%. These data provided by FAO are contested, particularly for certain countries such as China, where it is thought that the decrease in active agricultural workers has been higher. Consequently, the difference between FAO and ILO for this country, which is variable depending on the years, can reach up to 200 million active agricultural workers! FAOSTAT does, however, remain the only base that covers all the countries in the world over a long period.

[42] Including Sudan, which is included in North Africa for the United Nations.

Graph 2 *Geographical breakdown of agricultural workers in 2010*



Source: FAOSTAT.

Unlike the trend in the relative weight of agriculture in overall activity, the agricultural population is continuing to increase.[43]

Over the past 30 years, there has been an increase of 350 million people (+37%), but this growth varies considerably depending on the parts of the world. Asia has integrated 84% of these new active workers, SSA 28%, whereas the rest of the world has lost employment in agriculture, reflecting the diversity of the dynamics of sectoral growth.

These trends will be strengthened over the next decade. But it is Africa, due to its increasing share of the world's population, which will experience the greatest changes.[44]

b. Agrarian structures

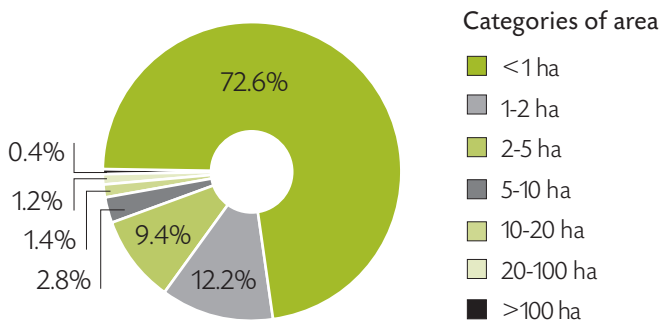
Agricultural censuses are the traditional source of information on agrarian structures. In addition to recurrent problems concerning the lack of data, it is often difficult to compare them due to the differences in definition of the observation units or classes of distribution (for example, the farm areas). FAO conducts a regular exercise of

[43] As Deere and de Janvry (1979) envisaged: "*The absolute number of peasants in the third world still may increase for a long time to come under the double force of the demographic explosion and the decomposition of feudal and communal modes that eject their peasantries into the capitalist mode of production.*"

[44] According to FAO, the number of active agricultural workers on the sub-continent should increase by 45 million by 2020, against 22 million for India and a decrease of 35 million for China.

compiling and comparing census data provided by countries: World Census of Agriculture (FAO, 2010 and 2012*b*).

Graph 3 *Breakdown of agricultural holdings by categories of surface area*



Source FAO 2010 World Census of Agriculture (81 countries) and authors' calculations.

In its publication "2000 World Census of Agriculture" (FAO, 2010*a*), which corresponds to the period 1996-2005, FAO has consolidated the information provided by 114 countries, but only 81 of them have provided data on the number of their holdings and their size[45] in a format that allows a comparison. For these 81 countries, 435 holdings have been identified. These countries do, however, account for 84% of the world's population and they include the main Asian countries, which have the vast majority of holdings (HLPE, 2013).

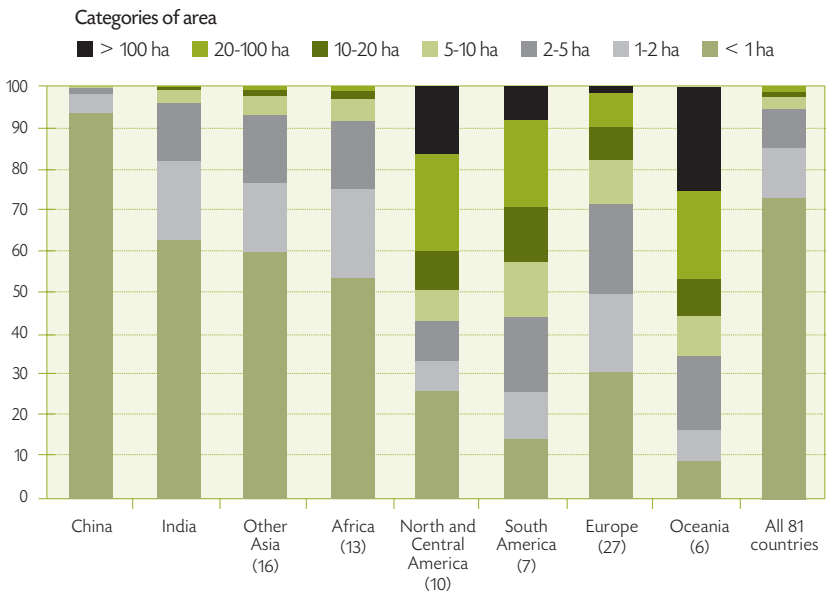
Their geographical distribution would appear to be meaningless due to the extent of the missing information. However, their distribution by size provides an extremely useful picture of the world's agricultural structures (Graph 3). 73% of holdings identified use less than 1 ha (316 million); 85% have less than 2 ha and 94% less than 5 ha.

Consequently, the vast majority of the world's active agricultural workers, 93% of whom are located in Asia and Africa, work on very small holdings (Graph 4). Holdings over

[45] 10 countries in North and Central America (including the USA, without Mexico), 7 in Latin America (including Brazil), 18 in Asia (including China, India, Pakistan, Indonesia and Vietnam), 27 in Europe, 6 in Oceania (without Australia) and 14 countries in Africa. This region comprises two North African countries: Morocco and Algeria (as the data for Egypt are incomplete) and… Réunion Island, but not Nigeria.

10 ha notably only exist in the Americas (50% of the regional total in the north and 40% in the south), Europe (only 20%) and Oceania (mainly represented here by New Zealand).

Graph 4 *Breakdown of the total number of holdings in a region by size class*



Source: FAO 2010 World Census of Agriculture and authors' calculations.

In terms of employment, only 75 countries have provided information, including 57 on paid employment,[46] which only allows partial conclusions to be drawn. The first observation is the low level of paid employment in agriculture and only a few countries are characterised by its relative importance. Three countries have more paid agricultural workers than holdings: for the record, Qatar (3.8 employees per holding) and, more significantly, Chile (1.6) and the USA (1.4). The USA, along with Brazil, (ratio of 0.9) are among the countries which have the largest amount of paid agricultural

[46] The missing information mainly concerns SSA. Among the large Asian countries, India and Indonesia are absent, as well as Burma and the Philippines. The statistics provide a total number of paid workers per country but, unfortunately, not the number of holdings declaring they use employees.

employment in the world, with 3 million and 4.3 million workers, respectively, *i.e.* 33% of the total recorded.[47] By way of illustration, for European countries, the ratios in France and Germany stand at 0.7 and 0.4. As an average value, for the countries under review, the ratio is one paid worker for 9 holdings (0.11 employees per holding).

Consequently, it is primarily family workers that provide the bulk of the world's agricultural labour force.[48] Despite the partial information, the orders of magnitude are not in doubt. They make it possible to argue that family farms account for the overwhelming majority of farms in the world, with a number in the region of 500 million agricultural holdings. It is these farms that have created the most employment and absorbed the bulk of the 350 million new agricultural workers over the past thirty years. This integration has taken place on existing holdings and, especially, by creating new holdings, by extending farmland or by the fragmentation of existing holdings.

Large-scale holdings that use paid labour are in the range of 1% above 50 ha and only employ a few million of the 1.3 billion active agricultural workers in the world. The segment of family businesses that use a few permanent employees is much more difficult to identify. However, the comparison of the information on employees with that of the categories of surface areas reveals a limited role in relative value.[49]

2.1.2. *Contribution of family farms to incomes and production*

a. Agricultural incomes

Family farms make an essential contribution to the incomes and livelihood of the population due to their importance in the structure of global activity. The agricultural activities conducted on holdings make a substantial contribution to the incomes of agricultural households. However, considerable research based on household surveys and case studies recalls the importance of diversifying incomes and the share of non-agricultural incomes. The latter have developed significantly with the improvement in connections to markets for goods and services and the growth in transport and communications, which facilitates travel and short, medium and long-term migration.

[47] The country with the largest number of paid workers is China (6.7 million employees, *i.e.* 31% of the total recorded). But this number is insignificant in relation to the number of holdings (193 million).

[48] In China, the 193 million holdings employ 519 million family workers and provide a livelihood for 800 million people (*i.e.* approximately 2.7 family workers per agricultural households with 4 people).

[49] Certain agricultural activities with a high labour content on small areas such as horticulture can deviate from this overall configuration.

These developments have brought about new forms of rural life where the activity of family farms is part of a composite and multi-active group, often with many locations.

At the same time, it is worth recalling the scale of rural poverty at global level, which, also and above all, reflects that of agricultural households (IFAD, 2010): the vast majority of family farmers have small amounts of land,[50] with limited technical means and first attempt to meet their food needs. Consequently, a large proportion of family incomes often corresponds to the development of the on-farm consumption of farm products, which are subsequently completed, depending on the level of market integration, with the sale of part of the production: initially the sale of the surplus, then the sale of an increasing proportion of total production depending on the reduction in the risk related to the improvement in the market environment and the various possible measures of public policies.

The low level of return, which generally characterises agriculture, stems from a reduced labour productivity (added value/worker), marked by considerable disparities with the other sectors: often in the range of 1 to 10 in OECD countries, and up to 150 in the poorest countries (McMillan and Rodrik, 2011). The options are then non-agricultural – if the opportunities exist – or to improve the performance of holdings (yields, diversification towards products with higher added value).

Family farmers are ultimately not permanently confined to poverty. Like the developments observed in certain OECD countries or among "emerging countries", the modernisation of holdings, more fluid markets with more efficient information systems and, especially, external assistance and support, can facilitate the catching up and the convergence towards the income levels of other sectors of the economy.[51]

b. World agricultural production

As already mentioned, as family farms do not constitute a statistical category, their contribution to world agricultural production can only be estimated depending on the characteristics of the main production systems.

[50] In the regions that are still experiencing growth in their agricultural populations, these areas are declining. For example, in India, over the past 40 years, holdings with less than 1 ha have doubled, those with over 5 ha have been divided by 1.5. Conversely, there are phenomena of concentration and an increase in the average surface areas in countries where the agricultural population declines.

[51] It should be remembered here that this convergence may be an explicit objective of agricultural policies, as in the case of France.

For vegetable crops, we can consider that at global level and for all the basic food production (cereals – rice, wheat, corn, millet and sorghum –, tubers and plantains), the bulk of the volumes comes from family farms, particularly due to the importance of on-farm consumption, but also due to their role in the structure of the activity of farms.

Table 5 *Estimates* of the contribution (%) of family farms to production (food crops and cotton)*

	Corporate agriculture ⟷ Family farms		
Sectors	**Corporate agriculture**	**Family businesses**	**Family farms**
Rice	2	4	94
Cotton	3	8	89
All bananas	13	18	69
Plantains	2	16	82
Export desserts	78	13	9

* Estimates according to CIRAD experts of the contribution of corporate agriculture, family business and family farms to the production of rice, cotton and bananas (as a % volumes produced).

Source: Estimates by F. Lançon (rice), M. Fok (cotton) and T. Lescot (bananas) in Rafflegeau et al., *2014*

For the other vegetable crops, the situation is more mixed. While cotton, coffee and cocoa are predominantly produced by family farms, corporate agriculture can play an important, or very important role, for certain other tropical commodities[52] – mainly oil palm, rubber, as well as bananas and sugar cane. For these commodities, "small village planter" models can coexist with major industrial plantations (estates); the association of the two has, moreover, been a development model in a number of countries (nucleus estates). At this stage, it has not been possible to differentiate between family farms and corporate farms, which are included in a category of "village plantations", in opposition to agroindustrial companies. Additional information is currently being collected and will make it possible to provide a more accurate picture of the contribution made by family farms and the role they play both in the planted areas and production. However, there are a wide variety of situations depending on countries, and a regionalised approach, which is difficult to conduct at this stage due to the lack of information, is necessary.

[52] This is also the case for soya, particularly in the USA, Argentina and Brazil.

The approach is extremely complex for livestock farming; we shall not venture into their assessment.

Table 6 *Estimates* of the contribution (%) of family farms to production (perennial crops and sugar cane)*

	Corporate agriculture	Family farms
Sectors	**Industrial plantations**	**Village plantations***
Coconut (ha)	4	96
Coffee (vol.)	5	95
Cocoa (vol.)	5	95
Rubber (ha)	24	76
Oil palm (ha)	59	41
Sugar cane (ha)	60	40

* Estimates according to experts of the contribution of industrial plantations and village plantations to the production of coconuts, coffee, cocoa, rubber, oil palm and sugar cane (as a % of the volume produced or as a % of the planted areas). Village plantations include both family farms and business farms.

Source: Estimates made by A. Prades (coconuts), P. Charmetant (coffee), P. Bastide (cocoa), J. Sainte-Beuve (rubber), S. Rafflegeau (palm oil) and R. Goebel (sugar cane) in Rafflegeau et al.*, 2014*

This initial approach shows the extent to which family farms play a key role in the supply to large agricultural markets.

2.2. Family farms and food security

There is a recurrent controversy over the capacity of family farming (generally qualified as small-scale farming, small producers) to effectively contribute to the challenges of food security and on several levels. The issue is all the more important because, in a number of countries, the situations of poverty and food insecurity concern some of the most precarious family farms. This debate very directly concerns agricultural development models.

Based on the obvious fact that the world needs more food and, therefore, more production, some[53] defend the idea that the private sector – understood as the corporate sector in opposition to peasants or family farmers[54] – can be the engine for agricultural development in the countries that need it the most. It is essential in this respect for the local environment to be conducive to economic development (in a corporate sense) and attract private investment. Conversely, there are many organisations which, like Via Campesina (2010), declare their conviction in terms of the preponderant role of family farming to feed the world. According to these organisations, the industrial food system will *"no longer supply healthy and high quality food" with "food that circulates from regions where there is poverty and hunger, towards rich and abundant regions."*

Since the upsurge in food prices in 2008 (HLPE, 2011) and the "food riots", food security has come to the fore again in debates and research on sustainable development, but the questions over its relationship with agricultural development models are very rarely raised. Yet the issue of food security is very complex. It is raised at various levels, from global to agricultural households, and not only *via* the quantities produced in agricultural holdings.

The exercise is made very difficult by the lack of data on the family farms themselves, at the same time at global, national and local levels. Consequently, when one considers the availability of and access to food, the assessment requires being able to link agricultural structures with the economic performance of holdings, but also with consumption and the health and nutritional statuses of members of agricultural and rural families. These issues are subject to reflection in the context of the World Agriculture Watch initiative (FAO, 2012a), but also, in a more general and methodological manner, in the Global Strategy for Improving Agricultural and Rural Statistics (World Bank & FAO, 2010).

[53] See the article by Suma Chakrabarti (President of EBRD) and José Graziano Da Silva (Director General of FAO) in the Wall Street Journal of 6 September 2012: "The private sector can drive agricultural development in countries that need it most".
http://online.wsj.com/article/SB10000872396390443686004577633080190871456.html

[54] It is worth noting the terms used; most peasants or farmers – particularly in developing countries – do not have a legally and socially recognised status. Yet this sector of activity is the first provider of employment at global level. It is after all private, even if it does not refer to strict business logics. IFAD acknowledges this aspect in most of its strategic documents: *"The rural private sector includes a whole continuum of economic agents, ranging from subsistence or smallholder farmers, rural wage-earners, livestock herders, small-scale traders and micro entrepreneurs; to medium-sized, local private operators such as input suppliers, microfinance institutions, transporters, agro processors, commodity brokers and traders; to other, bigger market players* […]. *Associations of farmers, herders, water users or traders also constitute an important part of the private sector"* (IFAD, 2007).

2.2.1. *Food security: Definition and representation*

Food security was for a long time analysed from the perspective of agricultural production and, consequently, of the availability of food with, for countries, self-sufficiency objectives. This vision still often permeates representations and debates. But with aspects of poverty being taken into account, the understanding of food security has become multidimensional by integrating the notions of access, quality and stability. The various aspects of access have been specified by introducing the notions of food security (sure[55] and not only healthy) and food "preference".

The most consensual definition is that of the World Food Summit of November 1996:[56] *"Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."*

More recently, the focus has been on the ethical dimension and human rights, even if the right to food is not a new concept. For example, in 1948, the Universal Declaration of Human Rights stated: *"Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food"* (Cotula, 2009). According to Olivier De Schutter,[57] United Nations Special Rapporteur on the Right to Food, it is the *"right of all human beings to feed themselves in dignity, either by producing their food or by purchasing it"*. Consequently, there is explicit reference here to agricultural production for on-farm consumption, which characterises a large part of family agriculture strategies, particularly in developing countries.

Food and nutritional security is one of the major global challenges for humanity, but which primarily remains the responsibility of countries and States, which must implement appropriate strategies to guarantee it for their citizens. The concept of *"food sovereignty"* was introduced into the debates by *Via Campesina* in 1996 during the World Food Summit organised under the aegis of FAO. It can be defined as *"the right of peoples and sovereign states to democratically determine their own agricultural and food policies"* (IAASTD, 2008). It is a response to globalisation and the liberalisation of food commodity markets, which involves rehabilitating sectoral policies and public interventions. States must be able to define their own food system, meet the expectations of citizens as a priority and reduce interdependencies, by

[55] See in particular : *Toxi-infections alimentaires, évolution des modes de vie et production alimentaire* (CEP, 2013).
[56] http://www.fao.org/docrep/003/W3613E/W3613E00.HTM
[57] http://www.srfood.org/index.php/fr/right-to-food

taking into account social and cultural specificities. Food security and food sovereignty can be considered as complementary: the first gives priority to the objective, the second concerns the means to achieve it.

Food and nutritional security is typically described with its four dimensions, which take both supply and demand into account (FAO, 2006):

- Physical availability: it involves food supply, which includes food production, provisions or stocks, imports and the other external aid received (particularly food aid);
- Economic and physical access to food: it depends on incomes, expenditure, and food prices on markets, as well as the infrastructure that provides access to food (all-weather roads, for example);
- The use of food: it concerns the way in which the human body optimises the nutrients consumed. An adequate intake of energy and nutrients requires both good practices for care and diet, food preparation, the diversity of the diet and the distribution of food within the household;
- The stability of the three aspects above: it involves taking shocks (climate, political, economic, etc.) into account, as well as the risks of a deterioration in the food situation that this can cause.

Consequently, the concept of food security is complex and breaks down into several levels, which range from the individual and the household to global levels, including food prospects on variable time scales; 2050, with the level of 9 billion human beings reached, is the current horizon for these exercises. But in these scenarios, the contributions made by various forms of production are not taken into account. Consequently, they do not provide possible answers to this controversial issue of family farming and food security.

At intermediary levels (territories and countries), questions are raised in particular over shortages, food insecurity, poverty, quality, food habits, markets, etc., with clear differences depending on both physical and socioeconomic contexts. For each of these levels, food security breaks down into its four dimensions with, at each time, a great diversity of situations.

Furthermore, if food consumption patterns and habits and socioeconomic situations in developed and developing countries are taken into account, it is not unwarranted to extend issues of undernutrition, deficiencies and food insecurity to situations in rich countries. It is also legitimate to raise questions over public health and poor

nutrition in the context of the dissemination of food consumption patterns and habits based on agroindustrial models.

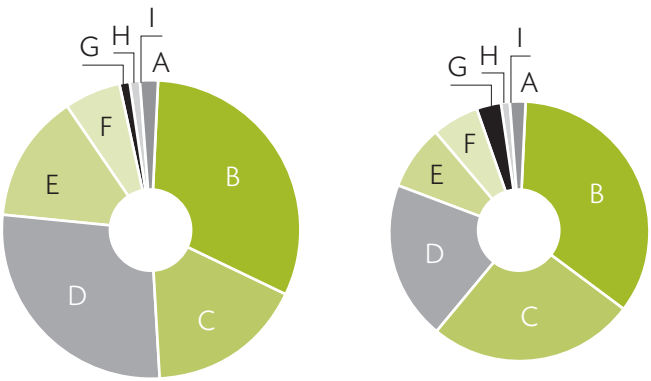
In rich countries, the issue of the contribution that family farming makes to food security also breaks down in terms of quality and the diversity of the food produced. In this case, family farming would be in the best position to supply consumers *via* more or less specific circuits, but which preserve and promote quality and diversity, due to the know-how that has been built up, the roots established in territories and communities, and a higher propensity for preserving resources and diversity than other production methods. It also has social and environmental aspects, including in regions where the intensive agricultural model is implemented, where new actors in production contribute to rebuilding alternative models based on the family labour force (Deléage and Sabin, 2012; Deléage, 2013).

2.2.2. *Family farming and food security at global level*

Although there is currently a lack of data based on the family model of agricultural production, it is safe to say that family farming makes an overwhelming contribution to the supply of food and non-food products compared to other forms of family business and entrepreneurial production (see Section 2.1.2).

Furthermore, family farming has the capacity to face increasing demand, related to both population growth and trends in food consumption, in a context of competition over the use of arable land (with an increasingly significant part being used for fodder production or biofuels), and increasingly fragile resources, particularly for soil and water (FAO, 2011*a*). For some (Altieri, 2008), "small producers" are the key to global food security, as there are large numbers of them in developing countries and they are the ones who produce most of the food crops to feed the world's rural and urban populations. In Latin America, some 17 million peasant farmer production units occupy almost 60.5 million hectares, *i.e.* 34.5% of total farmland, with average farm sizes of approximately 1.8 hectares, producing 51% of the corn 77% of beans, and 61% of potatoes for domestic consumption (Altieri, 2008).

Graph 5 *Trend in the number of undernourished people in the major world regions*



		Number (millions)		Regional share (%)	
		1990-1992	2011-2013	1990-1992	2011-2013
A	Developed regions	20	16	2	2
B	Southern Asia	314	295	31	35
C	Sub-Saharan Africa	173	223	17	26
D	Eastern Asia	279	167	27	20
E	South-Eastern Asia	140	65	14	8
F	Latin America and the Caribbean	66	47	6	6
G	Western Asia and Northern Africa	13	24	1	3
H	Caucasus and Central Asia	10	6	1	1
I	Oceania	1	1	0	0
	Total	1,015	842	100	100

Note: The areas of the pie charts are proportional to the total number of undernourished in each period. All figure are rounded
Source: FAO (2013a).

