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**Authors:** Youssef Belhaj & Mohamed Oucherrou

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# Perceptual Analysis Of Mountain Zone Governance: Case of the Tichoukt Massif–Middle Atlas, Morocco

**Youssef Belhaj**

Moulay Ismail University  
Meknes Applied Economics Laboratory, Meknes, Morocco  
[y.belhaj@umi.ac.ma](mailto:y.belhaj@umi.ac.ma)

**Mohamed Oucherrou**

Sidi Mohamed Ben Abdelah University, Fez, Morocco  
[medoucherrou@gmail.com](mailto:medoucherrou@gmail.com)

## Abstract

This article studies the cognitive aspects which guide public and private actors in the conception of development plans for mountainous areas in Morocco. Our ambition is to understand how local actors perceive the specificities of the development of mountainous areas in Morocco.

We used a combined method to collect and analyse data in the Tichoukt Massif; a mountainous area located in the Moroccan Middle Atlas. The results of the strategic analysis using the Mactor method were submitted to a panel of experts for confirmation (Delphi method).

Our results suggest that the absence of a reference framework that guides local actors in the conception of development plans for mountainous areas of Morocco hinders the convergence of collective interventions.

The complexity of the problem is linked to the difficulties inherent in evaluating the cognitive convergence of multisectoral interventions. The overlapping of objectives, the multiplicity of interventions and the fragmentation of their areas are limiting factors.

Our study is a contribution to the study of development problems in rural areas in Morocco. The results obtained can be used to deepen investigations into the cognitive factors of the governance of public policies. Our research strategy greatly increases the reliability and coherence of the construct.

**Keywords:** Territorial governance, mountainous areas, local actors, cognitive framework, Tichoukt Massif

# Analyse perceptive de la gouvernance des zones montagneuses : le cas du massif du Tichoukt – Moyen Atlas, Maroc

## Résumé

Cet article étudie les aspects cognitifs qui guident les acteurs publics et privés dans la conception des plans de développement des zones montagneuses du Maroc. Notre objectif est de comprendre comment les acteurs locaux perçoivent les spécificités du développement de ces zones.

Nous avons utilisé une méthode combinée pour collecter et analyser des données dans le massif du Tichoukt, une zone montagneuse située dans le Moyen Atlas marocain. Les résultats de l'analyse stratégique, réalisée à l'aide de la méthode Mactor, ont été soumis à un panel d'experts pour validation (méthode Delphi).

Nos résultats suggèrent que l'absence d'un cadre de référence guidant les acteurs locaux dans la conception des plans de développement des zones montagneuses du Maroc entrave la convergence des interventions collectives.

La complexité du problème est liée aux difficultés inhérentes à l'évaluation de la convergence cognitive des interventions multisectorielles. Le chevauchement des objectifs, la multiplicité des interventions et la fragmentation de leurs territoires constituent des facteurs limitants.

Notre étude contribue à l'étude des problématiques de développement en milieu rural au Maroc. Les résultats obtenus permettent d'approfondir les recherches sur les facteurs cognitifs de la gouvernance des politiques publiques. Notre stratégie de recherche renforce considérablement la fiabilité et la cohérence du modèle.

**Mots-clés :** Gouvernance territoriale, zones montagneuses, acteurs locaux, cadre cognitif, massif du Tichoukt

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## 1.0 Introduction

Advanced regionalization represents an operational response to the disparities that have characterized Morocco's development since independence, as well as to the limitations of top-down approaches to social and economic policymaking. The territorial approach aims to ensure that public policies are better tailored to the specific needs of each territory, by establishing new conditions likely to involve local stakeholders in the development of their living space (Pecqueur, 2014; John et al., 2021).

Morocco's mountainous regions represent a paradoxical situation. On the one hand, high levels of poverty coexist. On the other, the presence of potential for transformative prosperity. Because of their specific geographical features and the scale of the disparities that characterize them, these areas are at the top of the agenda for Morocco's political decision-makers. Moreover, the specific nature of these difficult areas, which need to be addressed, calls for the mobilization of knowledge, the use of adaptive approaches, the design of opportunities and the finding of special means. Directly through the territorialization of public policies, through this reflection, we want to apprehend the cognitive aspects that orient actors in the governance of

mountainous areas in Morocco. Our objective is to understand how these actors perceive the specificities of the development of mountainous areas in Morocco.

