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**[ Working Paper ]**

## Which Framework to Analyse Contemporary African Agricultural Holdings?

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### **Introduction**

In this paper, we propose to set a framework to analyse family farming with a specific focus on examples drawn from African situations. After some initial observations regarding African agriculture we then highlight a few points that justify the use of the sustainable livelihood framework to represent family farming. These reflexions are based on a Working Paper<sup>3</sup> followed by a collective book<sup>4</sup> that explore these conceptual and methodological dimensions. Two situations are presented to briefly illustrate the use of the framework: Mali and Madagascar. We conclude by some limits and suggestions to overcome them.

### **1. Setting the Scene: some structural traits**

Before entering the conceptual and methodological debate, we would like to address some points that often lead to misconceptions which are: (i) the observation unit and how to define it? (ii) the debate around markets vs self-provision for the family; (iii) beyond the family farm units, “collective action” that brings several units together is also part of the framework; and (iv) the need to reframe the divide between rural and urban in order to think the future of agriculture which requires to face the demographic and employment challenges and to go beyond the liberalization policies and strongly reshape policy packages

#### **The observation unit and how to define it?**

Based on many reference work (Faye and Benoit-Cattin, 1982; Gastellu, 1980, Winter

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<sup>1</sup> Cirad, UMR Moisa, <https://umr-moisa.cirad.fr/>

<sup>2</sup> Cirad, UMR Art-Dev, <http://art-dev.cnrs.fr/>

<sup>3</sup> Diversity in family farming: Theoretical and empirical approaches to its many forms in Rethinking Development, Working paper Series University of Pretoria, [https://www.researchgate.net/publication/297700616\\_Diversity\\_in\\_family\\_farming\\_Theoretical\\_and\\_empirical\\_approaches\\_to\\_its\\_many\\_forms](https://www.researchgate.net/publication/297700616_Diversity_in_family_farming_Theoretical_and_empirical_approaches_to_its_many_forms)

<sup>4</sup> Diversité des agricultures familiales de par le monde (free download from CTA site: <http://publications.cta.int/fr/publications/publication/1839/>), published in English version by Springer (<https://www.springer.com/it/book/9789402416169>)

1975) for Amira Group...) there is not a systematic correspondence between the household [or the so called “extended” family that may include several households] and the production unit, the residence unit and the consumption. In addition to this preliminary observation, the family structure and its internal organization may also vary widely even within a country. For instance in large families collective fields are farmed under the responsibility of the family’s head, but young men or women may also farm “individual” plots - that gives them a certain autonomy but may have agronomic consequences on the ecosystem (Bainville, 2018).

In general, family farming can be threatened by the land grab process led by corporates, pension funds, States and sovereign funds (Anseeuw and Ducastel, 2013) but also by a less visible land grab led by urban elites buying lands (Levang and Nkongho, 2012). These units are also part of the current landscape, can play a leading role in the transformation of agriculture and need more investigation.

### **Collective action**

Common mistakes about African agriculture are to consider it as collective – which derives from equally false but opposite narratives on African societies: (i) collective action should work because of the (false) collective nature of African agriculture; (ii) collective action cannot work because of several traits of African societies facing inadequate governance leading to collective mismanagement...

Reality is more complex and in defined conditions collective action truly works in Africa in the same way than in other situations elsewhere on the globe – and elsewhere, collective action also fails if these conditions are not met. Collective action cannot efficiently develop without the adequate institutional and enforcement framework: the rule of law.

### **Self-provision of food vs market**

Issues regarding market integration are often presented for Africa as the shift from subsistence agriculture to commercial agriculture, the former being “backward” meanwhile the market is described as the pathway to modernity.

This is an ideological vision because it is not a shift but a lengthy process of co-existence of self-provision and market production rationales; self-provision can only be dropped by a minority of the holdings highly specialized and fully integrated into secured markets. And for these units, crisis may jeopardize their existence...as it can be observed in Europe with the recurrent milk or pork crisis and the huge number of smallholdings relying of self-provision in Eastern Europe, but not only. For the huge majority and as it happened in other contexts market and subsistence go “hand in hand” and complement each other. We may even assume

that a stronger market integration may benefit from a strong share of self-provision. Historians have pointed out the process (Aymard, 1983; Le Roy Ladurie, 2002) and many empirical observations in African situations (Losch et al, 2012) show the importance of self-provision in contemporaneous agriculture not only in Africa (see for instance for EU Davidova et al. 2012).

