NO TO FATALITY ... IS IT POSSIBLE?

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Summary:

The risk of desertification is a scourge affecting the territories of the Tunisian South. The Institute of Arid Regions Medenine - Tunisia has expressed for the last five years its intention to create a regional observatory to fight against desertification to revalue the territories of the Tunisian Southeast through strategies of communication between national and international, individual and collective, and private and public development actors. However, conflicts between actors make thee passage to action difficult. The gradual disengagement of the State, mass exodus, the rise of unemployment and the increase in the presence of the private sector are observed furthermore in the Tunisian context at the level of territorial development. Moreover, the emergence of private actors providing services there where local actors did not use to deal with a public operator, the complexity of sustainable development, the divergence in perceptions of the risk of desertification, etc. are challenges that rural and arid territory is required to overcome. The objective of this paper is to consider the importance of confidence in the management of risk including the risk of desertification to strengthen relations between development partners.

Key words:

Trust, risk of desertification, Observatory, expert and non-expert knowledge.

Résumé :

Le risque de désertification est un fléau affectant les territoires du sud tunisien. L'Institut des régions arides de Medenine - Tunisie a exprimé depuis cinq ans son intention de créer un observatoire régional de lutte contre la désertification afin de revaloriser les territoires du sud-est tunisien à travers des stratégies de communication entre acteurs de développement nationaux et internationaux, individuels et collectifs et privés et publics. Toutefois, les conflits entre acteurs rendent difficile le passage à l'action. Le désengagement progressif de l'État, l'exode massif, la montée du chômage et l'accroissement de la présence du secteur privé sont observés davantage dans le contexte tunisien au niveau du développement territorial. Par ailleurs, l'apparition d'acteurs privés offrant leurs services là où les acteurs locaux avaient l'habitude de ne traiter qu'avec un opérateur public, la

complexité du développement durable, la divergence dans les perceptions du risque de désertification, etc. sont des défis que le territoire rural et aride est tenu de surmonter. L'objectif de cet article est de s'interroger sur l'importance de la confiance dans la gestion des risques notamment le risque de désertification dans le but de renforcer les relations entre partenaires de développement.

Mots clés :
Confiance, risque de désertification, observatoire, savoir expert et non expert.

Introduction

Our research, based on an interactionist approach, is initiated as part of the cooperation between the laboratory of economy and rural societies (LESOR) of the Institute of the arid regions Medenine - Tunisia and the Centre for research on mediations (CREM) of the University of Paul Verlaine Metz - France. Our contribution is to integrate a new concept; confidence in a multidisciplinary research: territorial confidence in arid and semi-arid areas. There are many definitions of trust in different areas: as a means to reduce the risk and uncertainty, a moral order, predictability conveying good will and reciprocity. Therefore, the establishment of observatories in these areas requires consultation with officials of these places of physical and/or virtual exchanges, business, etc. To combat desertification together and revive the local economy (creating new jobs, improve agriculture, etc.), this dialogue is reinforced by a mutual trust between these parties.

The process of territorial intelligence seeks to establish sustainable and effective strategies and ensure the biodiversity of the economic activities for the recovery of employment[1] in this semi-arid region. These actions are not simple to develop because they require the consent and involvement of all parties. Regional directions relate to the players involved in sustainable development for the fight against desertification. In a perspective of territorial intelligence, redefining and reorganizing agricultural and pastoral activities provide, nevertheless, social, cultural, economic and institutional ambiguities and may face representations of actors with respect to their territory. Under the aegis of territorial intelligence, is the Observatory a solution to the complex dangers which force the players to their cooperation and to the exchange of clear and transparent information. Ultimately, is gaining the trust of the players the means par excellence for any sustainable development

[1] Menzel Habib region suffers from an important lack of touristic and industrial activities for the resuscitation of the economy and support of agriculture. With high unemployment, active people are escaping the region towards the coastal and neighboring areas.

project: acting on the socio-economic and ecological dimensions? How do they see the risk of desertification?

