



CONTRIBUTION OF PARTICIPATORY TERRITORIAL DIAGNOSIS IN RURAL DEVELOPMENT PROJECTS (CASE OF THE PILOT PROJECT OF MAGROUNE, NAAMA, ALGERIA)

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ABSTRACT

Participatory territorial diagnosis (PTD) has become a privileged policy for the implementation of development actions. In this context, this article focuses on the impact of this strategy in rural development programs. This method carried out at the Magroune locality (Department of Naâma) aims to elaborate, according to a participative and partnership approach, an integrated development plan that reconciles socio-economic needs with the environmental and territorial needs of the rural locality in question. Field prospection and surveys with the local population made it possible to identify the problems affecting the locality and to propose suitable solutions through the construction of a problem and solution tree. The results show that isolation, insufficient drinking water, electrification, and silting up are the main problems that need to be solicited by local development actors.

Keywords: Naâma, participatory territorial diagnosis, rural development



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A RÉSZVÉTELI TERÜLETI DIAGNÓZIS HOZZÁJÁRULÁSA A VIDÉKFEJLESZTÉSI PROJEKTEKHEZ (A MAGROUNE-I KÍSÉRLETI PROJEKT ESETE, NAÂMA, ALGÉRIA)

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ABSZTRAKT

A részvételi területi diagnózis (PTD) a fejlesztési intézkedések végrehajtásának kiemelt politikájává vált. Ebben az összefüggésben ez a cikk ennek a stratégiának a vidékfejlesztési programokban kifejtett hatására összpontosít. A Magroune településen (Naâma tartomány) alkalmazott módszer célja, hogy a részvételi és partnerségi megközelítés alapján olyan integrált fejlesztési tervet dolgozzon ki, amely összehangolja a társadalmi-gazdasági igényeket a szóban forgó vidéki település környezeti és területi igényeivel. A terepszemle és a helyi lakosság körében végzett felmérések lehetővé tették a települést érintő problémák azonosítását és a megfelelő megoldási javaslatok kidolgozását egy problémafa felállítására. Az eredmények azt mutatják, hogy az elszigeteltség, az elégtelen ivóvízellátás, a villamosítás és az eliszaposodás a fő problémák, amelyekre a helyi fejlesztési szereplőknek meg kell találniuk a megoldást.

Kulcsszavak: Naâma, részvételi területi diagnózis, vidékfejlesztés

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1. Introduction

Algeria is a country that covers an area exceeding 2.3 million km² (Hadjadj et al., 2019). It encompasses a multitude of geographical and physical spaces, stretching from west to east parallel to the coastline (Moulai, 2008). Three contrasting sets share the Algerian territory: the Tellian set in the North 4%, the Highlands 9%, and the Sahara in the South 87% (MADR, 2010; ONS, 2015). The Algerian territory has 1,541 municipalities, of which 979, or 64%, are considered rural (Souidi & Bessaoud, 2011; Guerine & Hadjadj, 2019). They are distributed as follows: a quarter (25%) of rural municipalities are located in the High plateaus, nearly two-thirds (64%) in the North and finally, 11% are located in the South of the country (Bessaoud, 2006).

The history of the development of rural areas in Algeria has been marked by instability. Not a decade goes by without a new policy being announced. However, the excess of state dirigisme, agro-climatic constraints, as well as the handicaps inherent to organizational and technical aspects, mean that the results of these different policies are below the desired objectives (Akerkar, 2020). The policy of rural renewal in Algeria has passed from 1962 to 2014 through four distinct phases, as follows: self-management and agrarian revolution (1962/1979), first reforms of the state agricultural economy (1979/1999), stabilization, national reconciliation, and emergency actions (2000/2008), and national policy of agricultural and rural renewal (2009/2014) (Medjoub, 2012).