According to FAO (2013), the undernourished population in the world (cf. Graph 5) represents just under 870 million individuals, *i.e.* approximately 13% of the total population. It is concentrated in developing countries: 65 % in Asia (and more particularly in South Asia – 36%) and 27% in Sub-Saharan Africa. However, the situation is different between these two major regions with generally a prevalence of approximately 14% of the population in Asia and 27% in Sub-Saharan Africa. According to FAO (2005), *"approximately 75% of the food insecure live in rural areas"*. This population *a priori* comes from family farms.

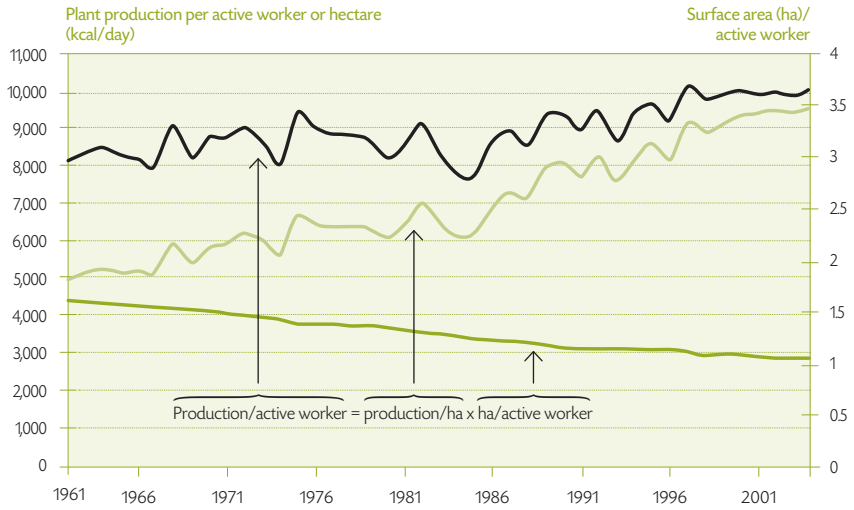
Fifty per cent of undernourished people are poor peasants, 22% landless peasants, 8% rural dwellers with traditional lifestyles, and 20% urban poor (Collin, 2012). In most cases, hunger is not a result of a lack of production, but rather a question of unequal conditions to access food, and particularly for access to land or other natural resources, or to have incomes that make it possible to buy one's food (FAO, 2011*c*).

Consequently, food availability is not so much the problem. The majority of undernourished households in the most affected countries are family farms whose livelihood depends on the family labour in agriculture (in the broad sense: crop production, livestock raising, fishing, etc.). The fight against poverty and undernourishment, in addition to programmes for rural industrialisation, social transfers and safety nets, and to encourage exodus, involves programmes that are directly connected with agricultural issues: access to production factors, production and productivity, availability and nutritional quality for on-farm consumptions of agricultural production, and agricultural investments.

In their overall approach to food security in Sub-Saharan Africa, Benoit-Cattin and Dorin (2012) emphasise the challenge of improving land and labour productivity.

Generally speaking, in Sub-Saharan Africa, the level of per capita food availability remained substantially constant between 1961 and 2003 at 2,000 kcal a day. During this period, this part of Africa experienced an annual population growth of 3%, with the particularity of an increase in the working population in agriculture at an average annual rate of 1.9%. Consequently, the agricultural exodus was lower than agricultural growth and there are an increasing number of agricultural workers, each needing to produce in order to feed more and more people: the ratio has risen from 2.6 to 3.7 people/agricultural worker. The availability of land per agricultural worker has decreased from 1.6 ha to 1 ha per worker (Graph 6).

Graph 6 *Components of the production of vegetable food calories per agricultural worker in Sub-Saharan Africa*



Source: Benoit-Cattin and Dorin (2012).

However, this overall performance remains inadequate, despite that fact that land productivity has practically doubled, from 5,000 à 9,500 (kcal/day) per hectare and that, at the same time, labour productivity has nonetheless risen from 8,000 to 10,000 (kcal/day) per agricultural worker.

Agricultural productivity has developed according to an average path that masks a strong heterogeneity between groups of countries with contrasting productivity trajectories. However, beyond specific cases that are not representative (South Africa and Nigeria), the general trend is effectively for a decrease in the surface area available per worker. This result contradicts the preconceived idea that there is a significant availability of undeveloped land in Sub-Saharan Africa for which a number of actors justify the current dynamics of land appropriation. Countries are subsequently differentiated between those where yields are stagnating and those which have managed to achieve an increase in land productivity of approximately 50%.

In the coming years, if we want to avoid an increase in food dependency on imports, there is a need to pay attention to the conditions for improving land and labour productivity, taking account of the diversity of local situations and national contexts, but with the common challenge of promoting job-rich agricultural growth.

2.2.3. *Food security and national situations*

The issue of food security is difficult to address, as the data are not produced in an adequate manner. It would be advisable to take advantage of the International Year of Family Farming in 2014 to move towards the explicit consideration of types of agricultural holdings in the general censuses that are conducted on agriculture, in principle, but not in reality, in all countries. In fact, it would involve following FAO's recommendations (FAO, 2007),[58] which advocate for an integrated system for censuses and agricultural surveys, the conceptual framework which makes it possible to effectively take into account the contemporary agrarian realities: pluriactivity, non-market aspects, migration and primary activities of collection and withdrawal from nature.

However, it is possible to use aggregated data and produce "proxies", which provide convergent elements on the extent of the contribution that family farms make to food security. We also propose to illustrate the discussion on the basis of case studies conducted in the context of this study (see the second part of the report), particularly on availability and access.

In Brazil, which has a dual agricultural model, the proportion of the number of family holdings stands at roughly 85% of the total. They only occupy 25% of farmland. In certain sectors, they produce more than the large agribusiness holdings, which is the case for corn, milk, cassava and beans. These products are mainly destined for the domestic market.

If we consider incomes – and the capacity to access food *via* the market – we see that 31% of family farmers say that they have not had any income during the year. For the 3 million farmers with income, the annual average does, however stand at BRL 13,600 (EUR 5,500), *i.e.* a monthly income per family worker over the age of 14 of BRL 436.[59] This average level of remuneration is higher than the minimum salary set by the State, the value of which stood at BRL 350 in 2006. Among the holdings with incomes, 1.7 million farmers earned extra-agricultural incomes from social transfers (pensions and social assistance for 65% of them) and salaries and revenues from non-farm activities (for 24% of them).

[58] However, it is necessary to review the elements of the methodology that concerns the labour force and, more particularly, the use of an external labour force on holdings (definitions, modalities, types of labour force, better characterisation of workers, etc.).

[59] The census assessed the average number of family workers over the age of 14 at 2.6 per holding.

In Africa, taken as a whole,[60] family farms account for roughly 80% of holdings, with an average of less than 2 ha of farmland and the most rudimentary equipment, generally manual (FAO, 2010*a* and 2012*b*). Despite a high level of agricultural imports, these family farms have been able to make a significant contribution to supplying cities (Bosc and Hanak-Freud, 1997; AFD-CIRAD-IFAD, 2011), both in basic food products (cereals and tubers), and in food diversification products, such as vegetables, milk, fruit and oilseeds (availability).

These forms of urban supply involve a rich and diversified self-employed agrifood sector,[61] either in terms of family farms or small and medium-sized rural or urban agroindustries. Through the added value generated and the corresponding incomes, these activities also contribute to the food security of these "transforming" famers, or the small and medium-sized self-employed in rural or urban areas.

In Senegal, a recent study by the Senegalese Federation of Non-Governmental Organisations (FONGS) (Sall *et al.,* 2010) recalls that 95% of agricultural holdings are family farms and that they make a substantial contribution to feeding rural areas and cities, meeting roughly 60% of national demand. The small and medium-sized holdings (surface areas less than or equal to 20 ha) provide 80% of vegetable production. On these holdings, 91% of the labour force is family-based (57% men and 43% women). They employ almost half of the national population, transfer values and maintain a fabric of solidarity, which extends to cities. However, it is observed that the production of family farms increases less rapidly than the national population, and that the importation of foodstuffs has constantly increased over the past decades.

The strategies that have allowed family farms to increase their production by extending sown areas have today reached their limits. The low level of remuneration for family labour, which has allowed them to minimise their production costs, creates problems for families in terms of the increase in the cost of living and consumption demand. It also makes the farming profession less attractive to young people.

Improving the situation requires improving productivity, but this must not stop at agricultural production. It concerns the overall production of the family farm,[62] including the integration of non-agricultural results, which require attention. The

[60] Which masks disparities, including in terms of the importance and situation of South Africa, and Southern Africa in general, with large-scale commercial farming entities.

[61] http://www.inter-reseaux.org/revue-grain-de-sel/58-valorisation-des-produits/

[62] Sall *et al.* (2010) define "The overall productivity of a family farm" as equal to "the net inputs of agricultural production + para- and non-agricultural inputs / family expenditure."

improvements must also concern the fabric of the self-employed in the agrifood industry, who have strategic assets (proximity, adaptation to cultural habits, respect of organoleptic qualities, capacity to create employment and distribute income), and offer prospects of significant progress. Margins for increasing productivity are indeed possible to market products suited to the expectations of urban consumers. It involves thinking about how family farmers can participate in alternative models to the agroindustrial model, which is strongly service-based (Rastoin and Ghersi, 2010).

2.2.4. *Food security on family farms in developing countries*

One of the main characteristics of the operating method of family farms in developing countries is certainly the strategies developed to ensure the food security of the family group. The conduct of farm managers is in line with strategies for food security with effects on decisions concerning the allocation of production factors, the choice of practices, etc. The importance of these strategies for food security, or to reduce the risk of food insecurity, is widely documented in the research of ORSTOM/IRD (Pélissier, 1966; Lericollais, 1975; Minvielle, 1985; Marchal, 1987; Janin, 2006) or CIRAD (Benoit-Cattin and Faye, 1982; Chia *et al.,* 2006; Gafsi *et al.,* 2007).

This strategy to secure the family's food is widely shared by agricultural holdings, yet with conduct that may be different. For example, Sall *et al.* (2010) identify two main types of conduct in Senegal:

- Holdings that give "*priority to food crops and their diversification to ensure food security. For example, since the late 1970s we have seen a reversal in the respective proportions of areas devoted to groundnuts, cash crops (64% in 1960, 24.4% in 1998) and those devoted to cereals (28% in 1960, 59% in 1998). This first strategy implies consumption behaviour for local products*";
- Holdings that are oriented towards "*the diversification of speculative crops and livestock raising systems to diversify their sources of income. If these families do not consume local products, they are vulnerable to variations in the prices of the imported food products they buy.*"

In terms of production, a recent agronomic summary shows that even in Senegal, in a region under high water stress, it is possible to envisage quite significant productivity gains of between 25 and 50% on rainfed cereals with quite small investments, which are technically controlled (Affholder *et al.,* 2013). The exercise could certainly be conducted in other ecosystems and other contexts, but it appears that given the

under-equipment of family farms,[63] the very low level of inputs used and the apparent under-exploitation of agronomic potential, even modest, for growth in production, it should be possible to significantly increase food security. This improvement would concern both the issue of availability and access, *via* potential increases in incomes which could result from this, and this could be achieved with rather modest investments.

However, the increase in productivity and the increase in agricultural production are not sufficient elements to improve food and nutritional security for rural communities. In a recent article, Dury and Bocoum (2012), seek to show that cereal production and food insecurity can cohabit by taking the example of the "Sikasso paradox" in Mali.

The Sikasso region is one of the most dynamic regions in Mali in terms of cotton and cereal production, in particular due to the natural soil resources, hydrological conditions and the action of public authorities *via* the development of the cotton sector. Compared to other regions in Mali, family farms are relatively well endowed with land, agricultural equipment and human capital. This region is also among the best equipped in the country in terms of public infrastructure (health, roads, access to water). The paradox of Sikasso lies in the gap between these facilities at regional level and the poverty measured by the low level of household expenditure or health indicators. Consequently, it is possible to make the assumption that there is less current expenditure, particularly for household food, which could be the strategic choices of farm managers to give priority to investment expenditure in homes, durable goods or agricultural equipment, to the detriment of current expenditure for the family's healthcare and food. The control of incomes by farm managers, who are reluctant to allocate them to food consumption expenditure, and the small amount of income spent on the family's food, combined with the significant investment in the working time devoted to agricultural activities by men and women, could explain the high prevalence of stunted growth observed among children in this region.

[63] Under 20 ha, the average area cultivated per person does not exceed 1 ha, and approximately 71% of agricultural holdings have ploughs and donkey-drawn hoes, against only 15% with multi-function cultivators and 18% with seeders. Animal traction is more widespread, *i.e.* 72% of cropland, against 17% for manual tilling and 1% for motorised tilling. The use of inputs is remarkably low (only 20% of holdings can use them), with a certain disparity between production areas: approximately 80% of inputs are consumed in cotton areas (see Mali case study in Part 2 of the report by Bélières *et al.* (2013), *Les agricultures familiales du monde. Définitions, contributions et politiques publiques.*

2.2.5. *By way of conclusion on food security*

Despite the lack of statistics allowing the contribution of the family farming category to be identified, it is clear that until now, food security has been widely provided by family farms. While family farms are not the only way to improve food security, they provide a promising scope for action, especially if we reason in terms of the overall productivity of their systems of activity, and in terms of the improvement in the agrifood models they are part of.

For Coordination Sud (2007), *"The logic of family farms, above all for the reproduction of the family on the holding more than maximising a profit, makes the quest for food security a primary objective. Supporting family farms means aiming to ensure food security for millions of family farmers. Family farmers also have the potential (production, quality, competitiveness, etc.)* via *markets to meet not only their own food needs, but also those of the entire population."*

Similarly, FAO, in one of its latest publications (FAO, 2012*b*), points out that agricultural growth is extremely effective in reducing hunger and poverty, especially by "mobilising" smallholders.

Finally, the latest report on human development in Africa (UNDP, 2012), points out that *"Building a food secure future for all Africans requires focus and action in critical areas–from increasing the productivity of smallholder farmers to advancing nutrition among children, building resilient communities and sustainable food systems, and empowering women and the rural poor. Success in these areas will come only if we view food security as a challenge that extends beyond sectoral mandates and reaches across the national development agenda and if we better integrate humanitarian and development work to strengthen the resilience of people and their communities to even the most severe crisis."*

2.3. Family farms and natural resources

Does family farming contribute to degrading or conserving nature? Is its environmental impact more marked or more muted than corporate agriculture? These questions, which are of particular relevance at the present time, often give rise to partisan and fervent positions. Family farming organisations, particularly in Southern countries (producers' organisations, rural associations, farmers' unions) and their allies (universities, national and international NGOs) frequently argue that family farming guarantees a responsible management of natural resources, since the conservation of the latter ensures the sustainability of the production unit. Family farms – whose location and intensity of production essentially do not depend on market signals – would thus appear to pay more attention to the environmental implications of their activities than corporate farms.

The organisations of large-scale producers do not, of course, have the same analysis and often associate environmental degradation and family farming, evoking the technical inefficiency of the latter. Family farming can also generate a diffuse pollution, which is difficult to address due to its geographic dispersion. This is, for example, the case of effluents from the artisanal extraction of palm oil, which are discharged into streams in countries of the Gulf of Guinea, whereas the effluents from industrial oil mills must be treated in accordance with national legislation. Artisanal extraction does, however, continue to be the key to the development of olive oil outside the supply basins of oil mills, since farmers have no other possible outlet for their production.

Indeed, the issue of environmental impacts is largely embedded in the more or less formalised representations of the causes of degradation (see section 2.3.1) and its assessment (see section 2.3.2). These representations are unquestionably included in the processes to build technical models for family farming (see section 2.3.3). However, it has to be noted that environmental concerns continue to have little importance in agricultural policies, which are generally built on the basis of productivist and commercial considerations (see section 2.3.4).

2.3.1. *The blame game! A longstanding and evolving issue*

From the Second World War to the beginning of the 1990s, the debate over the link between agriculture and the environment was dominated by the issue of the relationship between population growth and food supply, on which there is strong opposition between the neo-Malthusian analyses and the conceptions of Ester Boserup (Henry, 2007). During a second period, which runs from the 1990s to today, the relationship

between agriculture and the environment is conceived as a complex phenomenon in which various factors come into play, particularly that of the impact of political structures. At the turning point between these two periods there were major economic, health and environmental crises and important international events: the Brundtland Commission in 1987 and the Rio Earth Summit in 1992.

During the first period, the debate focused particularly on the gap between trends in the population and in agricultural production. The population increase was associated with the degradation of the environment (deforestation, decline in soil fertility, salinisation, soil compaction, desertification, etc.). The reason given was the difference between the geometric growth of the population and the arithmetic growth of production (Repetto and Holmes, 1983). In the late 1980s, FAO thus considered that while for industrialised countries one of the main agricultural causes of the degradation of natural resources resided in pollution, in developing countries, it was firstly related to the fact that *"much of the environmental damage that ultimately hurts them [the rural poor] is brought on by destructive practices that immediate economic necessity and survival often force on them"* (FAO, 1989). Consequently, the responses consisted in family planning and agricultural programmes aiming to *"transform ways of life in the agriculture and fisheries sector"* (FAO, *ibid*). Family farming was analysed as being an economic sector that was unable to make an autonomous change to its practices in the face of the population challenge. This neo-Malthusian conception was challenged by Boserup (1970), who considered that the increase of population pressure on the environment could give rise to changes in practices offering solutions for conservation, or for improving the state of nature, while allowing a significant increase in its productivity. She thus explained the development of fallow practices (successive transition from a twenty to twenty-five-year fallow forest to a fallow bush from six to ten years, then to a short fallow period of one to two years, until the fallow practice is simply stopped), the intensification of the pace of harvests (transition from one harvest a year to two or three) and the significant increase in production thanks to a fundamental change in agricultural practices. She considered that this change in practices was possible thanks to the increase in labour and capital per unit area. She even observed that situations of environmental degradation could be generated by an overly weak anthropic pressure, justifying inadequate practices, thus shaping *"low density population traps"* (Boserup, *ibid*). Consequently, by considering that population growth is a variable independent from agricultural production, therefore contrary to the Malthusian theory, Ester Boserup has shown that growth in demographic pressure was a factor that fostered technical change in the agricultural sector, and that it even made it possible to resolve situations of environmental degradation (Abellard, 2005).

The observation was indeed made that family farmers were able to develop practices that reduce environmental degradation and reverse the change in soil fertility, even in seriously degraded areas in Sub-Saharan Africa. These observations thereby contradict the discourse of international experts (Tiffen *et al.,* 1994; Tiffen, 1995; Mortimore and Harris, 2005), and the corresponding research demonstrates the fact that soil fertility cannot be simply reduced to natural factors, but that it stems from a process of social construction (Reboul, 1977; Ouédraogo, 1997).

However, at the same time, certain empirical research supported the neo-Malthusian theories. One example is the research of Yves Marchal (1983) in Northern Burkina Faso on soil degradation and deforestation, the cause of which is clearly attributed to anthropic pressure.

From the 1990s onwards, the contrast between the archaic peasant who clings to his traditions and resists technical progress, on the one hand, and the innovative family farmer able to adapt, on the other hand, loses its substance in the international debate in terms of the agricultural causes of environmental degradation. There are many reasons for this shift and the resulting development strategies, and this is due to the general change in the issue of rural development. They firstly concern the contestation of the relevance of the green revolution in a context of economic crisis (oil crises in the 1970s, debt crisis in the 1980s), the difficulties of major agricultural development projects in Africa and Latin America, the results of which are deemed to be well below the objectives, and the weak performance of agricultural colonisation policies in Africa, Latin America and Asia, which are said to have given rise to intense deforestation, yet without reducing the incidence of poverty.

Furthermore, the structural and productivist policies, which spearheaded post-war development strategies, are now contested by the economic weight for society and the adverse effects on the environment (overproduction crisis and negative externalities on the environment in Europe; problem of soil salinisation and rivers drying up in irrigated areas, etc.).

The food and ecological crises (dioxin, mad cow, ozone, climate change), which marked the 1990s, have also contributed to broadening the debate and considering environmental degradation as an overall problem calling the development model into question (Brunel, 2004; Rist, 2007).

The texts of the international commissions and conventions (Rio Declaration on the Environment, Convention on Desertification, conclusions of the Millennium Environment Assessment) contribute to building a different diagnostic of the causes

of environmental degradation and to changing the image of family farmers. The latter have gone from being guilty of degradation to victims in some way. The main causes are consequently attributed to inappropriate structural policies: colonisation of new land, incentives to increase agricultural production in fragile areas, replacement of forests by plantations, intensification of production using chemical inputs, etc. Furthermore, these policies are considered to be responsible for a continued and artificial high anthropic pressure in fragile environments.

In the 1990s and 2000s, the distance between the practices of family farmers and environmental degradation was further increased by the strengthening of the globalisation of the economy. The main environmental degradation is clearly attributed to companies and large producers in the fields of deforestation (Rudel and Roper, 1997), fishing (Pauly *et al.,* 2002; Mayers and Worm, 2003), or agricultural production (Biswanger, 1994).

In addition, scientific research supports ideas concerning the innovative capacity of family farmers in space and time. The summary by Mazoyer and Roudart (1997) of the long-term development of agriculture shows that the innovative capacity of family farms was the main ingredient in the agricultural revolutions that have marked the history of agriculture and food in the world from the Neolithic period to modern times. The extremely extensive research on agrarian systems and farming systems conducted during the 1980s and 1990s has shown in a comprehensive manner the ability of family farmers to use the natural resources available to them in an expert manner, in diverse environmental conditions, and their concern for conservation.[64] Some of these studies highlight the great ability of agrarian communities to make the best use of available natural resources given their weaknesses and variability (Dufumier, 2004, 2005).

