ISSN: 3029-0724

Review Article

Journal of Environmental Science and Agricultural Research

Global Perspectives on Indications Geographical Governance; A Sustainability Challenge for The Madd Pgi of Casamance

Pape Tahirou Kanoute[1*], Mariama Dieme[2], Babacar Faye[2] and Mikael Oliveira-Linder[2]

1Agricultural economist, ETDS, Ziguinchor, Senegal
2Université Gaston berger, Saint-Louis, Senegal

***Corresponding author**
Pape Tahirou Kanoute, Agricultural economist, ETDS, Ziguinchor, Senegal.

Received: February 19, 2026; **Accepted:** March 03, 2026; **Published:** March 11, 2026

ABSTRACT

One of the major results recorded in recent months is undoubtedly the official registration of the Madd PGI of Casamance by OAPI and the official presentation ceremony of the registration certificate which took place in two stages: Presentation in Dakar to the national authorities (Minister of Industry and Trade, Minister of the Environment) on June 25, 2024, then a presentation ceremony to the producers in Ziguinchor followed by training of the actors (producers and technical services) on the use of the label, on June 26, 27 and 28, 2024.

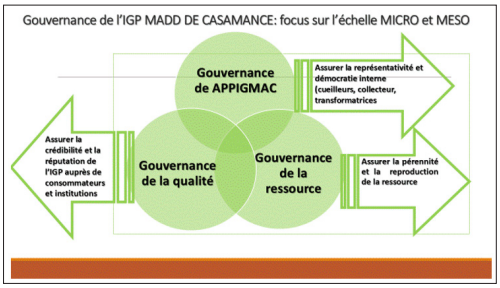
Keywords: Global Perspectives, Geographical Governance, Sustainability Challenge

Introduction

However, registering a GI is not an end in itself. For any GI, it represents the starting point of a crucial governance phase to ensure social, economic, and environmental sustainability. Indeed, the life of a GI consists of 4 main phases: GI identification (Inventory and identification studies, Identification of actors and main problems, Potential and mobilization of actors and Manifest interest of actors for the GI), GI construction (Creation of the association carrying the GI, Delimitation of the geographical area, Development of the specifications, Implementation of the control plan, Creation of a common logo, etc.), GI registration (Examinations and additional studies, payment of Tax, Publication, Management of any oppositions with the OAPI) and GI management (Market management, Promotion, Product marketing, Implementation and management of IP rights, Territorial marketing, Reproduction of the system and Resource management).

Regarding the Madd Protected Geographical Indication (PGI) of Casamance, we will focus on three fundamental aspects of governance that guided its identification, its development, and its current management. These are:

- The governance of the ODG must ensure internal democracy and the representativeness of the different categories of actors (pickers, collectors, processors);
- Quality governance must ensure its credibility with consumers and institutions;
- And the governance of resources that must ensure its sustainability and reproduction.



Governance of the APPIGMAC ODG, for Internal Democracy and the Représentativités of Stakeholders

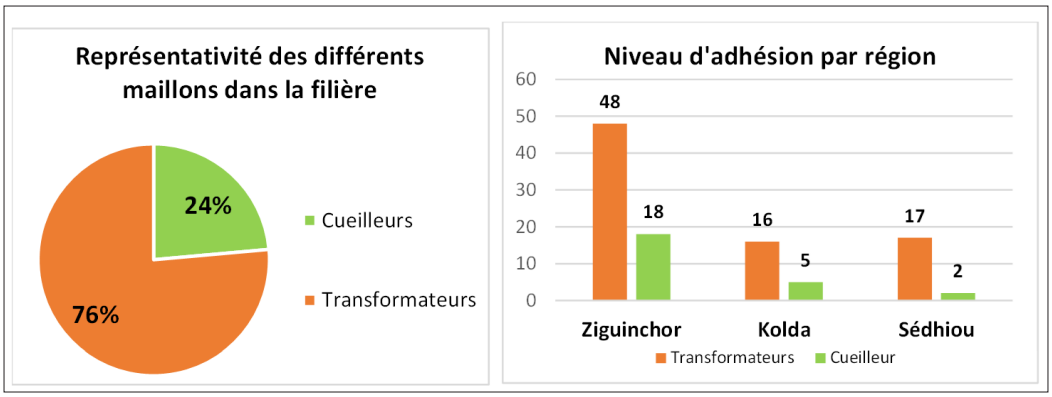
APPGMAC (Association for the protection and promotion of the Madd PGI of Casamance) The Madd value chain is composed of two links: the harvesters/collectors and the processors. In its mission to organize and structure the stakeholders in the Casamance Madd value chain, the APPIGMAC Management Organization (ODG APPIGMAC), with the support of the NGO ETDS and partners (FAO, WIPO, IG/AFD/CIRAD Facility), is

