

Course of International Political Theory

**Smallholder Rice Producers
in Casamance and
Senegal's Quest for Food
Self-Sufficiency:
Potential and Limits through
the Lens of Food Justice
and Food Sovereignty**

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Abstract

This study examines Senegal's rice production system through the lenses of food justice and food sovereignty, particularly in the context of the country's efforts to achieve self-sufficiency in rice. Indeed, Senegal is one of the largest consumers of rice in West Africa, and it relies heavily on imports to meet domestic demand, with local production covering less than half of consumption needs. The country has therefore set a goal of achieving self-sufficiency to end this dependence. In fact, despite the significant role of rice in Senegalese culture and its importance as a staple food, national agricultural policies tend to prioritize productivity over social, cultural, and ecological sustainability. This issue is particularly striking in the case of Casamance, where rice cultivation is primarily managed by women in an informal, subsistence-oriented manner, but where the contributions of local farmers are largely excluded from national self-sufficiency goals. These producers receive very limited support, and their work is not valued, even though it could make a significant contribution to the national production effort.

In order to highlight this paradox and understand its causes, this study contrasts the experiences of the Senegal River Valley (SRV), where institutional support, infrastructure, and access to resources enable large-scale rice production, with Casamance, where agricultural practices remain highly localized and disconnected from national policies. By grounding our analysis in the principles of food justice and food sovereignty, this research highlights how Senegal's agricultural system, by neglecting these aspects in its public policies in favor of productivity, leads to such contradictions.

The findings reveal a stark divide between the centralized, productivity-driven approach in the SRV and the autonomy and resilience of Casamance's informal farming systems. SRV farmers receive government support and contribute significantly to national production, but this comes at the cost of some loss of autonomy. Conversely, producers in Casamance operate in complete self-sufficiency, but are unable to earn income from their work by selling their produce in a country that is seeking to become self-sufficient in rice. Thus, this study ultimately advocates for a shift in national agricultural policy towards more inclusive, justice-oriented, and locally adapted systems, aiming to balance the pursuit of food security with the principles of food justice as social equity.

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Abbreviations

CIRIZ	Comité Interprofessionnel du Riz (Interprofessional Rice Committee)
CNCAS	Caisse Nationale de Crédit Agricole du Sénégal (National Agricultural Credit Fund of Senegal)
GIE	Groupement d'Intérêt Économique (Economic Interest Group)
GOANA	Grande Offensive Agricole pour la Nourriture et l'Abondance (Great Agricultural Offensive for Food and Abundance)
NERICA	New Rice for Africa
PNAR	Programme National d'Autossuffisance en riz (National Rice Self-Sufficiency Program)
SAED	Société d'Aménagement et d'Exploitation des terres du Delta du fleuve Sénégal et des vallées du fleuve Sénégal et de la Falémé (Senegal River Delta and Valley Development and Management Company)
SAP	Structural Adjustment Program
SRV	Senegal River Valley

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Introduction

As food demand increases, all agri-food systems face the same dilemma: is it better to prioritize productivity and offer cheaper products to the population, or is it better to prioritize social and environmental considerations in order to build fair and self-sufficient food systems? In Europe, this tension is particularly obvious in the debates surrounding the trade agreement between the European Union and Mercosur. On the one hand, this agreement would bring numerous economic opportunities, but on the other, it is necessary to consider the social and environmental risks associated with such trade liberalization. Indeed, European farmers fear what they see as unfair competition stemming from differing production standards, and environmental organizations are warning of the potential effects of agricultural intensification and deforestation in South America. However, these concerns are not limited to developed economies. They are also present in many African countries, where food systems must address even more pressing challenges. In Senegal, for example, population growth and rapid urbanization are driving a strong increase in food demand. At the same time, the country remains heavily dependent on imports for certain staple foods, raising questions about food sovereignty and vulnerability to fluctuations in international markets. In this context, it is worth considering the role that social and environmental concerns should play in the transformation of Senegal's agricultural system. Given the urgent need to increase production and reduce dependence on imports, these questions may seem secondary. However, another perspective is to ask whether reducing inequalities in access to resources, supporting small-scale producers, or ensuring the sustainability of agricultural practices might, on the contrary, constitute necessary conditions for moving closer to the goal of national self-sufficiency. The question then remains whether priority should be given to rapidly increasing productivity or whether addressing these issues might in the long run actually promote the development of a more autonomous and resilient food system.

Rice occupies a central place in Senegal's diet, economy, and cultural life. Indeed, Senegal is one of the largest consumers of rice in West Africa. However, its domestic production barely covers half of its consumption needs. Despite the country's reliance on rice, the production system has not kept pace with demand, creating a dependency on imports. The country has therefore set a goal of achieving self-sufficiency in this staple food by intensifying production. However, this goal is being pursued by concentrating resources mainly in the Senegal River Valley (SRV) at the expense of other regions such as Casamance, which is highly agricultural

but has historically been marginalized by public policies. Thus, the Senegal River Valley (SRV), with its irrigated schemes and structured institutional support, benefits from the bulk of public programs, credit, and agricultural inputs. In contrast, Casamance is largely neglected, despite significant its production potential. There, rice cultivation is predominantly rainfed, family-based, and carried out mainly by women, and it operates outside formal marketing channels. These producers thus contribute minimally to national self-sufficiency, even though their production could meaningfully support it.

This situation reveals a central tension: the state prioritizes productivity in areas like the SRV, where it is easier to implement large-scale irrigation and mechanization, while leaving regions like Casamance with their more traditional, informal farming systems, largely outside the reach of national policies. Casamance's rice farmers, despite their traditional knowledge and cultivation practices, remain excluded from the formal market and public support mechanisms. This paradox becomes evident when we considers the fact that, while regions like the SRV are investing heavily in boosting production, the rice from Casamance remains largely unrecognized and undervalued. Stores in urban areas, and even in rural areas sell only Asian rice or the "Valley rice," as Casamance rice is completely cut off from the national market.

Given this contrast, it is legitimate to ask why the Casamance region has been marginalized, despite its potential for rice cultivation, and how it could be integrated into national production efforts. More specifically, we might ask how Senegal could maximize its production while building a more equitable and self-sufficient rice production system, by integrating small-scale producers rather than favoring a single farming model that excludes other forms of agriculture, such as family farms in Casamance ? This integration must also be carried out in a way that respects producers' autonomy and the principles of food justice.

Thus, this tension highlights the need for national rice policies to balance the drive for productivity with the principles of justice and sovereignty. While the government's emphasis on increasing rice yields and modernizing production techniques is crucial, it must also respect the diversity of local systems, particularly in regions like Casamance, where agriculture is deeply rooted in family and community structures. The challenge is to find ways to boost production while respecting the local realities and ensuring that marginalized regions are not left behind in the push for national self-sufficiency.

To address this, this study uses food justice and food sovereignty as normative frameworks for analysis. These frameworks, largely used by international organizations, offer criteria that prioritize not only agricultural productivity but also the well-being and empowerment of local communities. These criteria consider how food systems can be made more inclusive, just, and resilient, ensuring that all stakeholders, especially marginalized ones, like women farmers in Casamance, are given the means to thrive. Thus, the analysis goes beyond economic metrics to address the social, cultural, and environmental dimensions that must be integral to any policy aiming for long-term food security.

The structure of this study is as follows: *Chapter I* explains the rationale for using food justice and food sovereignty as the guiding criteria for evaluating Senegal's rice system. *Chapter II* traces the historical construction of Senegal's rice dependency, illustrating the forces that have shaped the current state of the rice sector. *Chapter III* assesses the current rice system, by exploring territorial divides and how the SRV's inclusion in national policy contrasts with the exclusion of regions like Casamance. Finally, *Chapter IV* evaluates the rice production system according to the criteria set out in *Chapter I*, in order to determine whether the current system ensures justice and sovereignty for producers, and how it could align more closely with these normative standards while continuing to pursue its goal of self-sufficiency.

Methodology

This thesis is based on a qualitative approach, which combines documentary analysis, normative framing, and field research. It is a case study focused on the Senegalese rice system, with particular emphasis on the Casamance region. The choice of this case study reflects the aim of conducting an in-depth analysis of a specific food system in order to understand its historical dynamics, political logics, and territorially specific effects. The objective is not to produce a generalizations, but to propose a contextualized analysis that allows for the assessment of the coherence between the stated objectives of the rice self-sufficiency policy and its concrete effects.

The approach combines three complementary dimensions:

- an historical and institutional analysis of Senegalese agricultural policies;
- a normative evaluation framework based on criteria detailed in Chapter I;
- a qualitative field survey, aimed at grounding the analysis in the practices and experiences of the producers.

Casamance as a Case Study

The selection of Casamance as a case study is based on several reasons. The region has significant agricultural potential and a long-standing rice-growing tradition, notably based on rainfed systems and specific local knowledge. It thus occupies a unique position within Senegal's agricultural system. Furthermore, Casamance has a particular political and institutional trajectory, marked by historical tensions with the central state and relative marginalization in public policies. It therefore constitutes a relevant context for analyzing territorial disparities within the national rice system. Furthermore, the coexistence in Senegal of two major production models, on the one hand, irrigated rice cultivation concentrated in the Senegal River Valley (SRV), and on the other hand, rainfed rice cultivation practiced notably in Casamance makes this region particularly interesting for analyzing the differentiated effects of self-sufficiency policies. The study thus aims to highlight the structural inequalities that contrast these systems.

Documentary Analysis

This work relies on an analysis of secondary sources, including official documents (agricultural plans, national programs such as the National Rice Self-Sufficiency Program, PNAR), institutional reports, publications from international organizations, as well as academic literature on the agricultural history of Senegal, structural adjustment policies, and contemporary transformations in the rice sector. This analysis allows for tracing the genealogy of the rice system and identifying current strategic orientations.

Field Survey and Interviews

To complement the documentary analysis, semi-structured interviews were conducted with rice producers, notably within Economic Interest Groups (GIEs), the common form of agricultural organization in Senegal. This aims to collect qualitative data on concrete agricultural practices, production conditions, actors' room for maneuver, and their perceptions of public policies. The interviews are particularly focused on access to productive resources (land, water, inputs, equipment), working conditions, economic outlets, and knowledge of public programs.

In the Sine Saloum region, interviews were conducted with the GIE² Mbine Djalane, represented by Louise Diatta and Elisabeth Tenin Sarr, which comprises more than fifty exclusively female members, as well as with Dienaba Seck of the GIE Santhie, which brings together about twenty members, both men and women. In Casamance, an interview was conducted in Diembering with Aloyse, a producer cultivating rice within a family farm, and in Kabrousse, where group discussions were held with several rice producers, especially with Pierre Diatta.

It was not, however, possible to conduct direct interviews with producers in the Senegal River Valley, where irrigated rice cultivation predominates and major public investments are concentrated. Analysis of this model of production therefore relies more heavily on secondary

² Groupement d'Intérêt Économique (Economic Interest Group)

sources. This limitation does not affect the coherence of the research, which primarily aims to analyze territorial dynamics and the differentiated effects of public policies.

Evaluation Framework

The analysis draws on two normative frameworks: food justice and food sovereignty, which are presented and defined in *Chapter I*. These concepts are not used merely as descriptive categories, but as evaluative tools to examine whether the Senegalese rice system meets certain explicitly defined principles. The aim is thus to confront the stated policy orientations, notably the pursuit of self-sufficiency, with the concrete transformations of productive structures and power relations.

Research Limitations

This research has several limitations. First of all, the number of interviews conducted does not allow for statistical representativeness at the national level, as the objective remains analytical and exploratory. Moreover, the study focuses on the rice sector and does not cover the entirety of Senegal's food system. Finally, the adopted approach relies on an explicitly stated theoretical positioning: the evaluation of the system is conducted according to clearly defined normative criteria. By combining documentary analysis, qualitative fieldwork, and normative evaluation, this thesis therefore adopts an approach that is both empirical and critical. The aim is not merely to describe the functioning of the Senegalese rice system, but to question its coherence in relation to the defined principles, in order to assess the extent to which the pursuit of self-sufficiency contributes or not to transform the productive structures and power relations that organize the national food system, and if this quest for self-sufficiency is beneficial to producers.

CHAPTER I – DEFINING FOOD JUSTICE AND FOOD SOVEREIGNTY : NORMATIVE FRAMEWORKS AND EVALUATION CRITERIA

The evaluation of a food system cannot be limited to its productive performance or its contribution to national food security. A system may increase production while reproducing, or even reinforcing, inequalities in access to resources, structural dependencies, or forms of social and territorial exclusion. It is therefore necessary to draw on normative frameworks that allow for examining not only the outcomes of the food system, but also the social and political conditions in which it operates. This thesis thus relies on two distinct but complementary concepts: food justice and food sovereignty. Food justice, rooted in theories of social justice, enables the assessment of equity in access to resources, the recognition of actors, and their effective capacity to act within the food system. Food sovereignty, a concept that emerged from peasant movements and critiques of liberal agricultural policies, emphasizes the right of communities to define their own food policies and to control productive resources. Although these concepts stem from different traditions, their articulation provides a particularly relevant analytical framework: the first questions the social and distributive dimensions of the food system, while the second addresses its political and structural dimensions. After defining these two concepts, this chapter identifies the main analytical criteria to construct a normative evaluation framework. Then, this framework will serve as the central analytical tool to examine the Senegalese rice system.

1. Food Justice as a Framework for Evaluating Food Systems

Food justice addresses a central question: is the food system fair for those who participate in it, particularly producers? Beyond levels of production or food availability, it examines how resources, opportunities, and benefits are distributed among the actors, as well as their actual capacity to earn a decent livelihood and to make choices regarding their agricultural practices. It thus constitutes an analytical framework focused on the social, economic, and political conditions in which food production takes place. To apply this concept analytically, it can be divided into several criteria, such as equity in access to resources, actors' capabilities, and their capacity for agency. This breakdown allows the concept to be

operationalized into an analytical grid, enabling a concrete evaluation of the extent to which a food system promotes or hinders just conditions of production.

