

## “CO-MANAGEMENT” REVISITED: SUSTAINABLE USE OF NATURAL RESOURCES AND MODEL OF GOVERNANCE OF TAMERA/PORTUGAL

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### ABSTRACT

Political Economists' understanding of Sustainable Development shapes perceptions of resource degradation problems and prescriptions recommended to solve them. In this context, Elinor Ostrom's research is fundamental in the substitution of the “Tragedy of the Commons” metaphor to the more interesting “Drama of the Commons”. Of course we'll have tragedies, in the open access regime situation. But, sometimes, we'll have also reasons to laugh. Ostrom stresses that a commons can be well governed and that most people, when presented with a resource problem, can cooperate and act for the common good. “Co-management” and self-regulation are the keys for sustainable resource management. This conclusion may be fundamental when trying to investigate the relation between social responsibility and environmental sustainability. Relating social responsibility (as a special ethical positioning facing the community, including a set of values and a strategy of social inclusion and development, as well as the promotion of collective and individual citizenship) with the experiences of co-management (whose studies gave E. Ostrom the Nobel prize), is an interesting research field. A particular example of this kind of preoccupations is the land use case. Taking several cases, many researchers have been arguing that community-based management should prevent the commons tragedies and that cooperative management often results in sustainable use of agricultural land. The analysis identifies strong leadership and robust social capital as important factors of success. This paper introduces a particular case in the south of Portugal (TAMERA/Odemira), describe this experience of co-management and evaluate its results in terms of the relation Social Responsibility / Sustainable Development.

**Key-Words:** Commons; Co-Management; Social Responsibility; Sustainability, Tamera.

## INTRODUCTION

According to European Commission (Green Paper (2001)), the concept of social responsibility concerns the situation according to which companies or other organizations decide on a voluntary basis, to contribute to a fairer society and a cleaner environment. Based on this assumption, the company or, in a more general sense, the organization management cannot/should not be guided towards the only fulfilment of interests of the owners of the company, but also of other stakeholders' interests (employees, local communities, customers, suppliers, public authorities, competitors and society as a whole). In practice, Corporate Social Responsibility refers to the adoption of a model of business management in which the companies, being aware of their social commitment of co-responsibility in social and human development, hear, preserve and respect the interests of different parties, incorporating different needs of the business planning and operating them through their decisions and activities. There is no doubt that this is a significant change because, a few decades ago, one had the idea that private companies should be accountable only to their shareholders and they should produce profits.

Although much discussed, the concept of Social Responsibility is not yet finally stabilized. In any case, the effort of researchers to differentiate it from the

simple idea of charity has proved essential to its proper scope and understanding by companies and managers. At the same time, environmental preoccupations seem to enter definitively in the core of this way of being, including those related with the efficient and sustainable use of natural resources.

Relating social responsibility (as a special ethical positioning facing the community, including a set of values and a strategy of social inclusion and development, as well as the promotion of collective and individual citizenship) with the experiences of natural resources "co-management" is an interesting research field.

Political Economists' understanding of Sustainable Development shapes perceptions of resource degradation problems and prescriptions recommended to solve them. In this context, Elinor Ostrom's research is fundamental in the substitution of the "Tragedy of the Commons" metaphor to the more interesting "Drama of the Commons". Ostrom stresses that a commons can be well governed and that most people, when presented with a resource problem, can cooperate and act for the common good. "Co-management" and self-regulation are the keys for sustainable resource management.

A particular example of this kind of preoccupations is the land use case. Taking several cases, many researchers have been arguing that community-

based management should prevent the commons tragedies and that cooperative management often results in sustainable use of agricultural land. The analysis identifies strong leadership and robust social capital as important factors of success.

This paper is made of three parts. In the first point it introduces a typology of regimes of property rights relevant to common property of natural resources and investigates the presence of tragedies in their common-use. In the second point, “co-management” analysis is introduced. As Elinor Ostrom had been demonstrating, the conventional wisdom that common property is poorly managed and should be either regulated by central authorities or privatized, is far from being correct. In fact, there are a lot of examples of “true” common property regimes that are efficient and promote the conservation of the resources. Finally, the paper introduces a particular case in the south of Portugal (TAMERA/Odemira), describe this experience of co-management and evaluate its results in terms of the relation Social Responsibility / Sustainable Development.