1 - A reading of the risk of desertification

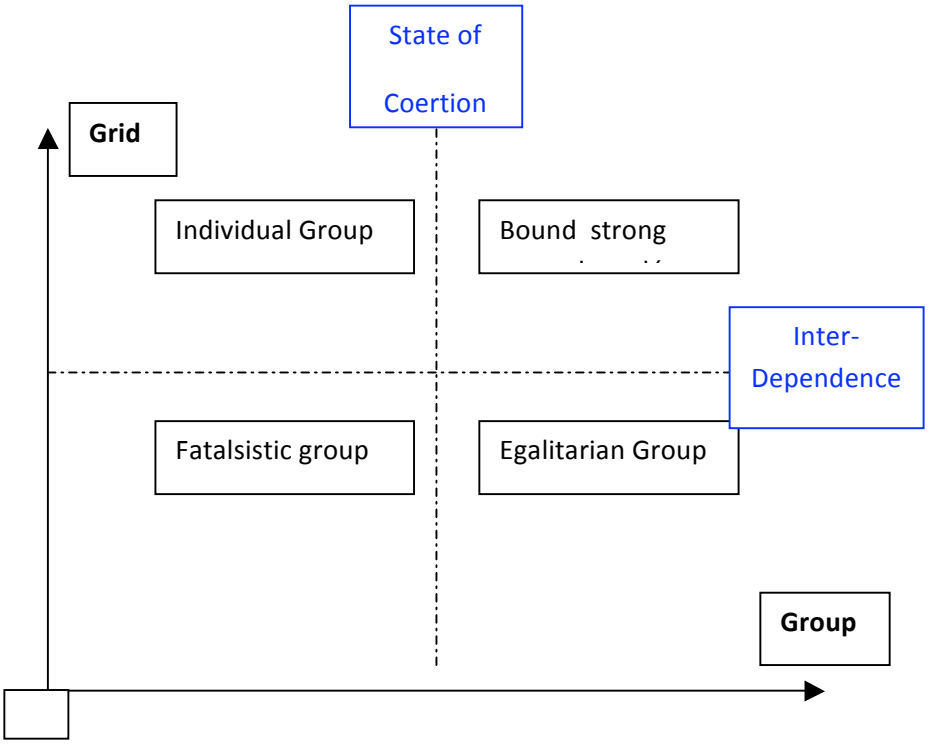
Wondering about the process of consolidation of coordination for the fight against desertification in the Tunisian South by the construction or reconstruction of trust is to focus on the different perceptions of this risk by the actors: researchers, local population and administrative structures. Studying the perceptions of the risk of desertification of the actors and their interpretations to identify mainly socio-economic expectations, to know their interactions with regards to their territory and to focus on their behavior following the proposal of techniques and methods to reduce this risk. Do they have trust between them, in the systems and methods, then? The phenomenon or the risk is interpreted by each player, depending on its experience, its values, its culture, cognitive abilities, etc. They differ from one person to another. The actor is regarded as the "spokesman" of the territory. From the stability of the State, he brings his reading on the drift due to the interactions between real and virtual constituent objects (desertification, exodus, poverty, unemployment, illiteracy, mistrust, etc.). Modes of interpretation of the reality of desertification are worth studying in order to propose, and subsequently carry out concrete actions to fight desertification.

1.1 Risk: a socio-cultural concept

It is difficult to have the same territorial view shared by all players. Due to the perception of risk and uncertainty, and before entering a relationship, initial trust is difficult to establish. Therefore, it promotes the reduction of the perception of uncertainty in a relationship, improves efficiency in the use of resources and generates more values in the relationship (Charki, 2005). The questioning of the mode of the functioning of public institutions leads to a crisis of trust in these representations of the State and *vice versa*. “Common appreciation of risk here offers different interpretations acting on the means to be implemented […]” (Herbaux, 2006:6).

Ulrich Beck (1993) notes that risk management is a complex process. Groups are doomed to fight the risk (Beck, 1993). Their acceptance of fate is explained by their different interactions with the territory (De Koninck, 2002). Thus, they refrain from acting and surrender to face a fact regarded as inescapable and inevitable. In contrast, other groups claim to intervene

effectively through strategies coherent development allows at least the reduction of the risk. Indeed, these players are convinced that man is responsible for part of the risk and can, therefore, act. Mary Douglas and Aaron Wildavsky (1982) are interested in the position of the player in the group and its influence on the interpretation of the risk. They suggest the model *Grid/group* mapping the various interactions between individuals and group to identify constraints, assess and appreciate the risk, etc. Membership in the group, social integration in the territory and the set up strategies affect the processing of information and the interpretation of risk.



Behavioral model of Douglas (Grid/Group model, 1982) in these (2006: 8)

Marc Calvez (1995) points out that the social distance, style of life of the actor in the Group (poor/rich, active/unemployed, etc.), the nature of the interactions (subordination, domination, power, etc.) affects his perception of risk. The challenge for researchers is to choose a control group representing the entire population. A symbolic self-protection attitude may be considered by the refusal of belonging to a risk group. This reaction marks the denial of

having to suffer the harms of a risk. Thus, the victimization of a group takes back to a feeling of not being concerned and facilitates the acceptance of risk following the distancing and isolation from the target group (Calvez, 1995).