### Export vs national – regional markets

After independence during the decades 1960-70, there has been a long-standing debate of export vs food crops about African agriculture connected with the debate on “import dependency”. But the figures here show that the food markets are the “true” and massive engine for agricultural growth in the next decades. Food markets are not only to feed the capital cities, but their growth is supported by the densification of the networks of small and medium towns that tend to occupy space (Bricas and Tchamda, 2015).

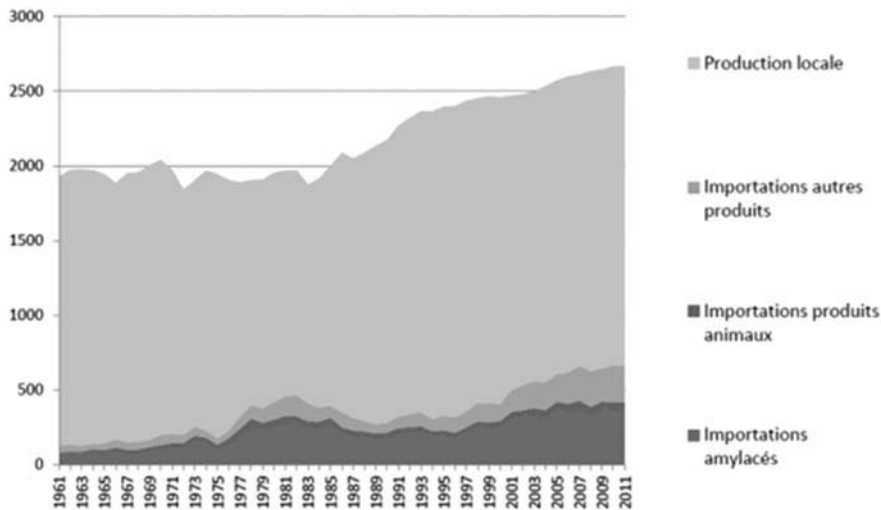


Fig 1. Part of importations in food disponibilities in West Africa, Cameroon and Chad

Source: Bricas and Tchamba 2015

### Demography and employment

This densification is led by the unique demographic situation of Africa for the coming decades up to 2050. While other continents are facing ageing of the rural population, Africa will experience a demographic boom until reaching the point where demographic transition will start.

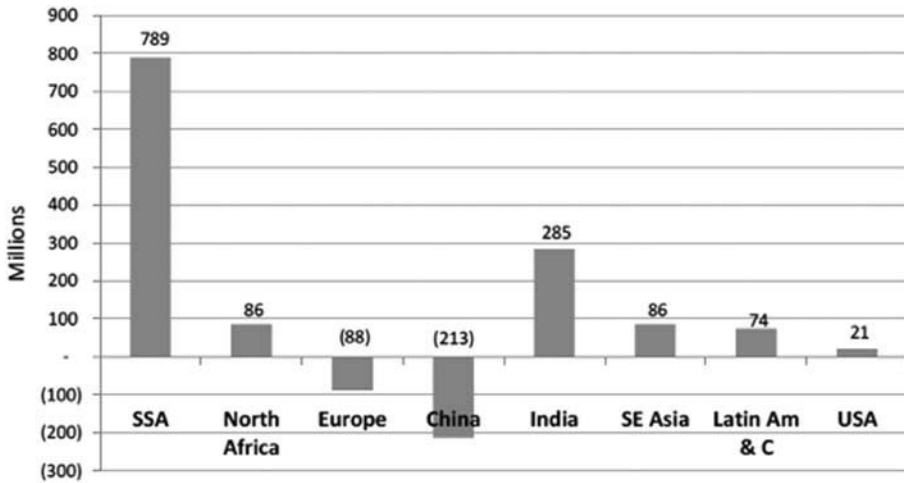


Fig 2. Labour force increase by major regions and countries (2015-2050)  
 Source: Losch 2016

At the global level, over the next 40 years, sub-Saharan Africa will count for 50% of world's population growth. This demographic push will translate into massive cohorts of youth entering the labor market, both in cities and in the so-called rural areas. With nearly 800 million new workers in rural areas, this increase is twofold the increase during the previous forty years. Considering current employment dynamics, job creation everywhere people live appears as a strategic priority for Africa's stability and food security.