1.1. Food Justice as Equity

Contemporary reflections on food justice often draw on a distributive conception of justice inherited from liberal political philosophy. Indeed, when discussing inequalities in access to food, debates frequently focus on the fair distribution of resources, the reduction of socio-economic gaps, and the guarantee of a basic minimum for all. From this perspective, John Rawls' theory of *justice as fairness*³ constitutes a key normative reference, as it provides a reflection about social justice based on principles of equity and protection of the least advantaged. Indeed, Rawls conceives justice as fairness through a hypothetical situation called the *original position*, in which rational individuals, placed behind a *veil of ignorance* regarding their future social position, agree on principles intended to govern the basic structure of society. Thus, two fundamental principles emerge: the first guarantees the equality of fundamental liberties, while the second regulates socio-economic inequalities through the principle of *fair equality of opportunity* and the *difference principle*, according to which inequalities are just only if they improve the situation of the least advantaged.

Applied to food justice, Rawlsian theory allows us to move beyond a strictly market-based approach to food, conceiving it instead as an essential condition for real equality. The principle of fair equality of opportunity does not concern direct access to goods such as food, but it implies that individuals with similar talents and motivations should have comparable chances of accessing social positions, regardless of their socio-economic background. However, this requires certain background conditions that allow individuals to effectively develop and exercise their capacities. In this respect, food security can be understood as one of the material conditions necessary for the meaningful exercise of opportunities, as individuals who lack reliable access to sufficient, healthy, and culturally appropriate food are significantly

³ Rawls, J. (1958) 'Justice as Fairness', *The Philosophical Review*, 67(2), pp. 164–194.

disadvantaged in their ability to pursue education, participate in the labour market, or engage in public life. From this perspective, food appears not only as a consumable good but as a prerequisite for the effective exercise of freedoms and opportunities. The difference principle, for its part, allows for the existence of inequalities within the food system, notably in terms of productivity, profits, or yields, on the strict condition that these inequalities effectively benefit the most disadvantaged populations. In a Rawlsian reading of food justice, agricultural, trade, and food policies cannot therefore be evaluated solely on the basis of their overall economic efficiency, but must be judged according to their ability to prioritize improvements in the situation of the most vulnerable groups, for example through policies supporting small producers, targeted subsidies, or food security measures. However, despite its normative strength, the Rawlsian conception of justice remains fundamentally statist. In *Justice as Fairness*, the principles of justice apply to the basic structure of a given national society, whereas at the international level, Rawls limits himself, in *The Law of Peoples*,⁴ to a minimal duty of assistance toward so-called “societies in need.” Thus this approach does not fully capture the injustices produced by a globalized food system, marked by asymmetric power relations and commercial and financial rules that structurally favor the wealthiest states and actors. By not applying the difference principle to a global scale, Rawls thus tends to interpret international food inequalities only as internal failures and not as the product of an unjust global institutional order.

From this criticism, Thomas Pogge proposes a radical rethinking of justice at the global level, explicitly breaking with Rawlsian statism. In *World Poverty and Human Rights*⁵, he argues that poverty and food insecurity cannot be understood as mere internal failures of states, but as the product of a global institutional order structured by the interests of the most powerful countries and actors. Then, Pogge does not limit himself to a duty of humanitarian assistance, as he develops the notion of negative responsibility, according to which wealthy states and economic elites have a moral obligation not to contribute to institutions that cause predictable and avoidable harm to the poorest. Applied to food justice, this approach highlights the role of agricultural trade rules, subsidies granted to Northern agriculture, intellectual property regimes on seeds, and land grabbing in the structural reproduction of hunger and malnutrition. Global food justice, from Pogge’s perspective, therefore, does not consist in redistributing resources

⁴ Rawls, J. (1993) ‘The Law of Peoples’, *Critical Inquiry*, 20(1), pp. 36–68.

⁵ Pogge, T. (2005) ‘World Poverty and Human Rights’, *Ethics & International Affairs*, 19(1).

ex post in the form of aid, but in reforming upstream the international economic and legal structures that produce food exclusion, thus transforming the fight against hunger into a demand for justice rather than an act of charity.

1.2. Food Justice as the Development of Capabilities

After having examined food justice from the perspective of principles of equity and redistribution, it becomes necessary to study this concept from another angle, one that allows for the assessment of inequalities in access to food resources and livelihoods. Indeed, while Pogge's framework provides a powerful account of structural injustice within the global institutional order and explains how international economic and political arrangements contribute to persistent food insecurity, it remains primarily focused on the distributive and institutional dimensions of injustice. In particular, it focuses on how global structures can systematically disadvantage certain populations in their access to essential resources. However, this perspective does not fully capture how individuals and communities are able to translate available resources into the real possibility of securing adequate food. Indeed, even where resources formally exist, individuals may still lack the means to access or utilize them. It is precisely at this point that Amartya Sen's capability approach becomes particularly relevant. By shifting the focus from the distribution of resources alone to individuals' actual capabilities, Sen provides a complementary perspective that allows for a deeper understanding of food insecurity as a problem not only of distribution, but also of people's real opportunities to achieve food security.

Sen introduces the concept of *entitlement*, or economic rights of access to food, to show that famines do not necessarily result from a global shortage of food production, but from the collapse of these rights of access. Indeed, according to Sen, an individual can obtain food through different means: via production, labor (exchanging work for a wage that allows the purchase of food), trade (buying food), or through social transfers (assistance from the state or organizations, help from family). A famine occurs when individuals lose these rights of access, even if food is potentially available on the market. This perspective critiques the classical view that attributes famines to a simple decline in production, which Sen considers simplistic and dangerous as it diverts attention from the social, economic, and political causes. Sen thus emphasizes that famines are largely dependent on institutional and political contexts, and they are therefore more likely when individuals lack social protection, when workers are precarious,

or when the state does not guarantee access to food resources. Conversely, democracies with a free press have historically succeeded in avoiding major famines, as governments are held accountable. For Sen, famine constitutes an extreme form of poverty and injustice, as they reveal the structural inequalities in access to resources. The solution therefore does not lie solely in increasing agricultural production, but in securing incomes, guaranteeing employment, and implementing redistributive and social protection policies.

Sen's capability approach, within the framework of this analysis, contributes to establishing a multidimensional framework for evaluating food justice, since from this perspective, food justice becomes an assessment of the real opportunities available to individuals to access adequate food and improve their well-being, rather than a mere redistribution of resources. It also allows us, in the context of this study, to evaluate the extent to which producers are able to make choices regarding their own production.

1.3. Food Justice as Recognition and Participation

Having examined the concept of food justice from the perspective of the fair distribution of primary goods within just institutions, and through Amartya Sen's capability approach, which emphasizes individuals' real freedom to lead the lives they value, it appears that these perspectives remain largely oriented toward economic justice and material living conditions. However, they tend to underestimate the importance of the cultural and social dimensions of justice, particularly in contexts where local norms and practices deeply shape ways of living. Nancy Fraser's approach provides, in this regard, a particularly relevant analytical framework, as it integrates the economic, social, and political dimensions of justice.

Nancy Fraser develops a conception of social justice based on three complementary and inseparable dimensions, *redistribution* and *recognition* and *representation*⁷. *Redistribution* concerns economic and material equality, that is, how resources, income, and opportunities are distributed within society in order to correct structural inequalities. It aims to address injustices related to exploitation, economic marginalization, and precariousness. What is particularly relevant for the present analysis is her principle of *recognition*, which addresses the cultural

⁷ Fraser, N. (1997) *Justice Interruptus: Critical Reflections on the "Postsocialist" Condition*. London: Routledge.

and social structures that shape individuals' status within society. According to Fraser, *recognition* is not primarily about affirming group identities, but also about overcoming institutionalized patterns of cultural value that deny certain groups in the participation of society. Injustices of recognition therefore take the form of status subordination or misrecognition, when specific social groups are systematically devalued, stereotyped, or rendered invisible within dominant social and institutional norms. Such injustices may manifest through forms of stigmatization, or the marginalization of particular forms of knowledge and social practices. The third dimension of justice identified by Nancy Fraser is *representation*, which refers to the political conditions that determine who is included in decision-making processes and whose voices are taken into account in the definition of collective rules. Injustices of representation arise when certain groups are excluded from political arenas or when decision-making processes are structured in such a way that they exclude certain groups of people from making decisions that directly affect them. For Fraser, these three dimensions of justice—*redistribution*, *recognition*, and *representation* are interdependent and cannot be fully addressed in separately. Economic inequalities, social devaluation, and political exclusion often reinforce one another, in the same way that material deprivation, status subordination, and lack of voice combine to prevent individuals and groups from participating as equals in society. All three dimensions converge toward the normative goal of *parity of participation*. Fraser defines it as the condition in which all members of a community are able to interact with one another as peers, without being disadvantaged by economic, cultural, or political barriers. Thus, achieving justice requires to address simultaneously economic, social, and political inequalities to ensure that everyone has the opportunity to participate fully in shaping the social structures that govern their lives.

Applied to food systems, Nancy Fraser's approach allows food justice to be understood as an articulation of redistribution, recognition, and representation, in order to provide a "participatory parity" to food producers. In terms of redistribution, food justice involves an equitable distribution of productive resources, agricultural income, and the benefits generated by food systems. In terms of recognition, it requires to value local knowledge, traditional agricultural practices, and the social identities of small producers, who may be marginalized by dominant agro-industrial or global market models. In global food networks, for example, producers can be positioned in fixed roles that reflect external expectations rather than their own priorities or identities, limiting their capacity to act according to local social norms and

values⁸. This illustrates a form of misrecognition, as farmers' multiple identities and knowledges are subordinated to distant economic or moral imperatives. Finally, the dimension of representation refers to the capacity of producers and local communities to participate in decisions concerning agricultural policies, collective structures, and resource governance. Without meaningful inclusion, these communities experience political marginalization and are prevented from shaping the rules that govern their livelihoods. From this perspective, this research will pay particular attention to the feminist dimension of food justice, since the case studied involves GIEs largely composed, and sometimes exclusively, of women. Nancy Fraser addresses this dimension through her critique of contemporary forms of women's emancipation. She offers a critical reading of contemporary feminism, emphasizing that the initial goal of empowering women through access to paid work has been partly co-opted by neoliberal capitalism. Increased integration of women into labor and production markets can thus create an illusion of autonomy and empowerment, while maintaining or even reinforcing forms of precarity, constrained flexibility, and double burdens of work.

Through this section, we have now established the foundations for defining a food system as *just* according to three main criteria: equity, which refers to equal access to means of production, resources, and opportunities necessary to fully participate in the food system; recognition, which involves the social and cultural valorization of producers; and participation, which concerns the capacity of local actors to engage in and influence the decisions that shape the system. This analytical framework constitutes a relevant tool for identifying persistent inequalities and potential levers to build more just and inclusive food systems, particularly in the specific context of Casamance.

2. Food Sovereignty as a Framework for Evaluating Food Systems

Food sovereignty addresses a question distinct from that of justice: to what extent does a food system possess a real political capacity for self-determination? It is not limited to the

⁸ Marisa Wilson et Peter Jackson, *Fairtrade bananas in the Caribbean: Towards a moral economy of recognition*, Institute of Geography, School of Geosciences, University of Edinburgh et Department of Geography, University of Sheffield, 14-16.

social conditions of production, but examines the decision-making power and control exercised over agricultural and food policy directions. To make it an operational analytical tool, food sovereignty will be broken down into three main dimensions: the right to food self-determination, control over the means of production (land, seeds, water, inputs), and the political and participatory nature of decision-making processes. This operationalization will allow for an assessment of the food system's political capacity to self-determine and to guide its development according to locally defined priorities.

2.1. Food Sovereignty as the Right to Food Self-Determination

Food sovereignty is defined as *“the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agricultural systems”*⁹.

The concept emerged in the mid-1990s, primarily promoted by Via Campesina, a transnational movement bringing together peasant organizations, small producers, agricultural workers, and rural communities from different regions of the world. The notion was formulated for the first time in 1996, on the sidelines of the World Food Summit organized by the FAO, in a context where the fight against hunger had already been on the international agenda for several decades. For Via Campesina, the persistence of hunger and malnutrition, despite this international mobilization, reveals a structural incapacity of dominant food policies to meet the needs of the most vulnerable populations. This perspective argues that this incapacity largely results from the central role given to international markets and agro-industrial actors in regulating global food systems. Indeed, the liberalization of agricultural trade and the concentration of economic power in the hands of multinational corporations are seen as dynamics that weaken peasants by reducing their productive and decision-making autonomy. Food sovereignty does not reject the goal of food security as a universal right to adequate food, but it challenges the modalities of its implementation, particularly when they are based on a primarily market-oriented and productivist logic. In this regard, food sovereignty proposes a *bottom-up* approach, centered on producers and local communities¹⁰. It adopts from food self-sufficiency the idea of

⁹ Via Campesina, excerpt from the Nyeleni Forum on Food Sovereignty, Mali, 2007).

¹⁰ Barnhill, A. & Doggett, T. (2018) 'Food ethics I: Food production and food justice', *Philosophy Compass*, 13(3), p. 9.

territorialization, prioritizing the organization of production, processing, and distribution at local or national scales, without excluding all forms of international exchange. At the same time, it continues the concept of food security by affirming the fundamental nature of the right to food and explicitly integrating the cultural and social preferences of the populations concerned.

The major contribution of food sovereignty thus lies in the explicit politicization of food and agriculture. By conceiving them as subjects of collective choice and democratic deliberation, this normative framework asserts the right of peoples to define their own agricultural and food model, as well as the rules governing the production, distribution, and access to food. Food sovereignty therefore appears as a claim for self-determination, aiming to place food-related decisions at the heart of the social, political, and cultural dynamics of the territories concerned¹¹.

2.2. Food Sovereignty as Control over Resources and Means of Production

Food sovereignty is not limited to an abstract right to food, it primarily involves effective control over resources and agricultural means of production. Philip McMichael, in his analysis of global food regimes¹², explains that the economic and political transformations of food systems have often led to the structural dispossession of small producers, concentrating land and productive control in the hands of states and transnational corporations. He situates this process within what he calls the corporate food regime, which was established from the 1980s to the 2000s, as part of the broader global process of liberalization¹³, in which states increasingly serve the interests of markets. In this context, international organizations and policies promoted free-market mechanisms as the most efficient means of distributing food and ensuring security, and thus global capital exercised greater leverage than many nation-states. Consequently, small-scale farmers were forced to confront world market prices that frequently

¹¹ *Ibid.*

¹² McMichael, P. (2014) 'Food Regimes and Agrarian Questions', *Agrarian Change and Peasant Studies*, 3.