A critical analysis of processes to develop territories, conducted during this period, has clearly revealed the adverse effects of both former colonisation polices (colonial history) and more recent ones (colonisation programmes for virgin land), underscoring the importance of environmental effects. Four types of project have been particularly highlighted:

- Livestock raising projects in wetlands (dairy farming in Amazonia) or in dry areas (pastoralism in savannah areas), leading to a degradation of the plant cover;

[64] In this respect, see the articles from the development research working papers (1983-1999), which focused on this point; see also Jouve (1999), Dixon *et al.,* (2001).

- Poorly managed irrigation projects, causing soil salinisation phenomena;
- Agricultural intensification projects, giving rise to a decline in soil fertility and pollution from pesticides and other chemical inputs;
- Agrarian colonisation projects, based on the expansion of oil palm crops.

On an entirely different point, it is observed that the strengthening of market integration in the context of globalised markets and the urbanisation processes have contributed to boosting old extractive industries, which clearly have negative environmental impacts. Certain practices are more particularly criticised:

- The collection of firewood for rural households but also, and especially, for urban dwellers;
- Charcoal production for household consumption, but also, and especially, for the steel industry;
- The taking of protected animal and plant species destined for the international consumption of exotic products, but also for the cosmetic and pharmaceutical industry.

2.3.2. *The methodological challenge of assessing the state of degradation of natural resources*

The degradation of natural resources as a result of agricultural activity is complex to assess due to the difficulty of making a strict separation between the scientific assessment of the state of resources from the standards related to their use. Based on the fact that nature is increasingly the product of anthropic action, the question raised often concerns maintaining the productive capacity of natural resources, which are also considered as assets mobilised in agricultural production processes. Consequently, the controversial issue often concerns the comparative effects that the different forms of agriculture (family, entrepreneurial) have on maintaining the productive level of resources. The analysis of the environmental effects of agriculture – decline in soil fertility, salinisation, erosion, deforestation, loss of biodiversity, water pollution, carbon production – is generally based on criteria that underlie a normative positioning. This particularly holds true in terms of the evolution of soil fertility.

In a recent article, Figuié and Hubert (2012) consider that the concepts of natural resources and degradation are in fact social constructions. As such, they extend the considerations mentioned previously concerning fertility by combining the concepts of fertility, natural resources and degradations in the field of social representations.

All these notions relate to a system of production of standards relative to a use that is or is not considered to be appropriate. This conception is in line with that of environmental economists, who consider that environmental issues are a matter of a controversial universe and not a stabilised universe (Godard, 1992, Hourcade *et al.,* 1992, Godard, 1993).[65]

Figuié et Hubert *(ibid)* illustrate their point through the case of grasslands degraded by family herders in the Cerrados region in Brazil. They inform us that the systems to assess the state of degradation of pastures are either based on means criteria, with respect to technical standards,[66] or on state criteria (assessment of the plant coverage of the pasture at a time *t*, not taking into account the history of the use of the plot). These two types of criteria lead us to believe that 80% of grasslands are degraded. However, these two assessment methods are solely based on a research perspective: the level of soil fertility is in particular determined through mineral restitution. The state of degradation of pasturelands is ultimately a parameter that provides information on the technical skills or the professional quality of the farmer. According to this logic, the degradation is opposed to intensification and is thought to be associated with a traditional and non-optimal land use, and is above all considered as a production factor for which the sustainability needs to be ensured. This logic is set against the criteria of family herders to assess the condition of their grasslands, who favour an approach in terms of processes (reference to the successive uses of the plot, the effects of which are cumulative), and which lead to repositioning the condition of a pastureland in a multiannual sequence of fertility management. The assessment of the level of irreversibility of the soil degradation also relates to a representation entrenched in a technical system. The capacity and modalities to recover from environmental degradation – decline in fertility, erosion – depends greatly on the perception that actors have of the scale of the degradation and the implications on their activities and level of well-being, as well as the available techniques and tools.

[65] O. Godard uses four criteria to distinguish stabilised universes and controversial universes: (i) the way of perceiving the problem (on the one hand, direct perception, on the other hand, perception by scientific or social representations), (ii) the nature of the interests in question (on the one hand, the agents present are the only ones to be concerned, on the other hand, it involves collective interests or absent third parties), (iii) the level of reversibility or irreversibility of the anticipated physical, ecological, and health phenomena. (iv) the level of stabilisation of the scientific knowledge of problems (on the one hand, stabilised and shared knowledge, on the other hand, uncertainties and scientific controversies) (Godard, 1992).

[66] *I.e.* the pasturelands are degraded because the volumes of amendment and fertilisers actually used are lower than the technical thresholds defined by the research departments.

Consequently, it should be stressed that, generally speaking, the assessment of environmental degradation poses a serious methodological or even epistemological problem. A first reason for this difficulty resides in the involvement of research both in the preparation of technical models and in the environmental assessment of their effects. *"Even the most strictly 'constative' scientific description is always open to the possibility of functioning in a prescriptive way, capable of contributing to its own verification by exercising a theory effect through which it helps to bring about that which it declares"* (Bourdieu, 1982, quoted by Figué and Hubert, 2002). A second reason concerns the consideration of relevant criteria, given the complexity of ecological systems and the consideration of time and the potential reversibility of degradation.

2.3.3. *The diversity of family systems and production models and their environmental impacts*

Beyond methodological assessment issues and the resulting biases, it should be recalled that family farms are characterised by the wide variety of their technical systems, for which the environmental implications are obviously very disparate. The nature and scale of environmental impacts in a given territory are not always strictly specific forms of farming (family, family business and entrepreneurial), which need to be repositioned in production systems leading to an intensity of natural resource exploitation, also taking into account the nature of local resources. Some of these family technical systems are similar to those adopted by family businesses or entrepreneurial farms: use of agro-chemical inputs, intensive use of mechanisation, untreated livestock manure, etc. This is particularly the case with plantation systems (perennial crops) with, in certain cases, practices that can be quite similar: use of the same inputs, same varieties, use of mechanisation.[67] However, even in the case of similar technical itineraries, the environmental impacts of family farming may be lower than those of other forms of agriculture due to the higher level of fragmentation of farmed areas and the existence of interstitial grassed or wooded areas, which can have a number of environmental impacts.[68]

However, it is also common that the three forms of agricultural holding (family, family business and entrepreneurial) coexist in the same territory, implementing very different technical systems due to the unequal production capacity. Yet does this mean that

[67] In France, the creation of cooperatives for the use of agricultural equipment (CUMA) has provided family farmers with access to the same machines as highly capitalised companies.

[68] They may serve as natural habitats for fauna, areas to maintain plant and animal biodiversity, areas to retain surface run-off, limiting erosion, and, why not, carbon capture, etc.

we should conclude that the environmental effects will be differentiated? The answer cannot always be positive, due to the existence of family technical systems that may be very aggressive for the environment and to the fact that, among family business or entrepreneurial farmers, some have entered the field of organic farming or responsible agriculture. Furthermore, the comparative analysis of the environmental effects between the three forms of agriculture is blurred by the potential existence of alliances between family and entrepreneurial farmers, which gives rise to activities that may considerably increase pressure on natural resources (for example in Amazonia).[69]

The great diversity of family farming technical systems involves relatively specific pressure on natural resources, the effects of which are sometimes difficult to prioritise or compare.

Diagram 1 provides an approximate representation of the main family farming technical models in terms of environmental impact. It is indeed a representation and not a result of a statistical survey, and the aim is mainly to demonstrate the diversity of family systems and their potential environmental impacts, and not to define strict relative positions.

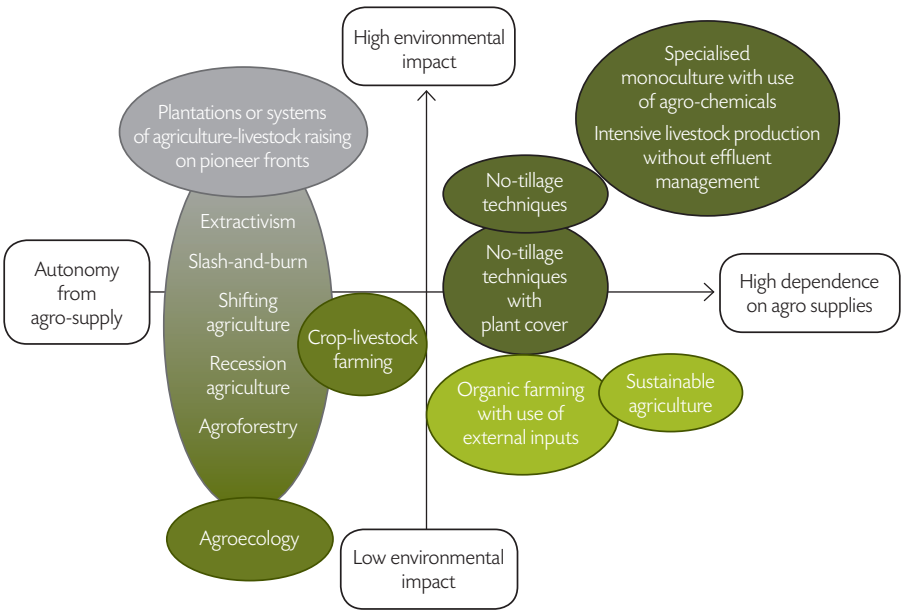
For the construction of this representation, we have considered that the negative environmental effects are increased by the use of agro-supply industries, particularly concerning water and soil pollution. The crossing point of these two vectors (autonomy-dependence in terms of agro-supplies, on the one hand, and slight or strong environmental effects, on the other hand) defines four bubbles in which it is possible, according to experts, to divide the technical systems of family farming.

Organic farming that does not use agro-supplies, technical systems claiming to be based on agroecology,[70] and the number of technical systems that do not use any or use few commercial inputs are positioned on the bottom left bubble. This situation corresponds to family farms that use an old agrarian area, with technical systems which can be reproduced without recourse to the agrochemical industry.

[69] In the eastern Amazon (Marabá region), it has been observed (Marchand, 2009) that there are often informal agreements made between family farmers and forestry workers, large-scale herders, or steel companies, the negative environmental effects of which are particularly evident. In the first case, forestry workers often rely on family farmers to locate large trees with commercial potential in order to reduce their prospection costs. In exchange, they conduct development works, such as the rehabilitation or maintenance of access roads to villages. In the second case, the herders take on family workers to maintain their pasturelands and eliminate forest regrowth. In the third case, the family farmers produce the charcoal required for the operation of the steel mills, by using the native vegetation left by forest workers.

[70] The concepts of which have been specified at the agronomic level by Altieri (1986), and on the socio-political level by Gliessman (2007).

Diagram 1 *Relative position of technical systems with regard to their environmental impacts and their dependence on agro-supplies*



Source: Prepared by the authors.

The bottom left bubble contrasts with the top right bubble, which groups together technical systems that are highly dependent on agro-supplies, whether it involves technical systems based on high-yield monocultures (cereals in France, rice in Thailand, coffee in Vietnam, sugarcane in Brazil, etc.), or high concentration livestock raising systems with untreated livestock manure (pigs, poultry).

While the ascending diagonal contrasts autonomous technical systems with systems that are dependent on the agrochemical industry, the descending diagonal compares the pioneering systems developed on the strict exploitation of natural resources, and the integrated agro-supply systems seeking to minimise the environmental impact.

The top right bubble thus includes technical systems that aim to transform natural resources into productive resources, without a concern for renewing these resources. The systems that characterise this situation are plantations (coffee, cocoa), or pioneer front livestock systems, installed after deforestation.

The systems located in the bottom left bubble use agro-supplies, but with a concern for environmental conservation, often associated with a concern for food security. These systems are built on the basis of specifications stipulating the agro-supplies that are acceptable from an environmental and health point of view. They are defined in conjunction with consumer associations and/or distributors (organic farms). Finally, others are based on a rational use of agro-supplies, by eliminating the most polluting and reducing the doses used (responsible agriculture). Some of these systems are integrated into consumer markets segmented by certification systems (protected geographical indication, label, brand). However, these systems are not specific to family farming, even if this form certainly widely predominates. An increasing number of agricultural holdings are investing in this high-quality niche, where environmental and social responsibility is certified by quality labels, such as ISO.

But while the technical systems mentioned are characteristic of each system and therefore easy to position, there is a diversity of systems, the environmental effects of which depend either on their concentration in the territory, or on the practices used. For example, there are technical systems that aim to extract environmental goods *(extractivism),* process the natural resources into productive resources (slash-and-burn and shifting cultivation), or use natural cycles to renew soil fertility (flood recession cropping). The environmental impact of these technical systems mainly resides in the anthropic pressure and their capacity to develop.[71] They can thereby effectively contribute to degrading the environment and can, in extreme cases, exacerbate desertification processes, particularly in semi-arid regions (top left bubble), or have similar and extremely reduced effects, even less than those caused by agro-ecology (bottom left bubble). Polyculture-livestock systems correspond to the same situation. They may be highly aggressive for natural resources if they are established to the detriment of forests or if the animal stocking density per unit area is too high, but they can also have a reduced, or even positive, impact on the environment, if they are conducted with a view to conservation. This is also the case for systems based on techniques to optimise the biological activity of the soil by eliminating ploughing, possibly completed with techniques that aim to limit losses of fertiliser nutrients and water in soil, by maintaining direct seeding mulch-based cropping systems. Depending on the volume of amendments and fertilisers incorporated at the beginning of the cycle and the type of weedkillers used to control the permanent cover, these technical systems can move from the bottom left bubble, corresponding to systems with relatively reduced, to the top right bubble, where there are the systems that are the most aggressive for the environment.

[71] Which takes us back to the debate between neo-Malthusians and Boserupians explained earlier.

It should be recalled that the changeover from one situation to another is often strongly influenced by agricultural policies, which can contribute to maintaining a holding beyond the regeneration capacity of natural resources.

2.3.4. *Agricultural policies generally not beneficial for the environment*

It should be noted that in most country case studies compiled in the second part of the report by Bélières *et al.* (2013), *« Les agricultures familiales du monde. Définitions, contributions et politiques publiques »,* agricultural policies find it difficult to incorporate environmental concerns in a coherent manner. In Europe, the CAP – despite the conditionalities and agro-environmental measures – continues to support intensive technical systems with recognised environmental impacts, even though they are contested by certain internal trends in the agricultural profession itself, by taxpayers and more generally by a segment of the population that is increasingly aware of the issued raised by the externalities of the intensive agricultural model (beyond simply its cost). In Southeast Asia, the State firmly supports family farms from the Green Revolution, on the basis of which it has built its agricultural export strategy (rice in Thailand, coffee in Vietnam, rubber in Malaysia, etc.), without particular consideration for maintaining natural resources. In Brazil, even if the precepts of agroecology have entered the doors of the Ministry of Agrarian Development (MAD) and agronomic research centres,[72] the technical orientations continue to fluctuate between promoting the intensification of production as part of the socioeconomic integration of family farms, and promoting rational agroecological practices, for ethical reasons, but also for a strategic differentiation in terms of family and entrepreneurial businesses.

This resistance on the part of certain States to incorporate environmental considerations into agricultural policies is firstly due to the disjuncture between agricultural and environmental sectors, despite attempts to establish links between them and the creation of consultation frameworks, which have increased in number over the past two decades. Consequently, there is often the juxtaposition of a family farming sector supported by the State, which establishes technical systems based on the use of industrial agro-supplies, and a more autonomous family farming sector, supported by environmental non-governmental organisations (NGOs), which implement technical systems sing few or no industrial agro-supplies.

[72] It should be noted that the Brazilian agricultural research company (EMBRAPA), which is attached to the Ministry of Agriculture (MAPA) and was set up in the 1970s to support the agricultural revolution of large holdings, has produced a technical manual on agroecology (Embrapa, 2006). This is a sign of a strong penetration of this new benchmark in agricultural, scientific, but also political and administrative, fields.

Since the signing of international conventions on biodiversity, climate change and desertification in 1992, there has been a zoning of rural areas at national level, regulating the use of natural resources. The mechanisms that regulate the restriction of use generally comprise a variety of situations, ranging from total protection to sustainable use. Family farmers whose systems are not aggressive for the environment are generally considered as privileged actors in protected areas and their agricultural activity is tolerated, or even in demand. In connection or not with these ecological zonings, certain States, which are growing in number, are attempting to more effectively integrate the environmental dimension into agricultural production systems, by defining mechanisms based on environmental services (ES) and payments for environmental services (PES).

2.3.5. *By way of conclusion on natural resources*

To conclude this rapid overview concerning the link between family farming and the environment, we will make six observations:

- The first concerns the turnaround in the debate since the 1980s. There has been a shift from a focus on the analysis of demographic pressure and the need to modernise family farming to a globalised conception of the causes of environmental degradation. This change contributes to limiting, or even exonerating, the responsibility of family farmers with regard to entrepreneurial and family business producers;
- The second concerns the scientific challenge of the assessment of the environmental impact for research, but also for farmers, technicians and environmental experts, given the recognised importance of social representations, which are greatly influenced by economic, social, symbolic and ethical considerations. A very specific challenge concerns the irreversible nature of environmental degradation caused by agriculture;
- The third concerns the diversity of family farming technical systems and the resulting impossibility of strictly classifying family farming in the category of the least aggressive farming for the environment. Indeed, a large proportion of family farms around the world use few agro-supplies due to the very fact of their economic constraints, whereas certain family technical systems can be highly polluting;
- The fourth concerns the solutions currently being considered by States and international organisations to resolve the environmental crisis and the fact that these solutions are generally based on a modulation of public action. The recommendations made generally concern the promotion of differentiated actions in

terms of land use planning (segmentation of areas with regard to environmental issues, introduction of a differentiated treatment of territories, ranging from the protection of the most fragile territories, to the rational and conditioned development of territories that are less sensitive to anthropic pressure). At international level, new regulations (standards) are defined in consultation frameworks involving public and private sectors and associations;

- The fifth is that, in an environment increasingly segmented and regulated, family farms are frequently conceived as part of the solution and no longer as factors of degradation, even if, and we have highlighted this, the diversity of technical systems does not allow this image to be validated in all situations. Their attachment at local level, their knowledge of the potential and natural resources and the use than can be made of them, as well as the plasticity of their system of activities, are assets in the eyes of many public authorities in terms of the rational use of natural resources;
- Finally, the sixth concerns the need to align the interests of agricultural and environmental actors in order to build realistic policies that go beyond categorical interests or clientelist tendencies.

2.4. Family farming and social issues

This section addresses the issues and debates over social models brought about by the family nature of agricultural production and by domestic relations with work. On the one hand, family farms are presented as a necessary alternative to concentration and to the financialisation of agriculture by a number of organisations – first and foremost Via Campesina, Oxfam, Coordination Sud and the World Rural Forum –, but also by a great deal of research (Barbedette, 2004; Bélières *et al.*, 2002; Brookfield, 2008; CIRAD-Tera, 1998; Lamarche, 1994). On the other hand, questions are raised over the restrictive nature for women and young people of a basic functioning of their excessive workload within a structure that reproduces a patriarchal and unequal figure of family organisations (Udry *et al.*, 1995; Nussbaum, 1999; Bisilliat, 2000; Guétat-Bernard, 2011; Verschuur, 2011; White, 2012). It is not of course a question of adopting a position on these debates and controversial issues, but rather of problematising them and objectifying them, of re-examining them in terms of the definition of family farming proposed in the first part.

2.4.1. *For a pragmatic and targeted understanding of gender issues: working relations in family farming, or reconciling production and reproduction*

The conjunction between Millennium Development Goal (MDG) 3 on gender equality and MDG 1 on poverty and food security has unquestionably stimulated research, militant action [73] and public policies on gender issues. The recent renewed interest in agriculture and its potential contributions to human development further increase this dynamism. The reduction in gender inequalities is therefore considered as one of the drivers of the increase in the productivity of farms in general, smallholders in particular (World Bank, 2011; World Bank, 2009; FAO, 2011*b*), and as a result of family farms.[74]

However, the abundant literature on the subject, in particular the reports of international institutions, rarely address the issue of family farming, and mainly focus on an entry by individuals, advocating for an access to production resources and markets for women, and equivalent working conditions and a remuneration equivalent to men's. The recognition of the contribution that women make to development thereby firstly requires an overall reinforcement of gender statistics in order to identify the actions and practices of women (Charmes, 2005; FAO, 2011*b*). Then, following on from a number of former and advanced research papers on access to civic and legal rights, education, credit, etc. (World Bank, 2011),[75] more recent recommendations have been introduced on women's land tenure (Daley *et al.,* 2011) and the inclusion of women in value chains, in particular *via* contractual arrangements (Minten *et al.,* 2009; Maertens *et al.,* 2012). If specific parts of production and/or agricultural development are under their responsibility, it is also important to seek to reduce the barriers related to their gender in order to improve productivity, or at least the efficiency of the activity, and, subsequently, all the family work. We shall not go any further on these aspects, which have been fully documented elsewhere (FAO, 2011*b*; Proctor, 2012; Sweetman, 2008; World Bank, 2009).

[73] The editorial line of the journal Gender and Development, co-published by OXFAM, also demonstrates the connections between the different development "worlds" in the issue.

[74] Already, from the 1970s onwards, the agricultural world had been a focus area to express a feminist discourse and analyses on the issue of modernising structures, coordination between production and reproduction and, more recently, the specific role played by women in managing natural resources (Verschuur, 2011).

[75] It is worth noting that a number of very old declarations of intent are constantly being repeated. For example, the recommendations made in 1983 by FAO on the state of food and agriculture in the world are similar to those renewed in 2011 (http://www.fao.org/docrep/017/ap663e/ap663e.pdf).

Giving priority to this individual entry, which crosscuts the globalising international approaches and is consistent with many militant actions, makes it possible to emphasise the ever-obvious difficulties that women must face in the rural world and, more specifically, in agriculture. Indeed, it seems to be accepted that agricultural employees and women in charge of a holding (family or not) must have the same rights and conditions for carrying out their activity as men. Consequently, reducing the differences that are still seen today would certainly improve incentives to produce, and the incomes and standard of living of the families in question. The salaries and incomes of women are generally 30% lower than those of men,[76] the mechanisation rate on holdings managed by women 2 to 3 times lower, women's herds 3 times less, and the use of fertiliser is 30% lower (FAO, 2011*b*).