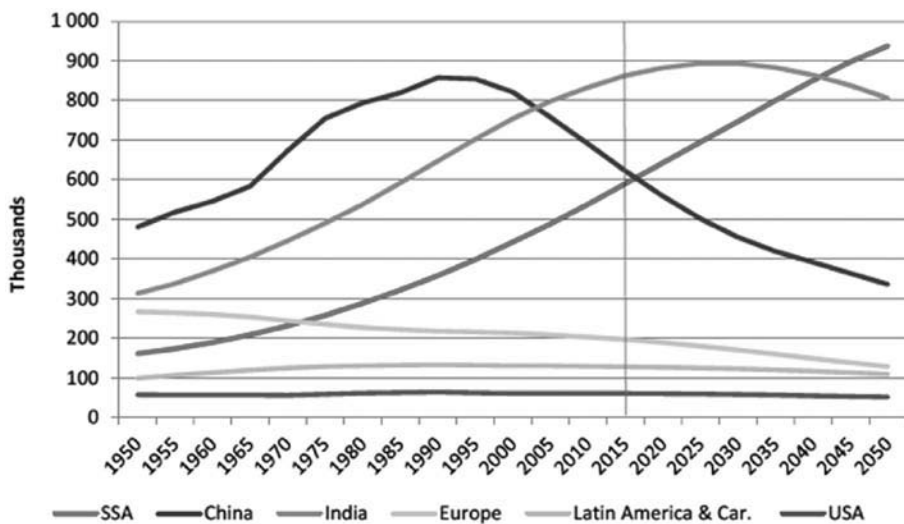


Fig 3. Evaluation of rural population by major countries and regions (1950-2050)  
 Source: Losch 2016

## 2. The livelihood framework to represent African family farming

### Family Farming

Family farming is a way of organizing farming activities characterized by strong linkages between the family patrimony and the productive assets on the one hand, and by the exclusive reliance on family labour, excluding permanent hired labour, on the other hand.

Excluding permanent hired labour is to have a clear analytical definition of family farming which by no means aims at being normative. Here, the objective is knowledge with the need to identify and to count: who are the family farmers and how many are they? Being normative is the domain of policy-making but to do so policy-makers require an analytical baseline to identify who can be considered as a family farmer and decide if this normative definition will include or not holdings that also rely on permanent hired workers to perform. Having a clear analytical definition is not a policy normative definition but it may have clear policy implications to support the choices given the importance of labour in agriculture and for many developing countries given the importance of the labour force engaged in agriculture, often over 50% of the total labour especially in Africa.

This core definition implies to define farms which are not family farms:

- the family business farms combine family and permanent hired labour and both assets and the farm governance are **under family control**;
- the corporate or entrepreneurial farms relies only on hired labour without any linkage between the owner of the assets and the hired workers

	Corporate agriculture		Family agriculture
	Entrepreneurial forms of farming	Family business forms	Family forms
Labour	Hired only	Mixed, existence of full time hired labour	Mostly family, no full time hired labour
Capital	Shareholders	Family or family association	Family
Management	Technical	Family /technical	Family
Consumption	Not applicable	Residual	Partial to dominant on-farm consumption
Legal status	Limited company or other type of company	Farmer status, associative forms	Informal or farmer status
Land holding	Ownership or formal tenant farming	Ownership, or formal or informal tenant farming	

Fig 4. Family vs other organisational forms of agriculture

Source: Bélières et al. (2015)

### **Main reasons to focus on labour**

Several reasons can be put forward to support the rationale to focus on labour. It is a way to bring into the debate the social dimensions of family farming regarding the status of the family members and the related social protection issues. Current normative policy recommendations support a segmented vision of the social dimension in agriculture: women and young being the emblems of such policy options. Without being naïve and recognizing the internal family inequalities and unequal distribution of roles and benefits within families, there is also to recognize the role of these kinship ties - going beyond the household – in crafting the resilience mechanisms of family farming. Social protection and selected proactive incentives towards women and youth should also consider to reinforce the cohesiveness of the social units.