¹³ Friedmann, H. and P. McMichael, 1989. 'Agriculture and the State System: The Rise and Fall of National Agricultures, 1870 to the Present'. *Sociologia Ruralis*, 29 (2): 93–117.

undercut their livelihoods and driving peasants from their lands. Furthermore, McMichael explains that transnational capital organized global food circuits to serve the demands of distant consumers by prioritizing the satisfaction of distinct dietary trends of the global North. These markets, supposed to ensure food security, present a paradoxical outcome as they immiserates vulnerable populations. The implementation of ‘free’ markets often excludes or starves those dispossessed through the same mechanisms and perpetuates structural inequalities that are racialized and spatially uneven, a dynamic that has historically benefited metropolitan over-consumption at the expense of the global South. These structural and economic pressures marginalize peasants within production chains, depriving them of land, seeds, and other essential resources, but it also reinforces their dependence on global markets, weakening their capacity to guarantee their own food security. Moreover, McMichael points out the environmental consequences of this corporate regime, such as soil depletion, biodiversity loss, and overuse of toxic inputs, which undermines again local agrarian resilience.

In response to these contradictions, McMichael defines the food sovereignty movement, led by La Vía Campesina, as a countermovement to corporate capital. Food sovereignty challenges the structure of production and consumption imposed by the corporate food regime and seeks to re-establish peasants’ control over the means of production. This movement politicizes food, aiming to reverse the displacement of small farmers from land and to reassert the agrarian foundation of society. By focusing on local control, ecological sustainability, and the social empowerment of producers, food sovereignty addresses the structural dispossession and dependency generated by globalized neoliberal food systems.

2.3. Food Sovereignty as a Political and Participatory Process

Even before the explicit emergence of the concept of food sovereignty in the 1990s, Harriet Friedmann’s work¹⁵ allows us to understand food and agriculture as deeply political objects. Writing in a context where the notion had not yet been formulated, Friedmann nevertheless analyzes the structural transformations of the global agri-food system and highlights a progressive shift of food politics toward a logic dominated by markets, trade

¹⁵ Friedmann, H. (1995) ‘The international political economy of food: A global crisis’, *International Journal of Health Services*, 25(3), pp. 511–538.

liberalization, and the growing power of transnational corporations. She observes that, as the number and negotiating capacity of farmers decline, food policies increasingly focus on consumption rather than production, contributing to the invisibilization of the social and territorial relations that underlie food.

From this perspective, Friedmann does not yet propose a normative principle of food sovereignty as such. However, she proposes a critique of the dominant food regime. By contrasting a *democratic food policy* with food governance guided by the market, she asserts that decisions regarding food, modes of production, and agri-food chains are matters of collective choice rather than mere economic adjustments. Emphasizing proximity, seasonality, territorial anchoring, and respect for ecosystems thus represents a break with the idea that efficiency and productivity are the only legitimate criteria for organizing food systems. In this sense, Friedmann contributes to politicizing food by linking it to issues of social justice, employment, land use, and cultural expression. It is precisely this politicization, still implicit in Friedmann, that is later taken up, systematized, and translated into a political principle by transnational peasant movements, foremost among them Via Campesina. With the formalization of food sovereignty from 1996 onwards, these actors give a normative and claim-based content to Friedmann's intuition: they explicitly assert the right of peoples to define their own food and agricultural systems and to regain control over productive choices in the face of global market logics. Where Friedmann diagnosed the depoliticizing effects of the transnational integration of food systems, Via Campesina transforms this critique into a political project, making food democracy, territorialized production, and the centrality of producers the pillars of a new model.

Through this section, we have now defined the foundations of a « sovereign » food system according to three main criteria: the right to food self-determination, which guarantees populations the ability to decide on their modes of production and consumption; control over resources and means of production, ensuring mastery of the essential elements for food and the political and participatory dimension, which entails the engagement of local actors in decision-making and food governance processes. This analytical framework provides a solid basis for evaluating the capacity of agricultural systems, particularly in Casamance, to ensure not only food production, but also the autonomy, control, and effective participation of communities.

3. Towards a Normative Evaluation Framework for Food Systems

After defining food justice and food sovereignty and identifying their main dimensions, the next step is to translate them into operational criteria in order to concretely evaluate a food system. This approach consists of constructing a normative analytical grid that allows for an assessment of the extent to which observed dynamics meet, or fail to meet, the requirements of justice and sovereignty. The selected criteria reflect contemporary international standards in agricultural development and the right to food, particularly those used by international organizations in the design and evaluation of public policies. They thus refer to widely recognized benchmarks regarding equity, participation, access to resources, and decision-making autonomy, without presupposing their effective implementation at the national level. These criteria therefore constitute analytical reference points intended to guide the evaluation of the Senegalese rice system in the following chapters.

3.1. Productivity and Food Security: A Necessary but Insufficient Criterion

The evaluation of food systems still largely relies on a dominant criterion: productivity. In agricultural policies as well as in discourses on food security, the capacity to produce more, faster, and at lower cost is often presented as the primary condition to fight against hunger and ensure abundance. This approach prioritizes quantitative indicators, such as yields per hectare, volumes produced, levels of self-sufficiency, and tends to estimate the performance of a food system according to its capacity to maximize production through mechanization, industrialization, and integration into markets. Historically, this centrality of productivity emerged with the Green Revolution, which promoted the adoption of high-yield varieties, the massive use of chemical inputs, and the technological modernization of agriculture¹⁶. Presented as a technical response to world hunger, this agricultural transformation relied on the idea that increasing food supply was sufficient to solve problems of food insecurity. From this

¹⁶ Herring, R.J. (ed.) (2015) *The Oxford Handbook of Food, Politics, and Society*, Oxford: Oxford Academic. Chapter 5.

perspective, traditional agricultural practices were often perceived as inefficient, archaic, or incapable of meeting contemporary demographic and economic demands¹⁷.

However, numerous critiques have highlighted the limitations of this strictly productivist vision. Among them, Vandana Shiva, in her work on the Green Revolution¹⁸, emphasizes that the dissemination of standardized seeds and intensive technologies contributed to weaken peasant agriculture by disrupting local ecological and social balances. Without denying the yield gains achieved in certain regions, she highlights the social effects of these transformations, such as the increased dependence on inputs, the marginalization of traditional agricultural knowledge or and the economic vulnerability of small producers. More broadly, these critiques question the human, social, and cultural costs of an agricultural model founded exclusively on productive performance. These observations were widely echoed and institutionalized by the *International Assessment of Agricultural Knowledge, Science and Technology for Development* (IAASTD) report, published in 2008 under the auspices of the World Bank and the United Nations. This report, which is the result of a broad consensus among scientists, state representatives and civil society organizations, concluded that the Green Revolution generated numerous unforeseen social and environmental consequences¹⁹. As a matter of fact, increases in yields sometimes came at the expense of ecological sustainability, social equity, and producer autonomy, which challenges the idea that productivity alone constitutes a sufficient indicator of agricultural success.

Thus, while productivity remains a necessary criterion, particularly in contexts of food dependency or demographic growth, it is clearly insufficient for evaluating the justice of a food system. By focusing exclusively on the volumes produced, this approach tends to overshadow essential dimensions such as production conditions, the social recognition of agricultural labor, the role of women, and the capacity of producers to control their productive choices. The pursuit of ever-higher yields can therefore come into tension with other fundamental objectives, such as producer autonomy, the preservation of local agricultural practices, or ecosystem sustainability. Therefore, the goal of food self-sufficiency, frequently invoked as an indicator of the success of agricultural policies, should not be confused with food sovereignty, since it

¹⁷ *Ibid.*

¹⁸ Shiva, V. & Streusand, D.E. (1993) 'Book review: *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics*', *The Journal of Asian Studies*, 52(4), pp. 1042–1044

¹⁹ Herring, R.J. (ed.) (2015) *The Oxford Handbook of Food, Politics, and Society*, Oxford: Oxford Academic. Chapter 5.

primarily refers to national production volumes without implying the control exercised by producers over production methods, resources, and the orientation of the food system.

Consequently, evaluating a food system as “just” requires moving beyond a strictly productivist perspective to integrate complementary criteria capable of capturing not only what is produced, but also how, by whom, and for whose benefit food is produced. It is precisely from this questioning of the centrality of productivity that a normative evaluation grid attentive to social justice and the sovereignty of agricultural actors can be constructed.

3.2. Food Justice as a Criterion for Evaluating Food Systems

In this research, food justice, as defined in *Chapter I*, is not only used as a theoretical framework but also as a normative tool for evaluating agri-food systems. The aim is to move from a theoretical reflection on what a just food system would be to an operational use of these principles in order to concretely analyze the productive, social, and institutional dynamics at stake in the Senegalese case.

Based on the adopted definition of food justice in *Chapter I*, several general criteria can be identified to evaluate agri-food systems beyond their mere productive performance. These criteria do not constitute a rigid grid but rather provide analytical indicators for questioning the justice of food systems in their social, economic, and cultural dimensions. They can be summarized as follows:

- *Equity in access to resources and benefits of the food system, particularly regarding land, inputs, income, and public support mechanisms;*
- *Effective improvement of the living and working conditions of producers, especially the most vulnerable actors;*
- *Social, cultural, and gendered recognition of agricultural work, including the valorization of local knowledge and traditional practices;*
- *The capacity of agricultural actors to make real choices concerning their modes of production, their markets, and the organization of their work.*

These general criteria, derived from food justice, are intended to serve as a guiding thread throughout the analysis. They will allow for an assessment of the extent to which the agri-food

systems under study contribute or fail to reduce inequalities, to enhance the dignity of producers, and to support forms of production compatible with local social and cultural realities. Applied transversally, they will guide the analysis of agricultural policies, the study of productive practices, and the interpretation of interviews conducted with producers, without presupposing the responses provided by actors in the field.

3.2. Food Sovereignty as a Criterion for Evaluating Food Systems

Like food justice, food sovereignty, as defined in *Chapter I*, is used in this thesis as a normative tool for evaluating agri-food systems, rather than as a theoretical ideal or a mere political slogan. It allows for an examination not only of the outcomes of agricultural policies, but especially of power relations, governance mechanisms, and the degree of control exercised by local actors over food production and distribution systems. Based on the adopted definition of food sovereignty in *Chapter I*, several general criteria can be identified to evaluate agri-food systems beyond their capacity to achieve productive self-sufficiency. As with food justice, these criteria do not constitute a rigid grid, but rather allow to structure the empirical analysis. They can be formulated as follows:

- *The degree of autonomy of producers in their production choices, particularly regarding seeds, inputs, agricultural techniques, and the organization of labor;*
- *Effective control over productive resources (land, water, agricultural knowledge) and the protection of these resources against processes of commodification and dispossession;*
- *The capacity of local actors to influence agricultural and food policies, including public policies and development programs;*
- *The territorial anchoring of food systems, understood as the coherence between modes of production, local ecosystems, and social and cultural practices.*

When used as evaluative criteria, these elements make it possible to clearly distinguish between food self-sufficiency, understood as the capacity to produce sufficient volumes at the national level, and food sovereignty, which relates to the question of who decides, how, and for whose benefit the food system is organized. A system can thus achieve self-sufficiency objectives while remaining weakly sovereign, particularly when producers have limited decision-making power or when decisions are largely centralized. These food sovereignty criteria, like those derived from food justice, serve as a guiding thread throughout the analysis. They will inform

the study of Senegalese agricultural policies, the examination of rice-growing practices in Casamance, and the interpretation of interviews conducted with producers, allowing for an assessment of the extent to which the systems under study strengthen, or conversely restrict the autonomy and agency of local agricultural actors.

At the end of this section, we have constructed a normative analysis grid allowing for the evaluation of the Senegalese rice system in terms of food justice and food sovereignty. By operationalizing the principles defined previously, we now have clear criteria that will serve as a reference for the analysis in Chapter IV. However, before applying this grid, it is necessary to establish an overview of the Senegalese rice system. This first involves tracing its historical genealogy to understand the construction of its dependence on imports, and then examining the current distribution of production, thereby preparing the ground for the forthcoming normative evaluation.

CHAPTER II – GENEALOGY OF A DEPENDENT AND INEQUAL SENEGALESE RICE SYSTEM

To understand the contemporary dynamics of the Senegalese rice system, it is necessary to trace its historical construction. Current configurations, such as the dependence on imports and the territorial inequalities are not the result of recent choices, but rather reflect a long trajectory marked by successive transformations of agricultural policies and economic relations. This chapter therefore proposes a historical analysis of the Senegalese rice system. It aims to show how food dependence was gradually constructed, first through the specialization imposed during the colonial period, and later through liberalization reforms and structural adjustment programs in the 1980s and 1990s. These sequences contributed to shape an outward-oriented agricultural system, which weakened subsistence production and accentuated structural inequalities. Finally, the chapter will examine how this historical trajectory led, in a context of increased vulnerability and food crises, to a rice self-sufficiency objective pursued by the

Senegalese government, which appears as a response to dependencies that have been built over the long term.

1. The Construction of Import Dependence

Senegal's dependence on rice imports does not result from a temporary imbalance between supply and demand, but is rather the outcome of a long historical process shaped by successive political and economic transformations. While some regions of the country, particularly Casamance, had traditional rice systems capable of meeting local needs, these balances were gradually disrupted. From the colonial period onwards, Senegal's agricultural economy was redirected toward export crops at the expense of subsistence production. This dynamic continued after independence and was further reinforced by liberalization policies and structural adjustment programs, which contributed to further weakening national productive capacities. The increase in rice imports thus appears as the result of a historical trajectory marked by the weakness of the state, the successive inefficient transformations of agricultural systems, and the country's integration into asymmetrical international trade circuits.