As a case study, we chose the Tichoukt Massif, based on its characteristic features of mountainous areas in Morocco. This geographical area is subject to the same paradox of all mountainous areas in Morocco, namely the presence of a poor population in an environment rich in natural and cultural resources<sup>1</sup>. Indeed, poverty rates are high compared to national and regional averages with strong manifestations of vulnerability and exclusion at all levels<sup>2</sup>.

We adopt an interpretivist approach structured in two phases. The aim is to understand and interpret the behaviours of actors involved in governance in Morocco's mountainous areas. In other words, what are the factors, reasons and intentions behind a given decision. We began with a prospective analysis, based on the Mactor method, of the positions of the actors in our field of study, questioning their perceptions of the problems of the massif, the effectiveness of the actions undertaken and the prospects for the development of these specific areas. The proposals formulated were then submitted, in the form of a questionnaire, to a panel of experts for confirmation by using the confirmatory Delphi method.

### ***1.1 Mountain Areas as Territories with Specific Needs***

Territorial governance can be defined as a dynamic process of coordination between public and private actors around territorialized issues and constitutes the path to the collective construction of objectives and actions (Rey-Valette et al., 2014). The notions of local and territorial development are more akin to simple spatial scales or neutral administrative levels for the operationalization of public policies in a top-down logic. The territory is now a permanent social construct, in constant appropriation (Defarges, 2015; Leloup et al., 2005; Mongeon et al., 2023; Patience Thusi et al., 2024).

Thus, the actor is at the heart of defining governance and its relationship with the territory, and their characteristics and interactions are crucial in the success or failure of collective actions, from conception to implementation (Brullot et al., 2014). Friedberg (as cited in Dion, 1993) adopts the notion of 'empirical actor' to refer to any individual or group of individuals concerned with the problem to be solved. This implies broadening the scope of public action analysis, based on the principle that the active involvement of a public or private actor in the process of designing and implementing collective actions varies depending on their position in the process, their strategy, and their ability to mobilize resources to defend their interests (Dion, 1993).

The distinctive characteristics of mountain areas have transformed them from an economic activity zone into a territory with specific characteristics and needs (Debarbieux, 2016). Indeed, the interaction between the actor and the territory is at the heart of the analysis of the determinants of development and one of the central questions of territorial governance (Rudaz & Gilles, 2009). A type of governance that refers to a mode of territorial regulation, actor coordination, a tool for public

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<sup>1</sup>Economic, Social, and Environmental Council Annual Report 2015  
<https://www.cese.ma/docs/rapport-annuel-2015/>

<sup>2</sup> The poverty rate at the level of the massif is 15.5%, it reaches 32.5%, or three times the national average in the municipality of Elmers, followed by Sekoura 11.9%, while it does not exceed in the Boulemane region 1.9% (HCP, 2014).

administrative management, and decision-making and territorial development support tools (Mongeon et al., 2023; Mounya, 2020; Patience Thusi et al., 2024).

In fact, mountainous areas, due to their characteristics, represent unique governance challenges. Population growth and modernization have led to intensive use of mountain area resources, resulting in ecosystem degradation due to a combination of unsustainable agricultural expansions, deforestation, overgrazing, and unregulated infrastructure development (Schirpke et al., 2020; Tucker et al., 2021). Factors that have accelerated the degradation of these fragile areas through soil erosion, biodiversity loss, and disruption of water cycles (Moutouama et al., 2019).

The paradoxical situation of mountainous areas requires inclusive and proactive strategies that delve into the roots of the complex relationships maintained by stakeholders and the involvement of communities (Bahadorestani et al., 2020; Karpouzoglou et al., 2020; Schirpke et al., 2020; Wheeler et al., 2024). Indeed, understanding and addressing the complex issues of these specific areas require innovative methods and flexible, adaptive tactics. To this end, a strong mobilization of human, financial, and technological resources proves indispensable in the long term to maintain a constructive and viable dynamic (Arion et al., 2024; Karpouzoglou et al., 2020; Tucker et al., 2021).

Such reasons drive reflections towards seeking more adequate policies and governance systems to preserve the landscapes and traditional communities of rural areas, as well as to support the maintenance of multifunctional landscapes (Nishi et al., 2021; Scheurer et al., 2018). A governance system that boosts citizen participation in collective decision-making and active collaboration within a community framework that preserves the characteristics of mountainous areas. Such a logic would have the potential to increase the community's social capital by strengthening local social cohesion, interpersonal cooperation, and the sense of belonging while respecting the nature of the relationship between Man and the land (Nieto-Romero et al., 2019; Schirpke et al., 2020).