The agricultural policies have historically being targeted at improving the economic side of the production unit. Social dimensions have been left behind. Focusing on the social dimensions also forces to consider the provision of public goods: access to clean water, health care services, access to (renewable) energy, internet and access to education... in rural areas as complementary policies required by the social component of the production unit.

### **Why using the Sustainable Rural Livelihoods (SRL)?**

Evolutionary trends and international and local contexts partly explain and shape the different forms of production. But they are also fashioned by the overall capital endowments of the domestic groups and production units, and by capabilities and specific functioning. The effective use of specific combinations of capital and their translation into forms of production, enable strategies to be implemented. The performance of the forms of production and their economic, social and environmental consequences can also be assessed on several observation levels in line with the sustainability challenges.

Performance can be extrapolated to the scale of relevant territories (depending on local configurations), if based on randomly surveyed production units, and then be put in perspective with outside forces affecting its evolution.

The methodological principles guiding the analysis of domestic structure are useful. The measurement and qualification of capital endowments and the conditions for gaining access to them indeed appear to be important elements for representing diversity in the forms of agricultural production. This broad perspective (beyond the farm only) makes it possible to integrate pluri-activity and mobility in the representation of the forms of production. It is a matter of ensuring the comparison between these forms, not in terms of performance, but in terms of structure and strategy, agricultural production and, more widely, reproduction. This