1.1. The Colonial Period: Forced Specialization and the Marginalization of Subsistence Crops

Before colonization, Senegalese agricultural systems were largely based on subsistence crops adapted to local ecological constraints and organized around subsistence logics. Rice cultivation held a central place in the southern regions of the country, particularly in Casamance, where it constituted both a vital food source and a pillar of local social and cultural organization. This production, largely intended for self-consumption, was embedded in relatively autonomous agrarian systems. The arrival of the French colonial administration in the nineteenth century marked a profound rupture in the organization of Senegal's agricultural economy. In a logic aimed at integrating the territory into the global economy, the colonization imposed a productive specialization based on peanut monoculture, intended to supply European

industries²⁰. Thus, Senegal gradually became a true “peanut colony,” ranking as the world’s third-largest exporter of peanuts. This specialization allowed rapid insertion into international trade circuits, but it came at the expense of internal food balances. As a matter of fact, priority given to peanuts led to the progressive marginalization of other subsistence crops, particularly millet, sorghum, and rice, all of which were essential for the population’s food security. This process, often referred to as the “peanut curse”²¹, weakened the country’s capacity to ensure its own food self-sufficiency and initiated a growing dependence on imports. In this context, Asian rice, imported at low cost, gradually emerged as a substitute solution, which laid the foundations for a durable structural dependence. In Casamance, traditional rice cultivation did not disappear entirely under colonial domination, but it was profoundly transformed. Rice production, historically oriented toward subsistence, was requisitioned by the colonial administration, notably for tax payments or to meet wartime needs²². This instrumentalization altered the social and economic function of rice, which ceased to be exclusively a means of community reproduction and became a tool of economic and fiscal coercion.

As a consequence, at the time of independence in the 1960s, Senegal inherited a highly outward-oriented agricultural system, structured around export crops and heavily dependent on food imports. As it lacked sufficient means and room for maneuver, the Senegalese state struggled to break with this colonial legacy. The peanut sector remained a priority, while support policies for subsistence crops were limited. At the same time, imports of Asian rice increased rapidly, facilitated by international trade frameworks and reinforced by liberal economic reforms. This historical trajectory also shaped dietary practices and preferences. Imported rice gradually became a central component of the Senegalese diet, even in regions historically producing local cereals. This shift contributed to increasing the country’s vulnerability to global market fluctuations and supply crises. Thus, the colonial period and the first post-independence decades profoundly transformed Senegalese agricultural and food systems, establishing structural imbalances that continue to constrain the country’s ability to build a autonomous, resilient and socially just food system.

²⁰ Diop, I. (2017) *L’agriculture du Sénégal sous la colonisation*. Harmattan Sénégal.

²¹ *Ibid.*

²² *Ibid.*

1.2. Structural Adjustment Programs: Agricultural liberalization and the deepening of food dependency

From the early 1980s, Senegal, like many countries in sub-Saharan Africa, implemented Structural Adjustment Programs (SAPs) under the auspices of the International Monetary Fund (IMF) and the World Bank. These reforms emerged in a context of deep economic crisis, marked by rising debt, persistent budget deficits, and an imbalanced balance of payments. In exchange for financing and debt rescheduling, the Senegalese state committed to a set of measures which were intended to stabilize the economy and strengthen its integration into international markets²³. Guided by a liberal doctrine, the SAPs' major effect was the drastic reduction of the state's role in the economy. They resulted in the liberalization of foreign trade, the progressive removal of customs barriers and subsidies, the privatization of public enterprises, and cuts to public spending. In the agricultural sector, these reforms led to massive state disengagement. This translated into the weakening of extension and support services, the elimination of guaranteed prices, the reduction of producer support, and the increased openness to food imports. While these policies allowed for some macroeconomic stabilization, their structural and social effects were considerable. The direct exposure of local agriculture to international competition largely undermined subsistence-oriented, low-mechanization sectors. Senegalese producers were unable to compete with imported products sold at low prices, often subsidized in exporting countries, and consequently saw their incomes decline, and national food production capacities eroded. Imported rice, particularly Asian rice, became firmly established as a central component of the diet, deepening the country's dependence on global markets. The SAPs also profoundly reshaped power relations between the Senegalese state, international donors, and domestic economic actors. The conditionalities imposed by the IMF and the World Bank greatly reduced the political room for maneuver of national authorities, with the reform agenda largely dictated from the international organizations. The incompleteness and irregularity of implementation reflected both economic constraints and internal political resistance, linked to the high social costs of adjustment, the vulnerability of rural populations, and the difficulty for the state to maintain legitimacy in a context of slow growth and persistent inequalities.

²³ International Monetary Fund (1996) *Adjustment for Growth: The African Experience*. International Monetary Fund.

The limitations of this model gradually became apparent. As Joseph Stiglitz emphasizes, policies inspired by the “Washington Consensus”, such as budgetary austerity, privatization, and rapid liberalization were too often implemented as ends in themselves, without sufficient consideration for national contexts or institutional capacities²⁴. In the Senegalese case, the unaccompanied agricultural liberalization contributed to weaken market regulation and reduced the state’s ability to protect the most vulnerable populations. The assumption that economic growth would automatically benefit the poorest proved largely illusory, particularly in the agricultural sector. This structural fragilization made Senegal especially vulnerable to external shocks. The global food crisis of 2007–2008, marked by a sharp increase in the price of imported food and widespread food riots, represented a revealing turning point, exposing the weaknesses of the model inherited from structural adjustment programs. It highlighted the inability of the Senegalese food system to ensure stable and equitable access to food and consequently opened the way for a shift in public policy. To respond to this impasse, Senegalese authorities initiated, from the mid-1990s onward, a transition toward so-called “post-adjustment” policies, in order to reaffirm the strategic role of the state in agricultural development. The devaluation of the CFA franc in 1994 constituted a critical moment in this reconfiguration, laying the foundations for the emergence, in the years that followed, of ambitious programs such as the GOANA and the National Rice Self-Sufficiency Program (PNAR)²⁵. These initiatives were framed as political responses to the structural failures of adjustment policies and to the food dependency constructed over previous decades, however without fully overcoming their enduring legacies.

Thus, the colonial period and the Structural Adjustment Programs constituted two decisive phases in the construction of Senegal’s dependence on rice imports. On the one hand, the colonial administration durably reoriented production systems toward extraverted logics, which largely contributed to marginalize food crops and restructure agricultural sectors according to priorities external to local food needs. On the other hand, the liberal reforms implemented from the 1980s onward deepened this trajectory by withdrawing the state from the agricultural sector, exposing local producers to international competition, and reinforcing

²⁴Stiglitz, J. (2002) *Globalization and Its Discontents*. Chapter 3: “Freedom to Choose?”.

²⁵ Ministère de l’Agriculture (2009) *Stratégie nationale de développement de la riziculture*. Février 2009.

reliance on imports as the primary means of food supply. Far from correcting the imbalances inherited from the colonial period, these transformations contributed to reenforce a dependent food model, the effects of which continue to shape the organization of the national rice system today.

2. The pursuit of self-sufficiency

The year 2008 marked a major turning point in Senegal's rice system. The sharp rise in food prices and the riots that followed highlighted the economic, social, and political risks associated with the country's heavy dependence on rice imports. This crisis revealed the structural vulnerabilities of the liberalized model inherited from previous decades, based on state withdrawal and integration into international markets, and led public authorities to place agricultural production back at the center of national priorities. In this context, the objective of rice self-sufficiency gradually emerged as an imperative, both to strengthen food security and to reduce the country's vulnerability to fluctuations in global markets. This ambition was translated by a renewed assertion of the state's role in agricultural development, through the implementation of ambitious programs aimed at supporting domestic production, modernizing infrastructure, and structuring the rice sector. Thus, few initiatives emerged, such as the Great Agricultural Offensive for Food and Abundance (GOANA), followed by the National Rice Self-Sufficiency Program (PNAR), which illustrate this political commitment to rebuilding national productive capacities and reorienting the food system toward greater autonomy.

2.1. The 2008 food riots: breaking point and political shift

As seen previously, Senegal remains a largely agricultural country, with nearly 60% of its working population employed in the sector²⁶. It also possesses several rice production basins distributed across the national territory. However, this domestic production remains insufficient to meet the country's food needs, as it currently accounts for only about 40% of the rice consumed by the Senegalese population. This persistent dependence on imports contrasts with

²⁶ FAO (n.d.) *Aperçu du Développement Rizicole – Sénégal*.

the country's agricultural potential and constitutes a central issue in contemporary public policy. In this context, since the early 2010s, Senegal, like other West African countries such as Côte d'Ivoire, has set itself the objective to achieve rice self-sufficiency by 2030. Although this objective is officially aimed at strengthening food sovereignty, it was primarily elevated to the rank of political priority following the events of 2008, which brutally exposed the vulnerability of the national food system. The year 2008 was marked by the "food riots," a series of social mobilizations that erupted in around thirty countries worldwide, particularly affecting the African continent, including Senegal. In the country, the first demonstrations appeared as early as late 2007 in Dakar, following President Abdoulaye Wade's decision to ban the sale of goods on roads and sidewalks in the city center²⁷. Initially led by street vendors directly affected by this measure, these protests quickly expanded and crystallized broader discontent over the rising cost of living, particularly the rapid increase in the price of staple food products, foremost among them rice. While the initial mobilizations, largely led by young people, were severely repressed, the demonstrations that continued throughout 2008 gradually gained social legitimacy. They were no longer carried solely by marginalized groups or individuals perceived as violent, but also by mothers and religious figures, particularly imams, which contributed to their apparent depoliticization and strengthened their credibility in the eyes of the authorities. This social discontent can largely be explained by the rapid and significant increase in food prices, with some products experiencing rises of 30 to 40% within just a few weeks²⁸. The price of one kilogram of rice, for example, increased by approximately 50 CFA francs during this period, directly affecting the purchasing power of the most vulnerable households²⁹. This price surge highlighted, Senegal's heavy dependence on food imports and revealed the structural fragilities of a system exposed to fluctuations in international markets.

Thus, the 2008 riots constitute a major turning point in the political awareness of food-related issues in Senegal. They call into question not only the economic conditions that made such vulnerability possible, but also the historical and structural orientations of the country's agricultural and trade policies. This considerations thus paved the way for the reaffirmation of rice self-sufficiency as a priority response to food insecurity.

²⁷ Anti, A. (2010) *Note de l'IFRI - Les "émeutes de la faim" au Sénégal : un puissant révélateur d'une défaillance de gouvernance*. IFRI.

²⁸ *Ibid.*

²⁹ *Ibid.*

2.2. Post-adjustment policies: from GOANA to PNAR

From the late 1990s onward, and even more so during the 2000s, Senegalese agricultural policies evolved within what is commonly referred to as a “post-structural adjustment” context, marked by a gradual recognition of the economic and social limitations of Structural Adjustment Programs (SAPs). Without fundamentally challenging the liberal framework established in previous decades, these new policy orientations reflected a willingness to correct the imbalances generated by the extensive withdrawal of the state, particularly in strategic sectors such as agriculture and food security.

Post-structural adjustment policies are thus characterized by a selective return of the state to the economy, through targeted interventions aimed at supporting domestic production and strengthening resilience to food shocks. This repositioning notably involves the introduction of regulated agricultural subsidies, public investment in rural infrastructure (irrigation, roads, storage capacity), and the development of diverse national agricultural plans over the medium and long term. The objective is no longer limited to macroeconomic stabilization but now incorporates broader goals of poverty reduction, inclusive growth, and food security³⁰.

In the case of Senegal, this shift is particularly reflected in initiatives such as the *Grande Offensive Agricole pour la Nourriture et l'Abondance* (GOANA), launched in 2008 in the context of the global food crisis. Presented as an emergency response to rising food prices and increasing dependence on imports, GOANA marked a turning point in national agricultural policies as it reaffirmed the central role of the state in guiding agricultural production. Indeed, driven by a highly centralized executive authority, the program relied on the rapid mobilization of public resources through several key measures: substantial subsidies for agricultural inputs (improved seeds, fertilizers), provision of agricultural equipment, expansion of cultivated areas, and the promotion of high-potential production zones, particularly the Senegal River Valley (SRV) and certain regions of Casamance. The stated objective was to rapidly increase production volumes, especially rice, in order to address the urgent social and political challenges posed by food insecurity³¹. However, GOANA was quickly perceived by public

³⁰ Anti, A. (2010) *Note de l'IFRI - Les “émeutes de la faim” au Sénégal : un puissant révélateur d'une défaillance de gouvernance*. IFRI.

³¹ Anti, A. (2010) *Note de l'IFRI - Les “émeutes de la faim” au Sénégal : un puissant révélateur d'une défaillance de gouvernance*. IFRI.

authorities as a largely short-term response, insufficiently structured to sustainably transform the national rice system. It is within this perspective that the *Programme national d'autosuffisance en riz* (PNAR) was progressively established, in order to embed the goal of rice self-sufficiency within a medium- and long-term strategy. The PNAR explicitly aims to reduce and ultimately eliminate Senegal's dependence on rice imports by strengthening the entire national rice value chain, from production to commercialization.

The program is based on a more systemic approach than previous initiatives, structured around several complementary pillars. It notably aims to sustainably increase yields through the expansion of irrigation and improved water management, particularly in the Senegal River Valley; to support producers through targeted subsidies for inputs, mechanization, and technical assistance; and to strengthen the value chain, notably by improving local rice processing, storage and distribution capacities. The PNAR is also embedded within a broader strategic framework, as it is part of the *Programme d'accélération de la cadence de l'agriculture sénégalaise* (PRACAS), the agricultural pillar of the *Plan Sénégal Émergent* (PSE)³². This reflects the central importance of the rice sector in the national development strategy.

The 2008 food riots highlighted the strong dependence of West African countries on food imports and the structural vulnerability of their agricultural systems. This crisis catalyzed Senegal's pursuit of rice self-sufficiency through programs such as GOANA and later PNAR, primarily aimed at increasing domestic production. However, as we will develop later; this strategy, centered on quantity and productivity, presents significant limitations. Indeed, it remains difficult to implement effectively and overlooks other essential dimensions, such as the integration of small-scale producers, social recognition, and the consideration of local dynamics, all of which are critical to achieving food justice and food sovereignty.

3. The Structural Limits of Self-Sufficiency

³² Ministère de l'Économie, des Finances et du Budget (2023) *Plan Sénégal Émergent (PSE) : Plan d'Actions Prioritaires 3, 2024-2028*. December 2023.