## NATURAL RESOURCES, PROPERTY-RIGHTS AND TRAGEDIES

*“Ambiguous terms blur analytical and prescriptive clarity. The term “common property” resource is a glaring example (...)”*  
**Schlager and Ostrom (1992)**

In the literature on Natural Resources it would be difficult to find a concept as misunderstood as commons and common property (Coelho, 2003, 1999). Term commons and common property is repeatedly used to refer different situations: property owned by a government; property owned by no one; property owned and defended by a community of resource users; any common-pool used by multiple individuals independently of the type of property rights involved. This perpetuates the “unfortunate tradition” of failing to recognise the critical distinction between common property (*res communes*) and nonproperty/open access (*res nullius*) (Bromley (1991)).

The problem started five decades ago with the article of Gordon (1954), on fisheries, and the confusion persisted in the papers of recognised authors in the Property Rights Theory (Demsetz, 1967). It was reinforced with Hardin (1968) in its much-cited allegory of the “Tragedy of the Commons” (See Filipe, Coelho and Ferreira, 2007).

Some academics use the term common property and open access interchangeably. The current situation derives from the fact that none of the cited authors offer a coherent discussion on the meaning of property, rights and property-rights, before presenting the problems inherent in common property.

First of all, if we want to rectify the confusion, we must recognise that the

term property refers not to an object or a natural resource but rather to the benefit stream that arises from the use of that object or resource. When economists think about property they are perhaps inclined to think of an object, and when they think in common property they accept the idea of common use of that object. This leads to the acceptance of the aphorism that “everybody property is nobody’s property”. The truth is that is only correct to say: “everybody’s access is nobody’s property”.

At the same time, we must recognise that, in the essence of the concept of property, there is a social relation. Property rights do not refer to relations between men and things but rather to the sanctioned behavioural relations among men that arise from the existence of things and pertain to their use (Furubotn and Pejovich, 1972).

The prevailing system of property rights in a community can be described as a set of economic and social relations defining the position of each individual with respect to the utilisation of scarce resources. So, there is nothing inherent in the resource itself that determines absolutely the nature of the property rights. The property nature and the specification of resource use rights are determined by the society members and by the rules and conventions that they choose and establish between them, about the use of the resources. Not by the resource, itself (Gibbs and Bromley, 1989).

One solution to the impasse over the use of the term “common property” is to distinguish the resource and the regime. This distinction, between the resource itself and the property-rights regime under which it is held, is critically important. In fact, the same resource can be used under more than one regime.

There are different proposals for this definition. Bromley (1991) suggests 4 possible regimes in the case of natural resources. These regimes are defined by the structure of the rights and duties that characterise individual domains of choice. This definition includes: State property; Common property; Open Access and Private property.

In the case of private property, the individuals have the right to undertake the socially acceptable uses (and only those, which means they have the duty to conserve the resources) and to prevent the use from non-owners. The state property is a regime where individuals have rules of access and duties to observe about the resource use face to a management agency, which has the right to determine these access/use rules.

The common property is the case where the management group of “co-owners” has the right to exclude non-members, and those, have a duty to abide this exclusion. In this sense, the “co-owners” manage effectively the resource so they have also rights and duties with respect to the use and conservation of the resources. In an

open access regime, no defined group of users is set. The benefit stream from the resource is available to anyone. The individuals have, at the same time, a privilege and no duties with respect to resource use and conservation.

In this context, surveying several contributions, we can now propose this typology of *Idealised types of property-rights regimes relevant to common property resources*.

***Open Access (res nullius):***

Free- for-all; use rights are neither exclusive nor transferable; rights to access are common but open access to everyone (therefore no one property).

***State Property (res publica):***

Ownership, management and control held by a government agency; public resources to which access rights have not been specified

***Communal Property (res communes):***

Resource use rights are controlled by an identifiable group of co-owners; there exist rules concerning access, who should be excluded and how should the resource be used and conserved; community-based resource management system; "true" common-property.

This typology leads to a clear distinction between the "true" common property (*res communes*) and the open access regime (*res nullius*). It is important to recognise that, in the first case, the group of "co-owners" is well defined and that a management regime for determining use rates has been established. In this sense, the common property reminds something like "a private property of a group of co-owners". But, of course, the autonomy of decisions, especially in what refers to the transferability of rights, is much more limited than in the case of private property.