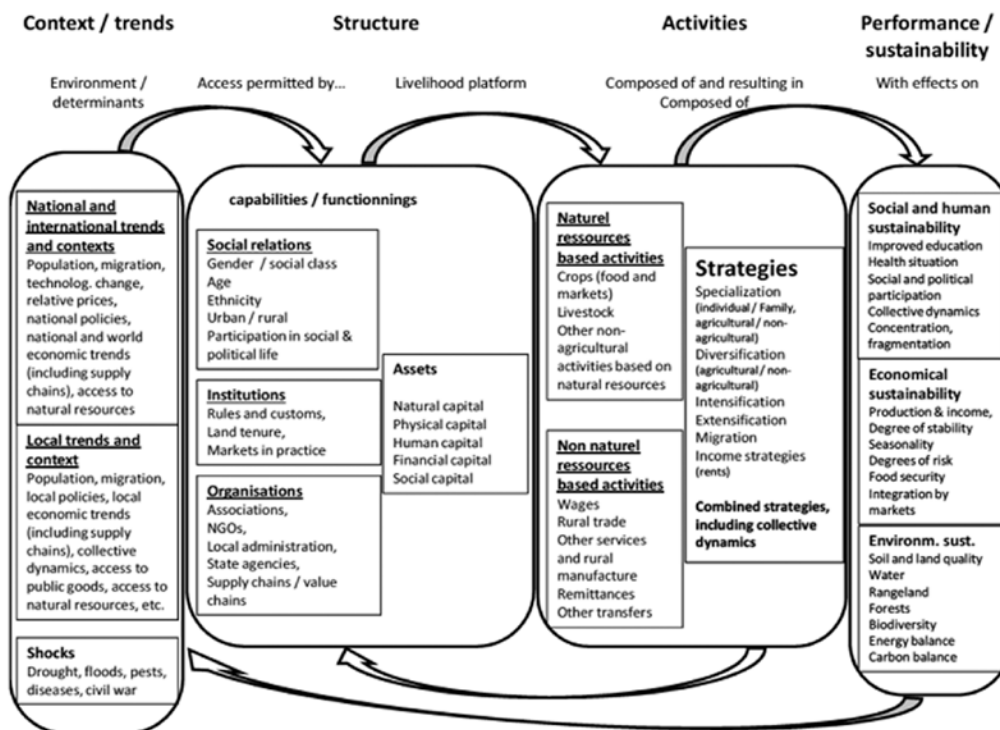


Fig 5. Framework of sustainable rural livelihood

Source: Sourisseau et al 2014

requires to consider off-farm and non-farm activities as fully part of the system. Ignoring these features limit our understanding of the resilient family farm units (see Vaillant (2015) for Ecuador or Fréguin-Gresh et al. (2015) for Nicaragua). The framework also includes times since it considers feed-back effects, it can then be used to monitor and follow-up the structural changes at farm and the evolution of the performances.

In the current situation of agriculture, the livelihood framework can therefore integrate individual and family run activities (pluri-activity eventually through migrations) but also collective action, organizations, institutions and regulations. These collective dimensions are fully part of the SRL framework and on the ground support the development of individual strategies at farm and household level.

The SRL framework seems to us to be well suited to the characterization of contemporary family forms of agriculture, as it encompasses activity systems that are not limited to agriculture alone and which today constitute the vast majority of situations around the world (Bélières et al; 2015; Lowder et al., 2014). It allows the market as well as non-market commercial as well as non-commercial dimensions to be taken into account. It is based on the application of several types of capital/assets/resources, whose significance depends on the



social relationships, institutions and organizations within which families formulate and structure their strategies.

It also allows to also identify and include the parameters that can be modified via collective action or public action. This implies considering how other levels of organization affect the mobilization capacities of the families to improve their livelihoods. It is therefore the encompassing levels of spatial organization (territorial, regional, national, etc.) that are involved here. Particular attention is paid to the scales of implementation of public policies and the manner in which they impact or do not impact capabilities and capital allocations, especially through the role of institutions and organizations.

### Additional perspectives

The relationship between the form of family farming studied and the territory, especially in terms of impact on natural resources and land use, is not addressed in the original SRL framework. We suggest to do so on the basis of changes that agricultural and non-agricultural activities have undergone – over a time span of 10 to 15 years or even 20 years, depending on the available information – and by spelling out these activities' impact on the resources of the territory under consideration.