After tracing the historical trajectory of Senegal's rice system from the colonial period to the Structural Adjustment Programs, and later to post-adjustment policies such as the PNAR, it becomes clear that self-sufficiency initiatives struggle to break this dependence. This difficulty does not derive solely from past political choices but also from persistent structural obstacles that constrain the effectiveness of implemented measures. On the one hand, it is due to the highly centralized and poorly coordinated organization of the state, and on the other hand, the market concentration and the influence of major importers limits the development of a truly autonomous national rice sector. Moreover, urban consumers' preference for imported rice, rooted in the colonial legacy and reinforced by trade flows, restricts the competitiveness of local rice and sustains strong import dependence. This section will therefore analyze these two major dimensions that continue to shape Senegal's rice system today.

3.1. A Centralized, Dependent, and Disconnected State

The analysis of Senegal's agricultural system shows that since the 1980s, the state has progressively abandoned family farming, accompanied by widespread land degradation and low productivity across many sectors. Rather than implementing sustainable agricultural policies, the state has successively launched diverse plans, such as the "Maize Plan" (2003), the "Cassava Plan," or the "REVA Plan", which were more presidential communication strategies rather than genuinely structural interventions³³. In fact, these initiatives, often poorly coordinated and inconsistent, systematically failed to achieve their objectives, highlighting persistent governance weaknesses. This inefficiency is largely explained by the centralization of executive power in the Senegalese regime. Agricultural policies are indeed designed in a top-down logic, almost exclusively at the presidential level, with very little expertise and consultation with local actors or civil society organizations. This structure, inherited from the colonial period, maintains a strong state overseeing production but disconnected from on-the-ground realities. Decisions are thus made unilaterally, which favor large industrial farms at the expense of small family farms, even though the majority of the rural population depends on

³³ Anti, A. (2010) *Note de l'IFRI - Les "émeutes de la faim" au Sénégal : un puissant révélateur d'une défaillance de gouvernance*. IFRI.

these for their livelihoods. Rural youth, facing these structural obstacles, are often discouraged and migrate to urban areas, abandoning family farms.

The National Rice Self-Sufficiency Program (PNAR) has undeniably contributed to an increase in national production over the past decade. Supported by the state through input subsidies, hydro-agricultural infrastructure, and strengthened technical assistance, the rice sector has seen notable expansion. In 2023, white rice production reached approximately 1.6 million tons, covering more than half of national demand, compared with about one-third in the early 2000s³⁴. This progress is largely due to the expansion of cultivated areas and improved yields in irrigated perimeters, where yields can average 5.5 tons per hectare³⁵. However, these advances have still not allowed for the substantial reduction of external dependence. Senegal continues to import over one million tons of rice annually to meet domestic demand, which reflects the persistent vulnerability of the country to international market fluctuations. The stated objective of achieving self-sufficiency by 2030 therefore requires not only continued investment but also a more structural transformation of the rice sector. Several analysis note that the strategy implemented has primarily relied on expanding cultivated areas rather than systematically improving productivity³⁶. Indeed, farmers face numerous constraints that limit yield gains, particularly challenges in water management, pressure from weeds and granivorous birds, unequal access to quality inputs, and limited agricultural advisory services. These technical and institutional factors reduce the effectiveness of investments. Thus, area expansion alone does not guarantee sustainable self-sufficiency. Without strengthening farmer organizations, improving technical support, and consolidating water management infrastructure, these public policies cannot be fully efficient. These elements underscore the structural limits of the PNAR, whose productivist logic continues to clash with deep-rooted constraints within Senegal's national rice system.

Another limit is that the state remains structurally dependent on imports. Taxes collected on imported rice constitute a significant source of public revenue, while the domestic market is dominated by an oligopoly of a few importing companies controlling warehouses, distribution

³⁴ Ministère de l'Agriculture de la Souveraineté Alimentaire et de l'Élevage, Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (2024) *Production du riz au Sénégal : Déterminants et Perspectives*. Note politique, avril 2024

³⁵ *Ibid.*

³⁶ CSEA-CIRES-IPAR (2016) *Améliorer les politiques d'autosuffisance en riz en Afrique de l'Ouest : Défis et opportunités – Rapport de l'atelier de Dakar, 12–14 janvier 2016*. July 2016

networks, and financing capacity³⁷. These actors, who have a considerable influence over the political class, have an interest in maintaining import dependence, as achieving rice self-sufficiency would reduce their profits. They can also hinder or undermine the development of competing local production chains through lobbying or economic leverage. Thus, all these factors, the combination of a centralized state, insufficiently attentive to local actors, and a market dominated by a few major importers, constitute a major structural obstacle to achieve an effective and sustainable self-sufficiency.

3.2. Low Competitiveness of Local Rice and Consumer Preferences

Beyond agricultural policies and support programs, the Senegalese rice system today faces structural obstacles that hinder the achievement of self-sufficiency. One major constraint lies in the evolution of consumption habits, which reinforce import dependence and the system's vulnerabilities. Historically, African rice (*Oryza glaberrima*), domesticated before the arrival of Europeans, exhibited agronomic traits well-suited to local conditions: tolerance to excess iron, low-fertility soils, and water fluctuations³⁸. However, this species was fragile, low-yielding, and its seeds dispersed easily, limiting its productivity and large-scale commercialization.

These limitations facilitated the adoption of Asian rice (*Oryza sativa*) from the 16th century onward, which gradually became the production and consumption standard. This shift shaped hybrid dietary preferences, with, on one hand, traits inherited from African rice remained culturally embedded, and on the other, characteristics from Asian rice particularly grain quality and presentation became dominant³⁹. Improved local varieties, such as NERICAs (New Rice for Africa), can compete with Asian imports if their milling quality meets urban standards, but their competitiveness remains constrained by colonial legacies and strong consumer demand for imported rice.

³⁷ Anti, A. (2010) *Note de l'IFRI - Les "émeutes de la faim" au Sénégal : un puissant révélateur d'une défaillance de gouvernance*. IFRI.

³⁸ Britwum, K. & Demont, M. (2021) 'Trading off consumer preferences induced by cultural and colonial heritage: Lessons from New Rice for Africa (NERICA) in Casamance, Senegal', *Q Open*, 1(2), qoab014. doi: 10.1093/qopen/qoab014.

³⁹ *Ibid.*

As a result, the preference for broken rice, predominantly urban, is in fact imported rather than indigenous, whereas some rural populations, such as the Diola in Casamance, retain a preference for traditional whole rice. Heritage rice production in Casamance is primarily a culture of subsistence, however, deficits in urban areas are filled by imports coming through Dakar (5,000 to 8,000 tons per month)⁴⁰, which exacerbates regional dependency. Despite intensification efforts in the Senegal River Valley and the increase in national production, the quality of local rice remains insufficient to meet urban consumer standards, which limits its competitiveness against imported rice. Agricultural policies have largely neglected the impact of quality on the market, focusing more on the quantity produced rather than adapting to consumer preferences⁴¹. This situation constitutes a major barrier to national self-sufficiency, illustrating that production growth alone does not guarantee food sovereignty. Thus, the Senegalese rice system remains exposed to a double vulnerability: dependence on imports and the inability to fully valorize local production, despite its real agricultural potential.

This chapter has shown, through a historical perspective, how dependence on rice imports gradually developed in Senegal. From the production orientations imposed during the colonial period to the liberal reforms of Structural Adjustment Programs, and then to post-adjustment policies aimed at self-sufficiency, the Senegalese rice system has been shaped by economic, institutional, and political factors that have long favored reliance on imports. While the pursuit of self-sufficiency has become a central objective of public policies since the late 2000s, previous analyses have highlighted the persistence of structural obstacles linked notably to governance practices, economic interests, and market dynamics that limit the implementation of truly transformative policies. This historical trajectory helps explain why small producers remain largely marginalized within national rice development strategies. Nevertheless, these producers could represent a crucial lever to strengthen local production and support a more autonomous and equitable transformation of the food system. This genealogy thus constitutes an essential prerequisite for the analysis to follow, by shedding light on the structural mechanisms that hinder the development of a rice system consistent with the principles of food justice and food sovereignty as previously defined.

⁴⁰ CSEA-CIRES-IPAR (2016) *Améliorer les politiques d'autosuffisance en riz en Afrique de l'Ouest : Défis et opportunités – Rapport de l'atelier de Dakar, 12–14 janvier 2016*. July 2016.

⁴¹ *Ibid.*

CHAPTER III — THE SENEGALESE RICE SYSTEM TODAY: BETWEEN NATIONAL AMBITIONS AND TERRITORIAL DIVIDES

After tracing the historical construction of Senegal's dependence on rice imports and analyzing the shift toward the goal of self-sufficiency, it is now necessary to provide an overview of the state of the contemporary rice system. This step allows us to connect the historical trajectory examined previously with current dynamics and to see concretely how national ambitions translate into the effective organization of production. This chapter will first analyze the central role of rice in national consumption as well as its strategic importance in the agricultural economy. The analysis will be conducted at the national level in order to understand the overall structuring of the sector and the priority orientations of public policies. Then, it will be deepened at the territorial level, with a particular focus on Casamance, the subject of our case study. This double analysis will highlight a major paradox: although Casamance has significant rice potential, based on local knowledge and favorable agroecological conditions, it remains largely under-exploited. This situation is mainly explained by a deficit of investment, a relative political marginalization, and an unequal integration into national dynamics of agricultural modernization. The analysis of the rice system today thus reveals not only clearly stated national ambitions but also persistent territorial divides that conflict with self-sufficiency goal.

1. Rice in Senegal: a Food Staple, Economic and Political Stake

Rice occupies a central place in Senegal's food system, as it serves as the staple food for the majority of the population, with one of the highest consumption levels in West Africa. This importance makes rice a strategic product, both for national food security and social stability, as evidenced by past food crises and riots linked to the rise of prices. The country's longstanding dependence on imports has thus turned rice into a major political issue, placing self-sufficiency at the core of public priorities, notably through programs such as the National Rice Self-Sufficiency Program (PNAR). Beyond its role as a food staple, rice also plays a significant part in the agricultural economy. Its production supports hundreds of thousands of

households, primarily through family farms, and mobilizes substantial public resources, notably in terms of infrastructure development, input subsidies, or technical support. However, this production is unequally distributed across the country, as it is heavily concentrated in irrigated areas, where the culture is market-oriented, while in other regions, particularly in the south, rice production remains mostly rainfed, small-scale, and primarily used for subsistence. This differentiated structuring of production reflects deep territorial inequalities and is a key factor for understanding the contemporary dynamics of Senegal's rice system.

1.1. The Central Role of Rice in National Diets

Rice occupies a central place in Senegalese diets. It is the country's main staple, consumed daily by the entire population and it is at the basis of many traditional emblematic dishes, such as *Thieboudienne* and *Yassa*. Per capita consumption is among the highest in West Africa, reaching nearly 100 kg per year (FAO, 2013), and continues to rise due to population growth and rapid urbanization.

To meet this growing demand, Senegal relies heavily on imports. Today, over 80% of the rice consumed in the country comes from abroad, which makes it the second-largest import expenditure after oil and its derivatives (European Investment Bank). The majority of these imports come from Asia, particularly Thailand and Vietnam, which are the main suppliers of rice for the Senegalese market (FAO, 2013). This dependence exposes the country to fluctuations in international prices, regional food crises, and food security challenges, and above all, it limits the valorization of domestic production. At the same time, rice represents a major economic and social stake. Its production, processing, and marketing provide a source of income for many rural families and structure local markets. Thus, the cultural and dietary importance of rice and its strategic economic role makes this staple a priority in the country's agricultural and food security policies. A notable event was the liberalization of the rice sector in 1996. At this time, the state withdrew from production and marketing functions, and it was also marked by the liberalization of imports. Consequently, the country experienced a significant increase in rice imports, particularly due to the 1994 CFA franc devaluation and the growing domestic demand. For several decades, national production thus covered only 20 to 30% of needs. This situation reinforced again the structural dependence on international markets.

However, since the 2010s, within the framework of agricultural recovery policies, particularly the National Rice Self-Sufficiency Program (PNAR), national production has seen significant growth, rising from 559,021 tons in 2014 to over 1.4 million tons in 2022⁴². This increase has allowed the country to extend the national consumption coverage rate to approximately 73%⁴³. This progress was permitted largely by the strengthening of productive capacities in specific areas of the country. However, this intensification also reveals a deeply unequal structuring of the rice sector.

1.2. Rice in the Senegalese Agricultural Economy

Senegalese rice cultivation is primarily carried out by small family farms, representing between 200,000 and 300,000 households, or approximately 1.5 million people (FAO, 2013). These farms are generally organized into Economic Interest Groups (GIEs), which constitute the main form of collective organization in the Senegalese agriculture. Through these groups, producers can access to inputs, credit, and public support mechanisms. In many regions, these GIEs are predominantly composed of women, particularly in rainfed rice cultivation areas. However, despite this apparent structural homogeneity lies a strong duality between two distinct production systems. On the one hand *irrigated rice*⁴⁴, concentrated mainly in the Senegal River Valley, and on the other hand, *rainfed rice*⁴⁵, which dominates the southern regions of the country, especially Casamance. (Cf. Figure 1.)

The Senegal River Valley today forms the heart of the national commercial rice production. This region has benefited for several decades from massive public investments aimed at developing irrigation and modernizing production. These developments have been carried out and are managed by the *Société d'Aménagement et d'Exploitation des terres du Delta du fleuve Sénégal et des vallées du fleuve Sénégal et de la Falémé (SAED*. This public company, plays a central role in land development, water management, and the dissemination of modern

⁴² Ministère de l'Agriculture, de l'Équipement Rural et de la Souveraineté Alimentaire (2022) *Programme National d'Autosuffisance en Riz (PNAR) – Stratégie Nationale Développement de la Riziculture Sénégalaise (2020-2030)*. November 2022.

⁴³ *Ibid.*

⁴⁴ Diagne, M., Demont, M., Seck, P.A. & Diaw, A. (2013) 'Self-sufficiency policy and irrigated rice productivity in the Senegal River Valley', Food Security.