## **2.0 Research Methodology**

Research methodology is of particular importance in any research work, as it largely conditions the quality of the results obtained (Thiétart, 2014). Being aware of such a reality, we made sure that our methodological choices were made in perfect harmony between our data, our approaches, and our aims. In our case, the complex nature of our problem forced us to adopt combined approaches<sup>3</sup> and methods to improve our understanding of reality and guarantee the reliability of the results obtained.

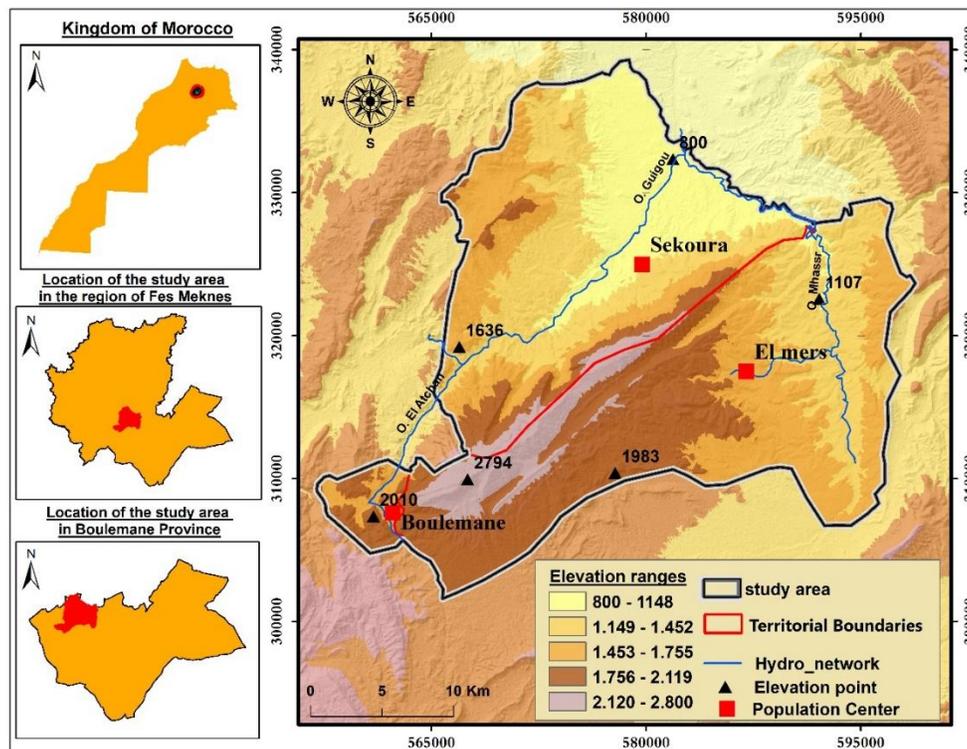
### ***2.1 The Tichoukt Massif as a Case Study***

The Tichoukt Massif is in the central Middle Atlas, more precisely in the eastern folded part of this zone. It extends over a length of 32 km, an estimated area of 832 km<sup>2</sup> and over an altitude of up to 2796 m (Lasserre, 1965) and with a population of 21,631 inhabitants (High Commission for Planning of Morocco, 2024). As shown on the map below (see Figure 1), administratively, the massif is made up of three municipalities: Boulemane, Sekoura and El Mers.

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<sup>3</sup> The use of combined methods refers to the mobilization of different methods in a complementary, sequential, or parallel logic (Thietart, 2014).

Figure 1. Geographical position of the Tichoukt Massif.



Source: Authors.

We chose the Tichoukt Massif as our case study because it represents a typical example of Moroccan mountain areas, and because of the similarities in the historical, geographical, economic, and social determinants of the mountain population. This territory is subject to the same paradox of all Moroccan mountainous areas; poverty rates are high compared to national and regional averages with strong manifestations of vulnerability and exclusion at all levels. The Tichoukt Massif is one of the poorest areas at national level, according to statistics provided by the High Commissioner for Plans (HCP) through the 2024 multidimensional poverty study<sup>4</sup>. This shows that poverty rates are high throughout the massif at 11.56% and reach 19.4% in the poorest area of Elmers. These figures are still very high compared with the national average of 6.8%.in 2024<sup>5</sup>.

The Tichoukt Massif's development relations structure is based on the Constitution, as well as on a panoply of organic laws and decrees governing national land-use planning. As such, the massif is not outside the national, regional, and local context. The new constitution (through chapters 136 and 140) and the three organic laws constitute a roadmap for development at the level of territorial municipalities, and a

<sup>4</sup> Based on the measurement of a broad set of needs such as access to education, health, water and electricity, sanitation, communication, and housing conditions.