Accepting the risk[2] is only possible after the exchange of opinion, perceptions, judgments and representations of one other. Natacha calender (2006) notes that the perception of the risk by non-experts is very complex given its integration of personal values and characteristics. Perceived risk conveys a subjective, qualitative and psycho-social image based on affection, emotion, and symbols (Marris, Joly, 1999). Thus, the establishment of a collective and deliberate reflection to reduce reflection risk does reassure actors and strengthen the bonds of trust? Risk is harm suffered by the actor and focuses on the impacts generated on people, natural landscapes, etc. The concept of socially acceptable risk shows that he is likely to be refused. Is this the citizen who is exposed to the risk or the political decision-maker or the researcher?

1.2 Global awareness of the risk of desertification

The complexity of desertification[3] requires the development of diversified structures of research through scientific partnerships. Thus, demonstrations were organized to fight desertification. The mobility of the authorities, aware of its disastrous impact, opened the way to the first Conference held in Nairobi in 1977. The CUNED (Committee of the United Nations for Education and Development), at the end of the first manifestation of Nairobi, defines desertification as a phenomenon affecting natural biological resources by their reduction or destruction. The environmental and economic consequences constitute an eminent obstacle for sustainable rural development and incite migratory movements of populations. Once the biological potential is destroyed, populations are helpless against this danger that has eaten into their lands and threatened their survival.

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[2] The difference in the Anglo-Saxon and French term of the acceptability of the risk is developed. In the French context, the term evokes that the risk is acceptable whereas in the Anglo-Saxon context, it expresses the degree of tolerance to the risk.

[3] Desertification, Liu Xinmin and Zhao Xyue-yong (1997), refers to the transformation of the region into a desert. Multiple definitions have been proposed. However, criticism has been advanced as desertification was considered a scourge that only affects living ecosystems and unbalances their systems of life (without affecting its human, social and political dimension, etc.). From after the first section of the international convention on the fight against desertification, this phenomenon means land degradation in arid, semi-arid and sub-humid areas due to climate change and human activities. The lands, therefore, are affected by natural mechanisms and/or human practices. This phenomenon has existed since antiquity; prehistory. However, it drew the attention of interdisciplinary research recently that is in the development of the first programmes to fight desertification initiated by UNESCO in 1950 (Akrimi, 2001).

Menzel Habib Observatory is reserved to identify and assess the risk of desertification, identify the factors that contributed to its emergence, prioritize and classify them according to their level of danger, emergency and acceptance for the company. To identify, evaluate, understand, communicate the questions of actors to finally act and take the necessary steps are the steps in the risk management. On the other side, non perceived risk gives considerable importance to detect and measure their potential harm. To tolerate or dismiss a risk depends on the availability of relevant information to make this decision of acceptance/refusal. Thus, and in a context of territorial intelligence, the culture of secrecy and non transparency in information affect the perceptions of stakeholders in their territory (Vincent, 2001).

The IRA as a representative under the Ministry, has established schemas and scenarios to compare the situations and inform decision makers to identify and determine social priorities (integration of women in the projects, reduce exodus and migration, etc.), economic (support agriculture, propose para-agricultural activities, etc.) and ecological (limiting overgrazing, find a balance between uses and scarce resources, etc.). Risk assessment is a phase for which the experts give their recommendations and opinions to be applied by the population or study group. Indeed, the observatories are implemented in complex ecosystems (case of Menzel Habib) for the assessment and monitoring of previous experimentation, to deepen work studies on the links between rural populations and natural environment, to highlight forms of impacts and their ecological consequences and identify indicators of desertification. Referring to the human and social sciences, the enrichment of the understanding of the process of establishment of observatories in the arid and semi-arid territories led to the follow up to the process of trust building.

1.3 How to manage risk?

According to Georges Bertrand (1986), risk assessment goes through four phases. The identification of danger is to identify and define the threat. Once the danger is detected, characterize and distinguish it among many others is done via probabilities and subjective and qualitative research. Then, the definition of strategies, means to put in place is possible following the evaluation of the danger. Identifying, characterizing the risk and preventing against any danger is already feasible following the installation of environmental monitoring system. In addition the probabilistic calculations allow to clarify the extent of the risk, its gravity, the magnitude of the damage and the urgency of the situation to assess the exposure of the population and other species to the scourge of desertification.

a - For which strategies to fight desertification

Who will be the mediator between the public and other stakeholders? Risk management is the case of instances of decisions (contain, 2006). The intervention of public authorities is explained, on the one hand, by the perception and recognition of the risk in order to take decisions to reduce or eradicate it. Philippe Herbaux (2006) evokes the "acceptable" risk or not by the institutions and the public to note that it is a socio-cultural concept incorporating the policy. Indeed, it focuses on the role of Governments for the expertise of the risk through their mobilization and the designed means (establishment of socio-economic observatory, seminars, TV spots, etc.). He wondered what the position, role and investment of the State in the constitution of knowledge bases[4] to combat the risk. Besides, "literature seems silent about this research axis and may constitute a passionate construction project".