Citation: Pape Tahirou Kanoute, Mariama Dieme, Babacar Faye, Mikael Oliveira-Linder. Global Perspectives on Indications Geographical Governance; A Sustainability Challenge for The Madd Pgi of Casamance. J Envi Sci Agri Res. 2026. 4(1): 1-5. DOI: doi.org/10.61440/JESAR.2026.v4.157

continuously conducting awareness-raising activities in harvesting and processing areas to further mobilize Madd value chain stakeholders to join the project. The objective is to develop a strategy to increase the representation and commitment of all categories of stakeholders within APPIGMAC. To date, the Association has 81 processing structures, mostly Economic Interest Groups (GIEs), and 17 harvester groups and 5 collectors. Within the processing link, a significant number of the groups operating in the sector are already members of the association. However, in the harvesting sector, the level of participation of stakeholders remains low given the potential available in the area.

Table 1: Level of Stakeholder Engagement

Year	Cueilleurs					Transformatrices				
	Villages	Groupes	commercant	plateform	total	GIE	Entreprises	entreprises	SARL	Total
2019	0	0	0	0	0	1	0	0	0	1
2020	0	0	0	0	0	0	0	0	0	0
2021	1	1	2	0	4	13	1	0		14
2022	1	1	1	0	3	31	4	0	0	35
2023	0	6	0	1	7	7	9	0	0	16
2024	0	6	2	0	8	1	5	1	1	8
2025	0	3	0	0	3	7	0	0	0	7
total	2	17	5	1	25	60	19	1	1	81



Harvesters are one of the key players in the Casamance Madd Geographical Indication (GI). Their crucial role operates on at least two levels. On the one hand, they act as guardians of the forest, using its resources sustainably and contributing to ecological restoration. On the other hand, they provide the essential high-quality raw materials necessary for the processed GI products to reach the market with the desired quality. Despite their importance to the sector and the region, the number of harvesters associated with the GI remains relatively small. This situation not only affects the supply of quality madd for processing units and the market, but also represents a missed opportunity to improve the sustainable management of forest basins. How then can harvester participation be increased? How can technical services support the engagement of these essential members of the sector? These are all questions that stakeholders continue to ask themselves.

Quality governance, for credibility with consumers and institutions

The governance of the specific quality of a PGI product is one of the fundamental elements that guarantee its sustainability. It is ensured internally by the stakeholders themselves and externally by an independent and impartial entity.

Within the framework of the Casamance Madd, this quality governance is ensured through an internal and external control system applied at the level of the two main links in the chain (harvesting and processing).

Harvesting Stage

At the harvesting stage, this control and traceability system is ensured through collection, grading, and packaging centers for fresh produce, as well as at processing units. The elements controlled include the origin of the products, organoleptic quality (physical integrity, level of ripeness, etc.), shelf life after harvest, and adherence to good harvesting practices.