<sup>5</sup> Statistics taken from the Synthèse du rapport du High Commissioner for Plans of Morocco : Cartographie de la pauvreté multidimensionnelle, paysage territorial et dynamique, May 2025, from [https://www.hcp.ma/Synthese-Cartographie-de-la-pauvrete-multidimensionnelle-paysage-territorial-et-dynamique-Mai-2025\\_a4103.html](https://www.hcp.ma/Synthese-Cartographie-de-la-pauvrete-multidimensionnelle-paysage-territorial-et-dynamique-Mai-2025_a4103.html)

master plan for putting into practice the new concept of advanced regionalization, which is based on the principles of partnership and complementarity to meet the needs of citizens by making optimum use of all territorial resources.

The relationships established between the development actors involved in territorial planning are based on a set of decisions and measures taken by the territorial municipalities to achieve the development objectives for a given period, according to the electoral term specified in the organic laws by the central authorities<sup>6</sup>.

## **2.2 Materials and Methods**

Our study is divided into two interdependent phases following an exploratory approach, which is warranted by the complexity of our issue. The objective is to enhance our comprehension of the existing connections between the cognitive frameworks of territorial governance stakeholders and the development of Morocco's mountainous regions. To achieve this goal, we conducted a strategic analysis of stakeholder interactions in our research area using the Mactor method. Subsequently, we presented the obtained results as a proposal to experts for validation, aiming to identify both convergences and divergences through the Delphi Argument Method.

*2.2.1. Empirical exploration of local stakeholders' perceptions: the Mactor method.* The aim of the first phase of our work is to explore local stakeholders' perceptions of the specificities of the development of the Tichoukt Massif, highlighting convergences and divergences in the positions of stakeholders. As shown in the following table (see Table 1), we surveyed the main Actors directly involved in the local governance of public development policies.

The choice of an actor-based approach as the unit of analysis—structures are represented by their respective managers—is a particular response to the composite nature of our research object. The territorial governance being a field of interaction in which the objectives, strategies and actions of actors condition the coherence of their joint actions. Based on their roles in local governance, we were able to identify the most influential actors based on the municipalities' organic laws<sup>7</sup> and an interview with the presidents of the municipalities of Boulemane, Sekoura, and El Mers. Following this, in-depth research on the selected stakeholders enabled us to determine their objectives and the structure of their interactions.

*2.2.2. Confirmatory study with experts: the Delphi method.* The Delphi method was developed in the 1950s by Olaf Helmer and Norman Dalkey at the Rank Corporation (Rowe & Wright, 1999). Originally used for prospective, systematic, and interactive analyses, it has since evolved into a structured communication method based on a panel of experts (Hsu & Sandford, 2007). This method can take the form of a written questionnaire or an oral presentation of issues or topics for anonymous, independent consultation and debate. In practice, there are several variants of the Delphi method, generally structured in four stages: (a) definition of the purpose of the consultation,

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<sup>6</sup> Structured based on organic laws on regions (no. 111.14), prefectures and provinces (no. 112.14), and communes (no. 113.14) in Morocco.

<sup>7</sup> Organic Law No. 111-14 relating to regions, No. 112-14 relating to prefectures and provinces and No. 113-14 relating to municipalities.

(b) choice of experts, (c) design of the questionnaire, and (d) analysis of the results (Rowe & Wright, 1999).

Table 1. *The Main Actors in the Governance of the Tichoukt Massif*

<b>Codes</b>	<b>Actors</b>	<b>Codes</b>	<b>Actors</b>
CCDRF	Centre for Conservation and Development of Forest Resources	CR	Regional Council -Fez-Meknes
SETLEB	Equipment, Transport, Logistics, and Water Service-Boulemane	CP	Provincial Council - Boulemane
CA	Chamber of Crafts	PB	Province Boulemane
ACAB	Carrefour Adrare Association-Boulemane	CCB	Communal Council-Boulemane
AAB	Alhadaf association -Boulemane	CCS	Municipal Council-Sekoura
FAFM	Atlas Without Border Federation - El Mers	CCM	Elmers Municipal Council
MAA	Asourif Association -El mers	DRT	Regional Directorate of Tourism
ALS	Lahrach-Sekoura Association	PAD	Provincial Directorate of Agriculture
THESE	Edourare-Sekoura cooperative		

In our case, we proceeded in two stages, following a sequential analytical logic. We opted to explore the perceptions of local stakeholders directly involved in the governance of mountain development policies before submitting the results of our survey to a panel of experts in the field of mountain development in Morocco.