The confrontation between the perceptions of professionals to that of other professionals is rich with knowledge. Consensus and confidence is never easy if different actors do not share step values and similar interests. Nevertheless, the richness and diversity offers a possibility to supply knowledge bases. Between the actors using the subjectivity and socio-psychological visions and actors on rationality, confrontations are noticed between two sciences; expert and non-expert (Vermandele, 2006). The superior position of expert science revives the exasperation of the actors. To calm the legitimacy, expert science ghetto is a limit of learning, and it should recognize popular knowledge.

b - Confrontation of knowledge

According to the sociology of translation, interference between companies and science is often observed. Thus, the two negotiate their areas of authority and exercise thus causing conflicts of interests between the scientific community and the population at the level of risk assessment. Brian Wynne (1999) and Jean-Yves Trépos (2001) focus on the differences between a subjective and personal citizen assessment and probabilistic and rational scientific assessment. Researchers are there to resolve ambiguities and limit the contradictions. Indeed, their role is to find areas of agreement with the population despite the differences in interests. This takes us back to show us that researchers are not the only producers of knowledge. Their imposition is discussed and negotiated to leave space for popular knowledge. Olivier Laügt (2000) emphasizes the importance of expert science to facilitate the discussions and provide

[4] "Risk without knowledge is dangerous, but knowledge without risk is unnecessary" (quote from Frederico Mayor, DG UNESCO 1987-1999).

explanations and clarifications in policies, strategies and taken decisions. Besides Andrea Lorenzet and Federico Neresini (2004:4) stipulate that “it is no longer possible when thinking that the methods and scientific objectives benefit from everyone’s trust”.

The solution par excellence to make scientific analysis more recognized, legitimised and rigorous, is to involve all actors (different disciplines and non-experts) in the process of knowledge production. Non-experts refer to their individual and collective experiences: knowledge on pastoral practices, impacts of such a remedy on livestock, etc. Michel Callon, Pierre Lascoumes and Yannick Barthe (2001) notify that non-supremacy of expert knowledge must be recognized and integrate lay knowledge in the production of knowledge. As a mediator, it ensures the involvement and commitment of the citizen in development projects. This more than important role can be played and attributed to the scientists who seek recognition of their work.

Farmers exploit the ancestral knowledge to fight desertification and improve agricultural products (i.e. toxic plants, care of livestock, etc.). Moreover, in order to improve the productivity of goat meat species and dromedaries, especially in times of food shortages, the IRA has put its trust in small families in the Tunisian South so that it put them in charge of producing in a traditional way dairy products. “Generally they are elderly people who have very ancient knowledge” (IRA Report 2007: 86). In addition, and thanks to the press, science takes into account the opinion of scientists and of the public in an attempt to satisfy the general interest: what are the risks? What are the solutions for farmers? How much will technology cost for the administrative structures, research and for the population? Are they able to bear the costs? This expertise provides solutions to the questions of the population that has been neglected for a long time and excluded from the projects (Wynne, 1999).

Popularizing science is not an easy matter. Media (advertisements in radio, television, articles in the local press, etc.) try to simplify to the maximum the results of scientific research and resolve ambiguities. For a good transmission of information, the expert should be less based on calculations to let the non-expert knowledge flourish. Also, and for the dissemination of knowledge, the IRA has devoted a Masters degree for the "fight against desertification and the management of the resources in arid environments" in collaboration with National Institute of Agronomy in Tunis. The training program also has an international Master’s degree "Integrated Drylands Management" starting in collaboration with the University of the United Nations, the University of Tottori (Japan), the Institute of the Desert (Lanzhou - China) and ICARDA (Aleppo-Syria) (IRA report, 2007).

Adopting a more broad and extended vision than the scientific vision in the field of the database enriches risk perception. When the responses of citizens match the scientific perception this shows that the idea conveyed by the expert is well transmitted. The more the gap is in perceptions, the more communicative deficit is noticed. Paul Slovic (1992) considers the support of several dimensions in the assessment of the risk. Citizens distinguish the effects of risk (whether reversible or not, short term or long term, localized or general, extended or concentrated, etc.), the fragility of the target population, the assessment of issues and comparisons.