The chronological reading of the first three phases that guided the development of the agricultural sector since independence illustrates a timidity of integration of the human component in development projects. Many projects have failed in the past because of this disintegration. The new rural renewal strategy imposes the participation of the rural population in the reflection, design, realization, and monitoring of rural development projects through household surveys and focus groups, as in the case of proximity and integrated rural development projects (Moulai, 2008). All these policies are encouraged by the public authorities to improve the living conditions of the rural population, and almost all of them are aimed at eliminating state assistance in the management of rural areas. Participatory territorial diagnosis (PTD) is defined as the inventory of a given territory that identifies problems, strengths, weaknesses, people's expectations, and economic, environmental, and social issues to establish areas for progress (Dominique & Annick, 2011). The diagnosis can be broken down into three phases: identifying data and partners, putting them up for debate to define issues and directions, and sharing with those concerned (Moulai, 2008).

Research has been conducted to highlight the role or impact that this policy has on decision-making for rural development. We cite as examples: Oihi (2006), Barakat & Bendou, (2013, 2014) in Morocco; Koumoi & Orekan (2018) in Togo; Noel (2001) in Belgium. In Algeria, research in this area has been limited to a few studies, such as Zouad & Benhamida (2014) and Bestani & Zaoui (2014).

Our study aims to show how and to what extent participatory territorial diagnosis (PTD) constitutes an efficient mechanism in rural development strategy. From this

perspective, our field of evaluation concerns the locality of Magroune, in the Wilaya of Naâma (western Algeria) and selected as a pilot site in the framework of international cooperation between Algeria and the United Nations Development Program. We first present the locality concerned and the methodological approach followed, as well as the indicators taken into consideration in this evaluation. We will then proceed, in light of the results of the PTD, to explain how the latter can help the public authorities to carry out development projects that reflect the vision of the population concerned.

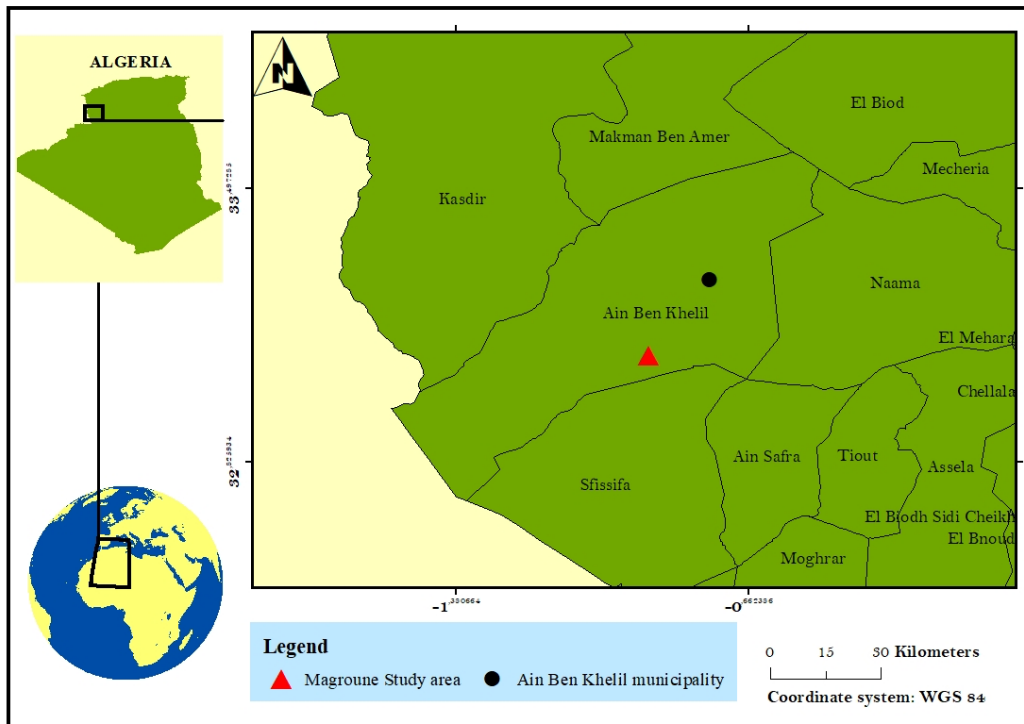
2. Presentation of the locality

The Wilaya of Naâma is the result of the last administrative division of 1984 instituted by law 84-09 of April 4, 1984. It is composed of 12 municipalities and covering an area of 29,514.14 km² (Zair, 2011; Guerine et al., 2022a). The population of Wilaya was estimated at 296,597 inhabitants in 2021, or a density of 9.94 hab/km² (Youcefi & Marouf, 2023). It consists of a vast steppe plain (74% of the territory), a mountainous area located in the southwestern region (12%), and a pre-Saharan area occupying the rest of the territory (Bensaid, 2006).