This conceptual delimitation is crucial in terms of resource economic analysis. The property rights (his common absence or vague stance) are in the core of the problem of natural resources management. Since the seminal paper of Gordon (1954), the central idea is that, in conditions of free access and competition, the market leads to non -optimal solutions in the use of the resources. The open access nature of many natural resources and the presence of externalities in the capture/ use lead to market equilibrium solutions that implicate an overexploitation of the resources - "The Tragedy of the Commons", in the words of Hardin - and industries' overcapacity.

Then, the identification of the property regimes is not only a question of describing the attributes of the resources, it's a matter of putting in evidence the institutional

structure and the process of decision over resource use (Seabright, 1993)). In this sense, the problems of common property resources (res-communes) are much more complex because they involve the contractual relations between the co-owners, but more solvable than the problems carried by open access, at least because of the permanent risk of new-entrants, in this last case.

For the “entrepreneur” and for the public authorities these different situations are critical when thinking about possible projects of investment and the design of natural resources policy. What is important to retain is that open access regime presupposes the non-existence of property-rights over the resources, perfectly defined and controlled. By the contrary, the “true” common property is defined by the impossibility of access by non-owners and the clear definition of use rights among members. This resource-use regime (there are a lot of examples in the world) has been successful in managing the resources over centuries, contrary to the idea of “the tragedy of the commons”. It’s the open access that “creates” tragedies.

## THE DRAMA OF THE COMMONS AND THE RETURN OF “CO-MANAGEMENT”

In 2009, Elinor Ostrom won the Nobel Prize for “her analysis of economic governance, especially the commons” (Press Release of the Royal Swedish Academy of Sciences announce of Eco-

nomics Nobel Prize). One of Ostrom’s research topics is, precisely, the issue of commons conceptualization and its importance for natural resources policy design. The fundamental originality of her work is the substitution of the “tragedy” metaphor by the idea of the drama of the commons. In fact, Ostrom stresses that a commons can be well-governed and that most people, when presented with a resource problem, can cooperate and act for the common good. The rules, which help to provide efficiency in resource use, are also those that foster community and engagement. So, sometimes (in situations of open access) we’ll have tragedies, of course, but, sometimes, we’ll have also many reasons to laugh.

Ostrom has challenged the conventional wisdom that common property is poorly managed and should be either regulated by central authorities or privatized (Ostrom, 1990). These central ideas came from the empirical work she made in the four corners of the world. Combining data from diverse sources (For example, she conducted several field studies on the management of pasture by locals in Africa and irrigation systems management in villages of western Nepal), she has uncovered numerous principles that govern successful sustainability and that defy conventional beliefs on “tragedies”.

Ostrom has noticed that a large number of common pool resources

(CPR)<sup>1</sup> are governed by common property regimes. These are special kind of arrangements, different from private property or state administration, and based on self-management by a local community. In these property regimes, access to the resource is not free, and the commons are not perceived as public goods.

What is important is that, while there is relatively free but controlled access to the resource system for community members, there are mechanisms that allow the community to exclude outsiders from using its resource. So, in such a common property regime, the common pool resource appears as a private good to an outsider and as a common good to an insider of the community. The resource units withdrawn from the system are typically owned individually by the appropriators (a common property good is, in this context, rival in consumption) but the common property regime typically protect the core resource and allocate the fringe through complex community norms of consensus decision-making.

This kind of property regime arise in situations where appropriators, acting independently, would obtain a lower total net benefit of resource use than what is achieved when

they co-ordinate their strategies in some way, maintaining the resource system as common property instead of dividing it up into bits of private property (Augusto, 2010). Trying to demonstrate this, Professor Ostrom has studied how self-organization and local-level management works and keeps common pool resources viable, whether natural (e.g. forests) or man-made (e.g. police forces). In this sense, Ostrom's research explores how, between the atomized individual and the heavy-hand of father-government, there is a range of voluntary, collective associations that, over time, can evolve efficient and equitable rules for the use of common resources. In particular, Ostrom's work emphasizes how humans interact with ecosystems to maintain long-term sustainable resource yields, such as many forests, fisheries, oil fields, grazing lands, and irrigation systems.

At the same time she tries to understand the conditions that allow for the most productive tenure arrangements and she stresses that no single governance policy can control over-exploitation in all settings.

Of course, the management problems of this type of property regime are also enormous: Common resource management has to face the difficult task of devising rules that limit the amount, timing, and technology used to withdraw various resource units from

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<sup>1</sup>Common pool resources are resources to which more than one individual has access, but where each person's consumption reduces availability of the resources to others.

the resource system. But, switching the idea that res-communes can not be confounded with open access, Elinor Ostrom demonstrates how societies have developed diverse institutional arrangements for managing natural resources and avoiding ecosystem collapse in many cases (even though some arrangements have failed to prevent resource exhaustion).