These projects, which are clearly laid out in international agendas (World Bank, 2011), should, however, be clearly articulated with the overall reflection on family farming. We feel that only supporting the productive functions of agricultural households managed by women, overlooking the domestic times (*i.e.* the reproductive work in the domestic sphere, the care economy) and the ever-present inclusion of operating capital in families' assets, would only have a limited scope and impacts.[77] It would therefore firstly be necessary to pay specific attention to women who are heads of agricultural households and to their constraints. To do so, it would be necessary to combine the issues of developing positive functions of family production forms compared to other production forms, with a systematic understanding of the barriers faced by women with responsibility, and the known or alternative ways of removing them. For example, a particularly important issue is that of transferring means of production. When a woman is at the head of a holding, notably in West Africa, she has many fewer possibilities of maintaining it in the family assets than a man. Aligning women's property rights with those of men would only partially remove this obstacle. It should be jointly included with recognising the collective nature of production at the level of the family. We feel that such approaches hold promise for the future due to the progress observed in agricultural households under the responsibility of women.[78]

[76] SOFA 2011 *(State of Food and Agriculture)* indicates that there is a wide disparity of access to paid employment, but, for developing countries, a rate of 40% for women (against 70% for men), with the agricultural sector employing almost a third of these employees (FAO, 2011*b*).

[77] In particular, the figures given of an impact of a 2.5 to 4% increase in world agricultural production by reducing gender inequalities (*i.e.* 20 to 30% of growth in women's output), then the resulting decline of 12 to 17% in the number of poor, take little account of the complexity of the internal social organisation of families.

[78] On very incomplete data, as it has not been provided in all countries, SOFA 2011 indicates that 19% of farmers identified are women in Latin America, 15% in Sub-Saharan Africa, 11% in South and Southeast Asia, 4% in West Asia and North Africa, 3% in Oceania. However, these figures mask the fact that the feminisation of agricultural responsibilities may result from the temporary migration of men, widowhood or an effective choice of the family. The second situation would appear to be the most common, *a priori* revealing a situation of additional weakness.

However, more generally, it is necessary to re-examine the issues of gender in family farming through the prism of social relations between men and women within households. For this, we start from the assumption that there is an overall consistency in the functioning of the household as systems of activities in which the family assets (of all the family) and operating capital (of all the family) are intrinsically linked and articulated. In this regard, *"analysing agrarian issues and rural development through the prism of gender requires calling into question certain categories of analysis; that the social relations between men and women be at the centre of the analysis; that the social, economic and political organisation of the reproduction work – which includes subsistence production – be reconsidered"* (Verschuur, 2011).

The calling into question mainly concerns the positive definition of family farming that cannot be reduced to an agglomeration of individual behaviour maximising their agricultural production. Consequently, it involves differentiating between analyses of household productivity judging the competition between their members as a negative factor, restraining competition (Udry *et al.,* 1995). It is therefore especially necessary to consider the way in which the emancipation of women within family farms – and not of women as employees or farm managers – creates tension with or, on the contrary, can strengthen the advantages of family production compared to other forms of production. These tensions would, *inter alia,* appear to concern the limitation, through the individualisation of rights and responsibilities, of an excessive workload for women by the fragmentation of collective logics and by tightening conditions for the negotiation of the organisation of work. On the contrary, the factors of dynamism would appear to concern new forms of coordination within families, which would maintain the domestic power relations and would be boosted by a more highly valued status for women. The household/holding would then benefit from the progress in women's access to services and resources, and their greater participation in the commercial sphere.

In this regard, the input from feminist studies on the links between productive work and reproductive work is considerable.[79] These studies first highlight the violence of domestic and productive relations being brought together in a single social relationship, and not the resulting recognition of the actual work of women (Barthez, 1982). In societies that he qualifies as "peasant" and that can be assimilated to family farming, as defined above, Meillassoux (1975) explained that the domination of women by

[79] The following points, including the bibliographical points, are widely based on a personal communication by Hélène Guétat-Bernard.

men stems more from political enterprise than from the natural process. It is fostered by the importance of ensuring the next generation and therefore of controlling the sphere of reproduction. As a result, the control over reproduction is extended to that over production. Consequently, family farms have long functioned – and still function – on the principle of the family reproduction costs being covered by the domestic work of women, which allows men, in the patriarchal system, to manage the market production. Its productivity is therefore clearly perceived in this articulation, which was for a long time a synonym of domination, with *de facto* the gradual widening of disparities between men and women.

In Africa, notably, studies highlight the excessive workload of women to explain the dissemination (and differentiated effects) of cash crops under colonisation or during the first years of independence. For example, the case of the modernisation of coffee growing in Cameroon shows the ambiguities of relations within households in family farming (Guétat-Bernard, 2011). On the one hand, men, the main beneficiaries of development projects, as they control access to land and are more in contact with institutional development actors, mobilise the work of women – which *de facto* becomes excessive work because women's other tasks are not abandoned – in order to increase the incomes and well-being of the entire family. But at the same time, engaging in cash crops while maintaining its family nature tends to freeze and strengthen the power asymmetries within households and the residence units, eventually leading to possible tensions. Generally speaking, Bisilliat (2000) demonstrates that even today, the intermediation of many development projects, devised with an understanding of, or without paying attention to, the relationships in family work, is destabilising as it calls into question the work relationships without dealing with offsetting the loss of overall productivity of the family model.

Other research, which opens up avenues for understanding future transformations, has addressed the importance of the role of women in the modernisation of agriculture, *via* the division of tasks and the life choices within families. Among the situations explored, there are studies in the USA (Osterud, 2012; Neth, 1995), France (Pelletier, 2007), the UK (Price and Evans, 2006) or, more recently, Brazil (Medeiros, 2011). The results show that women, when they have expressed themselves, have militated more for arrangements for their status within the family unit, but which do not put a strain on the very essence of the non-capitalist model. At the risk of fragmentation and a strict isolation of systems of activities, which would be in line with an individualisation of rights, they prefer to preserve the family character of agricultural production, showing great pragmatism. Consequently, the feminist movements in agriculture have militated more for the family forms of production against the development of business

forms and companies. In Brazil, notably, these movements, following a specific positioning, have rallied behind the cause of the landless and agroecology, in a strategy to build networks and social capital successfully implemented by the proponents of sustainable development. They have forged alliances with the academic world and political leaders.

The ecofeminism movement, despite the various currents running through it and the fact that it has at present run out of steam, has shed light on the environmental issue in an original way. The most significant research shows that women are more adversely affected by environmental damage, but that they propose alternatives to the masculine visions in terms of natural resources management. *"The experiences of women's initiatives within the environmental movements suggests that women's militancy is much more closely linked to family survival issues than is men's"* (Agarwal, 1992). Consequently, in research for a more effective measurement of the non-market positive impacts of agriculture, attention should certainly be paid to what is allotted to women in family organisations and their commitment inside and outside the household in terms of understanding the environment (Guétat-Bernard, 2011). For certain authors, the potential developments in the social relations within the family for the management of agricultural production, with a relaxation of masculine domination, are indeed likely to limit practices that are over-aggressive for the environment (Agarwal, 2000).

Today, these analyses are as relevant as ever. But it is important to mobilise them by judging developments in family structures and, more generally, agricultural households (particularly the number of members and composition in terms of sub-units within families) and resulting changes in working relationships and in the strength of all the functions assigned to agriculture.

Table 7 shows that the United Nations forecast a fall in fertility all over the world, particularly in the least developed regions. Although these figures concern the entire world population, and the fact that we can assume that fertility will decline more in cities than in rural areas, they suggest that women will have more room for manoeuvre.

Table 7 *Children per woman by major world region and by major period (average estimate for the last two columns)*

Regions	1950-1955	1980-1985	2005-2010	2020-2025	2040-2045
World	4.95	3.59	2.52	2.33	2.19
Least developed regions	6.07	4.16	2.68	2.40	2.22
Sub-Saharan Africa	6.53	6.58	5.10	4.13	3.16
Total Africa	6.60	6.39	4.64	3.84	3.03
Asia	5.82	3.69	2.28	2.03	1.90
Europe	2.65	1.89	1.53	1.69	1.89
Latin America	5.86	3.93	2.30	1.96	1.79
North America	3.33	1.79	2.03	2.05	2.07
Oceania	3.81	2.58	2.49	2.40	2.24

Source: http://esa.un.org/wpp/Excel-Data/fertility.htm

Trends in the size of households and/or residence units, the supports of family farms, are more difficult to estimate. Data from agricultural censuses compiled by FAO are very incomplete (FAO, 2010*a* and 2012*b*), and the information is generally very difficult to find. Studies conducted a long time ago attest to the downward trend, between the 1920s and 2000s, of the size of households in developed countries (from 4 to 2 people), but to around 5 people being maintained for a sample of developing countries (Bongaarts, 2001). The same study did, however, forecast an eventual reduction, with a gradual alignment with the standards of developed countries, due to the increase in levels of education and the rise in individual aspirations. In African rural areas, the FAO data show a mixed picture (FAO, 2010*a*). Households are said to comprise 5 people on average (information on 18 countries), but 3.1 and 4 people in Mozambique and Ethiopia, respectively, against 11.1 in Mali and 11.8 in Senegal. However, if a permanent transition of the "major" domestic groups should be considered for certain countries, the fertility forecasts and trajectories in the North lead to forecast smaller residence units. This could mean a decline in the importance of patriarchal models.

These developments accompany the rise in what certain authors analyse as *"breaking apart this organic link between the domestic economy and capitalism"* (Verschuur, 2011). Increasing individualism is thought to cause a denaturation of family relations in the sphere of reproduction, the costs of which would be less effectively covered by the family's excessive workload. There would also subsequently be a loss of efficiency in the production sphere and a threat to the economic model of family farming. In this analysis, gender relations would explain the threats, but would also, as in the cases analysed of support for modernisation, provide some answers.

A first avenue, implicitly advocated by international institutions and their reports dedicated to gender issues and the future of agriculture in general, anticipates a modernisation and professionalisation of structures by a separation between the spheres of reproduction and production. The opportunity for women of *"the transformation of agriculture and the emergence of high-value marketing chains"* that FAO (2011*b*) highlights clearly reflects this. Family relations would be confined to the domestic aspect, farms would lose their family nature and, functioning on employer-employee relations, would *de facto* become family businesses. From the perspective of analyses in terms of gender, this type of development could lead to a generalisation of the dominant masculine vision, which women in charge of the farm would adopt, or the emergence of specific and certainly more cautious feminine practices, likely to alter the norms of agricultural production.

A second avenue would consist in a modification of family relations, placing more emphasis on the role of women in the articulation between the spheres of reproduction and production, so that the management of the first would continue to foster the second. Gender inequalities are clear and proven, but today they have especially become real social and political concerns that place a burden on the continuation of family organisations. Reducing them without this jeopardising links between the family and the agricultural holding implies a break with a patriarchal system, which has socially and politically imposed itself. This means that new forms of negotiation are necessary and, certainly, legal, institutional and organisational innovations in terms of access to means of production and markets.

But this also certainly requires reconsidering the deployment of public or community goods and services tailored to the needs of domestic spheres. Indeed, public authorities and associations should be able to participate indirectly in the reproduction sphere in order to support the changes in family social relations and thus contribute to the efficiency and competitiveness of families in the production sphere, while opening up prospects for investment and professional enrichment for women.

2.4.2. *Young people, working relations and family farming: Social issues related to the question of economic transition*

The issue of young people and their role on the labour market in an uncertain context of demographic transition is at the centre of current questions over the forms of agricultural production – capitalist or family – likely to meet the challenges of tomorrow. From a social point of view, the issue of youth concerns the nature of relations between the older and younger generation within the family sphere (which largely follows the previous analyses), but also the attractiveness (or rather the lack of attractiveness in this case) of the agricultural sector in general, particularly for family farming.

However, while there are country case studies to provide information on and anticipate training requirements or build public policies, and while many programs to support agriculture specifically target the installation of and support for the youngest, much less information and research explicitly address it on a global scale. The case of youth is far from providing as many analyses as feminism, and even less so in relation to the ssue of family farming. For example, FAO addresses the issue of youth much less than gender relations [80] and research is hard pressed to build an informed debate on the issue. The International Institute for Environment and Development (IIED) has, however, recently published a major report on the issue (Proctor and Lucchesi, 2012), while the International Fund for Agricultural Development (IFAD) has organised an important seminar on this topic and is involved in a number of activities to train and support young people (Vargas-Lundius, 2011). These recent operations are perhaps the signs of the increasing importance of the topic with respect to agricultural issues. The following paragraphs draw substantially on these two reports.

As shown in the IIED report based on demographic and employment prospects, most debates, as previously with gender, strictly focus on production aspects. The understanding of maintaining young people in agriculture – which is deemed necessary for some time yet in many parts of the world due to the realities of the urban labour market – involves the individual satisfaction of a farm manager who would be young, but whose agricultural activity would be comparable, in terms of income and way of life, to what is offered by the other economic sectors, especially in cities. The report does not belie this vision and sees other opportunities in a more attractive agricultural sector and in the transformation of national and international agrifood systems. Innovations are, in particular, seen in peri-urban areas, implying situations in which the weight of patriarchal family organisations is partially high. The opportunities could

[85] No SOFA since 1947 has devoted reports to this issue, compared to two for gender relations.

benefit smallholdings, but they would certainly need to switch to a capitalist mode to fully seize them. The authors also advocate for concerted public action to provide incentives and support, specifically for young people, and the assertion of the sector in its integration into markets.

The focal points to "attract" young people, or at least maintain them in agriculture, coincide with those of women's empowerment (Proctor and Lucchesi, 2012; Vargas-Lundius, 2011):

- An overall improvement of access for young people to public health and education services in order not to depend only on the family or village sphere and open up a range of professional choices;
- A secure and individualised access to high-quality land, particularly with a more efficient transfer. The individualisation of decisions would appear to be demonstrated by a number of case studies. It is a source of conflicts between generations and contributes to a splitting of holdings, although the means of having land considered to be the most secure would still be to inherit land which has already been farmed in a family context (White, 2012);
- Institutional and organisational innovations, with a structuring of youth associations able to defend their interests outside the family sphere;
- The search for integration into sectors with high added value, *via* the modernisation of production structures, which could also be combined with employment opportunities in trade or service provision upstream and downstream from these sectors (Fares *et al.,* 2006);
- Benefitting from the prospects of the introduction of information and communication technologies in the agricultural sector.

Finally, the key point is that young people are the future of modernised smallholders, which gradually align with the productive structures of non-agricultural sectors. The family dimension and even more so, the nature, constraints and opportunities of relations within families between young people and their elders figure little in the analyses.

The literature on mobility may also be used to analyse the strategies of young people in terms of their family agricultural structure.[81] This is not a question of concealing the fact that mobility can signify a breakup, a dislocation, if the migratory capabilities

[81] Mobility also, to a lesser extent, concerns women and could be used to analyse gender relations.

of individuals and their household of origin are weak (De Haas, 2010; Cortes *et al.,* 2013). It is also not a question of masking the fact that migration demonstrates the attractiveness of other places compared to a family and agricultural organisation in which young people struggle to make something of themselves. Consequently, its amplification is partly a sign of internal tensions in rural families. The force of attraction of non-agricultural sectors and the breakdown of family structures can be measured at the often high cost of migration for young people (problem of absence, problem of despair, sometimes physical risks, etc.). The trade in tangible and intangible goods between families that remain in the village and young migrants can contribute to extending complex systems of activities (Bryceson, 2002; Losch *et al.,* 2012), and can give a prestige, a status and utility to young generations. It is important to have more information on these links between young migrants (physically and/or through employment) in order to clearly identify this segment of the dynamics of leaving farming.

Approaches on the aspirations of young people also allow analyses to be refined. These aspirations can both explain inter-generational tensions and offer opportunities (White, 2011).

In addition, an overview of surveys conducted in Sub-Saharan Africa provides mixed results (Leavy and Smith, 2010). It appears, in particular, that the aspirations are extremely dependent on the contexts and the attraction of "modern" sectors is far from being systematic. They also change and remain social constructs from representations outside, but also very much within the family sphere. Indeed, wherever family hierarchies are well established and where there is clearly an entrenchment of economic relations in social relations, the latter take precedence over the former. Similarly, aspirations towards more education are generally less significant in rural areas, as the possibilities do not necessarily involve studies, and there is confidence in the extended family structure. However, what would appear to preoccupy young rural dwellers is their status, with a strong connection perceived between the status within the family and the status in the wider community. But the status of younger children on family farms often appears to be insufficiently recognised, or even synonymous with significantly unequal treatment.

In Oceania, the situation is completely different and despite preconceived ideas, the surveys of young people show that there is a strong attachment to the family, the community, the church and village educational structures. These institutions provide stability and prospects for an accession to a social status that often takes precedence over the economic prospects of migration. Young people state that they are actors in the life of the family and associations, but also in improving these institutions (Secretariat of the Pacific Community, 2010).

Consequently, while certain studies attest to a malaise felt within agricultural families, with sometimes alarming figures in terms of suicide rates, the desire to migrate, and inter-generational conflicts (Proctor and Lucchesi, 2012), one cannot neglect the attachment to the family institution, even in its patriarchal form, and the reassuring nature, in a period of uncertainty, of the type of stable framework offered by the agricultural family. It would surely be necessary to analyse more specifically the link between the malaise of young rural dwellers and the specific orientation of public discourses and policies that are directed more towards options of consumerist growth overestimating the city and its opportunities. As a result, just as agriculture is back on the agendas on issues of development as a possible option, a reversal of values cannot be excluded. Feedback on the unfortunate experiences of young migrants in cities (for which India provides some significant results), and the current impasses of an economic transition by leaving agriculture, without completely inversing the trend for urbanisation, could offer new scenarios. In the current context, the possible approaches seem to be more promising by maintaining and improving family forms of production than through contractual arrangements and the changeover to entrepreneurial forms.

This certainly involves a renegotiation of family relationships with, for both young people and women, a redefinition of a more rewarding status, in particular allowing more initiatives within and outside agriculture. This redefinition could fit in with maintaining an articulation between production and reproduction and the effectiveness of family solidarity, which can be of utmost importance during periods of crisis.

3. The "politicisation" of family farms

In most countries, agriculture is a "State affair". Yet the public policies implemented do not necessarily and only depend on the general characteristics of the family farms in question, or their specific economic, social and environmental contributions. The production of policies to support family farmers is the result of a specific construction process combining the structural characteristics of national economies and local political representations and the roles of agriculture in society.

The case studies analysed[82] – Brazil, Cuba, France, Hungary, India, Mali, Morocco, Mexico and South Africa – illustrate the variety of these combinations. They feed into the analyses of this third part, which is based on three sections:

- The first section presents national economic configurations, development regimes and macro-level actors who influence the politicisation of family farming;
- The second section analyses the politicisation at national levels and draws some lessons from it;
- The third and last section encourages family farming and the instruments likely to support it as a comprehensive project, beyond sectoral limits.

3.1. Economic and political contexts of the politicisation of family farming policies

The "politicisation" processes for family farming are analysed on the basis of three complementary levels. The first concerns the configurations and national contexts in terms of political economy and the trajectories of agricultural sectors within societies. These mechanisms mainly stem from dynamics that are endogenous to States. The second level concerns long-term developments in national political systems and macroeconomic strategies in connection with the international references at the time. It thus involves identifying the influences of benchmarks that are essentially exogenous on the changes in national political regimes and economic orientations.

[82] See part II of the report by Bélières *et al.* (2013), *Les agricultures familiales du monde. Définitions, contributions et politiques publiques.*

The third level is that of the development of actors, given their integration into international networks and their roles in terms of the politicisation of family farming. We will address them consecutively.

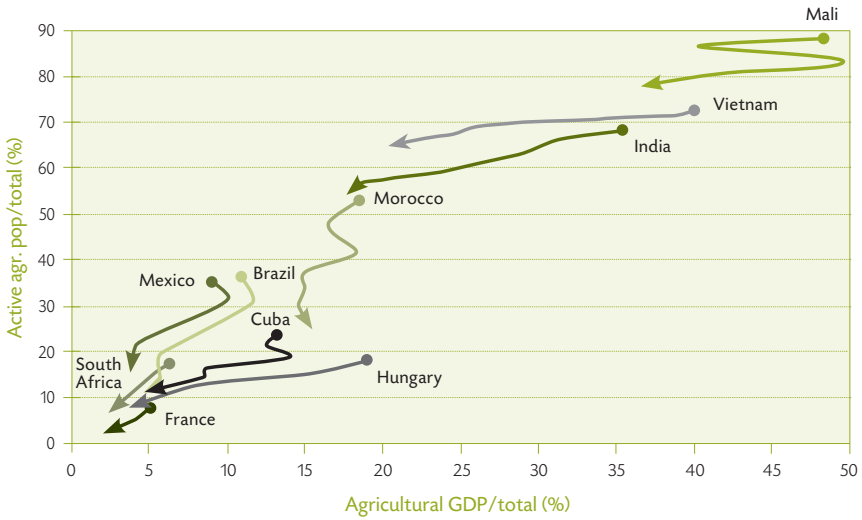
3.1.1. *Importance of agriculture in national contexts, endogenous dynamics*

Each economic and social configuration has its own history and its own pace of change, which depends on endogenous dynamics. These dynamics have been forged by a body of assets-constraints that are more or less conducive to innovation, by the intelligence of modes of government, but also by relations with the outside (Grataloup, 2007). The procedures for linking the national and international, between the local and global, and especially the moment at which the interactions take place, often determine the nature and amplitude of the room for manoeuvre of local actors. They therefore influence the development trajectories of each State, such as for example, the period of European hegemony, and more particularly of colonisation, which permanently marked the structures of colonised countries.

With reference to the historical model of the transition already mentioned (Section 2), the status of agriculture in the economy and society – *i.e.* its economic and demographic weight, the power to act of actors and its role in representations (its political weight) – is largely conditioned by the scale of structural changes accomplished at national level. It of course concerns the level of diversification of the economy, translated into the main aggregates (sectoral contributions to GDP and foreign trade) and in the structure of activity (employment by sector), but also the distribution of activities and people in the territory, expressed by the urbanisation, the type of urban network and regional economic specialisations.