The locality of Magroune, approximately 60 km away from the chief town of the Wilaya of Naâma, is part of the municipality of Ain Ben Khelil. It is characterized geologically by the presence of vast surfaces of erosion (Highlands) and mountainous reliefs constituted by dolomites of the middle Jurassic. The geological bedrock gives the hydrographic network an elongated geometry (Oued Kherba, Oued Taoussara, Oued Redjem, Oued Oglat Bayda, Oued Magroune) (CFN, 2016).

The dune belt of Magroune invades the territory of the locality and extends its end in the immediate vicinity. Its elongated shape of southwest, northeast, and northwest reflects the preferred direction of the winds (*Figure1*). The region is located in the lower arid bioclimatic stage with cool winters. Annual precipitation rarely exceeds 250 mm and often shows a seasonal pattern of autumn/spring/winter/summer (Guerine & Hadjadj, 2019). The aridity of the climate, prolonged drought, soil fragility, and overgrazing are the main causes of the degradation of natural vegetation. The proliferation of therophytes and chamaephytes characterizes the major features of the vegetation cover of the region, much like other steppe terrains (Aidoud, 2005; Amghar & Kadi-Hanifi, 2008).

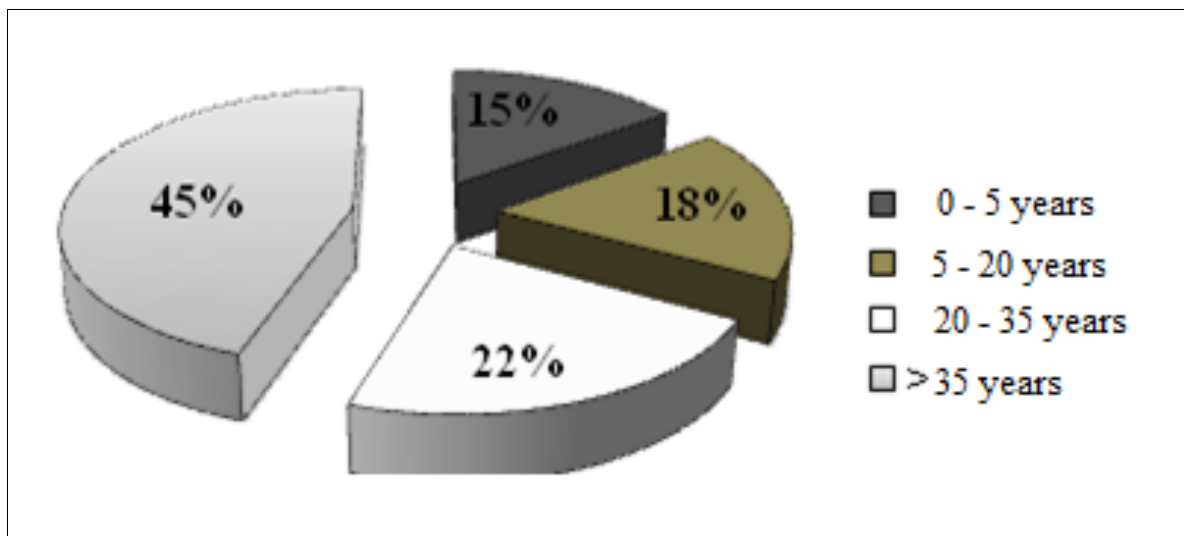
Figure 1: Geographic location of Magroune



Source: Edited by the authors.

The population of Magroune has about 117 households according to the results of the latest census, with some of them sedentary, others nomads. Indeed, the locality has 661 inhabitants, and the gender distribution reflects a predominance of men (58%) over women (42%). This predominance can be justified by the fact that men are more adapted to the difficult living conditions in the steppe region. The distribution of the population by age structure is highly heterogeneous, with a clear dominance of the class > 35 years group (45%), constituting almost half the population of the locality (Figure 2).