Based on our exploratory phase, we formulated an initial list of proposals that was submitted to the panel of experts to assess the levels of convergence of positions on a five-level Likert scale (Cherkaoui & Haouata, 2017). This list contains affirmative and prospective questions formulated to provoke debate and produce responsive arguments or opinions.

After designing the questionnaire, we proceeded with three rounds of data collection by sending the questionnaires in Word format to the designated experts (see Table2) with a response time of 2–3 days. In the first round, each expert was asked to express his or her level of agreement or disagreement with each of our proposals, to comment on them or even to add his or her own proposals. Then, in the second round, each expert received the same questionnaire with a summary of the other experts'

anonymous responses to each of the proposals. At this stage, our professionals have the right to confirm or modify their answers by commenting on them of the most relevant comments already collected in the second phase (see Table 3).

Table 2. *Qualities of Experts Involved in the Delphi Argument Analysis*

Experts	Qualities
JENNAN Lahcen	<ul style="list-style-type: none"> <li>▪ University professor/USMBA-FLDM-Fez</li> <li>▪ President of the scientific committee of the Civil Coalition for the Mountains-Morocco</li> <li>▪ Expert in mountain development issues in Morocco</li> </ul>
KSIRI Abderrahim	<ul style="list-style-type: none"> <li>▪ President of the provincial environmental affairs and sustainable development commission</li> <li>▪ President of AESVT-Morocco</li> <li>▪ National Coordinator of the AMCDD</li> </ul>
AL KATMOUR Hassane	<ul style="list-style-type: none"> <li>▪ University professor /USMBA-FLS-Fez</li> </ul>
BAHRI Noureddine	<ul style="list-style-type: none"> <li>▪ University professor /INRA-Meknes</li> </ul>
DDICH Mohammed	<ul style="list-style-type: none"> <li>▪ President of the Civil Coalition for the Mountains-Morocco</li> </ul>
OUTAHAR Rachid	<ul style="list-style-type: none"> <li>▪ Secretary general of the regional hub of the Moroccan Social Economy Network – Fez/Meknes region</li> </ul>

Table 3. *Grouping of Proposals in the Third Phase of the Delphi Argument*

	Group 1	Group 2	Group 3
<b>Positions</b>	High levels of consensus	Low levels of consensus	Low levels of consensus
<b>Judgements</b>	Important to very important	Not very important or not important	Important to very important

In the final phase of the Delphi method, the experts are asked to make further comments, especially on the proposals of the third group. To process the data collected, we mobilised content analysis techniques using NVIVO software, which brought together a range of methods for the detailed study of documents with the aim of identifying meanings and associations not directly perceptible through simple reading (Guelfand, 2013).

### 3.0 Results and Discussion

The results of our exploratory study with local governance actors in the Tichoukt Massif and our consultations with a panel of experts fill the need to appreciate the coherence of the cognitive framework of territorial governance actors and to apprehend its impact on the development of these areas of specific character.

#### 3.1 Stakeholder Convergence Levels

To assess the positions of the actors in relation to the development objectives of the municipalities, we selected the objectives of the Communal Action Plan (CAP) serving as a reference at the level of the Tichoukt Massif (see Table 4). Adopted by the organic law on municipalities 113.14 on July 23, 2015, this new methodology in the work of the administration and municipalities considers the needs and possibilities of the population and provides a panoply of mechanisms to strengthen cooperation and partnership between different municipalities over a period of 6 years<sup>8</sup>.

Table 4. *The Main Objectives of the Communal Action Plan of the Tichoukt Massif*<sup>9</sup>

Objectives	Codes
Qualification of associative actors and the associative fabric	OT1
Capacity building for elected officials and municipal officials	OT2
Improvement of municipal infrastructure	OT3
Strengthening of basic services at municipal level	OT4
Development of agricultural products	OA1
Promotion of livestock production	OA2
Investment in tourism potential	OT1
Promotion and promotion of craft products	OAR1
Inclusion of vulnerable population	OS1
Qualification of rural women and support for people in difficult situations and the disabled	OS2
Development of environmental awareness in the municipality	OE1
Qualification of the forest area	OE2

At the massif level, it is advisable to consider the balance of power between stakeholders and the structure of their interactions. In this sense, the 3rd-order convergence matrix (3CCA), which is linked to the ‘actor/objective’ weighted value matrix (3MAO), provides greater precision in the analysis of interdependencies.