Graph 7 is one of the possible illustrations of this process of change. It shows the "structural signature" of the countries studied using two simple criteria – the proportion of agriculture in GDP and in employment – for 1980-2010. This period, limited to thirty years (due to statistical constraints), is obviously insufficient with regard to long-term trajectories, which can alone allow "national time" to be compared with "world time". These two criteria are also extremely limited and make it difficult to identify the "critical moments" where the changes or breaks occur in the economic and political regimes (see Section 3.1.2). However, this representation highlights differences between countries and partly makes it possible to understand the differences in the economic, social and political weight of the agricultural sector. The graph illustrates several aspects of the trajectory of change.

Graph 7 *Trend in the economic weight of agriculture in the countries studied (1980-2010)*



Note: until 2005 for France and Mali; from 1985 for Vietnam.
Source: World Bank, World Development Indicators, 2013, for GDP, FAOStat, 2012, for the working population.

It firstly recalls one of the historical invariants of the recent economic transition (1980-2010), *i.e.* the declining and gradual trend of the place of agriculture or, as Timmer (2009) says in a provocative manner, a *"world without agriculture"* with a structural positioning of the countries studied, which moves from the upper right quadrant to the lower left quadrant depending on the place of the agricultural sector. These dynamics correspond to a well-defined period of economic development characterised by specific agricultural modernisation policies, which we analyse in this section. It would be a mistake to consider these trajectories as a norm or an essential way towards development. They result from policies and economic changes from a given period and remain a description of past transitions. It subsequently shows the rapidity of developments over the given period, which is shown by the length of the trend line: rapid changes over the period or more limited changes can point to a structural inertia, or quite simply the existence of former transitions shown by the structural positioning at the beginning. This is the case in France, where the intersectoral reorganisations took place before 1980.

Finally, it makes it possible to differentiate countries according to the trends observed:

- Countries engaged in a generalised economic diversification process where the share of agriculture in GDP and employment decreases: the case of Mexico and Brazil (diagonal trend);
- Countries in the process of diversification, where the share of agriculture in GDP declines, but without a proportional transfer of labour to other sectors (horizontal trend): this change shows a fall in productivity and remuneration between the agriculture and non-agricultural sectors, as is the case with Mali, Vietnam, but also India, and in different ways, Hungary;
- Countries where agriculture maintains its significant macroeconomic role, but with a rapid decline in agriculture assets (vertical trend), which illustrates rapid agricultural productivity gains, as is the case with Morocco.

This general approach provides an initial outline. It is, however, limited as it focuses on aggregated average trends for the entire economy and sector, and does not show intra-sectoral differences according to the types of agriculture. For example, in Morocco, the productivity gains of irrigated agriculture on the plains focused on production with high added value (fruit and vegetables) mask the marginalisation of rainfed cereal agriculture and livestock raising in plateau or mountain areas.

3.1.2. *Long-term trend of the link between family farming, national public policies and the international reference*

The historical analysis developed in this part is based on concepts and methods used in various disciplinary fields of social sciences: the historical analysis of development (Rist, 2007), the history of public action (Laborier and Trom, 2003), the institutional analysis of public policies (Mahoney, 2001; North, 1990; Pierson, 2000) and notably the joint analysis of the ideas implemented, the interests at stake and the institutions established (Hall, 1997; Lichbach and Zuckerman, 1997; Palier and Surel, 2005). This research approach and the results have been formalised in Léonard and Maître d'Hôtel (2008), Bonnal (2010).

The role of agriculture in societies and national economies, as well as the nature of its recognition by States, have changed significantly over the past two centuries. This change is firstly due to the very construction process for Nation-states, which has radically modified the collective representations of agriculture and its functions, but also to the successive modifications to the international reference on development, the effect of which on the processes to build national policies has been constantly affirmed since the end of the 19th century.

We shall analyse this development in two successive ways. The first consists in specifying the general context of the succession of political and economic regimes over the long-term compared to the change in the predominant international reference in terms of economic development and political regimes. The second will seek to apply this "grid of development trajectories" to the national case studies conducted for this study.

a. The development trajectories of political regimes and economic orientations of States

The comparison of the development trajectories of political regimes and national economic strategies is based on two preliminary observations.

The first is that the macro-structural approach (see 3.1.1.) must be completed with a history of agrarian dynamics allowing an understanding of the origin of the different types of agriculture. Two main types of situations can be identified:

- The contexts of gradual change, where the internal dynamics of the agricultural sector are incorporated into the general structural transformation process.

  In this first case, the agrarian structures develop on the basis of the physical conditions of the natural environment (natural resources – fertility, availability of water, relief, climate conditions), population characteristics (particularly densities and the distribution of population in the territory) and the technological level, with these three aspects obviously being articulated (Boserup, 1970). The trends for the fragmentation or concentration of agricultural holdings are directly influenced by the dynamics specific to rural households marked by population growth and the social and cultural context. But they also result from the processes to integrate agricultural markets and the development of employment opportunities outside agriculture, in relation to the diversification of the economy, the urbanisation rate, and the existence of options for migration at the national and international levels (Bairoch, 1999). The economic and social policies for sectoral modernisation and education play a leading role. Their performance and the redistribution capacity of States (in terms of incentives and support) play an accelerating role.

- The contexts of breaks or internal or external events permanently modify agricultural structures.

  In this second case, phenomena of breaks, which may be rapid or limited in time or, on the contrary, relate to more long-term dynamics, modify the existing order. This may involve exogenous breaks, the ideal type being colonisation by an

external power, which imposes its values, and its modes of development and property ownership (latifundary estates, large plantations, the legacy of which permanently marks agrarian structures and leads to a structural dualism). The modern large-scale investments, such as development projects with development areas or foreign direct investments can be assimilated to this. It may also involve internal breaks related to political processes. The most typical cases are revolutions and/or large-scale agrarian reforms (as in Mexico or Japan, South Korea, and Taiwan) and episodes of collectivisation (complete or not) implemented by Communist regimes, then liberalisation/decollectivisation (Valdès Paz, 1997).

These multifaceted developments are the source of specific power relations between the various actors in the agricultural sector (and the different types of agriculture) and the other actors of the economy and society, which will mark both the configuration of States and the orientations of their policies, and particularly their agricultural polices. The latter are generally the result of a long-term process and may be partly disconnected from current economic power relations. For example, in the case of France, the current resources allocated to agricultural policies and the power of influence of professional organisations express long-term and crystallised influences, in the political system for instance (institutions, mode of election, mapping of electoral districts, which lead to an overrepresentation of rural areas), whereas they are quite far removed from the actual influence of agriculture in the economy and society today.

The second observation, which forms the basis for the construction of a time grid for the development of national political regimes and economic strategies, stems from the observation of the dominant influence of international references in this field on the evolution of ideas, development strategies and, ultimately, the political debate at national level. In terms of agriculture, it is observed that there are a variety of configurations where family farming is either addressed "by default", or in an implicit manner when it is the dominant or exclusive form of the organisation of agriculture, or addressed in a differentiated manner towards family business within national societies. In certain countries with contrasting agrarian structures, the dualisation of agriculture appears to be an historical construction, a construction which has been consolidated in a specific manner in certain countries (Brazil, Hungary), or reduced over greatly varying time periods (Cuba, Vietnam) during the different phases of national development, more or less as a direct response to trends in the international reference.

Consequently, it is necessary to go back to the end of the 19th century to understand the characteristics of national family farms and the relations they have with the State.

To do so, we propose to distinguish four main periods.

The emergence of liberalism and structuring of international agricultural trade: 1880-1930

The liberal period from 1880 to 1930 was marked by generalised processes for the integration of national or international agricultural markets, depending on the specific modalities of each national context. During this period, there were, however, marked divergences opposing certain colonising countries, on the one hand,[83] and countries selecting a clearly agro-exporting option (Brazil, Mexico), supported by liberal tax and trade policies. There are also divergences within States concerning the mechanisms for public intervention in connection with the uneven capacity of political control of the central States and the various components of the agricultural sector. The policies adopted during the liberal period are vastly underpinned by the idea of the inevitability of the expansion of holdings due to the industrialisation of the sector. In the countries under Western colonial domination, or those which are still highly affected by it, the policies identify a modern, capitalist sector, organised on the basis of "colonial" enclaves, and a family or indigenous sector, more or less integrated into the market, undercapitalised and subordinate to the interest of the former. Yet this option banking on the advent of large capitalist enterprises did not lead to the disappearance of family farms. On the contrary, in North America, New Zealand, in certain Latin American countries, but also in the forest areas of West Africa, they impose their capacity to gain markets.

The centralising State: 1930-1980

The self-directed national development period (1930-1980) was initiated with the vigorous questioning of liberal options by the international crisis in the 1930s. The latter considerably weakened the economic role and political influence of national agrarian bourgeoisies, and of the colonial agricultural sector within colonial empires. The protectionist option, oriented towards the consolidation of family farming, found a new source of legitimisation. This evolution corresponds to the establishment[84]

[83] This is notably the case in France whose trade was endogenised within the Empire in a context of customs protectionism, which started with the customs act of 1892 (Méline Act).

[84] Or of consolidation in the case of France.

of "national-populist" pacts between the State and the working classes, which were specific to national contexts. The redefinition of the orientations and provisions of the agricultural policy generally corresponds to it being placed at the service of national objectives for industrial and urban development (or those of metropolitan areas in the case of colonising countries). This general orientation was perpetuated well after the war and the period of African independence. It was justified by continued international tensions, and particularly the Cold War. The technical progress, which emerged just after the war, formed the basis of the introduction of policies focused on production, which relied widely on disseminated public mechanisms, including land operations that contributed to weakening customary systems.

This reinforced the role the State's role as a regulator of developments in the agricultural sector. This phase of State interventionism and regulation reflects a choice to modernise national agriculture. While the period after the Second World War, then the 1960s, marked formal changes in political regimes (with African independence and the coup d'états in Latin America), they did not call into question the self-directed development and import substitution industrialisation (ISI) model adopted in the 1930s. They were, on the contrary, moments when this model was reinforced and confirm the subordination of the agricultural policy to the development of the urban and industrial sector.

The return of liberalism and trade globalisation: 1980-1995

The period of liberal bifurcation (1980-1995) marked the weakening of agricultural policies. This questioning varied according to the resistance capacity of States. The shift of the international development reference towards the neoliberal model (opening of markets and deregulation of agricultural sectors, large-scale State withdrawal), which occurred in the second half of the 1970s, only materialised, in terms of the choices and content for public policies in a number of countries, in the early 1980s, the budgetary crises associated with the second oil shock (1979) and the debt crisis (which struck in 1982), compelled most developing countries to adopt structural adjustment plans (often imposed by international financial institutions). This period ended with the creation of the World Trade Organisation (WTO) (1994), which put an end to the agricultural exception and standardised the treatment of agriculture at the trade level, which constitutes a major difference with the previous period of the General Agreement on Tariffs and Trade (GATT) (1947-1994). However, the nature of the bifurcation varies considerably depending on national contexts.[85] Countries

[85] For European Union countries like France, the CAP plays a cushioning role and delays the effects of liberalisation processes.

like France, with the key role played by the CAP in certain sectors, were able to cushion the impacts of liberal measures by transforming a significant part of support for production into direct aid for holdings.

In some countries, these reforms often led to a crisis in sectors of family production, which were oriented towards food supply for national markets, as well as for exporting agro-industries, which could benefit from high levels of subsidies. They had a direct impact on the legitimacy of corporate organisations, which are characteristic of the State intervention mechanism, and, at the same time, on the emergence of new agricultural unions and farmers' organisations, which found strong intermediaries for support and to legitimise them *via* international networks. In the case of Mexico, it was the organisations affiliated with the Institutional Revolutionary Party, on the one hand, and autonomous alternative organisations, which emerged and were strengthened during this period and the international expression of which is symbolised by Via Campesina. In cases such as Mali, this dismantling of agricultural policies implicitly oriented towards family farms weakened the power of the State and paved the way for an expression of farmers' organisations, which was also reinforced during this period (Bosc *et al.,* 2002).

In certain countries, such as Mexico, these developments led to a strengthening of the dual nature of national agricultural sectors, by widening the differentiations between modern holdings that are able to achieve their competitive integration into the globalised value chains, on the one hand, and the undercapitalised family farming sectors, which are led to increasingly diversify into non-agricultural activities, paid employment and, more and more, migrate to urban areas or Northern countries, on the other hand. In other countries that had the means to maintain a national agricultural policy, the developments have been different (India, France) and the effects of liberalisation have been offset by changes in the modalities of implementing policies. Finally, other countries, such as Brazil, starting from the mid-1990s, have established an explicitly dual policy de facto recognising the existence of two sub-sectors in their agriculture.

From the mid-1990s, with some 15 structural adjustments, the institutions that produce the international reference pushed for a differentiated consideration of socio-economic structures and the implementation policies for support and to remedy the negative externalities of competitive integration processes, undertaken in the mid-1990s. These injunctions subsequently had variable consequences depending on the intervention capacities inherent to each State. Their effects were limited or muted in India, Brazil and France, but they sometimes had significant impacts on the policies of States that are not as strong or are more dependent on external aid (Mali).

The period of institutional adjustments: From 1995 onwards

The period that we shall qualify as institutional liberalism (from 1995 onwards) is marked by the importance of the social-liberal reference, and the segmentation of rural policies, both in terms of target publics and tools, in a context of the increasing role of sustainable development. From the 1990s onwards, the failures seen in the processes for State withdrawal and liberalisation (increase in phenomena of poverty, inequalities, violence, etc.) are attributed to the existence of market flaws and led to a renewed interest in the creation of institutions able to support the development of markets and remedy their negative externalities. The issue of governance emerged together with this observation in order to account for the power asymmetries in the development of these externalities, giving rise to a rehabilitation of the role of the State.

The regulatory functions reassigned to the State concern two main dimensions, which are in line with the new governance *credo* as promoted by international agencies:

- Support for the market integration process by producing public goods (allocation for infrastructure, information, training, human and institutional capacity building);
- The correction of the negative externalities of the liberal development model *via* the implementation of compensatory policies (assistance for the most fragile categories, "safety nets",[86] but also support for competitiveness by modernising and offsetting market asymmetries).

The emergence on the agenda of public policies on environmental issues also stems from the negative externalities of the productivist development model being taken into account. With a prioritisation that varies depending on the country, there is consequently a range of attributions related to public action, referring to the corpus which, at the same time, emerges around the notion of sustainable development: social protection (HLPE, 2012), environmental conservation, good governance, and support for competitive integration. In all national situations, the emergence of these attributions continues to be subject to the dominant framework of competitive integration in global value chains. Little do they concern food production intended to satisfy the domestic market (for example, millet-sorghum in Mali).

[86] In certain respects, the fight against poverty may be considered as being in the category of externalities, those related to the negative consequences of the growth model...

Finally, at international level, the multiplication of institutional and operational frameworks for the production of public action can be analysed as an agenda in favour of a dual evolution of agricultural sectors. The technical models that presided over the modernisation of agriculture, particularly in the second half of the 20th century (after 1945), led to major changes, but these changes concerned a minority of agricultural holdings at global level (Losch, 2014) and these holdings were very unevenly distributed to the benefit of developed or emerging countries. They constitute a minority of "modern" farmers, often from family businesses, but also from family farms in countries where agricultural work is mainly manual, sometimes with or without irrigated areas (India). In all countries, there is growing disparity, on the one hand, between a segment of agriculture (both family farms and family businesses) integrated into markets, using the productivity gains required for the increasing international integration or, on the contrary, still benefitting from the high levels of protection, which are subject to specific support policies and, on the other hand, a "mass" of family farmers who, if they have not been overlooked, are offered social assistance or a role in environmental and cultural conservation. They may constitute the majority of family farmers in a country like France or Vietnam, the latter country playing the game of international commercial integration (WTO membership), while placing importance on domestic markets.

b. Development trajectories of the countries studied

There is a certain gap in the national configurations of the countries studied compared to the general periodisation mentioned above. It is, of course, a consequence of national agrarian history, national strategic choices in terms of development, but also power relations with "the outside", the rest of the world, *i.e.* the more or less strong political and economic independence from international financial institutions and other States, particularly *via* regional or bilateral agreements. These configurations also result from the encounter between trends in global references and national trajectories led by national actors, engaged in games of power and influence.

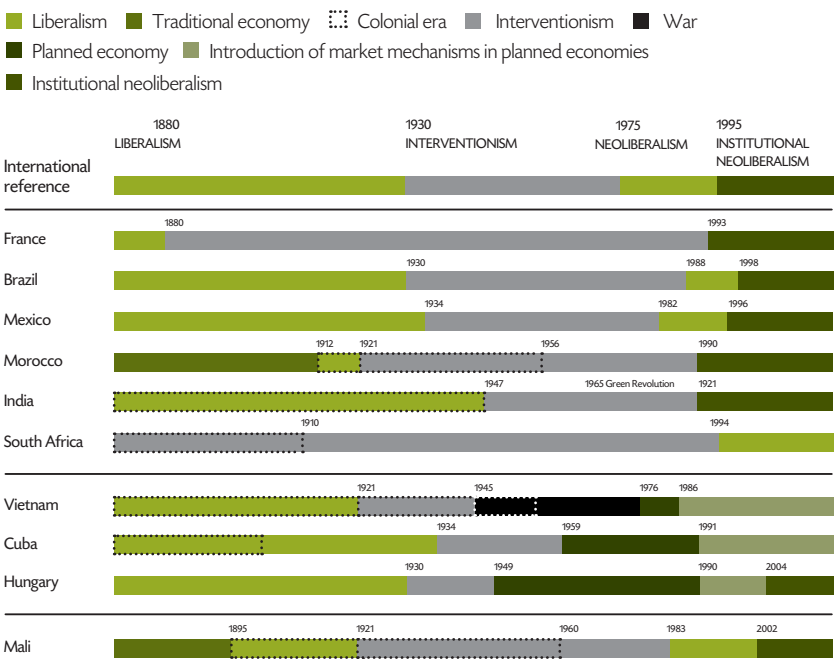
Consequently, strictly in the field of agricultural policies, previous research restricted to a limited sample of countries[87] (Bonnal, 2010), has observed that the content of agricultural and rural policies is, in each country, widely influenced by the combined interplay of the strength of farmers' corporatism, the commercial strategies of the dominant actors in the agricultural sector and the capacity of States to finance their

[87] PROPOCID project, already mentioned, under which the development trajectories of Brazil, France, Madagascar, Mali, Mexico and New Caledonia were analysed.

own policies. It also depends on the fact of whether historically agricultural policies have or have not been a legitimising factor in the construction of States (Léonard and Maître d'Hôtel, 2008; Bonnal, 2010). In the final analysis, it can be considered that it is largely due to the capacity of States to control the economic transition of the 1980s – which itself was conditioned by previous developments – which determines the current room for manoeuvre, particularly concerning the recognition of and support for family farms, but also their capacity to experiment and implement their own public action instruments suited to their national issues.

In this respect, the countries studied for this report offer a wide variety of situations (Graph 8).

Graph 8 *Periodisation of national policies with regard to trends in international references*



Source: Prepared by the authors.

Three configurations can be identified depending on the intervention capacity of States (political will and means of intervention (Graph 8):

- Countries that benefit from a degree of flexibility on the definition of their public policies for family farming. France, Brazil, India, Mexico, Morocco and South Africa have in common a rather broad control of their economic transition and the ability to change, or define, their strategic choices in terms of competitiveness, modernising agricultural structures or supporting a "social" agriculture. But they are widely differentiated by the modalities of the transition and the political choices made;
- Countries that evolve from a planned economy to a market economy with a high level of public regulation. Countries in the process of coming out of a planned economy regime are faced with their own specific structural issues. Depending on how far the collectivisation phase dates back to and its modalities, they adopt differentiated strategies and policies seeking either to facilitate the competitive integration of family farms that have remained in place during the planned economic phase, or to re-legitimise family farming that existed before the revolutionary process by providing them with the necessary support, limited by the State's available funds, or again to transform collective holdings into private companies by marginalising family farmers;
- Low-income developing countries subject to strong constraints from international or foreign institutions. The common feature of low-income countries that depend on international aid is generally that they have been subject to all the rigour of structural adjustment policies during their liberal transition. They subsequently have little opportunity to build or maintain autonomous public policies. In Mali, as in a large number of African countries, and some countries in Asia and Latin America, the State is replaced by parapublic agencies that are heavily dependent on external macro-actors (NGOs, aid agencies), which set up development projects with a distinctive territorial anchoring, based on references for action that are often specific to them, which prevents the emergence of a national coherence.

Table 8 *Main characteristics of the countries analysed depending on the configuration of their economic and political trajectories*

Configurations	Country	Characteristics
Countries with room for manoeuvre	France	Continuity of the political regime and economic policies over the long term. Weakness of the liberal orientation of the 1980s. Sustained and continued policy to support family farmers, coordinated with the EU CAP.
	Brazil	Emerging economy. Trajectory marked by liberalism (19th century), State intervention (20th century) and economic and trade liberalisation (end of the 20th century). Strong historical importance of agrarian elites in the construction of the State. In the recent period, gap between the political and economic reforms, the former having occurred before the latter. Late liberal reform compared to the global movement. Dual agricultural policies specific either to family businesses or family farming.
	Mexico	Emerging economy. Long-term development trajectory similar to Brazil. Sudden economic transition in the 1980s following the economic and tax crisis in 1984. Dismantling then reintroduction of policies to support agriculture, particularly family farming.
	Morocco	Development trajectory embedded in France's colonial history. Sudden liberalisation in the early 1990s, concentration of public support for export agriculture. Reintroduction of broader, dual and specific agricultural policies in the late 2000s, either for the "modern" agro-export sector, which occupies the plain area, or for the traditional sector, which "dominates" in the mountain area.
	India	National trajectory marked by the succession of the British colonisation, establishment of the Republic and the developer State and cautious and limited liberalisation of the economy. While agriculture is mainly family-based, the agricultural policy has never been dismantled. It has evolved from support of the green revolution to a policy for a safety net and support for production equipment.
	South Africa	Trajectory marked by the absence of a liberal period in the 19th century and by a profound liberation of the economy at the end of the 20th century. Family farming, annihilated by the separate development policies (Apartheid) conducted throughout the 20th century is virtually absent. Public policies are reduced and concern support for the competitiveness of family and entrepreneurial businesses and on the land reform, without allowing the re-emergence of family farming.