Figure 2: Population structure by age



Source: Edited by the authors.

The illiteracy rate is high for the entire population. Among women, the proportion is even higher. This situation is due to the remoteness of the locality from the municipality of Ain Ben Khelil (25 km) and to the lack of enthusiasm of the parents to educate their children.

The life of the population is based mainly on traditional and ancestral sheep, goat, and cattle breeding. The latter is done according to extensive management methods and is largely dependent on natural rangelands. The number of sheep and goats is approximately 4,600 head, while cattle number approximately 753 head. The period of prolonged dearth and the degradation of the rangelands have forced farmers to resort to expensive feed (DSA, 2017).

3. Methodology

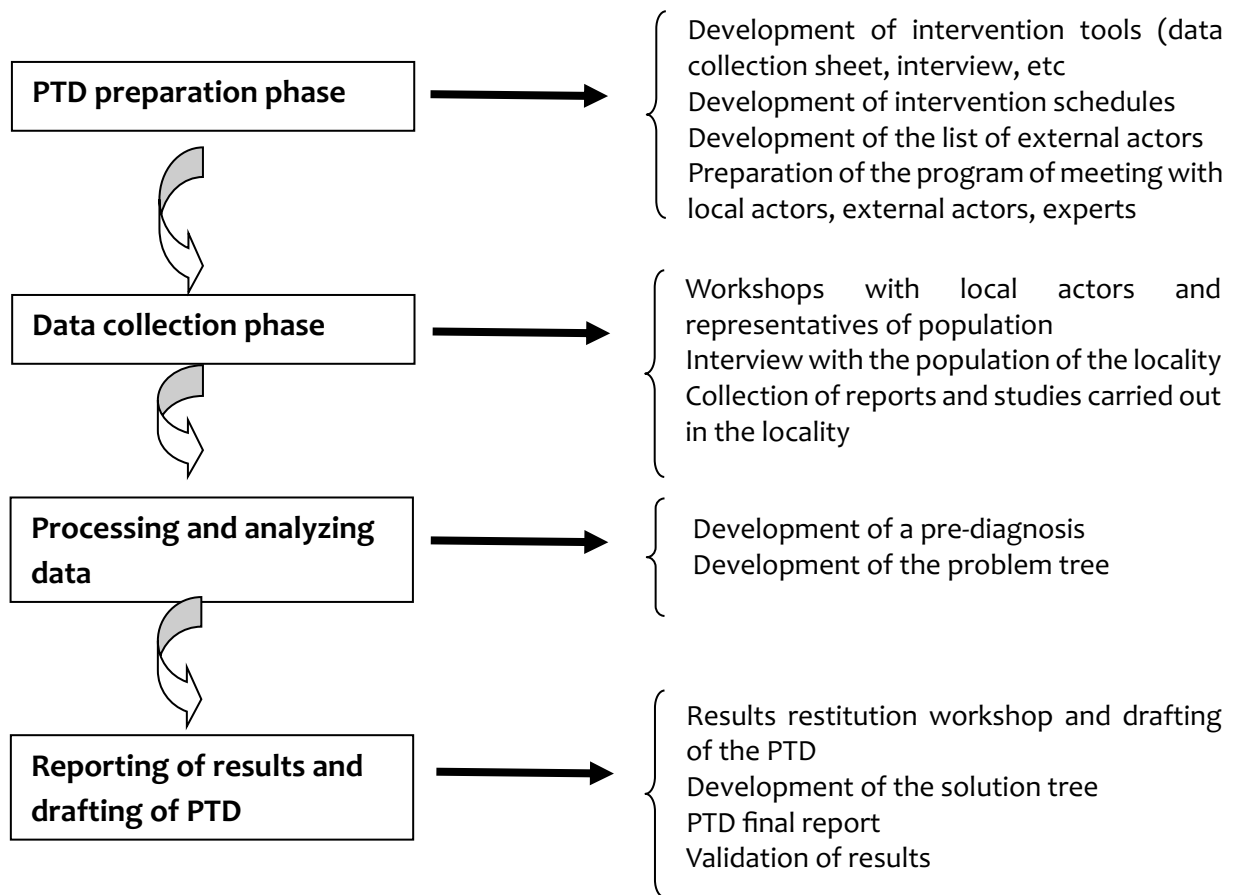
Since 2009, Algeria has adopted a new policy for managing rural areas. This policy of rural renewal is based on a new way of governing the rural world. It is focused on shared responsibility and a partnership between public actors and the inhabitants of these spaces (Saidoun et al., 2022). Proximity and integrated rural development projects remain the preferred instrument for the application of the new rural development policy in Algeria. These multi-sectoral projects are based on collaboration between public sectors and the integration of the population concerned into development projects (Guerine et al., 2022b). For our study area, we will demonstrate the importance of PTD in the new vision of rural development.