2 - Methodology and research context

Enhancement of the State of the links and interactions in the Goffman approach allows to approve the maintenance treatment methods and explain the interweaving of relations of trust/mistrust between players. The starting point is marked by a field observation followed by interviews administered to the various development actors (researchers, decision makers and farmers and ranchers) involved in the establishment of the Observatory Menzel Habib. The structuring of data is an important step to arrange the submission of the interview. Maintenance includes three groups of questions each referring to a specific theme. The first theme is studying the concept of interaction between actors and levels of exchange between them. This allows us to verify that the density and the quality of the mesh associating actors affect the actions and the flow of information through the network of actors. The second theme focuses on communicative and informational policy updates in consistency after the establishment of the Observatory Menzel Habib while emphasizing the actors of the desertification phenomenon perceptions and actions of one other. The third theme highlights the involvement of stakeholders to participate voluntarily or under compulsion to local events, on the one hand, and the communicative strategies developed through a participatory approach to the revival of confidence. We focus on targeted accounts. Meetings and interviews with the actors in the field followed by a content analysis.

Specificities of the Observatory Menzel Habib

The natural potential and the population in rural areas and in arid and semi-arid areas are affected by the phenomenon of desertification. Thus, desertification is not a plague caused solely by climate change affecting exclusively arid zones and the most threatened areas. Scientific rebound of this phenomenon presents both due to climatic factors and threats from human activities affecting the arid, semi-arid and sub-humid areas. Desertification as a

dynamic process, proves to be a danger to the fauna and flora on the one hand, and on the other hand, for the population in question. Thus, it appeals to the natural sciences, the Humanities and social sciences. Relating to various disciplines, desertification is a concern to researchers, humanitarian, economists, etc. The establishment of observatories allows one to collect data to understand the causes, mechanisms, the extent and the consequences of desertification. This device is intended to monitor long-term environmental changes. Indicators, patterns, scenarios, etc. help decision making. How do stakeholders perceive desertification? What will be responsibility of actors share of their exploitation of land and resource management? Is the Observatory Menzel Habib able to help in the fight against desertification?

The land issue in Menzel Habib has accentuated the scourge of desertification. Collective land belonging to the tribes is still very much the point of contention of the tribes. Legally, no one is an landowner. Intrusion laws, property laws and property by colonialism, traditional systems have collapsed and are no longer legitimate. Heritage management by the Government is required to distribute the rights on spaces and resources. It manifests itself by the legal right-of-way with the objective of preserving the rights of future generations. The common law strongly opposes the heritage system. This right is highlighted by the West which has exacerbated the right holders. Heritage management makes it possible the taking in hand the interests of future generations. Moreover, the land issue is at the crossroads of the environmental design for the fight against desertification. Therefore, it seems urgent to solve this problem to allocate the best properties. Institutional policies may find their interest in this heritage management perspective to participate in these projects. The decentralization of authority to the government brings together them and commits various states in this global cause. The distribution of the responsibilities of the government to local communities and the land operator was provided by art (*cf.* arts. 10-2 of the international convention on desertification).

3 - Discussions

Tunisia concerned by the scope of the socio-economic and ecological difficulty of the fight against desertification, has mobilized itself at the dawn of the 1970s for more than 30 years to combat this danger threatening the environment, the economy, society, culture, etc. Promoting sustainable development has two essential objectives: the satisfaction of international

commitments, including the convention on the fight against the scourge of desertification and the convention and territorial enhancement (launch of new activities); which emphasizes a double concern. The changes induced by the modernization of agriculture (increasing use of machinery, fertilizers, pesticides, over-exploitation, etc.) deplete soils and generate their clearing and the scarcity of some plant species. Will such a use of the LOTH[5] program of territorial enhancement program increase the intrinsic satisfaction and enable to improve the way they carry out the work, and consequently, territorial confidence following the design of the Observatory Menzel Habib?

3.1 Perceptions of desertification

In the fight against the risk of desertification, Bachir El Arbi (1991) points out that the perceptions of stakeholders are markedly different since the colonial period. Indeed, local authorities; the service of the peasantry, whose objective was the development of the lands of the South thanks to the restructuring of a pastoral economy described as unstable to stable arboreal economy. Thus, the divergence of interests and strategies revived this feeling of unease towards the actors and participated in the failure of the policies of territorial development. Even more, and because of the rising costs of water infrastructure that these boards were concentrated on an area pilot; a model, "a showcase" 20000 ha of irrigated perimeters (program DYEPN, 2000). Salah Omrani (1982) said that the experts had to readjust development for rational use plan taking into account the land aspect which has been completely overlooked previously. Moreover, the new plan put in place was also rejected by the population following an indisputable and violent refusal expressed by the murder of a shepherd who was responsible for the control of pastoral care.