Configurations	Country	Characteristics
Countries in transition	Vietnam	Trajectory comprising the succession of colonisation, a State under a Communist regime and a phase of economic liberalisation associated with the Communist regime. Strong State intervention to assist family farmers and their cooperatives in order to strengthen their integration into export industries and support production on the domestic market.
	Cuba	Trajectory comprising the succession of colonisation, then liberalism, (19th century) and planned economy (20th century) phases. Cuba, whose economy is still planned, is currently introducing, in an experimental and limited manner, certain market economy instruments. Family farming is subject to an unprecedented and growing recognition and, in this respect, benefits from certain experimental support measures.
	Hungary	Trajectory marked by the liberalism phase, extended by that of extensive State intervention, starting in 1949, by the membership of the Soviet bloc and the planned economy. Since the fall of the Berlin Wall (1989) and its EU membership (2004), Hungary has been conducting its transition towards a moderate liberal economy. The dual agricultural policy gives priority to large structures (large-scale family farms and corporate farms) to the detriment of small family farms.
Developing countries	Mali	Trajectory formed by a dominated economy (French colony) in a traditional economy context (19th, 20th century) and extended by an interventionist regime, reinforced by a short period of planned economy. The sudden and substantial liberalisation, imposed in the context of the Structural Adjustment Programmes (SAPs) in the 1980s has recently been relaxed, while the politically and economically weakened State is seeking to rebuild its legitimacy. Agricultural aid has been considerably reduced with the SAPs and has focused on the two main agricultural production areas, neglecting the farmers from other areas who are often forced into exodus.

3.1.3. *National actors of politicisation and recognition of family farms in our case studies*

The deregulation in the 1980s and turnaround in the the mid-1990s considerably modified the respective importance and role of macro-actors intervening in the political debate concerning family farming.

- The international financial institutions (IFI) change their discourse and their orientations, shifting from an active promotion of farm modernisation in the South to a more mixed position, focusing on sustainable development, the fight against poverty and malnutrition, good governance under the constraint of the necessary budgetary balance and economic accounts and the increase in trade liberalisation;
- Environmental actors have considerably increased their political influence, thanks, in particular, to the emergence of the theme of sustainable development, introduced onto the international stage by the United Nations international conferences (Rio 1992, Johannesburg 2002, Rio 2012). The signing of international conventions on climate change, biodiversity and desertification increased the importance of "conservationist", ecologist and environmental movements. International NGOs were pushed into the limelight and thus became essential actors for political agendas with a weight and influence, more or less significant depending on the country and the national configurations. These actors (environmental and conservation NGOs) overlap and often intervene in competition with the actors of the agriculture sector, rarely in synergy in order to seek and define programmes reconciling the environment and agricultural development. The economic consequences of these positions on national policies remains very uneven depending on the situations and national capacities to translate the recommended orientations for conservation and sustainable development at the economic level;
- States themselves have largely been reconstituted. On the one hand, countries in the South have diversified and lost their apparent homogeneity. While the emerging countries have taken advantage of the opening-up of trade to increase their global market shares and set out on a continuous growth cycle for several years, allowing some to reactivate their agricultural policies, countries under structural adjustment have had lower economic growth rates and have been deprived of the resources required for a public intervention in the agricultural sector (Bosc *et al.,* 2010). On the other hand, South-South technical cooperation initiatives have been established under the impetus of emerging countries (particularly China, Brazil and South Africa), giving rise to foreign investments in the poorest countries and unprecedented technical cooperation;

- The multinational food groups, and those of major retailers and finance, have been strengthened by the opening-up of trade in national areas and have sought new sources of profit in agriculture;
- The structuring of an international protest movement against agricultural intensification, developed in reaction to the contested results of liberal policies. They have been joined by intellectuals, think tanks, and international solidarity and social movements from farmers' organisations, who demand a better sharing of global wealth and the establishment of international rules calling into question the economic hegemony of certain macro-actors. In the agriculture sector, a number of cooperation actions, both bilateral (the Netherlands, France) and multilateral (IFAD, World Bank) promoted the strengthening of farmers' and rural organisations, sometimes playing an ambiguous game, insofar as this strengthening can also be interpreted as weakening the role of the State and consequently being fully in line with the neoliberal project. However, the efforts of development and solidarity NGOs and actors from associations have given a voice to family farmers in fora where they were little or not at all present. [88]

These actors carry differentiated values, representations and discourses concerning public support for agriculture, on the one hand, and the interest in a differentiated treatment concerning family farming, on the other hand. In rather a significant manner, an alert was formulated at the international level over the harm caused by intensive agriculture. Indeed, the 2000s were marked by the publication of several major collective expert reports, which highlighted points of tension in the international debates such as: the Millennium Ecosystem Assessment (MEA) concerning the eco-system services rendered by ecosystems and nature to the economy as a whole and often in the agriculture sector (pollination for example), the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) on the obstacles of the intensive agricultural development model or the World Bank's World Development Report 2008 (World Bank, 2007) on the importance of the role of agriculture for development, which advocates for a change in paradigm in favour of an agriculture more in tune with the environmental issues and participating in the fight against poverty.

[88] This is the case of the challenge made by the Panafrican Farmers Organizations Platform during the meeting of the Committee on World Food Security at FAO in Rome in October 2011, which for the first time saw, on the same rostrum and at FAO, leaders from farmers' organisations and political leaders with the rank of minister.

This research, of which the relevance of the conclusions has been reinforced by the food crisis in 2009 and after, leads to the need to define new agricultural models and implicitly or explicitly recognises the strategic role that must be given to family farming in the search for answers to global challenges. For many actors, family farming no longer appears as a residual social sector, opposed to innovation and technical change, but as a group of diversified production units, capable of generating relevant responses to the complex issues of environmental management, supplying food to cities, conservation of the rural environment, maintaining solidarity networks, etc.

Indeed, hardly any cooperation agency or international meeting shows concern for the development of smallholder agricultures.[89] However, for a number of macro-actors and certain donors, the model of large private enterprises implementing capital intensive productive systems (mechanisation, chemical inputs, GMOs, etc.) would still appear to be the response to the increasing demand for agricultural production and price stabilisation.

The politicisation of family farming at national level results from the interaction of these actors, their representations and their weight in the national political debate. It is necessarily contextualised in the national spaces. But the positions of national actors fit in with the interplay of actors and alliances that exist at the international level through networks, cooperation agreements, commercial contracts, etc.

To summarise this section, among the ten case studies analysed, we can identify the various national configurations of political consensus on the recognition of family farming, the legitimacy of the public policies for that consensus and the effectiveness of the latter.

Four configurations can be distinguished

The implicit legitimacy of public policies to support a majority of family farming

The question of defining public policies for family farming is not an issue, nor is its meaning, in India, France or Mali, given the fact that all agricultural holdings in these countries are considered, rightly or wrongly, as being family farms. Consequently, the agricultural policy is a policy that, in principle, only targets family farmers. The elements that differentiate these three countries are: the diversity of measures to support production, the importance of the consideration of non-productive aspects (social and environmental) and the nature and scale of the means mobilised. In India,

[89] See the inter-agency note drafted during the Mexican Presidency of the G20 (May 2012).

the support instruments are limited, but they apply to a considerable number of families. In France, the instruments are very diversified, integrated and systemic. They mobilise considerable resources, which partly come from the European Union. They apply to a small number of farmers, given the residual nature of the agricultural sector. In Mali, which lacks budgetary resources, the agricultural policy remains largely rhetorical. The aid is limited and only concerns a minority of farmers.

The recent legitimacy of public policies to support family farming with additional functions to entrepreneurial agriculture and family businesses

Brazil, Mexico and Morocco have recently recognised their family farms as a differentiated form of agriculture compared to entrepreneurial agriculture and family businesses. While the latter are mainly recognised for their participation in the balance of economic and commercial accounts, family farming now benefits from a political recognition of its roles in the economic (supply for the national market), social (stabilisation of the population in rural areas), cultural (conservation of values and social ties) and environmental (preservation of natural resources) fields. Out of the three countries, Brazil is the one where the recognition is the most advanced, given its legal formalisation (law defining family farms) and administrative formalisation (creation of a ministry for family farming: the Ministry of Agrarian Development). In the three countries, public policy instruments are therefore specific to the forms of agriculture.

The strategic position of States in economic transition

In Vietnam, Hungary and Cuba, support for family farming appears as a way to manage decollectivisation and the integration of national agriculture into globalised value chains (Vietnam and Hungary). Depending on the types of organisation of agricultural structures during the Communist period, the role accorded to family farming may be significant (Vietnam), or shared with other structures, particularly State-owned companies (Cuba) or private companies (Hungary). In all cases, and depending on very different degrees and intensities, the policies opening a space for the development of the market economy are based on the capacities for initiative and adaptation of family farms.

The weak legitimacy of public policies for family farming needs to be rebuilt

This is the case of South Africa. The conception of family farming is embedded in the ethnic organisation of society and, in reality, only applies to Black and mixed race populations, with entrepreneurial agriculture and family businesses being run

essentially by the white population. At the political level, the issue of family farming consequently corresponds to that of the public resources that need to be mobilised to create a "*Black agriculture*" on which there is no consensus. Post-apartheid policy is experiencing great difficulties *via* a very limited land reform and support for an African agriculture, which is struggling to find its place in the "commercial" model proposed to it.

3.2. Public policies in practical terms: Lessons learned from case studies

The case studies make it possible to address the nature of agriculture sector policies, and territorial, environmental and social policies in terms of their rural dimension. For each of these categories, the prominent characteristics are compared and the more generic lessons that can be learned from them are pointed up.

3.2.1. *The sectoral policies to assist and support agricultural production*

The 20th century experienced its share of famines related to dramatic climate events, conflicts or political choices (India, Sahel, China, Europe) and most of the agricultural policies in the second half of this century aimed to increase production in order to secure the food supply for the increasingly urban population within each State. The case studies analysed show that family farming was not systematically targeted. This is despite the fact that due to the importance of this form of organisation the target was implicit. In other countries, this target was explicit, particularly in the context of official dual policies (Brazil, Mexico and Morocco), or in the context of strong exclusive policies (France in the 1960s, Vietnam during the economic reforms – *Doi Moi*). Other countries chose to support other forms of organisation for agricultural production (Cuba, Hungary), with the extreme case of the apartheid policy in South Africa, resulting in the elimination of "small Black agriculture", which land reform is not managing to rebuild. In several countries, the strong State involvement in the agriculture sector can be considered as a decisive factor in the dynamism of family farming (India, Vietnam, France). Even if the withdrawal of the public authority is being felt, State support has played a decisive role in the provision of services to farmers, sometimes in the context of mixed public-private systems, which are essential for the modernisation of agriculture (agricultural extension, insurance systems, credit subsidies, education and training at various levels, agricultural research) in India, Vietnam, France and Brazil in particular.

In Vietnam, the collectivisation period was rather short and the generalisation of land use rights rapid and systematic, which particularly strengthened family farming. State services play an essential role in the coordination between the production and export of agricultural products, by managing separate domestic and external prices, and by controlling foreign exchange. Agricultural price dynamics are one of the factors that account for the success of Vietnam's export strategy. These services are also highly present in policies to modernise the means of production, and for the distribution of inputs, or technical assistance for producers.

In short, the policies conducive to the development of the production of family farmers, which in the cases observed are reflected in increases in the supply put on the market, in most cases are based on the triptych: (i) facilities provided to access production factors (materials, inputs, credit information and training) according to a technical intensification model based on the triptych "variety improvement/the use of chemical inputs, then mechanisation / motorisation" depending on the case, including investments in infrastructure; (ii) the existence of remunerative markets, generally regulated with a reasoned intervention on agricultural prices; (iii) securing access to land for the family group of the agricultural holding, including the intergenerational transferability *via* a regulation framework for the land market or by securing land use rights.

India's agricultural policies do not diffferentiate forms of agriculture. Small or medium-sized family farms account for the bulk of production units, yet the weight of history remains strong. The country has inherited a very unequal land structure and has not succeeded in allocating land resources to the smallest producers allowing them to earn their livelihood from agriculture alone.[90] This results in a very significant number of landless peasants and micro-holdings in which active workers must sell their labour for part of the year. Consequently, even if the environmental limits of the Green Revolution are today clear, agricultural policies are today part of a general approach to modernisation and intensification (particularly *via* the development of irrigation).

However, these policies maintain instruments to protect the domestic market. Agricultural prices are regulated, with a minimum price system (minimum support price), set by the national agency, Food Corporation of India. This agency also manages the subsidised inputs the farmers have access to. As elsewhere in Asia (Timmer, 2010),

[90] However, on the large irrigated plains, the Indian Government has completed a reparcelling aiming to facilitate the implementation of the technical package of the Green Revolution.

price stability has played an extremely important role in the Green Revolution, particularly for cereal production. In order to offset these prices for producers which are relatively high,[91] social policies covering the field of food have been established to make it accessible to the poorest households thanks to a network of subsidised shops (Fair price shops).

The State's strong involvement in agriculture is considered as a decisive factor in the dynamism of India's family farming. It is also clear in the provision of services to agriculture: agricultural extension, insurance systems, credit subsidies (particularly for the development of drip irrigation) are still widely provided by government departments.

These technical approaches apply the intensification model of the Green Revolution, which was generalised after the Second World War according to differentiated modalities and depending on the contexts, but which are based on the same components, both in developed and developing countries. The main differences in situations are due to the type of "modernisation" resulting from whether or not tillage instruments are disseminated, which has direct consequences on the productivity of the labourer: farming which will thus be conducted with motorisation (tractors and tools adapted to the various farming tasks and heavy transport to manage the transfers of fertility), other forms with animal traction, finally other forms continue with manual cultivation. Depending on the country, the financial or technical support tools are more or less developed or integrated in the context of approaches to the development of sectors (India, Mali, Morocco) for domestic markets and/or international markets (Vietnam and Mali).

The implementation of technological developments is often based on more or less decentralised mechanisms involving, in an uneven manner, farmers' organisations.

In Brazil, based on existing mechanisms, the public policies for family farming especially articulate credit, technical advice and agricultural insurance. The implementation of the Family Farming Support Programme (PRONAF) has allowed family farmers to have access to financing at subsidised rates, which is a major step forward. Brazil has also introduced a federal agricultural advice system, but which is decentralised to the level of federal States and municipalities (*municipios*), associating public institutions and private structures, which benefit from public service delegations or public

[91] If it is not in relation to international prices, at least with regard to the purchasing power of the poorest households.

research. There is a strong link between this technical assistance and the crop insurance system, as the validation of the contract between the farmer and his insurer requires the validation by a technical assistance structure. As with credit, there are specific insurance tools for family farming concerning both climate risks (Family Farming Insurance System – SEAF) and market risks (Price Guarantee Programme for Family Farming – PGPAF).

Depending on the countries and periods, policies conducive to the development of collective actions by family farmers have been implemented by strengthening organisations, depending on various forms: cooperatives, associations, or producers' organisations (France, Vietnam, Mali, India.). These organisation dynamics play a significant role in: (i) improving performance by allowing economies of scale and increasing the market power of family farmers; (ii) at the same time building their negotiation capacities for public policies (Brazil for policies to support family farms, France, including for the sometimes controversial support for certain aspects of the CAP).

In France, the capacity building instruments for farmers and their organisations have structured developments in agriculture. They concern the development of collective expertise *via* the structuring role of modernist agricultural trade unionism, from upstream to downstream, up to the operational capacities to manage "agricultural development" at the end of the 1960s. Today, this co-management system with public authorities is gradually disappearing to the benefit of an increasing privatisation of services. Yet a very significant proportion of the advice is provided by input suppliers (partly made up of supply cooperatives) or producers' groups downstream. The insurance system is private and historically mutualist, but today open to competition from all private operators. The system is mandatory for fixed assets, with a national solidarity in the event of natural disasters. For harvests, there is an incentive in the form of a CAP grant to insure them.

The situation in Mali contrasts sharply with those of countries that have the means to support their agriculture, such as India, Brazil, France, or even, to a lesser extent, Mexico. In Mali, the new Agricultural Orientation Law provides for the registration of agricultural holdings, which can subsequently benefit from political measures, without this yet being reflected in reality. Price regulation mainly concerns the cotton sector (for exports) *via* the cotton company, which is currently being privatised. In 2008, the State initiated a policy to subsidise inputs, seeds and agricultural equipment in order to restart production, initially for rice (rice initiative), which was subsequently extended to corn and cotton production. Cereal prices traditionally fluctuate depending on both local availability (with strong seasonal variations) and the international market (when imports are necessary to supply urban centres).

However, the State of Mali has very few means to finance aid for the production of and access to food for the poorest households. The issue of food security – a structural element of the Poverty Reduction Strategy Framework – continues to be a permanent challenge for a number of households. When international agricultural prices are low, the import of food products to supply urban markets is an element that contributes to maintaining low prices for consumption and production.

The low level of available funding of the State of Mali and its dependence on foreign donors to finance the agricultural and rural sector explains the absence of interest rate subsidies, the weakness of extension services to support the significant active agricultural population (including in cotton areas[92] following the cotton crisis and the privatisation of the sector), and the absence of insurance systems.

In terms of land, the situations are highly variable depending on the country, distinguishing agrarian histories that have produced a structural duality for various reasons (South Africa, countries with a planned economy with large units under State management, then decollectivized – Cuba, Hungary, as well as Brazil, Mexico and Morocco), from other agrarian histories that have not resulted in such marked polarisations, for example, India, Vietnam, or France, even if in the latter case one can assume that a dualism is emerging.

[92] Hence the questions raised over *"le devenir des agricultures familiales des zones cotonnières africaines"* (Deveze and Halley des Fontaines, 2005).

Box 3 *How the land issue is addressed in countries marked by the dualism of agrarian structures: Brazil and Mexico*

In Brazil, on the land issue, policies have made it possible to go beyond the historical and conflictual alternative of agrarian reform. Indeed, the latter (in a process of the seizure of unused land and redistribution to organised landless farmers) has been a common feature of the agrarian policy since the democratisation of the country, but in proportions that are on the whole relatively low, and with limited success. The social tensions over land in the agricultural border areas (particularly in Amazonia) are not addressed by agriculture sector policies.

The land issue, despite the fact that it forms the basis of the Mexican State, is now addressed with a great deal of flexibility: lease contracts, whether legal or not, declared or not, make it possible to go beyond the historical divide between latifundios and "*ejidales*" land, which is managed collectively, by blurring the boundaries between individual and private property, rights of use and of property.

Following in the footsteps of socialists, land tenure security for land cultivated by family farmers totally (Vietnam) or partly (Cuba) is implemented by an extension of the duration of rights of use.

Access to the market is subject to a wide range of measures, on prices – between administered prices with a minimum price, regulated or fully liberalised prices (Mali, South Africa, Morocco and Mexico), or a coupling between administered and free market prices in Cuba – infrastructure, organisations, the possibility to reserve certain markets for family farmers (Brazil) and the existence of support at present (India) or at certain periods (France).

Box 4 *Markets for family farmers in a context of liberalisation in Brazil*

The liberalisation of agricultural markets and the choice of strengthening its competitive integration into the major international markets limit the control of agricultural prices at national level. However, different public action mechanisms do facilitate access to the market of family farm production, for example, access to public collective catering (canteens in schools, retirement homes and hospitals). A dual bid invitation system is organised, with the first only accessible to farmers who produce locally. If local production is not sufficient, the second bid invitation is launched.

Box 5 *The return to market signals in Cuban agriculture*

The centralised planning system in the country has widely obscured the function of prices as indicators of production costs. For the producer, the incentive to produce mainly came from the level of allocation of inputs, which were themselves subsidised by the central State budget. The productive specialisation was practiced within the system of mutual economic assistance, the Council for Mutual Economic Assistance (COMECON).[93] For the consumer, the food products were distributed, for a long time and widely, *via* a State system ("*la libreta*"), in which the consumer only paid a tiny part of the value, the bulk being borne by the central State. Today, this system is gradually being replaced by classic market mechanisms.

Yet the political choices do not necessarily concern family farming, as shown by the experiences of South Africa and Hungary, in very contrasting historical, political and institutional contexts. The public agricultural policies in South Africa are in line with a liberal reference, based on market mechanisms. They support a family business or entrepreneurial model of agriculture, generally white, and reserve the benefit of social policies for the Blacks from the Bantustans, combined with an on-farm production model. The prospects for agrarian reform brought about by the end of apartheid (and the purpose of which is to obtain the redistribution of 30% of land) and the coming to power of the African National Congress (ANC) 20 years ago have not led to substantial changes to date.

In Hungary, land is central to three issues with different timescales. On the one hand, in the long term, the return of family assets collectivised during the Communist period. On the other hand, in the new economic organisation emerging after the collapse of the Soviet bloc, large private structures were formed (capitalistic and cooperatives) managing the former combines. Finally, micro-holdings were created from individual plots and the egalitarian privatisation of State farms. In a market of fragile employment, the latter attracted workers who topped up their non-agricultural incomes with agricultural activities (with a large proportion for on-farm consumption). Since 1991, agricultural prices have no longer been regulated in the country and the strategy to strengthen a market agriculture focuses aid and subsidies on categories of holdings active on the national or international market. The micro-holdings of less than one

[93] Sugar, orange juice, tobacco and rum for Cuba, whereas UHT milk, potatoes, wheat, canned vegetables and even a part of animal feed were imported from Eastern European socialist countries and the Soviet Union.

hectare are excluded from seasonal credit or investment. Only the "commercial" family farming structures have access to it.

3.2.2. *Environmental policies*

Given the issues of food security or the development of production (issues of incomes and the generation of foreign currency by the development of export), it has to be recognised that States have given little attention to environmental questions in relation to agricultural policies. The coexistence between the different policies is the norm, integration is extremely rare, except for considering the second pillar of the CAP as a beginning, but which remains very timid. The coexistence is reflected by a segmentation of spaces in the context of the development of protected areas with measures including economic activities (Brazil in certain cases) or going as far as to exclude them (South Africa). Consequently, there is a general tendency for the segmentation of spaces between spaces devoted to economic development (agricultural and non-agricultural) and the segmentation of policies with a dominant position in favour of "conservationist" approaches. The case of the search for a deeper integration of environmental concerns in the context of agricultural policies remains more rare, but our case studies point to experiences that constitute openings towards innovative practices (search for autonomous technical systems compared to the chemical industry, development of agricultural practices on the principles of agroecology…).