3.1. Process of the realization of Participatory Territorial Diagnosis (PTD)

Although the notion of participation has existed for a long time in development practices, it has now become an indispensable practice and a major element in the discourses and strategies for fighting poverty (Barakat & Bendou, 2014). A local development approach, PTD is a collective exercise that leads the local community to induce and sustain a long-term development process (D'Aquino & Seck, 2001).

PTD is an inventory that forms a part of a strategic approach to the development of the territory, the objective of which is not to produce a monograph or a simple objective description of a territory, but rather to provide a frame of reference that reflects a desire for action, mobilizing all local forces around development issues (Besancenot, 2008). It provides knowledge of the socio-economic and environmental assets and constraints of a territory as perceived by the population and the various stakeholders (Lardon & Piveteau, 2005). PTD has four main steps (Barakat & Bendou, 2014), each formulated and adapted according to the circumstances encountered in the field during interviews with the population of the locality of Magroune (*Figure 3*).

Figure 3: Steps of Participatory Territorial Diagnosis



Source: Edited by the authors.

This process allowed the population of the territory to be actors in their development. Table 1 illustrates the number of people who have gone through the PTD process.

Table 1: Number of participants in the PTD process

Geographic area	Number of inhabitants	Number of participants	Number of men surveyed	Number of women surveyed
Magroune	661	562	300	262

Source: Edited by the authors.

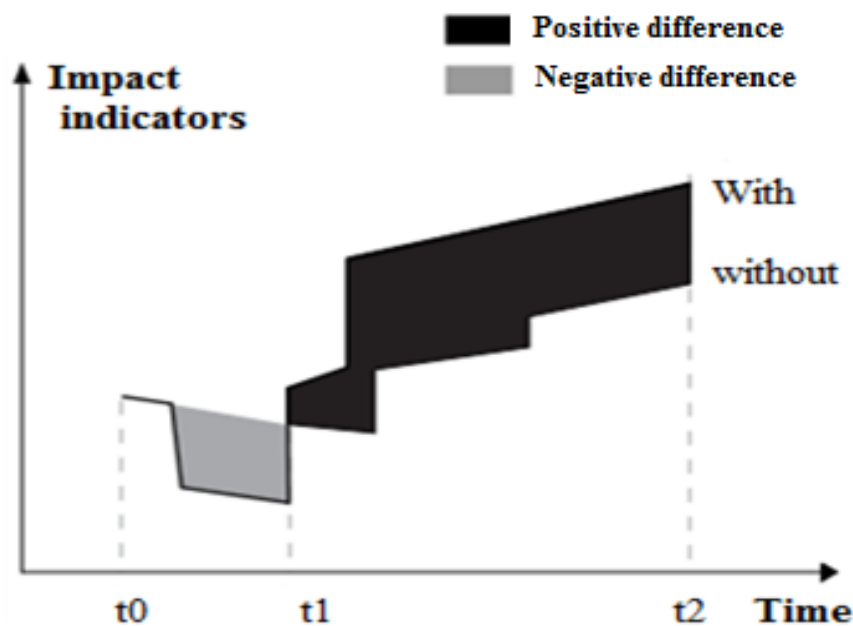
The semi-directive interviews with the rural population took place in the presence of the local actors of the municipality studied (local elected officials, chief of the forest district, subdivisional agricultural services officer, and president of the Magroune association) to bring the public authorities into the DTP process to enable them to set up an action plan adapted to the local reality, and the aspirations and expectations of the population.