⁴⁵ *Ibid.*

agricultural techniques. Thanks to these infrastructures, irrigated rice cultivation manages to achieve average yields between 5 and 6 tons per hectare, sometimes with peaks reaching 8 to 9 tons⁴⁶. These levels are significantly higher than those observed in rainfed systems. This region also benefits from privileged access to inputs and public support schemes. Producers can have access to certified seeds, fertilizer subsidies of up to 40% below market price⁴⁷, and access to agricultural credit via the Caisse Nationale de Crédit Agricole du Sénégal (CNCAS). The condition is to belong to a GIE and to use certified seeds. This system encourages the integration of these farms into a structured commercial logic⁴⁸. As a result, nearly all locally marketed rice comes from this region, which concentrates the bulk of public investments, infrastructures, and production support mechanisms.

Conversely, in the southern regions of Senegal, notably Fatick, Ziguinchor, Sédhiou, Kolda, Tambacounda, and Kédougou, rice cultivation relies primarily on traditional rainfed systems. These areas nonetheless possess significant land potential, with hundreds of thousands of hectares potentially arable, particularly in floodplain valleys. However, production remains largely constrained by the absence of irrigation infrastructure, limited access to modern inputs. In this regions, GIEs also produce predominantly manually, as rice cultivation is mostly carried out by small family farms, often managed by women. The seeds used are mainly traditional varieties, and access to credit remains limited due to low integration into formal economic circuits and the lack of financial resources⁴⁹. As a result, yields are significantly lower, and production is primarily intended for self-consumption. Rice commercialization is marginal or even inexistent, and if any volumes are sold, it is generally in an informal manner, and doesn't respond to a structured commercial logic. The limited development of processing and marketing infrastructure further constrains the integration of these producers into the national rice sector.

⁴⁶ *Ibid.*

⁴⁷ Colen, L., Demont, M. & Swinnen, J. (2013) 'Smallholder participation in value chains: The case of domestic rice in Senegal', in Elbehri, A. (ed.) *Rebuilding West Africa's Food Potential*. Rome: FAO/IFAD.

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

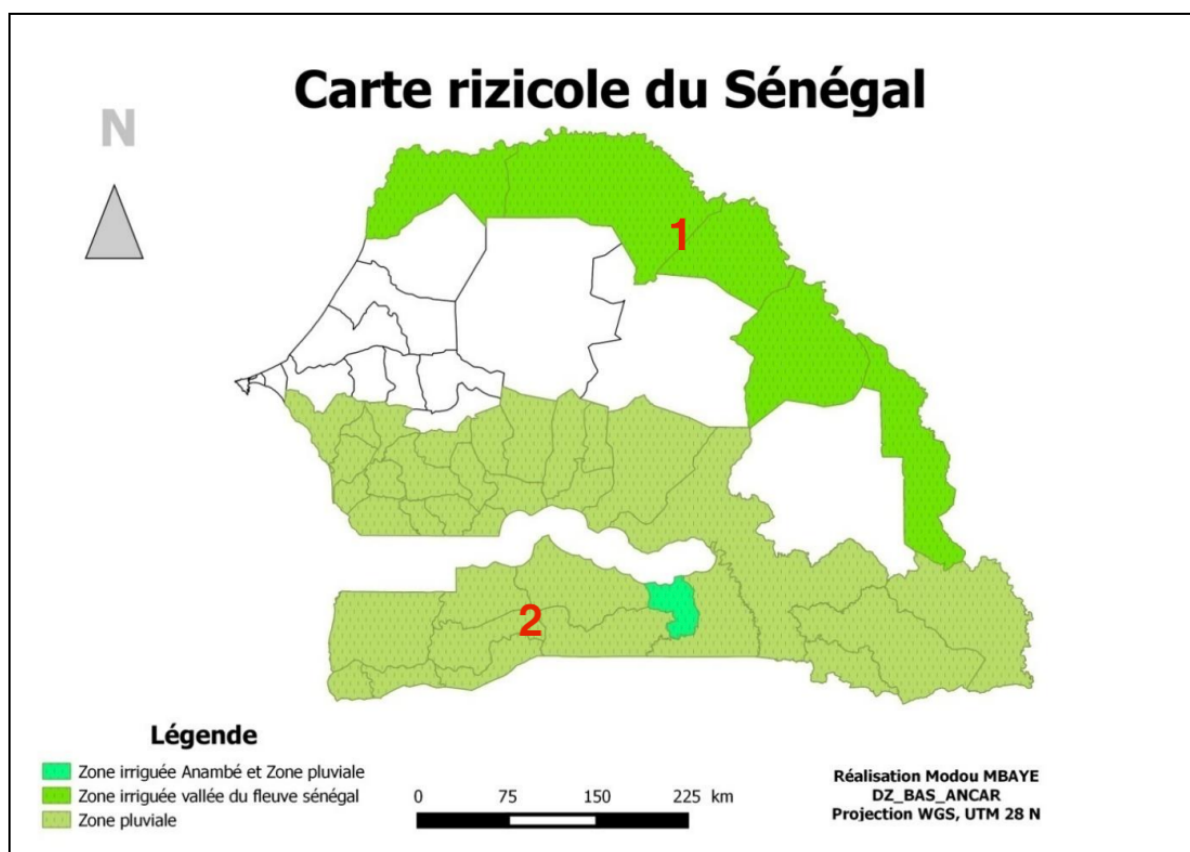


Figure 1: Map of the different types of rice cultivation in Senegal

Source: Ministère de l'Agriculture et de l'Équipement Rural

Legend:

- (1) Irrigated area – Senegal River Valley
- (2) Rainfed area

Thus, the analysis of rice's role in Senegal underscores its centrality as both a pillar of national nutrition and a major economic and political concern. However, despite the existence of national programs aimed at strengthening rice production, the distribution of public investments, infrastructure, and support mechanisms is heavily concentrated in the Senegal River Valley, where production is integrated into a commercial and productivity-oriented logic. In contrast, in rainfed areas, although they are home significant share of producers and possess substantial arable land potential, they remain characterized by a limited access to productive resources, which largely restricts their ability to fully contribute to national production and benefit from public policies. This dual structuring of the Senegalese rice sector highlights an inequality in access to productive resources, which is a central issue in evaluating the national

food system through the lens of food justice, particularly regarding equity. Also, this differentiation is not merely technical, but it reflects political choices and institutional priorities that guide investments, support measures, and development dynamics. Understanding this organization of the rice system thus allows to anticipate the resulting territorial imbalances, particularly the gradual marginalization of certain rainfed production areas, which have historically been central and hold significant potential to support the national production effort.

2. Casamance: The Historical and Political Marginalization of an "Agricultural Granary"

Casamance represents a unique region within Senegal, both geographically and culturally. Predominantly inhabited by the Diola people, whose identity is deeply rooted in the region, Casamance is distinguished by its lowland rice systems, primarily rainfed, which play a central role in the local economy and hold strong cultural significance. However, despite this considerable agricultural potential, capable of significantly contributing to national food self-sufficiency, Casamance has historically been marginalized and underexploited. This frustration, nourished by decades of political and economic marginalization, partly explains the conflicts in the region and the movements which claim for independence. This section therefore aims to analyze the specificities of Casamance and highlight the paradox between its agricultural wealth and its relative neglect.

2.1. A Distinct Region: Geography, Identity, and Political History



Figure 2 : Location of the Casamance Region within Senegal

Source: Géoconfluences

Casamance represents a territorial and political singularity within Senegal, with roots extending back to the colonial period. Situated between Gambia to the north and Guinea-Bissau to the south, the region was shaped by an artificial colonial boundary. Originally, it belonged to the broader territorial sphere of the Gabonese Empire. This geographic configuration has long isolated Casamance from the rest of the country, both economically and politically, which fostered a lasting sense of marginalization relative to the central power in Dakar. During the colonial period, structural differences emerged between the north and south of Senegal. The northern region is predominantly inhabited by the Wolof population, more urbanized and historically integrated into commercial and administrative networks, whereas Casamance is dominated by the Diola (Joola) ethnic group, traditionally rural and long associated with animist practices. The Diolas possess distinct social and agricultural systems, characterized by a strong community organization. Also, rice as a central position in their culture, since, originally, all families used to grow rice, which was therefore central to their way of life and beliefs. . For the Diolas, rice forms the dietary staple and a key marker of wealth, prestige, and security: owning productive rice fields and abundant granaries is synonym of material well-being and social recognition. Rice also occupies a significant place in ritual and religious practices, including funerary ceremonies and other rites, which testifies of its structuring role in social and spiritual

organization. This close link between society and rice cultivation is reflected in the enduring attachment to traditional agricultural tools, such as the *daba*, passed down through generations and often associated with initiation rituals. These tools, adapted to local ecological conditions, carry strong symbolic and cultural value, explaining why many producers are reluctant to replace them with modern equipment. Moreover, the Diola language, still widely spoken in daily life, reinforces a strong regional identity, sometimes in contrast to Wolof, often perceived as the dominant language of central power. the use of this language once again highlights the uniqueness of this region.

Economically, Casamance suffers from structural isolation. The poor state of road infrastructure hinders mobility and limits the region's integration into national markets⁵⁰. This situation is further exacerbated by land speculation, particularly around Ziguinchor, where people from the northern regions can access land under favorable conditions. Local populations, who often rely on customary land rights that are not formally recognized, find themselves dispossessed or marginalized, which foster a deep sense of injustice and resentment toward Dakar. Ultimately, these frustrations contributed to the emergence of the Casamance conflict, which began in 1982 with the creation of the Mouvement des Forces Démocratiques de la Casamance (MFDC)⁵¹. This conflict, considered the most ancient active armed conflict in Africa, has profoundly affected the region. Clashes between Senegalese forces and rebel groups have led to an underinvestment by the state and international donors in the region, especially in agricultural infrastructure. Several anti-salt dam projects aimed at protecting rice fields were abandoned from the late 1990s following the sudden withdrawal of many Western donors in response to the use of landmines⁵². As a result, rice cultivation has become particularly vulnerable to the combined effects of soil salinization and reduced rainfall.

The consequences of the conflict are still felt today. Hundreds of villages remain abandoned, and the region experiences extremely high poverty levels: in 2018, nearly 75% of the population lived below the poverty line (Le Monde Afrique, 2020). This situation has encouraged massive rural exodus, particularly among the youth, who migrate to Dakar or Europe, reducing the local agricultural workforce and further weakening traditional production systems. Beyond the conflict, other structural constraints weigh on Casamance. Local and regional trade remains

⁵⁰ Evans, M. (2005) 'Insecurity or Isolation? Natural Resources and Livelihoods in Lower Casamance', *Canadian Journal of African Studies / Revue Canadienne des Études Africaines*, 39(2), pp. 282–312.

⁵¹ *Ibid.*

⁵² *Ibid.*

limited, which hinders the commercialization of agricultural products, including rice. Unfavorable macroeconomic conditions and governance issues further exacerbate rural precarity. Despite the adaptive capacity of producers in response to environmental and social changes, these adjustments do not translate into sustainable livelihoods over the long term.

In this context, Casamance represents a central tension within Senegal's rice strategy. While the state pursues the goal of rice self-sufficiency, it neglects, in the southern part of the country, a territory often described as a "granary," with favorable agroecological conditions and a long-standing rice cultivation know-how. But the region's economic, political, and security challenges constitute a major barrier to fully exploiting this potential. This contradiction raises questions about Senegal's agricultural strategy in the context of the quest for national rice self-sufficiency: is Casamance intended to be fully leveraged in achieving national objectives, or does it remain a peripheral region, left out in favor of production models perceived as more immediately efficient? From this perspective, a fundamental question arises: given the region's specific constraints, can Casamance contribute to the national goal of rice self-sufficiency while respecting principles of justice and food sovereignty, or is it likely to remain marginalized despite its strategic potential?

2.2. A specific rice system revealing a structural paradox

Casamance has a very significant rice potential, comparable to that of the Senegal River Valley (VFS). Indeed, the southern regions total approximately 234,000 hectares of exploitable land (116,000 ha in Ziguinchor, 56,000 ha in Sédhiou, 50,000 ha in Kolda, and 12,000 ha in the Anambé basin) (FAO, 2013), compared to 240,000 hectares of irrigated land in the VFS (FAO, 2013). Despite the similarity in area, yields show a particularly significant gap. In 2023, irrigated rice in the VFS produced an average of 5.5 t/ha⁵³, while rainfed rice cultivation in Casamance reached only 3.4 t/ha⁵⁴.

⁵³ Ministère de l'Agriculture de la Souveraineté Alimentaire et de l'Élevage, Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (2024) *Production du riz au Sénégal : Déterminants et Perspectives*. Note politique, avril 2024.

⁵⁴ *Ibid.*

To quantify this gap, we can rely on the relative difference:

$$\text{Relative difference (\%)} : \frac{5,5 - 3,4}{3,4} \times 100 \approx 61,8 \%$$

In other words, irrigated yields are approximately 62 % higher than those of rainfed crops, even though the cultivable areas are nearly equivalent. This observation highlights that Casamance is significantly underexploited. Indeed, with a comparable area, it produces far less rice than the Senegal River Valley.

Several factors explain this situation. First, the limited training of farmers restricts the adoption of improved cultivation techniques: only 2.5 % of household heads practicing rainfed rice farming have received agricultural training⁵⁵. Second, rice cultivation is rainfed and traditional, carried out mainly with manual tools and predominantly by women, which reduces productivity and the capacity to intensify production. Moreover, Casamance receives less state support, particularly in terms of infrastructure, inputs, and mechanization, unlike the river valley, which benefits from substantial investments. Finally, environmental constraints exacerbate the problem, such as higher soil salinization, pest attacks like birds, and limited water management.

If rainfall contributes to these lower yields, it alone does not explain the 62 % gap. It is primarily the other factors we have just described that constrain production. Nevertheless, certain solutions exist to improve yields. Mangrove rice cultivation, practiced in the mangrove areas of Casamance, uses salt-tolerant varieties such as WAR and ROK⁵⁶, allowing farmers to circumvent soil salinization and increase productivity in these sensitive zones. This demonstrates that even under less favorable conditions, production can be significantly improved through the adoption of adapted varieties and technical support. Thus, despite a potential nearly equivalent to that of the Senegal River Valley, Casamance remains less integrated into national production, perfectly illustrating the paradox: fertile and extensive lands, but low yields and insufficient production to fully contribute to the country's rice self-sufficiency.

⁵⁵ Ministère de l'Agriculture de la Souveraineté Alimentaire et de l'Élevage, Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (2024) *Production du riz au Sénégal : Déterminants et Perspectives*. Note politique, avril 2024.