Science is in disagreement with traditional beliefs. After the analysis of the interviews, many researchers, administrative officers and representatives of the institutions of guardianship believe that the faith of the population prevents it from seeing problems. Others believe that even informing about the risk related to desertification, farmers continue to exercise excessive agriculture. Desertification is only one of the problems to face. By asking the farmers and pastoralists, they are aware of the magnitude of the phenomenon of desertification and the fragility of the environment. They possess a rich know-how to combat this risk since they were able to adapt to the problems of desertification since antiquity. The population is in a dilemma between their objectives and the preservation of natural resources. Researchers believe that they must be mediators and that they support such a challenge through preventive

[5] LOTH: languages, objects, territories and hospitality is a program initiated between the LESOR and CREM.

actions. To make them accept the risk is to improve information and communication technologies. However, the low acceptance and misunderstanding of the population of Menzel Habib at the level of development of natural resources are a subject of a concern.

3.2 Diversity of competent authorities

Desertification control project was led by four authorities. Studies[6] are concentrated in the plains of Jeffara and Ouaraa, the regions of Nefzaoua and Dhahar and low Southern Plains and steppe regions of Tunisia. From 1974 until 1975, the Board of Forests has supported this project. Then, from 1976 until 1977, the livestock and pasture Office led the case followed by the Institute of the arid regions[7] from 1978 until March 1979. Then, the Office of livestock and pasture resumed this big site. Does the multiplicity of centers of decision have an impact on the perception of the population of the local authorities? Can created trust be built between ministries, governorates, communities, local population, etc.?

For the fight against desertification, the decisions of the agricultural policy are represented by the maintenance of the rural population, the maintenance of the agricultural and pastoral space of the level of agricultural production space and the survival of some agricultural territories. In the 1980s, guardianship institutions, especially the Ministry of Agriculture, whose objective was the development of the culture of the irrigated to launch the production of concentrated, the prohibition of mechanized dried cultivation, coaching, training and the dissemination of knowledge. Menzel Habib farm subdivision is responsible for the safety of the food provided to animals, the quality of foodstuffs, to assist farmers, to assist pastoralists in material and financial terms, etc. It is composed of delegates, associations, veterinarians, administrative officers, experts and scientists and representatives of the governmental authority. Local development projects were put forward for the establishment of partnership. They are initiated by the constitution of a group (representatives of government departments, professional, personal rural financing, peasant organization responsible institution) intended to control the agro-pastoralist practices, methods of financing of agriculture and the proposal for funding bids.

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[6] Ogelt Merteba project is a project of action integrated in the fight against desertification. It is designed to preserve natural resources and fighting desertification, ensuring a regular and rich food for the safeguarding of the livestock, increasing the productivity of meat, improving the social situation of the population by increasing revenues and reducing rural exodus.

[7] Now projects have emerged including the creation of the IRA in 1976 for scientific research and training. Compound of five research laboratories: laboratory of dryland farming and culture population, laboratory of livestock and wildlife, laboratory of economy and rural society, pastoral Ecology Laboratory and enhancement of spontaneous plants and the laboratory of éremologie and desertification control propel research and propose solutions to address this problem and to adapt to the situation.

Research structures attribute to themselves the mission of studying the problems of desertification and monitoring of the territory of these natural or induced risks. Their objectives are multiple among them the improvement in the performance of the Observatory and the GPS[8], the update of territorial maps, the increase in the productivity of the laboratories, the sensitization of citizens, management skills and loyalty of partners. Various research projects rely on data from the GPS. For this, the IRA must ensure a good distribution of stations for effective coverage of areas at risk, ensure a good quality of the data collected so that they are exploited.

Analyzing needs and constraints of peasant organizations that significantly lack funding sources, proposing financing strategies tailored to their situations and considering alternatives to allow the promotion of rural territories and supporting economic activities. Finally, development projects will they bring effective methods of dialogue between partners for the improvement of agriculture? To reduce unemployment and to make the territory more attractive, local authorities rely on the rational exploitation paths using rotation and implementing defense and on the creation of spaces irrigated for the production of fodder. It has chosen to show a model to farmers to earn their trust. Illustrating successful examples on pastoral improvements allowed changing certain perceptions of the population.