3.2. Evaluation of the impact of the program

The evaluation of the impact of projects and programs is based on the identification of a differential between two situations: the one resulting from the implementation of the project on the one hand, and the one that would have prevailed if the project had not been implemented on the other (Delarue & Cochet, 2011).

Impacts are therefore assessed at the end of a project, or even some time after its completion, to allow time for the actions to express their effects, which requires a reference situation for an objective or relevant assessment (Figure 4).

Figure 4: Diagram of the evaluation of the impacts of a project



Source: Delarue & Cochet (2011).

In our case, for the examination of the socio-economic impacts of the works carried out at the level of the locality of Magroune, we have retained three levels of analysis. These are the territory of the locality, households, and organizational framework. The analysis is completed by proposing indicators for each level (Table 2).

4. Research results

The entire population of the locality participated in the PTD process, except for children under five years of age. The number of participants was 562, of which 303 were men and 262 were women, representing 85% of the total number of people involved. Considerable interest was shown in the participation of women in the development dynamics of their territory. The latter are generally in precarious and marginalized situations that handicap their participation in local development.

4.1. Role of the PTD in understanding the local reality

The work of the focus groups was carried out according to a SEPO approach (successes, failures, potentialities, obstacles) which, in its different phases, made it possible to gather a mass of information on the following aspects:

- Assets and weaknesses,
- Wishes of the proposal,
- Classification and justification of priorities,
- Proposals for an action plan.

The analysis of the results of the PTD has allowed us to identify the main findings related to the four main dimensions that stand out as difficulties that hinder the development of the locality, namely:

4.1.1. Access to social services

The inaccessibility and isolation of the locality present serious problems. The poor condition of the existing road network makes access to social services in the municipality of Ain Ben Khelil difficult. This is undoubtedly a handicap for any attempt at development.

4.1.2. Drinking water problem

The constraints relating to the exploitation of existing wells are one of the primary concerns of the local population. Indeed, the degraded state of the existing wells and the lack of equipment makes these resources inoperable, forcing the population to travel 25 km to obtain water from the municipality of Ain Ben Khelil.

4.1.3. Energy problem

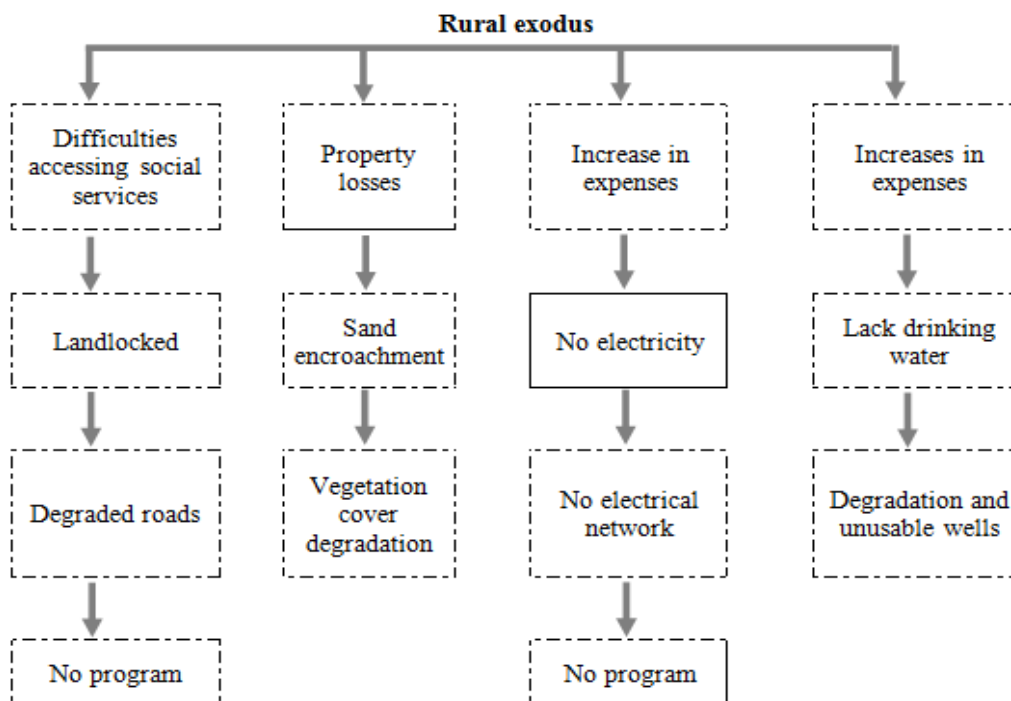
The lack of electrification poses a major problem for the rural population of Magroune who frequently use traditional means (candles), but with the violent winds that affect the region, these means are not a solution. The problem of electricity becomes even more serious in the summer, especially for newborns with the stings of scorpions. Women surround their children with lighted candles to chase away these venomous insects.