⁵⁶ *Ibid.*

Rice occupies a central place in Senegalese food consumption and the economy. However, yet its production is marked by a pronounced duality. Irrigated areas benefit from significant institutional support, while rainfed rice cultivation, particularly in Casamance, remains marginalized despite its productive potential and cultural value. This unequal integration of different production zones highlights the limits of self-sufficiency policies focused on performance and quantity and highlights the importance of including small producers and considering local dynamics. Thus, after assessing the current state of Senegal's rice sector, the following chapter, based by relying on the normative framework developed in *Chapter I*, intend to evaluate the Senegalese rice system. It particularly compares national objectives with local realities and analyze producers' capacity to participate in both production and food governance.

CHAPTER IV — ASSESSING THE SENEGALESE RICE SYSTEM THROUGH THE LENS OF FOOD JUSTICE AND SOVEREIGNTY: A COMPARATIVE ANALYSIS BETWEEN THE NATIONAL FRAMEWORK AND CASAMANCE

This chapter aims to assess the extent to which Senegal's rice self-sufficiency strategy effectively achieves food justice and food sovereignty, as defined in *Chapter I*. Senegal pursues self-sufficiency as an end in itself, whereas food sovereignty requires asking questions about who produces, how, for whom, and with what decision-making power. In this context, Casamance serves as a revealing case of the limitations of the dominant model: despite its high productive potential, this region remains marginalized by policies focused on quantitative performance rather than social justice and recognition of local actors. The evaluation is based on the normative framework developed in *Chapter I* and relies on empirical data, including interviews conducted with small producers from different regions. It is carried out at two complementary scales: nationally, to measure the overall impact of agricultural policies, and

through the specific case of Casamance, where the study of the working conditions of Economic Interest Groups (GIE) allows for a comparison between institutional objectives and local realities. This comparative approach will put in evidence the central assumption of this thesis, which supposes that the pursuit of self-sufficiency does not necessarily guarantee food sovereignty or justice. It will highlight the importance of integrating small-scale farms into agricultural policies and considering factors beyond mere productivity in order to build a truly just and sovereign food system.

1. A Food justice unevenly achieved in Senegal's rice sector

To assess the extent to which the Senegalese rice system meets the requirements of food justice, this section draws on the criteria defined and operationalized in *Chapter I*, namely equity in access to resources and support mechanisms, improvement of producers' living conditions, recognition of agricultural knowledge and labor, and the capacity of actors to make real choices regarding their activities.

This analysis is conducted at two complementary scales: on one hand, the national framework, mainly represented by the Senegal River Valley, which is the primary space where public policies are implemented, and concentrates most of the commercialized production; on the other hand, Casamance, studied as a contrasting case, where rainfed rice systems largely operate on the margins of institutional support. This comparative approach highlights disparities in the allocation of resources, support, and opportunities, and it also questions how agricultural policies, though oriented toward national self-sufficiency, produce differentiated effects across territories. It aims to determine the extent to which the current rice system contributes to, or conversely fails to ensure, equitable conditions for all producers.

1.1. Access to resources and support mechanisms

The equity criterion outlined in *Chapter I* is translated in access to resources and benefits within the food system, including land, inputs, equipment, income, and public support programs. It also includes the effective improvement of producers' living and working conditions, particularly for the most vulnerable actors. This dual analysis allows for the

assessment not only of the material distribution of production means but also of the concrete effects of public policies on working conditions and producers' well-being.

In the Senegal River Valley (VFS), national agricultural policy relatively facilitates access to equipment and inputs. Indeed, the state subsidizes up to 70% of the cost of agricultural machinery (tractors, harvesters, rice mills) and provides fertilizers at reduced prices (FAO, 2013). Through GIE membership, producers can access to credit, and it is conditioned on the use of certified seeds, and it is supplemented by private lenders at higher interest rates. This organization enables producers to improve their production conditions and secure access to inputs and at the same time, it creates a framework that supports some technical and financial guidance. However, the monopoly of the agricultural bank and the public input supplier, combined with bureaucratic complexity, limits the effectiveness of these mechanisms and their ability to fully benefit producers, particularly the smaller ones.

In Casamance, and also in regions with similar conditions such as Sine Saloum, rainfed producers face much more precarious conditions. Producers lack access to mechanized equipment and must purchase inputs themselves, often at very high prices in local hardware stores. They sometimes received an occasional assistance, such as the distribution of improved seeds, but it remains marginal and poorly adapted to actual needs. There is no institutional training, as producers only rely on traditional knowledge passed down through generations. In Casamance, one producer jokes by affirming that in the region farmers have been growing rice since they were born. Rainfed cultivation remains highly labor-intensive, primarily manual, and yields are low, limiting the cultivated area and marketable surplus.

Thus, this situation creates a double inequality: not only do producers lack access to resources and public support, but their living and working conditions remain unchanged, or even constrained by the scarcity of means. Thus, whether in Casamance or Sine-Saloum, the current organization of the agricultural system reproduces structural inequalities, with rainfed areas and small-scale producers largely marginalized compared to irrigated regions that are better integrated into the national support framework.

1.2. Social, cultural, and gender recognition of agricultural labor

The criterion of recognition seeks to assess the extent to which producers are socially and culturally valued, and whether their local knowledge and traditional practices are taken into account in agricultural policies and support mechanisms. This dimension particularly include the recognition of women's specific role in agricultural production, as well as the extent to which traditional knowledge is integrated into the design and implementation of agricultural policies.

In the Senegal River Valley (SRV), the formal recognition of producers is primarily mediated through collective structures such as Economic Interest Groups (GIEs) and village unions, which allows for the access to irrigation infrastructure, credit, and agricultural inputs. These structures confer a degree of institutional visibility and integration to producers within the national agricultural system. However, this recognition largely depends on compliance with formal administrative and technical requirements, such as the use of certified seeds and adherence to standardized production models aimed at maximizing yields. In this context, local knowledge and traditional farming practices tend to be subordinated to externally defined technical norms. Recognition is therefore conditional and instrumental, and does not allow producers to be recognized individually as such, only through large organizations, which serve more of an administrative role than one of genuine representation and recognition.

In Casamance, by contrast, the lack of institutional integration translates into a profound deficit of social, cultural, and gender recognition, particularly for women, who constitute the majority of the agricultural labor force. This is particularly evident in testimonies collected during fieldwork, which illustrate the marginalization of local knowledge within public interventions. For instance, Pierre Diatta, a producer from Cabrousse (a Diola village of Casamance), described the construction of an anti-saltwater dam by external agents who disregarded local technical knowledge. He explained that traditional methods rely on a mixture of clay and shells to ensure resistance to salinization. However, the public agent decided to construct the dam using only sand, ignoring warnings from local farmers. This resulted in structural failure and the degradation of surrounding rice fields. Such interventions not only undermine the effectiveness of agricultural infrastructure but also reflect the disregard of local expertise, which is overlooked, in addition of weakening producers' capacity to sustain their own production systems.

This lack of recognition is particularly pronounced in its gender dimension. Although national agricultural policies, including the PNAR⁵⁷, formally acknowledge the importance of strengthening women's participation in rice production, these measures remain limited in scope and unequally implemented across regions. This creates a structural inequality between territories such as Casamance, where women constitute the majority of rice producers and are responsible for most manual cultivation, and the Senegal River Valley, where agricultural modernization policies favor mechanized, irrigated, and commercially oriented production systems, often dominated by male producers with greater access to land, credit, and equipment. As a result, women continue to face significant barriers in accessing productive resources, financial support, and infrastructure. Above all, their specific status and working conditions are not officially recognized or incorporated into public policy. Although political discourse increasingly emphasizes the need to adopt a gender-sensitive approach⁵⁸, nothing has actually been implemented in practice, and no substantial changes have taken place. "Neutral" policies thus invisibilize women, even though they constitute the majority of the agricultural workforce, particularly in rice production. Indeed, agriculture accounts for 46.40% of the female workforce⁵⁹. Furthermore, the current state of the system ignores the conditions women face, including limited access to credit and land and a heavier domestic burden⁶⁰. Their work is thus often seen as an extension of their domestic work, as a mere means of subsistence that is discredited⁶¹.

More broadly, although family farming is frequently presented in national discourse as a cornerstone of agricultural development and food security, its diversity and its contribution to

⁵⁷ Ministère de l'Agriculture, de l'Équipement Rural et de la Souveraineté Alimentaire (2022) *Programme National d'Autosuffisance en Riz (PNAR) – Stratégie Nationale Développement de la Riziculture Sénégalaise (2020-2030)*. November 2022.

⁵⁸ Ministère de l'Économie, des Finances et du Budget, *Plan Sénégal Émergent (PSE) : Plan d'Actions Prioritaires 3, 2024-2028* (Dakar, décembre 2023), p. 72

⁵⁹ Maisonnave, H. and Nziengui Mamboundou, P. (2022) 'Agricultural economic reforms, gender inequality and poverty in Senegal', *Journal of Policy Modeling*, 44(2), pp. 361–374.

⁶⁰ Clavel, D., Guétat-Bernard, H. and Verger, E.O. (2023) 'Intensified rice production negatively impacts plant biodiversity, diet, lifestyle and quality of life: transdisciplinary and gendered research in the Middle Senegal River Valley', *Agriculture and Human Values*, 40, pp. 745–760. Available at: <https://doi.org/10.1007/s10460-022-10392-5>

⁶¹ *Ibid.*

rural livelihoods remain insufficiently recognized in practice. Family farms, particularly in rain-fed regions, often operate with limited institutional support and remain marginal in political and economic decision-making processes. Their production systems, rooted in local ecological conditions and cultural practices, are rarely incorporated into national development strategies, which tend to prioritize standardized and capital-intensive production models.

In its current state, Senegal's agricultural system fails to meet producers' need for recognition. On the one hand, in the Senegal River Valley, even though producers are more integrated through collective organizations, the model of intensive irrigated farming struggles to acknowledge the work of women, who are rendered even more invisible. This is because, in addition to being overlooked by public policies, they no longer enjoy the social and family recognition they once received under traditional production models⁶². In Casamance, these forms of farming still exist but are not integrated into national strategies, as they are perceived solely as informal, domestic, subsistence work. This uneven recognition contributes to reinforce territorial and social inequalities within the national rice system and highlights the limits of current agricultural policies in addressing the social and cultural dimensions of food justice.

1.3. Real Capacity of Producers to Decide on Their Production Methods and Market Outlets

Previously, we defined the capability criterion as the ability of producers to exercise genuine control over their production methods, the organization of their work, and the marketing of their harvests. It aims to measure their actual autonomy in the face of institutional, economic, and social constraints, as well as the freedom they have to adapt their practices to their local knowledge and needs.

In the Senegal River Valley (VFS), the organization of credit and inputs significantly limits producers' autonomy. To obtain a loan from the CNCAS, farmers must belong to a GIE and use certified seeds. Each year, based on the reference price set by the CIRIZ, the GIE calculates the volume of rice each producer must deliver to repay their loan⁶³. Consequently, a substantial

⁶² *Ibid.*

⁶³ Colen, L., Demont, M. & Swinnen, J. (2013) 'Smallholder participation in value chains: The case of domestic rice in Senegal', in Elbehri, A. (ed.) *Rebuilding West Africa's Food Potential*. Rome: FAO/IFAD.

portion of the harvest is automatically allocated for repayment, reducing the producers' flexibility to plan their crops, to choose varieties, or to sell their production. While this system facilitates access to credit and inputs, it creates a structural dependency and restricts the capacity of producers to make independent decisions about their agricultural practices.

In Casamance, the situation is very different. Rainfed farms operate primarily for self-consumption rather than for the market. As Pierre Diatta explained in Cabrousse, each family maintains rice reserves for two to three years and only sells any potential surplus. This household storage logic means that production decisions are guided by family needs rather than commercial or institutional imperatives. Agricultural knowledge and practices are transmitted through generations, and traditionally, all family members participate to for rice cultivation. However, this labor intensity and its low valuation can discourage younger generations from taking over the farms. During the interviews for example, Louise's daughter explained that she prefers to continue her studies and occasionally help her mother. Producers also explained that they adapt their practices to local constraints due to a lack of resources that would allow them to pursue alternatives. For example, some favor fast-growing seed varieties after having tried others, which were lost to birds and zebu cattle.

1. Food sovereignty confronted with the limits of the Senegalese rice system

Building on the previous analysis, this section aims to assess the degree of food sovereignty producers benefit within the Senegalese rice system, using the criteria defined in *Chapter I*. These include notably the autonomy of producers in the organization of their activities, the effective control over productive resources, the capacity to influence agricultural and food policy directions, as well as the territorial rooting of production systems. The objective is thus to evaluate the extent to which producers have real power over the conditions of production, processing, and marketing of their rice.

2.1. Autonomy of producers and organization of production

In the Senegal River Valley (SRV), rice producers are closely guided by a range of collective organizations, from Economic Interest Groups (GIE) to village unions and

federations. These structures enable producers to access inputs, certified seeds, and agricultural credit. In practice, producers repay these credits by delivering a portion of their harvest, and most GIEs lack processing or storage capacities. As a result, rice must be sold quickly, often at prices that do not fully reflect its value, which limits producers' real autonomy and their freedom to make market decisions⁶⁴. Despite these constraints, the SRV remains a relatively commercialized region: according to certain surveys, around 75% of producers sell part of their production individually, which is high compared to the rest of the country. However, nearly a quarter of producers still cultivate mainly for self-consumption. Even among those involved in marketing, access to markets varies greatly: the volumes sold differ significantly from one producer to another, and not all farmer organizations have the skills or resources to negotiate marketing, store, or process rice. Moreover, public policies encourage investment in the region by large, sometimes foreign, companies that take hierarchical control of production or impose contracts. These dynamics concentrate power in the hands of a few actors and limit the autonomy of local producers, restricting their capacity to control the conditions of production, processing, and marketing⁶⁵. Thus, producer autonomy remains partial: it is conditioned by membership in an organization, access to credit and inputs, and their position within the marketing chain.