The Government has chosen to decentralize power in forest officials which set the conditions of grazing. The fact that everyone felt controlled angered the population since the pastoral regime applies both to private and collective land. The right to pasture is transmitted by inheritance and reserved for each household. Selected policies struck the representations of a farmer, of a transhumant, etc. The institutions of guardianship in order to ensure traceability and control, demanded for the shepherd to be equipped with a shepherd map. However, his level of schooling is quite modest. Therefore, it is eminent to study what information to share with the local population. All the more his technique goes counter tribal values, he who relies on his own bearings rather than incomprehensible card[9]. The half-success of the formulas proposed by the administrative structures and research leaves the local actor perplexed. This unfortunately leads to only use decisions and solutions of short and fleeting scope to try to overcome the concerns of daily life and create new jobs. This is the case of the policy of the irrigated. Our research aims at wondering about the origin of the tensions and, consequently,

[8] GPS: Global positioning system: global positioning system. Appeared in the field of US Defense and takes place in other areas (commercial, maritime, etc.). It allows to know the position of an object on the surface of the Earth

[9] From interviews, very few farmers know the map of Menzel Habib.

the crisis of confidence between development actors and their logic of perception of the risk of desertification.

3.3 Exploitation of the knowledge of farmers and pastoralists

According to DYPEN (2000), farmers, pastoralists, farmers, etc. are the experts of their lands. Moreover, IRA calls for the expertise of farmers and pastoralists[10] to fight together against this scourge for the improvement of techniques of weaving (new activities for women), agricultural tools, etc. This concept describes the boundary between scientific stakeholders and scientists a territorial project (research object). Thus, the understanding of the stakes of an agricultural world, in the sociology of science, refers to the integration of the community of practice in academic research more and more intertwined with science speaks in favor of a merger of contemporary rural studies (ethnology, ethno-science, rural sociology) and science studies.

Because of the fragility of the situation, the citizen focuses on one side, the knowledge of experts for the capitalization of knowledge and political representations for the achievement of general interest, on the other side. The change in the social life of a farmer and agricultural practices is not necessarily appreciated. Disrupting transhumance practices, integrating new crops and plant species (culture of olive trees), etc. for combating desertification irritates even the population. Often imposed policies or attractive donations and grants are no longer solutions to be applied in a sensitive territory. Guardianship institutions, researchers and the local population should consult each other even more.

Conclusion

The more the number of participants increases the more the number of relations between them increases (Bertacchini, 2000). Is confidence, therefore, necessary to the existence of relations between partners and to be able to achieve them following the establishment of observatories? In addition, many information systems do not function well. Dysfunctions essentially come from the non-consideration of all stakeholders, of their divergence in their perceptions of the risk of desertification, of their needs, expectations and constraints during its implementation. It is becoming urgent to overcome many shortcomings in the design and implementation of observatories. It is then eminent to question how the actors will interact. To establish stability,

[10] IRA researchers are related closely with some breeders with knowledge on the behaviour of the species camelines and goatmeat. "TK are not separated from the know-how and the types of technical, religious, magical knowledge, policy (etc.), i.e., they are not separated from society because they are not the tech, but they are the result of daily practice" (IRA report)(2007: 15).

these partners should be trusted. From there, the establishment of observatories in these areas requires consultation with officials of these places of physical and/or virtual exchanges, the territorial communities, etc. In addition, the study and collection of the local environment allow the analysis of the institutional and non-institutional the role structures involved in development policy (Thiétart, 1999). Their level of participation and membership of the populations are put forward in order to analyze the impact on the management of resources.

With inconsistent policies and divergent perceptions of the actors, territorial development projects are doomed to failure. A long-term unemployed resident of Menzel Habib, expects from local authorities a fixed work and an improvement his/her its social situation. However, the objectives of the institutions of guardianship are different insofar as they plan for the long term, and focusing on the socio-economic and ecological dimensions (knowing that in the 1970s, they themselves were based on the economic side). Indeed, combating desertification is not a matter of months or years. It is a program which should settle in time requiring a large blast and continued a collaboration of all actors. This vision clashes with that of agro-shepherds who are worn by the harshness of their environment.

Bibliography

Akrimi N., 2001, « La désertification, ampleur et complexité d'appréhension », *Revue de l'environnement en Tunisie*, N°8, Juin 2001, pp 43 – 46.

Beck U., 1993, « De la société industrielle à la société à risques », *Revue suisse de sociologie*, N° 19, pp. 311-337.

Bertacchini Y., 2000, *Information et veille territoriales : Représentation du complexe local et émergence d'un projet d'intelligence territoriale*, Thèse de doctorat soutenu le 20/12/2000 à l'Université de Droit, d'Economie et des Sciences d'Aix-Marseille sous la direction de Philippe Dumas, 257 p.