4.1.4. Silting problem

The problem of silting up is mentioned as a priority by the population of Magroune, which suffers from the effects of this scourge almost all year round, especially with the presence of the Magroune dune belt, which threatens the region. The silting is very expensive for the population, it destroys property, the silting tracks, houses, and tents, and it contributes to the loss of herds.

The constraints reported by the population made it possible to develop a spatial representation of the area by formalizing the problem tree of the locality (*Figure 5*).

Figure 5: Problem tree

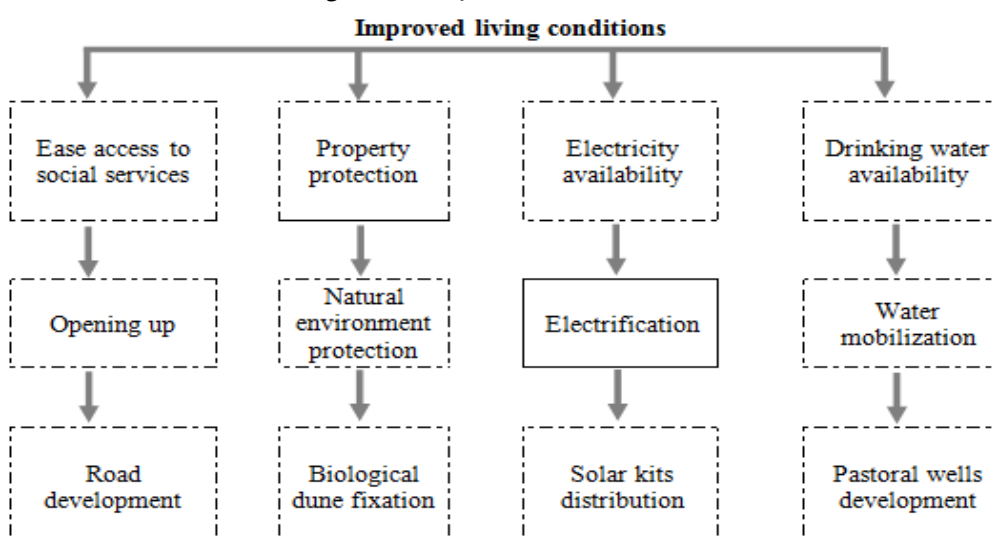


Source: Edited by the authors.

4.2 Strategic development orientations

The perception of priority needs by the population follows the same logic that prevailed when the problems were broken down. These problems have been translated into a set of development projects in various fields, namely water mobilization, development of tracks, electrification, and the fight against silting, as shown in the solution tree (Figure 6).

Figure 6: Proposed solutions tree



Source: Edited by the authors.

4.3 Evaluation of socio-economic impacts

Territorial diagnosis is a tool widely used by local authorities to better understand their territory and implement management adapted to its specificities. Among its advantages, PTD promotes the reconciliation of the representations of the different actors with a view to arriving at a common territory project. More than a tool for knowledge and analysis of space, it is a real decision-making mechanism compared to other approaches which have neglected the human component in territorial development projects.

In our case, the results obtained show the importance of planned interventions, as these actions have led to significant changes in the improvement of the living conditions of the population and to the conservation of the ecosystem in question (*Table 2*).