Indeed, certain agricultural policies aim to develop technical models in accordance with environmental concerns, as in the case with agroecological approaches in Brazil or Cuba.

Box 6 *Environmental issues at the prism of agriculture sector issues in Brazil*

In Brazil, the emergence of environmental concerns intersects with the recognition of family farms, but by adopting different prospects and networks for action. While these two are structured in reaction to the domination of agro-exporting visions, the first mobilised agroecology jointly with conservationist logics (even if the two approaches are not without conflicts) to justify family forms of production with potential to be less aggressive for the environment. In reality, corporate agriculture and family businesses also seize upon environmental approaches to strengthen their position, but there are clearly two different registers that draw on specific situations and ambitions.

In countries where natural resources are scarce and/or fragile, as in West Africa (soil, water and vegetation) or Morocco (water, agricultural water), specific actions are implemented with public and private actors and a variable involvement of family farmers and their organisations, territorial authorities, NGOs and public services. The issue of water and, in particular, groundwater management is crucial in the Moroccan context of links between agriculture and the environment. It is subject to specific attention by the Ministry of Agriculture and Basin Agencies, which more or less successfully manage to organise themselves between approaches based on agricultural supply and approaches by the demand of agencies. The fight against desertification in Mali or the Pillar II mechanism of the Green Plan in Morocco, which targets areas with high environmental constraints (slopes, less fertile soil than on the plains, lower irrigation capacity…) move towards a greater consideration of environmental constraints and considerations.

In other contexts, the emergence of the notion of "environmental services" and payments destined to recognise them and enhance their value would appear to be an avenue to explore in order to give it an operational content that cannot be modelled on local conditions.

Box 7 *The disconnection between environmental issues and family farming in Mali*

Beyond intentions, there are few drivers available to conceive sub-national mobilities and their impacts on the development and management of natural resources. Indeed, agricultural areas are subject to very high levels of demographic pressure. The issue of desertification related to the severe droughts in the 1970s and 1980s has directed the environmental recommendations towards reforestation and, later, the adoption of less aggressive crop management techniques, in particular by encouraging organic matter restitution and the development of water and soil conservation techniques. One challenge involves taking into account the weakening of rules for the management of common natural resources and their replacement or articulation with public action. But here again, the drivers remain ineffective, especially since it is usually NGOs that takes over with standardized forms of natural resources management, hampering the emergence of innovative solutions promoting family farming.

Supranational policies (CAP) can play a role, even modest, in the emergence of environmental concerns (Hungary), while the role of the second pillar remains limited in France in the management of a transition towards practices more in line with the principles of agroecology. The technical models that are necessarily local still largely need to be devised and the inventiveness of local initiatives would appear to outweigh the cumbersome public decision-making to initiate the change of course.

It is, however, likely that it will only be possible to envisage environmental policies in the future in the context of territorial policies taking into account productive, social and environmental issues in their entirety.

The weight and diversity of family farms in agricultural and rural populations in the countries studied here have been widely demonstrated. Consequently, all rural public policies (and sometimes urban policies as the links are so strong), but also equipment, education and health policies, also concern these families and contribute to facilitating (or constraining), together with policies promoting production, the strategic options implemented by them. Furthermore, the disarming of sectoral policies from the 1980s onwards – even if we have seen that on certain cases it was very relative – was combined with an affirmation of the role of States and local authorities, towards actions *a priori* less disturbing for the markets. These actions largely concern territorial approaches aiming to reduce/streamline public expenditure and/or circumvent the constraints imposed on sectoral policies. In certain cases, social policies and territorial policies are closely interrelated.

The following paragraphs illustrate, with examples taken from the national situations studied, some main orientations for support to or the marginalisation of family forms of production, which do not exclusively involve market incentives and sectoral policies to promote production.

3.2.3. *Contrasting social policies*

Social policies can relate to three main, non-exclusive, logics. The first concerns policies that are an integral part of the modernisation process implemented.

The case of France illustrates an example of social compromise in the modernisation of agriculture. The modernisation has been combined with a social pact, which aimed to bridge the gap in the incomes of farmers compared to the rest of the working population, particularly urban dwellers with as the counterpart – more or less explicit for the actors – the reduction in agricultural workers. Even if this may be subject to debate, the support for prices, then for the incomes of holdings, is part of this social

compromise around family farming. These social policies have also made it possible to create social protection, which has, however, remained within sectoral limits and generally remains less favourable compared to other sectors of activity.

The second logic relates to how situations of poverty are addressed and mainly refers to the liberalisation period. These social policies aim to support the reinforcement of the dualism in addressing poverty at the level of agricultural holdings and households that do not meet structural criteria and the performance of "agricultural companies", as shown by the case of Mexico. They may also concern target regions or publics (women, young people) in the more general context of poverty reduction policies (Mali) where there is a strong dependence on international aid or in a more autonomous manner (India).

Box 8 *Rural social policies in Mexico*

In Mexico, the trajectory is very different, due to a more radical liberal and industrial shift and a resulting abandonment of agricultural policies addressing family forms (Léonard, 2008). The corrective return towards more intervention and regulation in dual forms is more targeted and on a lower scale than in Brazil. However, similar logics are implemented (with the term "peasant" replacing "family"), between conservationism led by well-structured political and intellectual networks, and environmental and social sustainability. Without as many connections as in Brazil, social policies in the form of direct transfers to families and advances (limited) in terms of statuses for agricultural families, partially replace the reduction of support to family farmers by agricultural policies. This institutionalised segmentation is materialised spatially, with an "*agricultural, market and useful*" North and West and a "*socially supported*" Centre and South. In the latter, the rurality is restructured in pluriactivity by relying on the public transfers from social policies and private transfers related to migration. The latter, which saw a sixfold increase between 1992 and 2006, exceed the national total of public transfers to rural areas and de facto constitute a second set of safety nets. A social safety net has also been established: *Oportunidades,* based on the same principles as the *bolsa familia* in Brazil.

Finally, the last logic concerns the policies to supply public goods, outside the sectoral targets (health, education, equipment in facilities for access to water, sanitation and basic infrastructure), which play a key role in household economies. Their presence can generate a propensity for productive investment by reducing pressure on budgets and times to access these services (drinking water supply vs. time and efforts to fetch drinking water). Conversely, the lack of these basic services contributes towards migration towards urban worlds imagined, often wrongly, to be more hospitable. In fact, this logic tends to increasingly relate to territorial policies, the effectiveness of which depends on the means available to the territorial authorities. The comparison of the means allocated to social and territorial policies in Brazil and Mali is in itself an illustration of the differences that can exist between discourses and the realities of their implementation.

Public social policies (education and health) and territorial development policies (rural electrification, drinking water supply, improvement of road and rail networks…), but also developments in the status of farmer and the related advantages, played a significant role in transforming peasant France into a France of farmers connected to national and international markets. In the current period, the questions raised have become more complex in a context of economic insecurity in rural areas, economic crises and the rise in unemployment, with social policies now being managed by territorial authorities, which pay differing levels of attention to the agriculture sector. Yet we see, and often alongside policies, dynamics of a social nature (reintegration, social activities, associations…), which call into question family production forms once again by developing alternative models (short circuits, organic or sustainable agriculture, local development dynamics…).

3.2.4. *Territorial policies and allocations of public goods*

The following paragraphs illustrate some of the main orientations in terms of the support for or marginalisation of family forms of production, which do not only involve market incentives, and the sectoral policies to promote production. These more or less vigorous triggers in favour of territorial policies, with an integration capacity, give rise to institutional innovations which are often partly based on local initiatives. The question thus raised concerns the dose between procedures and policies driven by the central authorities and local initiatives and dynamics. In many situations, there will indeed be a whole host of local initiatives, often supported by NGOs or associations (Mali, France), but which sometimes find it difficult to go beyond the local level.

In France, since the 1990s, there has been a significant increase in the importance of sub-national territories in development and action (regions, regional parks, leader territories, or inter-communality). It is combined with a shift of competencies and means towards local development. Dispersed initiatives innovate by locally opening up production and markets. These initiatives sometimes implicitly concern the promotion of a reconstituted family farming, but which moves away from the forms of family farming promoted. However, driven by often militant associations, they have little in common with the national and European programmes (including leader). The latter maintain more the fragmentation of public policies with agricultural modernisation on one side, and non-agricultural local development on the other side.

These public mechanisms can stem from: (i) national policies for the devolution and/or decentralisation of the central State, (ii) regional compensation policies (leader programmes in EU countries for regions away from the conventional development dynamics, (iii) but also programmes targeting disadvantaged regions, such as in Brazil or Vietnam or, (iv) territorial policies to support modernisation policies with a priority focus on support for production for family business or entrepreneurial forms highly integrated into markets (Mexico). In Vietnam, the territorial policies have followed agricultural policies, with a spatial approach to public action. The poorest municipalities and regions (where family farming is predominant) benefit from increased and specific attention. However, the main orientations remain highly centralised, which undermines the local adaptation of instruments, and the possible articulations between agricultural dynamics – and their family specificities – and the activation of the specific resources of territories. In the case of Mexico, "Sustainable Rural Development Councils" are established at the various levels of administrative organisation. In addition, the land innovations and recognition of family farm functions that are not directly market-oriented are based more on territorial policies than the sectoral policies themselves.

India has never abandoned a strategic interventionism for questions of food security, and the vast majority of its agriculture is family-based. In recent years, the main shift has involved substituting classic sectoral policies with individual agricultural aid (which had fallen sharply for three decades), public investments generally increasing transfers to rural areas, but especially supposed to better equip and boost territories with strong or growing potential. For example, the development of irrigation and storage facilities in the Eastern States, for which the Green Revolution was limited, is a new priority. But it is today conducted jointly with major efforts in terms of electrification, education and health. The States of peninsular India, which are less favourable for agriculture, for their part play more a role in the acceleration of economic diversification and geographic mobilities.

Consequently, the territorialisation of public policies becomes one of the pillars to support agriculture and therefore family farming. The highly intensive systems, conducted on small areas, lead to these territorial visions being reinforced by adopting specific and localised conservation measures. In the most agricultural States, the joint improvement in the productive and environmental performance of irrigation is strategic, while States turn away from agriculture due to its impacts on water resources.

This territorialisation is also backed by social policies to fight against poverty, which take the form of direct transfers to the most disadvantaged families. In fact, family farmers mainly benefit from these transfers,[94] and they are also the main recipients of public efforts in terms of health and basic education.

Countries in transition towards the market economy are today reconsidering their territorial policies, by inheriting centralised practices that are still functional and, for most, a State agriculture in crisis, leaving room for family business, corporate, but also family farms. The latter must reinvent themselves, what they do at different rates and with more or less strong links with the sectoral dynamics at work. The differences depend on the choices made to manage the transition.

Box 9 *New opportunities for the territories of Cuban family farms*

In Cuba, the transition towards a market economy is still slow, but it holds an advantage for rural families as well as areas for initiatives for them. From an environmental perspective, the introduction of conservation measures has a strong influence on technical practices, particularly around the numerous natural parks. At the same time, the development of a pesticide-free agriculture, specific to family forms of production since the agrarian reforms of the 1960s, is indirectly promoted by the interest in the environment. The decision to biologically fight against plant pests, a sectoral aspect of a logic of autonomy from the outside, has allowed the emergence and expression of an expertise which, after having revealed a marginalisation, could prove to be an asset for the future and even become an argument to defend and support family farming.

At the same time, the policy to control the expansion of Havana has led to the urban concentration of the Cuban population being limited, with indirect but crucial effects

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[94] A sign of the objective of simplifying anti-corruption mechanisms: the direct and regular payment to over 700 million Indians of USD 730 of annual aid per family has just been decided.

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on family farms. It *de facto* obliges the State to take an interest in them and support them, and the efforts in terms of infrastructure and public goods concern more than elsewhere the needs of rural dwellers and do not focus on the capital alone. Even if there are still differences in quality, the *capabilities* of family farmers have been improved by this choice. More recently, this indirect effect has been amplified by the beginning of devolution (with a certain lag compared to the situations in Brazil and Europe). The territorial authorities have obtained more room for manoeuvre and means to apply the central directives, which allows policies to be more effectively adapted to local situations (including for agriculture), but also to more effectively promote inter-sectoral links and the role of family farms in local development.

Family farms also benefit from an effective and accessible education and health system (even if there are still differences between cities and rural areas), a retirement system common to all socioprofessional categories, and interventionist policies for gender equality concerning access to professional responsibilities and salaries. This progress enhances the attractiveness of rural areas as a result of an agriculture that remains profitable. Yet it will certainly not be sufficient to maintain the current geographical distribution in the country, if the decline in public support to agriculture continues.

Brazil and South Africa show radically different perspectives in the field of territorial policies.[95] In Brazil, territorial development, with its participative and situated dimension, is central to the project to recognise family farms (Bonnal and Kato, 2011), whereas in South Africa the territorial policies have difficulty in reversing the trajectories of the past, and particularly the marginalisation of Black family farming by a family business or corporate agriculture. The creation of the new country in 1994 and the provincialisation appeared to open the way for a streamlined decentralisation likely, through a better distribution of public means and production factors, to modify the foundations of agriculture. But it has to be said that the land reform is blocked, and that the environmental policies focus on rationales to sanctuarise protected areas and do not promote the recognition of other agricultural forms.[96] The provincialisation, despite the political and social progress it brings, does not substantially modify the way in which agricultural dualism is understood. The country has chosen

[95] At the same time, considerable public investments (dams, all national) are made to support family business and corporate farmers in the agro-export industry, with significant territorial impacts.

[96] On the contrary, environmental policies create conflicts over use around parks, with the latter covering large, potentially agricultural areas.

a liberal national option and, more recently, contract agriculture, with effects on the rapid decline of the weight of the sector in the economy measured in the country. This choice therefore gives a capital importance to social policies for health, education and the fight against poverty in the support for rural areas that are not part of agricultural markets.

Brazil stands out for having established territorial development mechanisms for family farming – PRONAF and the Territories of Citizenship – which try to combine, more or less successfully, the territorial rationales of projects and the reduction of inequalities and marginality. Family farms have also benefited greatly from the reinforcement of social policies, which started in 2003, in particular with the *bolsa familia* policy. The latter, based on increased transfers, conditional upon families respecting health and education programmes established in parallel, contributes to building synergies between the different approaches, undertaking not to allow the prospects for the development of family farms to markets alone. It is worth noting that these programmes together each address the trade union and militant mobilisations, but also have distinct approaches, with a more general perspective in common. These synergies are, however, hampered by the absence of territorial administration, which weakens their consolidation.

3.3. What public policy instruments to support family farming?

3.3.1. *An important lesson from the case studies: the disjunction between policies and instruments*

The political power relations, resulting from the number of farmers (Morocco, Mali) and or their historical capacity to organise themselves into lobby groups (France), and/or find intermediaries in political parties (India, Cuba, Brazil), clearly determines the political will in terms of family farms. Furthermore, the policies identified are first responses to the issues of national contexts.

Rural public policies in developing countries and disadvantaged territories in emerging countries mainly focus on the fight against poverty. They are most often part of an overall reference strategic framework, intended to integrate all development policies and strategies.[97] They are generally based on a dual target: the poorest, *via*

[97] For example, the Strategic Framework for Growth and Poverty Reduction in Mali.

social policies and the incentive to modernise for a segment of family farms, which are often the best equipped in production factors (Mali, but also India and Mexico). The transition towards an urbanised world a more concentrated agricultural sector is not questioned. It is an observation, a fact presented as an objective that offers the framework for most of the political representations of the possible futures, and this despite demographic trends which, in many cases, point to the continued increase of agricultural and rural populations. The questioning of this type of representation directly leads to legitimising "dual" policies (social on one side, productivist on the other), which worsens the situation of the majority of people, is legitimately questionable.

The analysis of rural policies shows a general decline – at very different rates and intensities of national regulations to the benefit of a governance by international macro-actors. New regulations through standards reduce the role of States at the same time as marginalising the representatives of family farms in decision-making processes.[98]

More specifically on the issue of instruments, some important lessons can be learned from the case studies:

- The successes of the Green Revolution in Asia and of the modernisation of agriculture in Europe have been facilitated by the stabilisation of agricultural prices, at sufficiently high levels to create an incentive to increase the productivity of the various production factors. At a time when there are successive strong variations in international agricultural commodity prices, this lesson is worth emphasising, and even more so because in certain countries, the price variations on domestic markets are just as high and a number of regulatory tools can be mobilised in addition to liberal orders (Galtier, 2012). However, the success of policies to support prices can also lead to an increase in the difference between small and large structures, and be unfavourable for family farming. Consequently, it is important for this to be combined with a framework policy for structures – especially for land – for a coordinated set of instruments and support for production (public investments in rural infrastructure, but also credit, insurance, advice and training, etc.);

[98] To give just one example, the representatives of smallholders are no longer part of the discussions on the certification of palm oil of the Roundtable on Sustainable Palm Oil (RSPO).

- The land issues provide a structure in the politicisation of family farms, with components rooted in national histories. The issue of agrarian reform is thus a strong social issue in countries that have inherited from their agrarian history a dual structure between latifundary estates, entrepreneurial and family farms (Mexico, Brazil, Cuba, Morocco, South Africa). The variety of agrarian histories results in land policies with diversified objectives: redistribution (Mexico in the 20th century, Cuba in the form of rights of use, but also Vietnam); extension of the size of holdings and concentration (France, South Africa); combinations of these policies (Brazil, Mexico). In contexts of considerable land pressure (urban sprawl, high population density), land policies manage as much the protection of the agricultural activity as land redistribution; the instruments therefore also often involve territorial authorities. Finally, land policies are highly influenced by the difficult transfer of family farms, with the weight of the land assets in the inheritance or the installation; many are part of support towards family business forms (France);
- National agricultural policies have been considerably affected by changes in international trade and questioned during WTO negotiations, with a trend to accentuate the separation on environmental and social aspects. Small producers, particularly family producers, are highly sensitive to price volatility. Yet the liberalisation of international markets, particularly for agricultural products, and the integration of small producers into these markets (part of policies to modernise agriculture) have accentuated the volatility and risk exposure of small producers. A set of decisive instruments to protect and stabilise prices have *de facto* been abandoned (Mali, Madagascar, Morocco, India), with major consequences for small producers, and only the countries capable of ensuring a transfer of resources from the rest of the economy towards agriculture can implement ambitious modernisation policies (Brazil, France, South Africa). At the same time, neither the budgetary situation of States, nor the consideration by environmental policies of the negative externalities of the Green Revolution, by taxing inputs or the regulation of the most harmful practices, make it possible today to limit the costs for smallholders (India in particular);
- Interest rate subsidies have been a widely used measure (particularly in the 1960s and 1970s) by certain countries to stimulate the modernisation of agriculture and allow investments with acceptable medium and long-term loans. This measure has often been implemented *via* dedicated banks (agricultural banks with public capital). It is now more a public service delegation. This type of measure, which is today reduced to specific targets – young farmers, upgrading to standards – is reserved for countries that have the financial capacity to

bear the cost of it (France, Brazil). It has widely disappeared elsewhere (Hungary, Cuba). In developing countries, public agencies and donors are opposed to it, [99] despite the fact that the interest rates of private medium or long-term loans are a major constraint to investments for family farms (Mali, Madagascar). Insurance is also a challenge due to the risks related to extreme climate phenomena and the volatility of prices for agricultural products and inputs. Countries with the financial capacity lower the cost for farmers. Elsewhere, it is difficult to establish institutional mechanisms due to the weakness of the market; the resources of family farms only allow the most privileged minority to have access to this type of service;

- The poorest countries have individual and collective capacity building mechanisms for their farmers, who are very limited and rely on international aid (Mali, Madagascar). In the most developed countries, basic education and vocational training, which are in particular imposed *via* the allocation of aid, largely contribute to this capacity building. However, it should be noted that in many cases, vocational training targets the modernisation/professionalisation of the agricultural holding and, by repercussion, undertake to obscure the family nature and the pluriactivity strategies. They may therefore provide support for leaving family farming to work in a company. It is more on the margins that apprenticeship training systems (Farmers' Field Schools, *Maison Familiales Rurales,* etc.) can focus on the family aspects of production;
- All countries have developed extension and agricultural advice structures, which are dependant either on public structures (Cuba, Mali, Madagascar), or jointly managed structures (France), or private-public partnerships (Mexico, Brazil, India). As long as there is a significant agricultural population, the advice especially concerns the technical part of production, in general by crop or type of livestock raising. An increasing amount of technical advice is provided by agro-suppliers (inputs, machines, building contractors…), the function of which is not to optimise the technical and economic management of producers but to ensure that there are outlets in the medium term. Mass dissemination (newspapers, radio, television) is widely used (Mali, India, Morocco). As the integration of agricultural holdings into the market become more complex, advice for the masses gives way to more personalised advice, for which a significant part of the cost is borne by the beneficiary, which tends to foster corporate logics;

[99] Their abandonment being part of the structural adjustment measures.