<sup>8</sup> Article 36 of the Municipal Charter 2009/Article 78 of the organic law relating to municipalities 113–14.

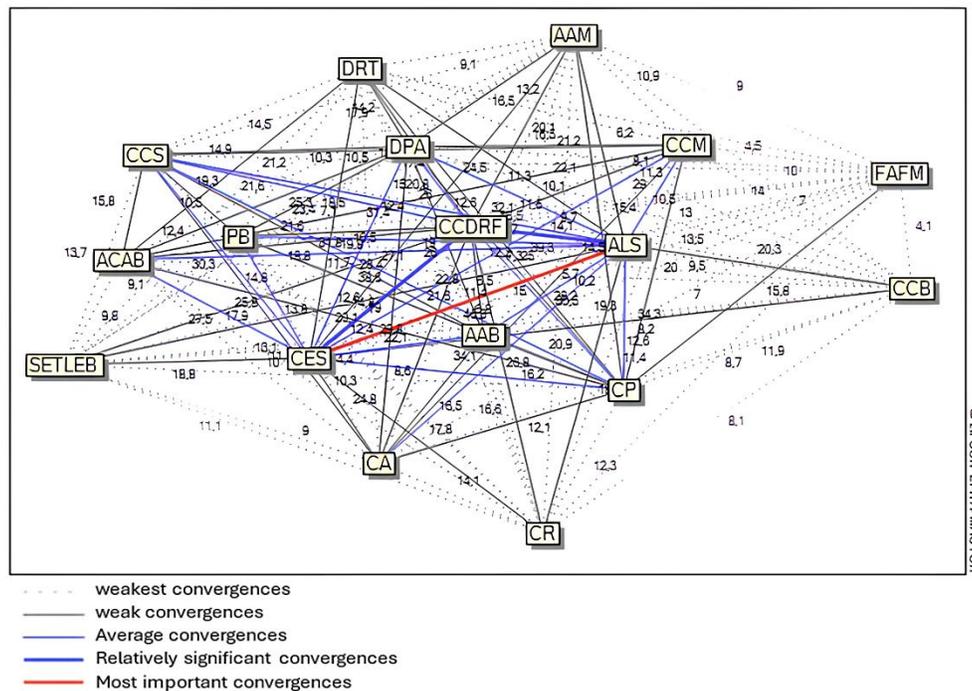
<sup>9</sup> Extracts from the ACP of the three municipalities of the Tichoukt massif, available on the official website of the municipality of Boulemane.

Thus, for each pair of actors, we would be able to determine the average intensity of convergence when the actors have the same positions—for or against.

The results obtained (see Figure 2) confirm the existence of low levels of convergence of positions between the main actors in governance at massif level, mainly between the regional council, the province, and provincial council, bearing in mind that the latter two play a decisive role in coordinating actions at territorial level. This is also true of interactions with external sectoral services. In addition, we note the low levels of convergence between representatives of civil society, a sign of the lack of integration of the roles of these institutions despite the large number of associations and cooperatives in the massif, which are supposed to play the role of mediator in transferring the demands and needs of residents to decision-makers.

The province is one of the institutions entrusted with the task of regional coordination. In fact, the governor is the coordinator of decentralized services, acting as an intermediary between the state and the territorial municipalities under constitutional legislative and regulatory provisions, which give him the legal and institutional means to exercise this function (Constitution off 2011). However, despite the province's constitutional and legal prerogatives, its levels of convergence with other actors remain relatively low, which is likely to hinder the harmonization of actions by decentralized services at local level and may have a negative impact on the convergence of public policies and programs for the development of the massif.

Figure 2. Graph of convergences—order 3.

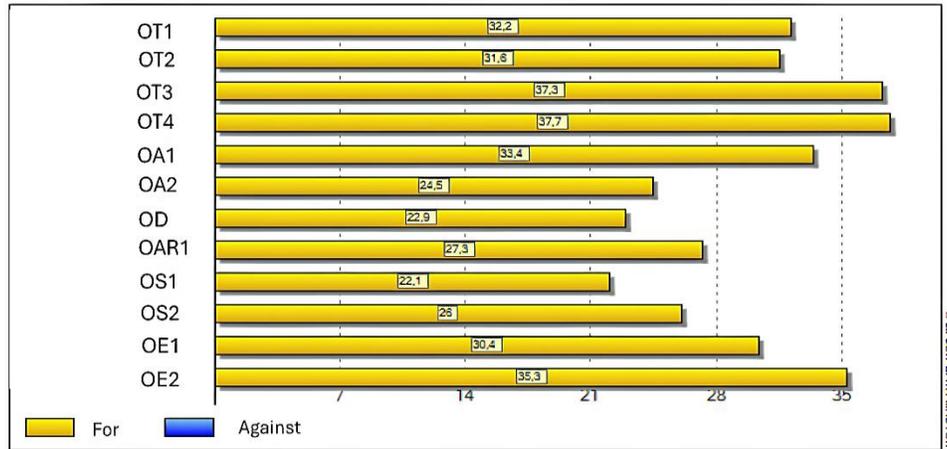


Source: Results generated by Mactor software.