Table 2: Proposed levels, indicators and results of analysis of planned actions

Level retained	Proposed indicators	Evaluation method	Before project	After project	Differential
Territory	Opening up indicator	km of trails in good condition	0	25	25
	Treated land indicator	Achievement in hectares	0	1,000	1,000
	Water availability indicator	Number of exploitable wells	0	2	2
Households	Energy indicator	Number of solar kits available	0	117	117
Organizational framework	Association movement	Number of associations	0	1	1

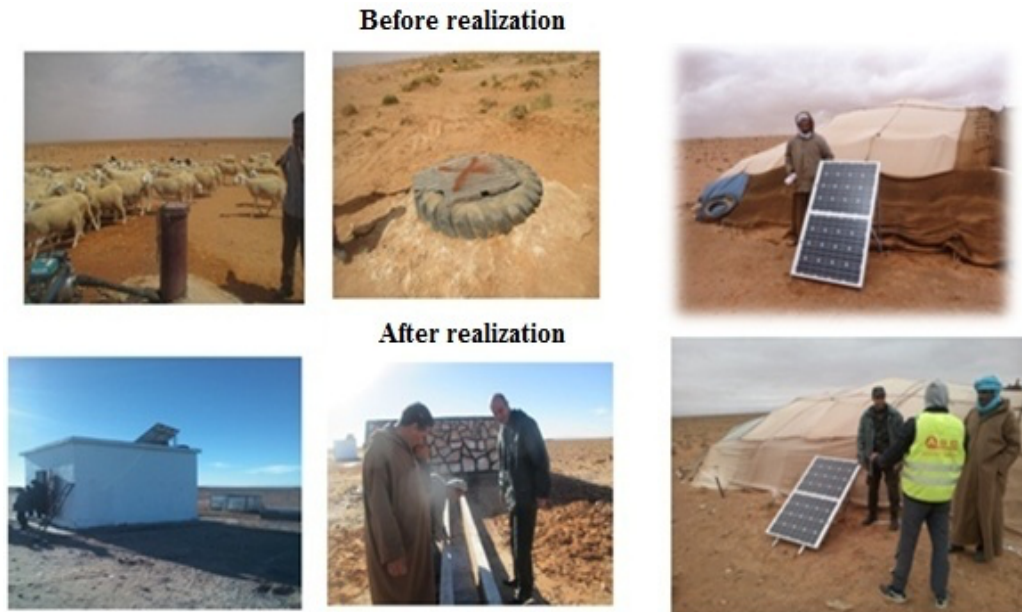
Source: Edited by the authors

The results of PTD were returned to local actors, who carried out development projects representing the priorities identified by the local population. We note that the promotion of sustainable local development passes in the first place by the improvement of the network of tracks towards the municipality of Ain Ben Khelil of 25 km whose goal is to facilitate the access of the local population to social services. The fight against silting is taken into consideration through the defense and fixation of dunes on 1,000 ha.

The development of two pastoral wells, particularly for drinking water supply and livestock watering, is of paramount importance. This action drives the economic and social activity of the population and contributes greatly to the improvement of income. Finally, the provision of energy through the distribution of 117 solar kits is one of the major strategic development priorities expected by the population.

The realization of participatory territorial diagnosis has allowed the improvement of the organizational framework of the locality by encouraging the population to organize itself in an association to be able to transmit its development vision to the local actors.

Figure 7: Illustration of some projects carried out at the locality level



Source: Photos by the authors.

5. Conclusions

A valid conception and efficient implementation of the development of a given territory require the participation of those who should benefit from it. Therefore, the identification of the local reality must be done through participatory territorial diagnosis. This approach allows the indigenous population to participate in the development process of their territory and to ensure the sustainability of the projects carried out. The realization of PTD at the level of the locality of Magroune (Municipality of Ain Ben Khelil, Wilayaof Naâma) allowed us to identify the weaknesses and the strengths of the territory and to target the main axes of development within the framework of a strategy of participative development. Indeed, the problems of isolation, lack of drinking water, electrification, and silting identified as major constraints that inhibit any attempt to improve the living conditions of the population and local development have been requested by the opening of a rural track of 25 km, development of two pastoral wells, distribution of 117 solar kits, and implementation of a project of pastoral planting on 1,000 hectares. In addition, we note that an association bearing the name of the locality “Magroune Association” was created by the local population to ensure the sustainability of the projects and to participate in the development process.

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