In terms of policy design and regulation, she stresses that the main lesson is that common property is often managed on the basis of rules and procedures that have evolved over long periods of time. As a result they are more adequate and subtle than outsiders (including politicians and social scientists) have tended to realize. In fact, *self-governance can be feasible and successful*. In this context Ostrom elucidates the key features of “co-management” successful governance:

- Active participation of users in creating/enforcing rules is crucial;
- Rules that are imposed from the outside or unilaterally dictated by powerful insiders have less legitimacy and are more likely to be violated;
- Monitoring and enforcement are better working when conducted by insiders than by outsiders.

Based on numerous studies of user-managed fish stocks, pastures, woods, lakes, and groundwater basins, Ostrom concludes that the outcomes are often better than predicted by standard

theories. She observes that resource users frequently develop sophisticated mechanisms for decision-making and rule enforcement to handle conflicts of interest.

Finally, analysing the design of long-enduring common property resources, Elinor Ostrom identified a set of design principles which are prerequisites for a stable “co-management” of these resources:

- Clearly defined boundaries (effective exclusion of external unentitled parties);
- Rules regarding the appropriation and provision of common resources adapted to local conditions;
- Collective-choice arrangements allowing most resource appropriators to participate in the decision-making process;
- Effective monitoring by monitors who are part of or accountable to the appropriators;
- Existence of a scale of graduated sanctions for resource appropriators who violate community rules;
- Mechanisms of conflict resolution cheaper and of easy access;
- Self-determination of the community recognized by higher-level authorities;
- In the case of larger Common Pool Resources, organization in the form of multiple layers of nested enterprises; with small local CPRs, organization at the base level.

## CASE STUDY: TAMERA

### *The Mission and the Actions*

Under the motto "think locally, act globally" approximately 200 people (about 170 workers and 30 children) live, work and study in TAMERA. Located at the south of Portugal, in the municipality of Odemira, Tamera is an international training and experimental site for the development of "peace research villages" and "healing biotopes".

Tamera was founded in 1995, by the sociologist and psychoanalyst Dieter Duhm, the theologian and peace activist Sabine Lichtenfels and the physicist and musician Charly Ehrenpreis. They took a long research in the fields of sociology, science and spirituality that led to the formulation of what they called the Plan of Healing Biotopes, a plan that states the construction of replicable ecological, technological and social sustainable model settlements of eco-villages in different areas of the world<sup>2</sup>.

In this context, following the idea of creating an eco-village, they bought a farm in Monte do Cerro/Odemira that aim to develop an example of a model for a non-violent co-existence of people

and between people and nature. The fundamental tasks of the project are the education of young people in a peace study environment and the building of a village, "the solar village", which produces its own food and solar energy in sustainable ways. Global networking, under the name of GRACE, completes the exigent program of this experience.

In the first years of the project development, the installation of the infrastructure for study, the experiential research in social living and community building in an ecology sustainable village, were developed on a site of 134 hectares. More than 20.000 trees were planted. Gardens, based on perm-culture were created; houses were constructed and a lot of workshops were built to research, teach and disseminate the fundamentals and results of the program.

The results seem to be very interesting. The evaluation analysis of different stakeholders, including the public powers in the municipality of Odemira and the community of Alentejo-people that surrounds the community of Tamera, give good credits to this experience. In this sense, we can say that in the municipality of Odemira there is, now, a community that shows that the solutions to the current global situation in environmental and energy terms are not utopian. The eco-village works as a community where the human impact on nature is almost null and research and technological development are

<sup>2</sup>The book Tamera from Leila Dragger as a subtitle: A model for the future; and give insights into the current status of the work of this project and on the three key areas in which it is based, permaculture and water landscape, solar technology and peace education.

at the service of sustainability. As an important pilot experience, its teaching results are significant: last year, for five days, Tamera received the annual conferences of Global network of Eco-Villages (GEN, Global Eco-village Network), devoted to the theme “Eco-Villages and sustainable living”. GEN was founded in the same year of 1995 to support creative experimental projects of ways of life with low environmental impact, worldwide. In the northern hemisphere, GEN focuses on forming communities capable of recovering damaged land by “collective action” and promote a human, ecologically sustainable, life style. Already in the southern countries, GEN highlights the needs of communities where public power inequalities persist and sustainable responses to local problems are requested. In Senegal, for example, there are now traditional villages to be transformed in eco-villages, the question for the authorities being how the eco-villages may end up with the depletion of natural resources.