The results of the mobilisation graph (see Figure 3) show that the institutions formally involved in all the objectives are in fact at relatively moderate levels of mobilization. While the design and implementation of the regional development program guide local actors in the design of the CAP, their levels of mobilization

across all objectives remain low. In addition to this, the actors with high levels of mobilization either do not have an influential formal position in territorial governance or are sectoral institutions whose objectives are linked to their respective areas of specialization. This is the case for representatives of civil society, the Chamber of Crafts, or the Provincial Department of Agriculture.

Figure 3. Graph of Actors mobilisation–order 3.



Source: Results generated by Mactor software.

Levels of mobilization of key actors in territorial governance (the regional council and the province) around the development objectives of the Tichoukt Massif are relatively average, which is not in line with the principles of preparing the municipality's action program, which must be based on the order of development priorities based on state policies and strategies and in line with the guidelines of the regional development program and the provincial program. Levels of convergence around the massif's development objectives remain low to very low, particularly for regional and provincial institutions which, under the new reforms, have been given broad powers to coordinate development plans within their territories. In addition to weak coordination between deconcentrated services in the implementation of development programs at massif level.

Consequently, the results of our documentary investigation and our strategic analysis enable us to formulate proposals that can be summarized in the table below (see Table 5).

Table 5. *Proposals to be Submitted to the Expert Panel*

Proposals	Codes
Mountainous areas are rich in territorial resources.	P1
Human development indicators are low in the mountainous areas of Morocco.	P2
The mountainous regions have not received the same attention as the plains.	P3
The problems of developing mountainous areas of Morocco are mainly linked to the weaknesses of territorial governance mechanisms.	P4

**Table 5 continued**

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One of the main constraints of territorial governance in mountainous areas is the weak involvement of civil society.	P5
Low levels of inter-institutional coordination are the main problem in the development of the mountainous regions of Morocco.	P6
The position of the municipality does not correspond to its role as coordinator of local development policies.	P7
The levels of mobilization of stakeholders around the objectives of the CAPs are relatively low.	P8
Levels of convergence around mountain development objectives are low	P9
Mountainous areas are characterized by deficiencies in coordination between decentralized services of sectoral departments in the operationalization of collective actions.	P10
Civil society does not present itself as a force of proposal to public actors in the management of local affairs.	P11
The low level of qualification of elected politicians hinders the development processes of the mountainous regions of Morocco.	P12
Associative actors in mountainous areas do not benefit from the supervision and training necessary to fulfil their roles as intermediaries in local development.	P13
The disintegration of associations negatively affects the effectiveness of their interventions in terms of local development.	P14

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### **3.2 Results of the Expert Survey**

Once we had processed the expected questionnaire data in the second phase of our empirical approach, we centralized them in a single file for comparative purposes. Figure 4 shows the results of our survey of experts on the development of Morocco's mountainous areas, according to the degree of importance of the proposals submitted and the degree of convergence of the positions identified.