Bertrand G., 1986, « Le savoir – penser l'espace », in « La Géographie Sciences carrefours, science sociale », in « L'état des sciences sociales en France », Édition Découverte, pp 88-94, p 93.

Calandre N., 2006, *Pratique et perception des risques nutritionnels : La mère face aux malnutritions infantiles au Vietnam*, thèse de doctorat, École Nationale Supérieure d'Agronomie de Montpellier, 111 p.

Callon M., Lascoumes P. et Barthe Y., 2001, *Agir dans un monde incertain : Essai sur la démocratie technique*, Seuil, Paris, pp 24-25.

Calvez M., 1995, « L'analyse culturelle des risques et la question de l'expérience sociale ». *Communication au Colloque INSERM " Risque et Santé. Les gestions de l'incertain "*, Toulouse, novembre 1995.

Charki M.H, 2005, « Le paradoxe de la confiance initiale », AIMS 2005 : XIV^{ème} conférence internationale de management stratégique, Pays de la Loire, Angers, http://www.stratégie-aims.com, 32 p.

De Koninck M., 2002, « La reproduction et les inégalités sociales de santé », in Descarries F. et C. Corbeil (dir.), Espaces et temps de la maternité, Montréal, les éditions du Remue-ménage, pp 381-399.

Douglas M., Wildavsky A., 1982, « Risk and culture, an essai on the selection of technological and environmental dangers », *Berkeley University of California* in Herbaux P. 2006, Insignifiants, risques et territoires, Journées « enjeux de l'information » des 13 et 14 juin 2006, 10 p.

DYPEN, 2000, Observatoires des relations populations-environnement en milieu rural tunisien : pour une gestion durable des ressources naturelles, Rapport scientifique, 515 p.

El Arbi B., 1991 , *Les changements sociaux et la construction tribale et les niveaux de développement à El Hamma : tribu Béni-Zid dans le sud tunisien*, thèse de doctorat de troisième cycle, Département sciences sociales, V° 1, 2, 3 et 4, Faculté des sciences humaines et sociales, 333 p.

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, قسم علم الإجتماع ,دكتورا 333، الثالث و الرابع. كلية العلوم الإنسانية و الإجتماعية ص: الفصل الأول، الثاني أطروحة الحلقة الثالثة

Herbaux P., 2006, « Insignifiants, risques et territoires », Journées enjeux de l'information, laboratoire CESD/ISIS, IUT de Marne la Vallée, 13 et 14 juin 2006.

Laügt O., 2000, *Discours d'expert et démocratie*, Paris, L'Harmattan, 205 p.

Marris, C., Joly, P.B., 1999, « Between consensus and citizens : public participation in technological decision-making in France», *Science Studies*, N°12 (2), pp 3-32.

Omrani S., 1982, *Le territoire des Béni-Zid (Sud-tunisien) : Modes de production et organisation de l'espace en zone aride*, thèse de doctorat du 3ème cycle, janvier 1982, Université Paul Valery, Montpellier, 375 p.

Sghaeir M., Jouad M., Tbib A., Fetoui M., Ben Abed M.A., Louhichi M., Saidi N., Oualli N.et Khadhadhi K., 2006, *Rapport scientifique du thème : Surveillance socio-économique, pratiques et usage des ressources naturelles dans l'Observatoire de Menzel Habib – Tunisie*, 110 p.

Slovic, 1992, « Perception of risk: Reflexions on the pshychometric paradigm », *in CAN, Avis adopté le 19 novembre 2002,* 63 p.

Thiétart R.A., 1999, *Méthodes de recherche en management*, DUNOD, Paris, 510 p.

Vermandele V., 2006, « Experts et journalistes, médiateurs de la science », Le journalisme scientifique, Université Laval, 15 p.

Vincent M., 2001, *La protection du secret en propriété industrielle*, DEA de droit de contrats, 126 p.
Xinmin L., Xyue-yong Z., 1997, « Transformation of desertified land in the Grazing-farming interlaced belt of Northern China », *RALA REPORT* N° 200, pp 97-102.

Wynne, B., 1999, « Une approche réflexive du partage entre savoir expert et savoir profane, *Les Cahiers de la sécurité intérieure*, N°38, 4ème trimestre, pp 219-236. Wynne B., 1999, « Les moutons peuvent-ils paître en toute sécurité ? Une approche réflexive du partage entre savoir expert et savoir profane », *Cahier de la fesécurité de l'intérieur*, Numéro spécial "Risque et démocratie", N° 38, pp 221-236.