- The countries that control their political agenda and their development choices (South Africa, Hungary, France) are firmly engaged in extensive modernisation and professionalisation processes.[100] The discourse on the family can be mobilised, with in particular the objective of standardising the activity compared to service sector trades in terms of remuneration and rhythm. But in the national power relations, alternative voices to productivism, and therefore that defend family logics for the organisation of production (*i.e.* not employing permanent employees) are either reserved or largely in the minority. Family farming is not or is no longer considered as a priority issue for territorial development or the management of national solidarity. In these countries, we also observe a disjunction between agriculture sector policies, territorial policies and social policies. This segmentation is predominant, even if a minority of territories with greater integration emerge, with innovative family farming dynamics, often led by alternative spheres, remote from power;
- The countries that have the autonomous financial means to implement their policy, and which recognise and effectively support family farms for their specific characteristics and functions, opt for a dual development, whether historical (Brazil and Mexico) or growing (India). The level of recognition and support is variable, depending on the role played by trade unions, which carry values of family farming compared to the defenders of corporate agriculture. For these countries, the territorial policies are articulated with agricultural policies, giving a decisive role to family farms in specific development territories. The aid to sectors and international integration consequently become more the expression of the other facet of agricultural duality. This is also the case for the social policies that seek to proceed by the same logic and achieve objectives similar to food security and poverty reduction. The policies of these countries in the process of completing a structural transformation, but still having to address extreme rural poverty, are then more segmented by dualism than fragmented;
- The emerging countries coming out of a planned economic period have positions favourable to family farms, and articulate agriculture sector and territorial policies (Cuba, Vietnam). With as key drivers access to land and securing this access and price regulation, the territorial rural policies and recent changes in social policies

[100] In France in particular, the family model has seen a considerable mobilisation at the level of representations and discourses, but, in reality, coming back to the categories defined above, the agricultural policies, focused on supply, have led to the development of business logics and not family forms.

still to a great extent concern family farms. However, there is an increasing segmentation of policies and the models are questioned in terms of their economic viability, their capacity to get to grips with inequalities and their environmental impacts;

- The least developed countries (Mali) recognise the importance of promoting the family nature of their agriculture, which is, in any case, overwhelmingly in the majority. The militant organisations have influence in this sense in national debates. Yet they struggle to have this recognition actually translated into policies, beyond declarations of intention. Their dependence on external macro-actors and the resulting logic of market windows also lead to a strong segmentation between sectoral, territorial, environmental and social policies. The family farms are the vast majority of the public targeted by these policies, but the sectoral references can vary due to the distribution of competencies and financing. This undermines the implementation of integrated and coherent approaches, which are, in any case, limited by the low budget capacities of States.

The current responses to the challenges of access to investment and capital, the urban transition as a driver for agricultural growth, the limits of non-agricultural diversification in situations of crisis and poverty traps, of which a large segment of the rural population are victims, are consequently not favourable and satisfactory for family farms. Agricultural policies struggle to leave strictly sectoral logics and open up to environmental and social issues. The instruments remain focused on supply logics, which generally neglect the family nature of holdings. Their aim is to transform family forms of production into entrepreneurial forms and therefore implicitly for family farming to disappear.

3.3.2. *For an extension of agricultural policies to rural policies, promoting all the functions and dimensions of family farming*

a. The terms for such an extension

Broadening the spectrum and prospects of policies to support family farming first of all requires affirming their recognition as forms of production, but also by the functions they fulfil for society and territories. First of all, if the act of agricultural production justifies sectoral policies, it should not be the only aspect considered: it leads to and articulates a number of functions (positive or negative) of income generation and capitalisation, of natural resources management, of shaping landscapes, of strengthening or weakening community-based social relations, inter-generational and gender relations, of support for food systems, etc. Production is also a territorialised

action and the recognition of family farming also involves recognising its contribution to the creation and renewal of territorial resources. [101]

Depending on the economic dynamism of the other sectors of activity, and therefore options of leaving agriculture, agriculture can play a fundamental role increating jobs, which it is necessary to qualify. Policies to support family farming can thus play a structuring role in accelerating the productivity gains of agricultural work (economies of scale, economy of scope) in more complex family systems of activity.

Recognising the functions related to production also calls for us to look at the diversity of structures and technical models that they implement. This requires breaking with technical standardisation and reasoning by taking into account the environmental aspects at the level of holdings and territories. In this regard, the implementation of agroecological principles should aim to provide productivity gains (reduction of certain monetary costs), while delivering improved agronomic and environmental performance. The performance of productive systems must moreover be measured by the usual productivity indicators, but also as a whole and by integrating their externalities for the environment and social cohesion at the level of the households in question, and in the territory in which they work as well.

On the economic front, this can go as far as evaluating the services rendered by family farms to other economic sectors, in particular in terms of maintaining and activating territorial resources. In what way is the territorial rooting a counterweight to an industrialised and globalised agriculture, which produces standardised commodities for the food industry? In what way does the food on rural, urban national or regional markets act as a driver for other sectors of the economy? In what way does the relocation of food systems contribute to the emergence of new trade regulations, standards and strategies likely to produce knock-on effects? In what way does the stabilisation of agricultural prices also benefit other market sectors?

From an environmental perspective, the costs of an agriculture functioning on technical models that are less aggressive and less costly in energy fuels are increased if we only consider the market economic factors, while the positive externalities are widely underestimated. Technical processes that degrade natural resources less can also contribute to facilitating economic diversification, while creating positive long-term effects on the environment.

[101] Understood as specific qualities, related to regional areas and know-how and which can be mobilised at various levels by actors in territories. The territorial resources have a specific dynamic, as political and social constructs, but are also revealed, activated and renewed thanks to the agricultural activity.

From a social perspective, similar approaches should lead to a reconsideration of the actual values of the externalities of the different forms of production and the complementarities and synergies that can come from combining them. The link between the family and the economy could in this respect be given greater attention, as well as the implications in terms of social policies of a choice in favour of a family model for the organisation of production. Just as payments for these services are established, the measurement of the social impacts of family farming – thinking in particular of the costs for society of a deteriorated social climate – could be envisaged and translated into an instrument for public policies. More generally, the family form of agricultural production should be subject to an extensive re-examination, in order to devise social policies adapted to the social standards and diversity of family and professional situations.

But it would also be necessary to go beyond the sectoral level and, at the same time, recognise the other activities implemented by agricultural families and their related functions, here again thinking in both sectoral and territorial terms. Just as it is necessary to envisage the environmental and social implications of agriculture, the costs and products of systems of activity must be considered in an overall manner. This also leads to taking into account the geographical mobilities of family members and considering the multi-location of systems.

b. Overview of some instruments

In terms of instruments, the recognition of family farming and understanding its economic and social aspects as a whole requires innovations and certainly breaks with classic measures, which widely still need to be explored and achieved. The following elements give some avenues for reflection:

- **Integrate the diversity of agricultural holdings as a basis for differentiated agricultural policies.** The recognition of the wealth of agricultural diversity is essential in order to switch from sectoral logics to territorial approaches. This requires implementing diagnostics, on territorialised bases and rooted in the realities of the different forms of territorial governance, characterising this diversity, the economic, social and environmental performance of these different types of family farms (but also and, of course, of other types), their interrelations (complementarity, synergies, competition) and their impacts on the territory. The differentiation elements presented in the first part of this report offer avenues for this type of diagnostic. The technical and economic content of the support should be considered in order to promote this diversity in family farms and with the other types, at the same time as recognising the functions they

fulfil for society. From a technical perspective, as already pointed out, this calls for the performance of production systems to be measured using new social and environmental indicators, but also for the prospects for new effective technical systems to be explored according to these criteria. In terms of the modulation and calibration of aid, it is a question of differentiating access to resources by diversifying credit instruments, social assistance, support for agricultural and non-agricultural activities depending on the economic situation of families, their capabilities, their territorial rooting, etc.;

- **Recognise the multifunctionality of family farming in instruments.** A first avenue, which is not new, but the implementation of which would deserve real attention, is the consideration of the multifunctional nature of family farming. This means combining environmental, social and productive measures. It would involve remunerating these functions, many of which are not taken into account by the market. But it could also involve aid considered in a more comprehensive manner – status, infrastructure, etc. – allowing these functions and combinations to be activated. Generally speaking, it would be important to define the functions, but also the indicators allowing the capacity of family farms to fulfil them to be evaluated, according to local contexts. Instruments had been implemented in France, notably in the early 2000s, it would be necessary to build on them, on the basis of their evaluations, and link them with the ongoing reflection and research on payments for environmental services;
- **Reinforce land governance** by a combination of interventions integrating (i) tax policies (for example a progressive land taxation according to the size of holdings, or of a part of the capital gains related to the change in land use when construction land is sold…), (ii) regulatory provisions (cap on land leasing and sharecropping to limit land rent…, limitation of land use…), and (iii) the creation or reinforcement of *ad hoc* mechanisms (public, by public service delegation, private…), in order to facilitate inter-generational transfer outside the family contexts of holdings (such as the "Terre de Liens" association),[102] limit land concentration, and secure access rights to land resources (notably for young farmers, particularly outside the family context). On this last point, it would involve taking into account existing institutional mechanisms mobilising the range of possible legal forms of public property (such as the *Conservatoire du littoral* coastal protection agency or Land Offices in France), assigning or not conditional and transferable use rights (as in Vietnam), a collective private

[102] http://www.terredeliens.org

property establishing contracts with users or cooperative member forms (Cooperatives for the Use of Agricultural Equipment – integral CUMA, Cooperatives of Public Interest – SCIC) in addition to the various private forms that exist in the legislative frameworks of each country.

- **Innovate in terms of social instruments, promoting the links between the family and the economy.** The idea is to jointly promote, and in a coordinated manner, the production functions destined for the market and all the social functions of family farms. The adjustment of rural social policies with urban social policies must be sought, but by taking into account the objectives and livelihoods of families. The self-supply of food, from agriculture, but also from the other activities developed, must in particular be promoted and recognised, as it contributes to the inclusive nature of rural systems of activity. It also often constitutes a significant proportion of the valuations of family production. Such a prospect therefore calls for an increase in social transfers, subject to conditions of respecting the social standards in force (health, education, social protection), in order to improve the capabilities of the members of the holding, which could be mobilised effectively elsewhere. For example, this can be instruments that reduce inequalities within families and facilitate inter-generational transfer processes, while remaining within the family context. We are also thinking of the need to take account of mobilities in the instruments to support holdings and in territorial development policies. But more generally, it involves, based on feedback from programmes already initiated, exploring prospects for public policies, supporting the poorest families without conditioning this support upon acts of market production. The examples of the "*ProHuerta*" program in Argentina or the "*bolsa familia*" in Brazil have indeed shown that unearmarked aid had a significant effect on the levels of agricultural production because they activated the social and productive resources of rural families. Finally, it involves creating the conditions to allow the family-production link to be expressed. Furthermore, in the case where sectoral policies based on developing supply are maintained, aid allocations must take into account social justice criteria with, in particular, ceilings on aid that take into account the size of families for family farms and family businesses.
- **Strengthen support mechanisms for collective actions (cooperatives and other organisations)** by regulatory and tax provisions. The limitation of investment costs through forms of multiple cooperatives (Cooperatives for the Use of Agricultural Equipment – integral CUMA, Cooperatives of Public Interest – CUMA, Workers' Production Cooperatives – SCOP, Cooperatives of Agricultural

Collective Interest – SICA, Economic Interest Groups – GIE, Cooperatives of Collective Interest – SCIC in France) is an instrument of competitiveness for family production structures by allowing them to benefit from economies of scale without concentration – particularly in terms of land. These forms also make it possible to gain access to markets, gain added value beyond production alone, share certain risks, etc. the mutualist financing or insurance mechanisms for agricultural or rural activities are another instrument to develop the generation of incomes with a social control that can be positive. Here again, there are innovations and other collective types of action are possible; they often come about in alternative contexts, particularly in the social economy and solidarity-based sector, and provide collective and original responses to crisis situations. Identifying, documenting and promoting them should be encouraged.

- **Continue innovation in terms of instruments for environmental management.** Rather than thinking in terms of compensation or dictates for good practices, it also involves giving family farms the means to implement environmentally friendly practices with measures to limit the negative effects of a strictly market-based regulation. By addressing the problem before the degradations or good practices and on the basis of specific diagnostics, these instruments indirectly make it possible to make operative the positive functions seen in family farming. The objective would be to establish environmental approaches by securing access to the resources of family farms: land, water, forest resources, animals, credit, etc. For example, this involves developing management rules for common goods, by defining common standards for the use of natural resources (water and biodiversity management bodies, etc.);
- **Reduce the levels of risk that family farms are subject to.** One of the weaknesses of family farms resides in their vulnerability to certain market relations, and in particular in the face of an excessive deregulation of markets. As a result, a greater and more effective market regulation, as well as an adjustment of standards and possibilities to negotiate these standards for the representatives of families can secure family farms. This is also the case for strengthening the sustainability of technical systems, which could include promoting the diversification of production. Finally, differentiated policies, which are much more favourable to diversified structures than the normative visions that are currently given priority, would reduce the uncertainties of family farms;
- **Raise the profile of family farms and their functions.** The support for development also involves giving visibility to family farms and their actual performance, in relation to the functions they fulfil. Statistical systems must

provide better information on the valuations of the non-market production of family farms, but also and more generally, the social and environmental services (as well as the degradations) rendered by families. This issue is both to have more consistent elements to define and implement the policies and to measure the effects and adapt them. It is a considerable challenge that is difficult to meet, especially because these statistical systems should also be able to collect information on the diversity of situations and performance;

- **Adapt institutional frameworks to give family farms their rightful place on the development of territories.** It is necessary to consider family farms as an overall political, social, and economic project and allocating the public policy instruments for this choice requires adapting and decompartmentalising the existing institutional frameworks. Research, advice, capacity building, market instruments, social assistance standards and the production of indicators must be renewed by breaking away from sectoral and supply logics (logic of production alone) as the main orientation for interventions. Depending on the agrarian histories, demo-economic dynamics, social power relations, the role of family farms can be secured, either by specific policies to mobilise differentiated tools and means, or by generic modernisation policies aiming to improve incomes and living conditions for farmers and rural dwellers and promoting their multifunctionality (or the social and environmental externalities they generate).

4. Themes for further developments

The study has allowed an initial review, but has also raised new questions worth subsequent development. The field of research is vast and would allow a renewed approach to agricultural development and sustainable rural development

4.1. Research to analyse the impacts of production models

There is no empirical and systematic research to document the impacts on sustainable development of the different forms of organisation of agricultural production. This issue had not been a real concern until now, neither for the research community, nor for politicians. This observation demonstrates the need to invest in the production of information to feed into the political dialogue and assist in the formulation of appropriate policies. The information systems will need to have a sufficient scale to allow knowledge to be updated and to measure the impacts that the territories of the different forms of organisation of production have on sustainable development. It is in this context that the World Agriculture Watch initiative, housed by FAO since 2011, with support from the French Ministry of Agriculture, Agrifood and Forestry and Ministry of Foreign Affairs, FAO, IFAD and CIRAD, was created.

4.2. Pay more attention to working relations and the forms of family organisation

The study places the issue of work at the centre of several questions, the terms of which vary depending on the contexts. Family farming is not impervious to social developments and particularly to forms of family blending and changes in the different national contexts (inter-generational relationship, contours of the household, gender relations), and it is necessary to deepen reflection on the influence that these changes have on the modification in the actual types of family farming. This more in-depth examination would contribute to the analysis of their resilience.

In short, in countries that have achieved their demographic and economic transition, the relationship with work in agriculture is influenced by the prevailing standards and values in the rest of society. The relationship with work and its organisation in agriculture is recomposed and new forms of organisation beyond the family are emerging. These transformations take on a wide variety of forms: networks, companies, service providers, self-employed associative agricultural, agriculture to "reintegrate" vulnerable or marginalised populations, and local food circuits. It is therefore essential to understand these changes in order to anticipate the definition of the most appropriate policies to support them.

In countries experiencing rapid demographic, economic and social transition (emerging countries or contexts of large-scale agricultural development), the development of employment relations remains a central issue of debate. Access to paid employment often remains a benchmark in relation to the economic hardship of a number of rural situations, but the development of paid employment is also the expression of the new power relations within the economy and of the society that crystallises the positions of groups of actors (particularly agricultural organisations). More generally, in many countries, the lack of opportunities for non-agricultural employment leads to new models of multi-active and multi-local activity, in connection with the development of migration, which has a permanent effect on the functioning of households and the decision-making process.

4.3. Pay close attention to emerging technical models

More generally, this study raises the issue of productive models. It in particular pinpoints the differences and divergences between the intensive models – for which we are now well aware of the fragility and the environmental damage, but also the formidable effectiveness in the short term – and the models generally relating to the various principles of agroecology – which raise many hopes, but for which the technical references are still by far insufficient and often require considerable investments in terms of work.

In countries with high population growth that do not have an alternative to agriculture, it is essential to place labour at the centre of reflection and policies. The technical options that greatly reduce labour (not to be confused with the reduction in arduousness) appear to be risky without serious sources of non-agricultural employment. Agricultural policies should be reasoned taking this variable into account, which has never been the case in the past due to an overly exclusive vision of the role of agriculture.

Consequently, in such a context, policies aiming to develop food production with a view to improving the on-farm consumption of rural households, but also marketing surplus, can prove to be as profitable (for the populations in question) as policies to integrate producers into the international market, which have dominated over the past two decades.

4.4. New family farming products in response to trends in food demand

Family farms have historically been associated with the supply of commodities to markets, both for food production for domestic markets and raw materials for export or for uses other than just food (construction, clothing, energy, etc.). They have been able to follow the requirements in terms of standards. But eating habits are changing everywhere and lead to new demands, which can provide new opportunities for family farms. In all countries, non-food production should also retain the attention of decision-makers, given the renewable nature of production.

In high-income countries, an increasing number of consumers are sensitive to quality markers. Certain family farms are today positioning themselves on differentiated markets, structured by the quality of products, their origins and the ways of producing them. The question raised is that of the economic viability of the technical and economic models that underlie these logics between, on the one hand, the supply of standardised commodities to the agro-industry and for large-scale distribution and, on the other hand, the direct supply of products to consumers.

In developing countries, urban growth also causes major reorganisations and offers new market opportunities, which go beyond the classic integration of international markets. The growth in urban demand, but also changes diet and consumer needs (processed or pre-processed products) offer prospects for the development of local agriculture and the rural processing of products.

4.5. Highlight the importance of social movements in transforming family farming and its politicisation

A more extensive analysis of social movements in agriculture and rural areas would also allow a better interpretation of the power relations and the needs of local actors in terms of support. It would also foster the emergence of a debate on policies and contribute to reinforcing it for the definition of actions adapted to the economic and social situations in each context in general and for each form of agriculture in particular.

4.6. Finally, contribute to bringing about changes to the representations of family farming

The interest of the proposed definition of family farming is that is based on specific characteristics and makes it possible to "refuse" a decontextualized comparison with the family business and entrepreneurial forms. Indeed, we consider that this comparison leads to a bias in the representation of family farming by limiting it simply to the productive function in a competitive context, which does not correspond either to the reality of local situations, or to the functions expected of agriculture. Our research has highlighted the diversity of the contributions of family farms in the economic, environmental, social and cultural fields: they produce agricultural goods, render environmental services, provide employment and incomes, contribute to the economy of rural territories and territorial balances, and preserve social links and cultural heritage. By their multifunctionality, they are eminently modern and have advantages to meet the challenges of today, as long as they benefit from an appropriate economic and institutional environment.

The issue of their recognition is therefore central, just as that of categorisations, which is far from being anecdotal. The assimilation to an imprecise category of small-scale farmers contributes to reinforcing an inaccurate image of family farming and to bringing about public action strategies that are not in tune with needs. Finally, the International Year of Family Farming provides the opportunity for a debate that should lead to public policies that rise to the challenges, based on political choices that are also societal choices.

There are three levels to these challenges: the definition of family farms, which this study aims to debate, that of national policies for the rural sector, with the broader aim of territorial development, and, finally, that of international cooperation and Official Development Assistance, which has a role to play in the collective reflection on the diversity of agricultural and territorial development models and trajectories.

Acronyms and abbreviations

AFD	*Agence Française de Développement*
ANC	African National Congress
CAP	Common Agricultural Policy
CFS	Committee on World Food Security
CIRAD	Center for International Research on Environment and Development
CNR	National Council for Rural Consultation and Cooperation (Senegal)
COMECON	Council for Mutual Economic Assistance
CUMA	Cooperative for the Use of Agricultural Equipment
EIG	Economic Interest Group
EMBRAPA	Brazilian Enterprise for Agricultural Research
EU	European Union
FAO	Food and Agriculture Organization
FONGS	Senegalese Federation of Non-Governmental Organisations
GATT	General Agreement on Tariffs and Trade
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
IFAD	International Fund for Agricultural Development
IFI	International Financial Institution
IIED	International Institute for Environment and Development
ILO	International Labour Organization
ISI	*Industrialisation par substitution des importations*

MAAF	Ministry of Agriculture, Agrifood and Forestry
MAD	Ministry of Agrarian Development (Brazil)
MAEDI	Ministry of Foreign Affairs and International Development
MAPA	Ministry of Agriculture (Brazil)
MDGs	Millennium Development Goals
MEA	Millennium Ecosystem Assessment
MERCOSUR	*Mercado Común del Sur*
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PES	Payments for Environmental Services
PGPAF	Programme to Guarantee Prices for Family Farming (Brazil)
PRONAF	Programme to Support Family Farming (Brazil)
ReNAF	National Family Farming Register
ROPPA	Agricultural Producers' Organisations of West Africa
RSPO	Roundtable on Sustainable Palm Oil
SAP	Structural Adjustment Programme
SCIC	Cooperative of Collective Interest
SCOP	Workers' Production Cooperative
SE	Environmental Services
SEAF	Family Farming Insurance System (Brazil)
SFER	French Society for Rural Economics
SICA	Cooperatives of Agricultural Collective Interest
SSA	Sub-Saharan Africa

TERA	Territory, Environment, Resources and Actors Department (CIRAD)
WAW	World Agriculture Watch
WTO	World Trade Organization

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Family Farming Around the World

Definitions, contributions and public policies

Family farms are central to both contemporary changes and contradictions in agriculture. They have been, and are still, the crucible for a whole host of agricultural innovations and major revolutions. They form the social basis of most Southern countries and contribute to supplying their local, national and international markets. Paradoxically, however, they constitute the vast majority of poor rural households which are also in a situation of food insecurity worldwide. They sometimes operate using specialised, and highly artificialised, intensified models (agrochemicals and mechanisation). In this respect, they do not escape the questions and criticism directed to agriculture and its capacity to meet the contemporary and widely globalised challenges of climate change, food security, the increasing scarcity of fossil fuels, and the prevention of emerging diseases. But family farms also provide alternative production models to conventional intensification – sustainable agriculture models or new energy sources – which differentiates them from corporate farms and can bring solutions to the world's food, social and environmental challenges.

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