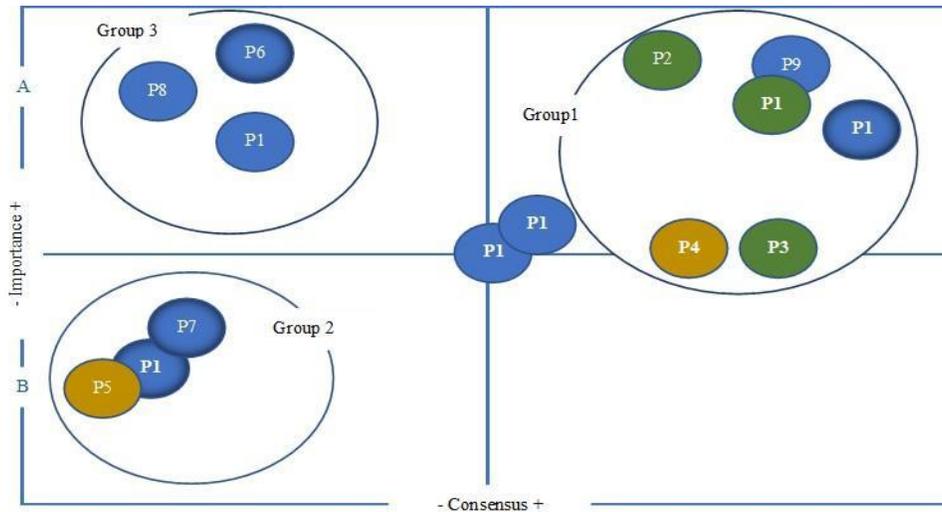
The experts' positions converge on eight proposals qualified as important to very important. Firstly, the participants in our survey are in complete agreement on the high territorial resource potential of Moroccan mountain regions, the low levels of cognitive convergence among local governance actors, and on the shortcomings of coordination mechanisms between the decentralized services of sectoral departments. Secondly, agreement on the low levels of human development indicators in these difficult, high-potential areas, which have not received the same attention in the country's development policies, and on the malfunctioning of local coordination and participation mechanisms, which have a direct impact on the population of these geographical areas with their specific needs. natural resources for subsistence purposes.

Proposals noting the involvement of civil society and the weak position of the municipality as a relay player in the local governance of development strategies in mountainous areas are deemed unimportant and lack consensus.

In commenting, our experts asserted that it is the mode of governance adopted that marginalizes the role of civil society, penalized by the lack of conditions favouring

its participatory function and reinforcing the convergence of its interventions. In practical terms, territorial governance is a complex system fed by the interactions of public and private actors, of which civil society is one, with relatively inadequate resources to accomplish its missions.

Figure 4. Result of the survey among the experts surveyed.



Source: Authors.

## 4.0 Conclusions

By way of conclusion, the results of this research have paved the way for us to explore certain dimensions of territorial development in Morocco in the light of the implications of the advanced regionalization plan, which embodies the desire for a transition towards a decentralized approach to correcting spatial inequalities. In principle, this approach encourages local actors to take greater responsibility for promoting their territories. Regarding the specific features of mountainous areas, the cognitive aspect is decisive insofar as local actors need to start from a shared diagnosis, with a common definition of problems and needs, to be able to coordinate their actions and design appropriate responses in line with the objectives set. The cognitive aspects defining the specificities of development in their territories. This dysfunction stems primarily from the low levels of involvement of civil society representatives in the design, implementation, and evaluation of development policies for these rural areas. In addition, the lack of formalism in coordination mechanisms has a negative impact on consultation and harmonization processes, aggravating divergences that are not limited to interactions between local political-administrative actors and civil society representatives but are also observed within these two groupings.

At the level of politico-administrative actors, the absence of a reference framework dedicated to the development of mountainous areas in Morocco fuels uncertainties and leads to a disaggregation of local actors' interventions and a waste of territorial resources. In addition to this, other factors inherent in the profiles of elected officials and their logic of action have a negative impact on the apprehension of the constraints linked to these difficult areas. Among others, the heterogeneous nature of the associative fabric and the shortcomings felt at

the level of skills and coordination and participation mechanisms mean that the actions undertaken lack coherence.

The results suggest that local development is not simply a matter of decentralizing powers without the financial means to meet the needs of local stakeholders. It is above all a set of mechanisms centred on the relationship that stakeholders forge with their territories. In fact, stakeholders must base their actions on a shared vision of the specificities of their area, which is a framework that clarifies the cognitive aspects of common actions and the mechanisms for their implementation, monitoring, and evaluation.

Ultimately, the development of mountainous areas depends on the operationalization of the advanced regionalization plan as a framework for adapting sectoral programs and strategies to the requirements and specificities of each geographical area. A strong coordination between territorial governance actors can help reinforce the convergence of individual actions.

As with any scientific work, certain limitations can be identified, thus forming avenues for future research. In our view, there are two methodological limitations. The first relates to the difficulties inherent in assessing the cognitive convergence of multi-sector policies. The interweaving of objectives, the multiplicity of interventions and the fragmentation of their domains complicate this exercise. Thus, the imperative of a pluralist approach to evaluation is essential to overcome the limits of reductive evaluative actions.

A second methodological limitation is associated with our approach to data collection in our empirical study. The selection of participants for our qualitative study was predominantly determined by our evaluation of their levels of influence in massif governance, introducing a subjective element that may affect the reliability of our findings.

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