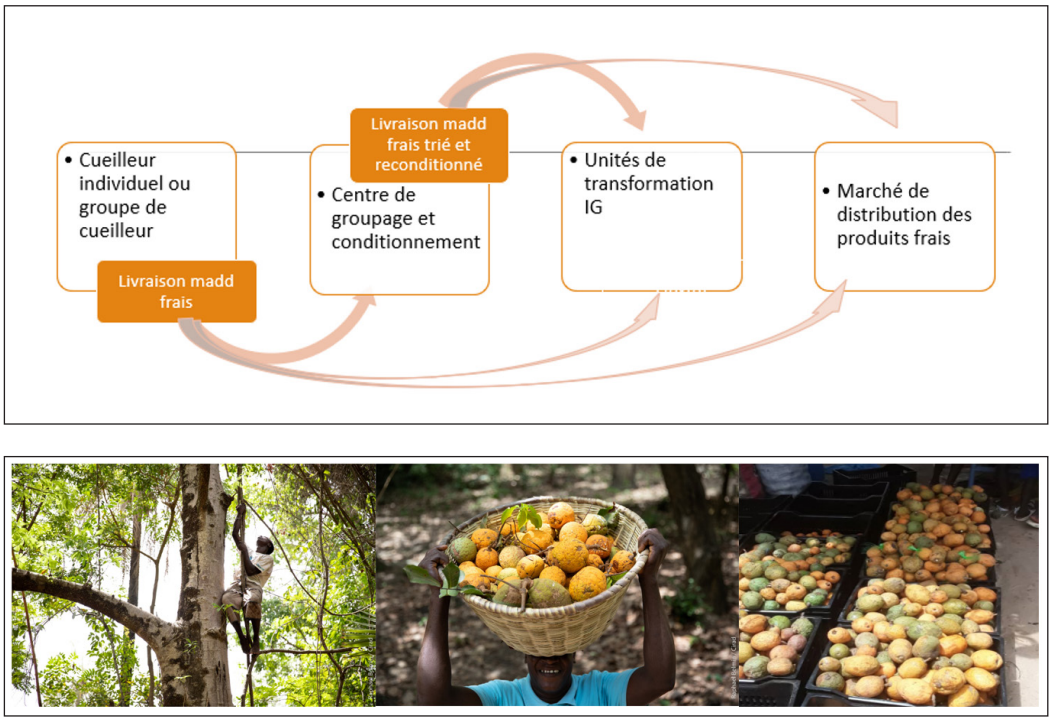


Figure 1: Control device for picking link

Processing Chain

In the processing chain, control is carried out at two levels. The first control is performed at the processing unit after seven (7) days of storage, and the second control is performed at the grouping and grading center for processed products fourteen (14) days after the production date. The control covers the following elements: the origin and quality of the products received, the quantities received, the quantities of pulp stored, compliance with the production specifications, the quantities of processed products, and the conformity of the processed products.