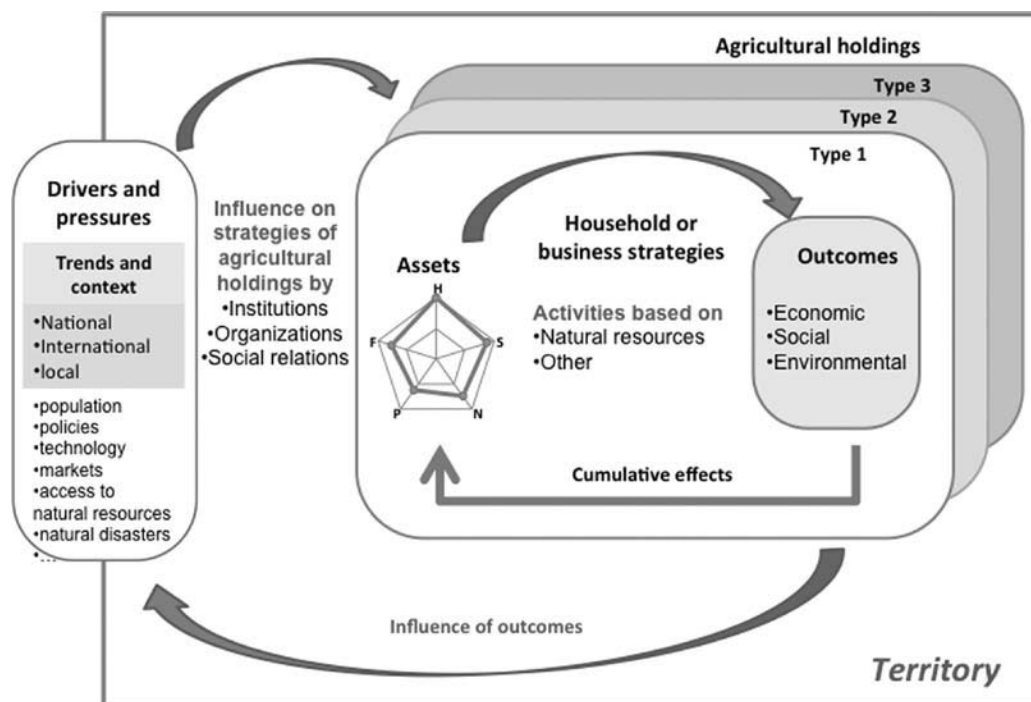


Fig 6. Adapted SRL framework, WAW methodology

Source: George et al. 2012, FAO 2012

It is therefore important to characterize the spatial and territorial impacts of agricultural activities undertaken by the family form under study, in the environment where activities based on natural resources take place. Adaptation of the framework is needed to integrate the territorial dimensions of livelihood's dynamics.

### **3. Illustrations**

We illustrate the use of the framework through two case studies, in Mali and Madagascar.

#### **Southern Mali**<sup>5</sup>

Crop production accounts for more than 70% of farm income, yet yields and labour productivity remain low, hence the importance of natural capital (available land), in combination with physical capital (farm equipment) and human capital (family labour), to derive value from the land. The low contribution of livestock to farm income confirms the importance of livestock for draught and savings, but not as any significant source of income. Agricultural incomes in the widest sense (including self-provision) represent, on average, 87% of farm income, which makes them highly dependent on agricultural activities. The poorest farms (quintile 1) and the wealthiest (quintile 5) are somewhat more diversified than the other farms. For the poorest, diversification takes place through the exploitation of freely accessible natural resources on the commons and processing of products that have been gathered - a diversification that finally earns little. At the other extreme, quintile 5 (on average 1.6 million CFAF/year per farm) is also more diversified, but through income earned from self-employment (trade, artisanal crafts and service activities) which is more remunerative but also requires more capital. The higher level of assets of farmers in Southern Mali is a not a condition for an improvement of the livelihoods, only 9% of the farmers are above poverty line and differentiated diversification patterns can be identified in the lowest (survival) and the highest quintile (economic growth).

#### **Madagascar**<sup>6</sup>

The strategies of farms in the Lake Alaotra area have been shaped by a century of versatile agricultural and development policies. With a premature market integration at the time of the initial tax collections on cattle and land, and reinforced by substantial agricultural irrigation development rarely found in other parts of the island, the transformations of these family

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<sup>5</sup> From Soumare et al., 2018

<sup>6</sup> From Andrianirina 2018

farms have been driven by socio-economic and climatic shocks, as also by those resulting from the new environment of opened-up markets.

Family farms that are stable net sellers are in an evolving process in which agricultural productivity is increasing and salaried labour (hired on a daily or per task basis) is gradually replacing family labour, which is being reallocated to remunerative 'secondary' activities, or to forms of investment in human capital through training and education. There is thus a change taking place in the family character of the farm in response to a beneficial environment and a 'favourable' economic shock. Nevertheless, what is occurring is the adoption of 'quite advanced adaptation strategies' instead of true 'structural transformations'. The effects of investments in human capital, in particular, can only be assessed in the decades to come. The effectiveness of non-agricultural diversification remains closely tied to regional prosperity.

In Madagascar, agriculture remains the main activity for all the households surveyed, but diversification appears to be more efficient for the highest quintiles of the population. Nevertheless, these households that are qualified of stable net sellers can achieve staying in the market rationale at the cost of limiting their self-consumption of rice at certain periods during the year.

## **Conclusion**

SRL is a relevant framework for analysing African Family Farms dynamics but it has to be used taking into account the different levels of economic and social organisation: individual, household, wider family, collective actions and the power relationship between these levels. The comprehensive interest of the framework has to be enhanced. One shouldn't be focussed on the quantitative measure of assets. Adaptations are needed from inside and from outside.

The assets definition, including non-material dimensions, has to be adapted to each situated and clearly expressed. The SRL framework has also to be adapted to fit with territorial and long-term approaches, using the concept of territorial resources. The SRL framework should be associated with the very nature of the role of agriculture in local and national economies, and with the state of institutional and organisational transformations.

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