In Casamance, the situation is very different. Producers manage all stages of production themselves, from seed selection to hulling and storage. Cultivation is largely intended for self-consumption, with sales limited to any surplus. Production and labor organization decisions are made at the family or community level, with strong involvement of children and women in all operations, following practices passed down through generations. Producers sometimes experiment with different types of seeds and adjust their work according to ecological risks, such as predation by birds or livestock, giving them practical autonomy in technical and organizational terms, even though it is not supported by public policies or credit structures.

This comparison shows that the autonomy of SRV producers is structured and limited by institutional frameworks and they apparenance to collective groups, whereas in

⁶⁴ Colen, L., Demont, M. & Swinnen, J. (2013) 'Smallholder participation in value chains: The case of domestic rice in Senegal', in Elbehri, A. (ed.) *Rebuilding West Africa's Food Potential*. Rome: FAO/IFAD.

⁶⁵ Bourgoin, J., Diop, D., Dia, D., Sall, M., Zagré, R., Grislain, Q. & Anseeuw, W. (2020) 'A look at the Senegalese agricultural model: land practices and territorial specificities of medium and large-scale farms', *Cahiers Agricultures*, 29, Article 18, 8 pp. doi: 10.1051/cagri/2020018.

Casamance, producers enjoy full autonomy in managing their production, but within an isolated, marginalized context without external support. In terms of food sovereignty, this indicates that real autonomy is not limited to access to resources or credit; it also depends on the freedom to decide how to produce, process, and sell, which remains strongly constrained in the SRV and largely preserved in Casamance, but at the cost of a structural marginalization.

2.2. Control of productive resources and vulnerability to commercialization dynamics

The criterion considered here examines the capacity of producers to exercise effective control over essential production resources, including land, water, and agricultural knowledge, and to protect them against pressures of commercialization and dispossession.

In the Senegal River Valley, rice farmers are organized within collective structures such as GIEs, village unions, and federations. These organizations manage land allocation, the maintenance of irrigated infrastructure, and access to inputs and credit, providing producers with a certain level of institutional control over production. However, this regulation is weakened by the arrival of foreign-invested companies, supported by the Senegalese state, which have transformed both the scale and nature of land appropriation⁶⁶. Land acquisitions occur over large areas, sometimes at the expense of local uses, and are often intended for export-oriented or speculative projects. This situation also affects lands traditionally used for livestock, generating tensions with agro-pastoralists. Access to water, for example in the region around Lake Guiers, represents another source of conflict, as new economic actors compete with farmers for this resource⁶⁷. Despite these tensions, the local population tends to accept investor projects due to the compensations offered, such as the construction of public infrastructure (schools, health centers, mosques), agricultural developments, and sometimes donations to local communities. This dynamic shows that real control over resources remains partial: producers maintain a role in the daily management of their farms, but land pressure and the

⁶⁶ Soullier, G., Moustier, P., Bourgoin, J. & Ba, A. (2020) 'The effects of agribusiness investments on family farmers: The case of the Senegal River Valley', *Économie Rurale*, pp. 61–79. doi: 10.4000/economierurale.6262.

⁶⁷ *Ibid.*

commercialization of resources limit their sovereignty and their capacity to fully decide how resources are used.

In Casamance, however, producers enjoy much more direct control over their resources. Farms are small, rice cultivation is rainfed and largely autonomous, and the management of water, seeds, and cultivation methods is driven by the community. The rice cultivated primarily for self-consumption and preserve traditional agricultural knowledge, passed down from generation to generation. The absence of large investors and state pressures on land allows them to maintain strong control over their resources and protect their production system from commercialization. However, this autonomy also results in marginalization from commercial circuits and public policies, limiting access to financing and technical innovations, while largely preserving local food sovereignty.

Thus, the comparison between the SRV and Casamance illustrates two opposing models: in the SRV, state structuring and support promote production but expose resources to commercialization and dispossession pressures, whereas in Casamance, producers' autonomy protects resources and local knowledge, but at the cost of limited integration into the national economy. This tension highlights the limits of national self-sufficiency strategies to guarantee land control and the protection of essential resources.

2.3. The capacity of local actors to influence agricultural and food policy

The criterion considered in this subsection is the capacity of local actors to influence agricultural and food policy, including public policies and development programs.

In the Senegal River Valley, producers benefit from a more formal organization. Structures such as GIEs and village unions provide them with a certain visibility with public institutions. This structuring, though imperfect, gives them relative power to participate indirectly in some collective decisions, notably in determining production volumes allocated to repay credits. However, even in this region, farms remain dependent on institutional decisions and the regulatory framework, and do not have complete autonomy to direct production and marketing as they wish.

In Casamance, the situation is very different. Producers live in near-total isolation from national agricultural policies. Interviewees were unaware of programs such as PNAR or GOANA, and most have never received any government support. Some respond to such questions with humor, while others, like Pierre Diata, express indignation at the authorities' disregard for local needs, particularly in poorly designed projects, such as the inadequately constructed dam. Participation in public policy is nonexistent, and the capacity to formulate demands is limited, partly due to a lack of organization and resources, a phenomenon described by some authors as an "urban bias"⁶⁸, where poor rural populations have more difficulty being heard compared to better-structured and connected urban actors.

Overall, the Senegalese rice system presents a major limitation to food sovereignty: despite stated national ambitions, Senegalese agricultural policies do not strengthen the decision-making capacities of the farms themselves, which are the actual basis of production. Family farms, particularly in rainfed areas like Casamance, therefore remain largely excluded from agricultural and food policy orientations, reducing their autonomy and their influence over the system in which they operate.

2.4. Territorial anchoring of food systems

The final criterion considered in terms of food sovereignty is the territorial anchoring of food systems, meaning the coherence between production methods, local ecosystems, and social and cultural practices.

In the Senegal River Valley, rice production is largely guided by institutional and state logics. Technical choices, labor organization, and agricultural calendars are defined centrally, according to macroeconomic objectives and strategic plans that prioritize productivity and formal coordination⁶⁹. This technocratic planning leaves little room for local adaptations or

⁶⁸ Herring, Ronald J. (ed.), *The Oxford Handbook of Food, Politics, and Society*, Oxford Handbooks (2015; online edn, Oxford Academic, 5 Dec. 2014), <https://doi.org/10.1093/oxfordhb/9780195397772.001.0001>, accessed 11 Nov. 2025.

⁶⁹ Ndiaye, A. (2014) *Autosuffisance en riz et développement agricole au Sénégal : Ne refermez pas le débat*. IPAR – Initiative Prospective Agricole et Rurale.

traditional knowledge and strongly conditions how producers can manage their production areas.

In Casamance, by contrast, rice cultivation remains largely traditional and deeply rooted in the territory. Agricultural practices, tools, and labor organization are passed down from generation to generation, and production is primarily intended for self-consumption. These local skills are fully mobilized in coherence with the characteristics of local ecosystems, however, they remain overlooked by public policies, which neither recognize nor support these practices. Casamance producers thus operate in an autonomous system, in harmony with their environment and social practices, but completely disconnected from the national production strategy.

This comparison highlights a central tension for food sovereignty: in the Senegal River Valley, institutional integration comes at the cost of technocratic standardization and a loss of connection with local practices, whereas in Casamance, territorial anchoring is preserved but marginalized by national policies. This analysis also reveals how the Senegalese rice system, which seeks to reach self-sufficiency, favors an approach centered on increasing productivity by concentrating public investments and programs in areas where intensification conditions are most favorable, particularly the Senegal River Valley. This choice marginalizes other territories, notably Casamance, which remains largely outside national dynamics despite significant production potential. In addition, when we analyse the government's strategy, we can note that while public policies effectively promote intensification, they tend to overlook concerns of food justice and sovereignty, particularly regarding producer autonomy, decision-making capacity, and the recognition of their practices.

The evaluation based on food justice criteria has shown that public measures, while aiming to support national production, produce effects that are unevenly distributed across territories. And above all, even if this does indeed lead to an increase in domestic production, it comes at the cost of disregarding certain social considerations that are nonetheless essential. As we have seen, in the Senegal River Valley, producers benefit from privileged access to subsidized inputs, credit, and infrastructure, but this integration comes with forms of institutional dependence that limit their economic autonomy and their capacity to fully control the conditions for marketing their production. In contrast, producers in Casamance, as well as in rainfed areas like Sine Saloum, remain largely excluded from support mechanisms, forcing

them to rely entirely on their own resources. Their traditional, family-based farming practices are not formally recognized and are considered domestic work, even though these types of farms are the majority in Senegal and have always been characteristics of the country's agriculture.

These considerations highlight a central issue: if integration into public policies provides access to resources, this comes with constraints and a standardization of practices, and thus leads to the marginalization of certain ones. In contrast, conversely, the least integrated areas, mainly the rain-fed farms, retain their autonomy, but their lack of recognition leaves them on the margins of the system.. Also, in terms of food sovereignty, similar dynamics are observed. In the Senegal River Valley, production is strongly structured by public institutions, credit mechanisms, and marketing circuits that regulate producers' activities. But this framework limits their control over production directions and the marketing of their harvests. In Casamance, by contrast, producers retain greater control over their agricultural practices and means of production, but it is at the cost of institutional isolation and lack of political recognition. Thus, the Senegalese rice system thus appear fragmented between on one hand, highly integrated but constrained spaces, and on the other, autonomous but marginalized territories.

These tensions reveal the limits of a self-sufficiency strategy mainly based on productive intensification in specific areas, without effectively integrating the diversity of existing agricultural systems. They particularly highlight the paradoxical situation of Casamance, where a rice system anchored in local territories, based on family farming and locally adapted knowledge, remains largely outside national dynamics. This situation raises questions about the conditions under which these systems could be recognized and integrated into the national strategy, not merely as spaces to be modernized, but as full components of the food system, capable of contributing to productive efforts while preserving the principles of food justice and sovereignty.

Conclusion and Recommendations

This study has shown that evaluating Senegal's rice system through the normative lenses of food justice and food sovereignty allows for a more nuanced understanding of the effects of national policies beyond mere productivity. Indeed, while productivity is essential, especially in countries like Senegal, where food demand is growing and the need for self-sufficiency is pressing, it is necessary for this intensification of production to take into account other aspects, particularly the social implications of production. In Senegal, where the majority of agricultural production, particularly rice, is carried out by small family farms, primarily by women, and where production relies on a variety of techniques, including both irrigated and rain-fed farming, the national strategy must take this complexity into account in order to establish a sustainable, equitable, and sovereign production system. Against this backdrop, the question guiding this research was whether traditional, smallholder agriculture, particularly through the example of rice producers of Casamance, can meet the objective of national self-sufficiency without succumbing to a hyper-productivist logic that undermines autonomy, cultural practices, and social equity.

To answer this question, it was first necessary to understand the importance of rice in the country, both as a staple food and for its significance in the economy and culture. In light of this, rice is all the more important in Casamance, where it has always been the foundation of all traditions and the rhythm of life. Furthermore, from a historical perspective, the evolution of the rice-growing system helps us understand why the government struggles to establish a system that successfully integrates the complexity and unique characteristics of its agricultural system. This dates back to the colonial era, which sought to integrate Senegal into international trade flows by completely disrupting its organizational structure, leaving the country with a system entirely disconnected from its local characteristics. Once the country was integrated into the global market, and with the government having retained a centralized structure, it has been difficult for the country to correct this disconnect. Recently, however, the government has launched various agricultural plans in an attempt to regain some autonomy. Among them, the National Plan for Rice Self-Sufficiency (PNAR) is intended to be a structural shift, as its aim is to eliminate the country's dependence on imports for its rice supply. However, for such policies to be truly effective and, above all, sustainable, they must address the social dimensions of agricultural production by taking into account the specificities of local production systems,

particularly the role of small-scale producers and women. Public policies should therefore be grounded in local contexts rather than reproducing standardized models of large-scale industrial agriculture that tend to overlook these aspects. While the objective of self-sufficiency is desirable, it can only be meaningful if it integrates these social considerations, or, it risks to exacerbate existing inequalities, and create an even more detrimental situation for small producers and women, who constitute the majority of the agricultural workforce.

Indeed, we were able to see the limitations of this strategy by analyzing Senegal's rice production system through the lens of food justice and food sovereignty. On the one hand, we can observe significant regional disparities. In the Senegal River Valley, state support facilitates access to inputs, credit, and infrastructure, but this integration imposes constraints on producers' autonomy and their capacity to control marketing and production decisions. This intensive production mode also invisibilizes producers, particularly women. By contrast, in Casamance and rainfed areas like the Sine Saloum, producers maintain greater control over their agricultural practices and rely on locally adapted knowledge, yet they face institutional isolation, limited recognition, and insufficient public support. This illustrates a central tension: integration into public policies increases access to resources but reduces autonomy, whereas autonomy in marginal regions exists largely because of exclusion from state mechanisms.

From these findings emerge several key recommendations. First, public policies should account for the gendered and familial structure of smallholder farms by recognizing the specific roles women play in production and management. In Casamance in particular, concrete measures should be implemented to support small-scale producers and integrate them into the national market. Family farming, which is the primary form of production, should be valued and recognized. Second, cultural and symbolic dimensions of rice cultivation must be respected, including attachment to traditional tools and locally transmitted knowledge. Also, local rice should be promoted over imported Asian rice, and to that end, the government should implement measures that focus on the quality of the rice produced, not just the quantity. The population should also be made more aware of the importance of consuming locally produced rice. Third, policies should not consider only organizations like farmer cooperatives but also individual and family farms as central actors, and more especially women, integrating them into governance and decision-making processes. Fourth, local knowledge and practices, often informal but highly adapted, should inform both technical interventions and strategic planning.

At the state level, decision-making should be more decentralized, and enhance consultation with local actors, and also adopt a bottom-up approach would increase policy relevance and legitimacy. Finally, national strategies must balance productivity objectives with criteria of justice and sovereignty: a system may be productive but neither just nor sovereign, and sustainable food systems require careful negotiation between these objectives to ensure equity, autonomy, and resilience.

In fine, while the quest for rice self-sufficiency in Senegal is crucial, it should not be seen as a narrow focus on increasing production but as part of a broader effort to transform the agricultural system into one that is more inclusive, just, and resilient. The challenge is to balance the demands of productivity with the needs of small-scale farmers, recognizing their potential while ensuring that their autonomy and local knowledge are preserved. To achieve this balance will require political will, systemic change, and a rethinking of how national agricultural strategies are formulated and implemented.

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