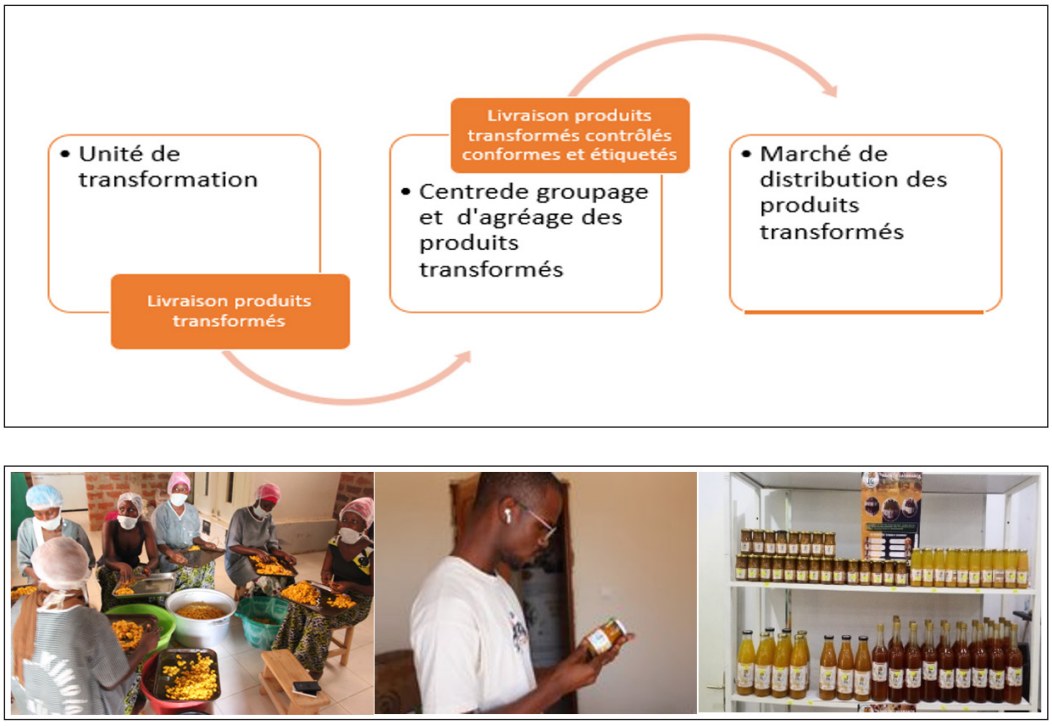


Figure 2: Control device, transformation link

The implementation of the **external control system** is not yet effective and requires further consideration of a low-cost system adapted to the realities of the sector.

Resource Governance for Environmental Sustainability

Good governance of the resource is fundamental to the sustainability of the "Madd de Casamance" GI. It ensures the long-term

viability of this resource (Saba senegalensis), which is threatened by strong human pressure in addition to natural factors.

To address this major challenge, the NGO ETDS conducted several studies in partnership with both local universities (UASZ, ENSA of Thies, ISFAR Bambey) and international universities (Montpellier SupAgro , MS FNS-MI, AgroParisTech). To further this objective and propose a sustainable management model for madd resources, a study was carried out to capitalize on community mechanisms or the model of organization and collective management of non-timber forest products (NTFPs) in the village of Thiobon (Bignona Department, Karthiak commune).

Thus, the Thiobon organizational model (in Lower Casamance), based on community management, has demonstrated its effectiveness in the sustainable management of this resource, following a study conducted in the area. The study aimed to capitalize on this model for the implementation of a resource monitoring system. This involved identifying harvesting areas, analyzing their environmental and socio-economic characteristics, and assessing their impact on resource sustainability. Surveys and a forest inventory were carried out, revealing that the local population's organization contributed to a good level of resource sustainability in this area, with positive indicators such as an actual density of 153 individuals per hectare, a canopy cover of 12.3%, and a regeneration rate of 77%. Furthermore, the study showed a clear distinction, in terms of resource sustainability, between the B_Sortie basin, which represents the basin where the management model was rigorously applied.

Bassins	Application du modèle	Pérennité de la ressource		Productivité du madd		
		Densité réelle	Taux de régénération	Recouvrement basal	Recouvrement aérien	Volume couvert
B_Sortie	Appliqué	+++	+++	+++	+++	+++
B_Centre	Non Appliqué	-	+	--	--	--
B_Entrée	Faiblement Appliqué	++	-	++	-	++
E_Sortie	Plus ou moins Appliqué	+++	++	+++	++	+++
E_Centre	Non Appliqué	-	+	--	--	--
E_Entrée	Faiblement Appliqué	+++	-	+++	-	++

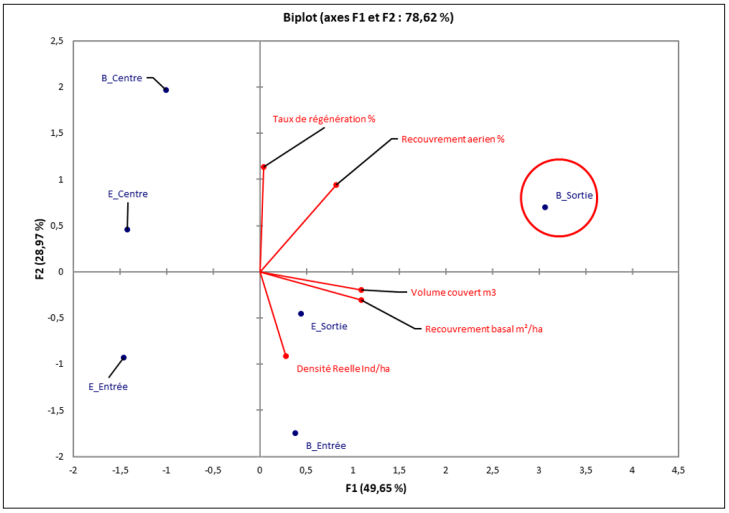


Figure 3: PCA analysis of environmental sustainability indicators of the resource in the different harvesting basins

For effective monitoring of this resource, a structured three-step system was proposed: data collection via forms for pickers and collectors, processing of this data to assess harvesting areas and finally, action based on the results of the second step.

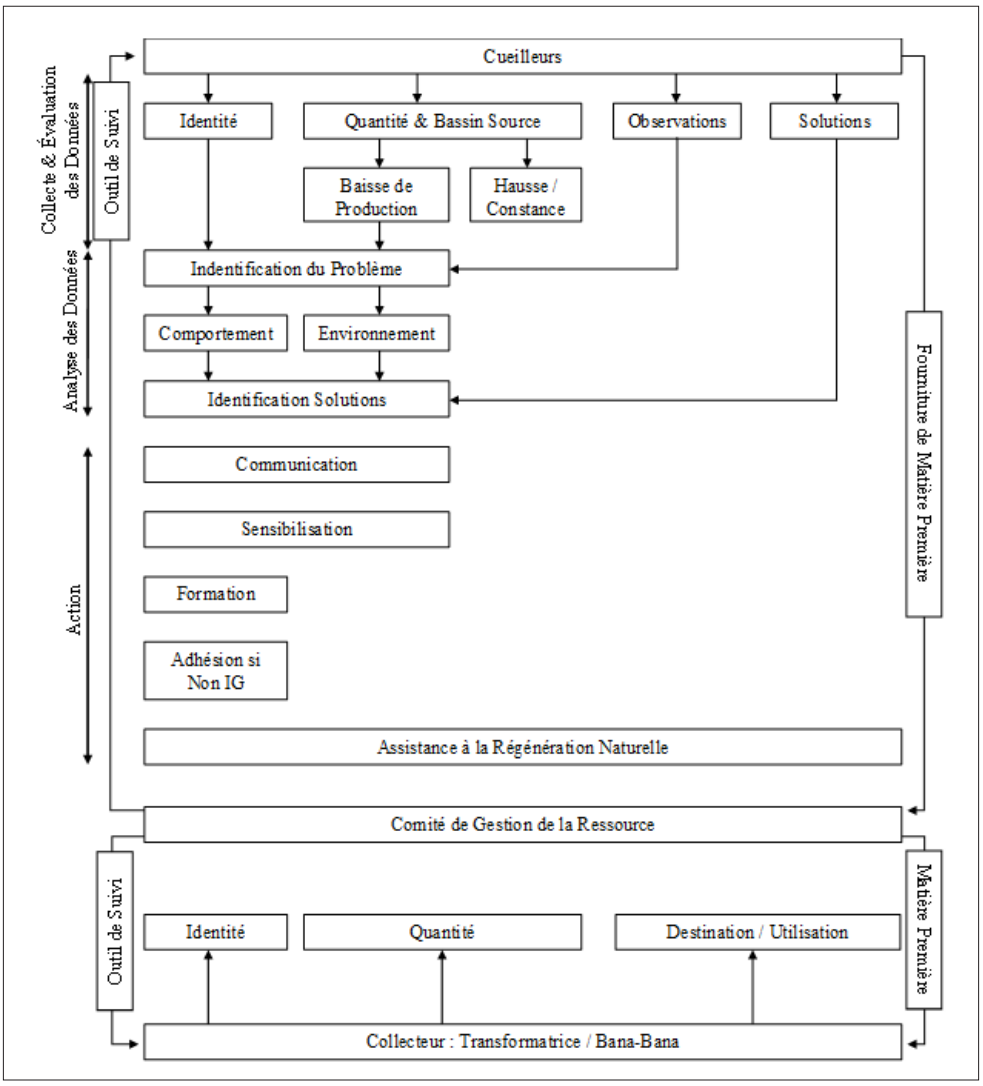


Figure 4: Local resource monitoring system

Perspectives of this study include the adapted replication of this model and device in gathering basins with the same socio-cultural and environmental realities, but also to continue studies of the dynamics in other basins, particularly those traversed by itinerant gatherers and those of Kolda and Sédhiou where other dynamics and practices have been pre-identified.