When arriving to Tamera, the most choking difference between this place and the surround landscape is the fresh and pleasant view of what it seems a green oasis that focuses around a huge lake. This image contrasts with the aridity of near landscapes of dying cork trees. It's easy to understand the name chosen by Lichtenfels for this site. Tamera means, in an ancestral

language, “next to the paramount”, next to the superior fountain of life. Water is the center element of the plan. Almost all vegetation has been reintroduced on a soil that, by the insistence on monocultures and by the lack of water, was simply destroyed. Now, through Holzer-Permaculture methods, this situation is reversed. Under this process, not only, near 20 thousands trees were planted, as we said, but also a special attention was made in creating harmony and safeguarding the symbiosis among the various species of plants and animals.

The auditorium or classroom, where most conferences and workshops take place, is the largest Iberian building made of straw packs, a technique that is being studied in Tamera and exported to other eco-villages throughout the world. The walls were built with 1500 bales and plastered with a layer of clay. The materials used allow keeping the temperature inside, whether Summer or Winter. The roof, covered with grass, also helps to the maintenance of a mild temperature in the Auditorium. This is very important because Odemira is a sunny (sometimes hot) area. But, at the same time, according to Leila Dregger, team coordinator and author of the book “Tamera, A model for the future”, was precisely because of the sun that Duhm and Lichtenfels chose Herdade do Monte do Cerro to found the first Portuguese eco-village.

This particular interest in the Sun is reflected in the development of the so-called Solar Village. The “experimental field” was opened in 2009, its fundamental mission being to develop the Solar Village project. In a space imagined by the physicist Jürgen Kleinwächter, a solar camp was built. The fundamental objective is to learn how to use the light from the Sun to create a clean and renewable energy. The equipment that can be seen in the village, with mirrors, greenhouse and parabolic systems that capture solar energy, “makes the place seem from another planet” (in *Diário do Alentejo*). In the greenhouse, a lens system heats straight pipes where oil circulates. The oil, heated to 200 degrees, flows for double-walled boilers, with water coming in boil. The steam can be used to food cooking – technical coordinator Paul Gisler says that less than five minutes are enough to bake a good vegetable dish or to sterilize the eco-village Health Center’s medical instruments. Hot oil serves still to put in action a motor, the Sunpulse Electric, which ensures the electricity in the Experimental Field. As it has the capacity to store hot oil, the engine can supply power refrigeration, mechanical, and electrical, even during the night. And also contributes for the characteristic smell of fries potatoes that surrounds the village.

A fixed focus mirror, leaning the Solar village cuisine, concentrates the

sun’s rays on a single point that can be used to boil water directly, roasting or contribute to the heating of the oil.

Barbara Kováts, other coordinator of the team, says that the technology used in the Solar Village aims to “build a energy network in the Alentejo that allows the autonomy of the people by solar energy”. For now, the Solar Village is funded by borrowings and Kováts launches the appeal to search for patrons to finance the new bio-gas system and new workshops.

As we said, water is a constant presence in Tamera and, in the case of the greenhouse Solar village, it serves to keep the humidity level inside, where banana trees and medicinal plants grow. Steam water with herbs make teas served in the eco-village. In the House of Herbs, where live the elderly women of Tamera, herbs and droughts are selected.

Alimentation in Tamera is exclusively vegan. Salads, sautéed of vegetables and various kinds of germinated seeds constitute the daily diet of who lives in eco-village.

Above all, Tamera started a training program for adolescents and young adults in a community of people with different professions and from different age groups. They all gathered one goal: the development of a replicable model of a survival culture, sustainable in all areas. A living culture without oppression and domination. Without fear and violence.

In this context, another important project that respects to the peace education, is the creation of the Global Campus, a University to the dissemination of these thoughts. With GRACE, the institution we cited, for global networking, they constitute the heart of a project that has, in its foundations, the education as a fundamental means to carry out the objectives and mechanisms design of the whole project.

Various departments develop the specific tasks. Examples: The Ecology department carries the idea of water and landscape healing through the implementation of water retention landscapes, permaculture and peace gardens. The Love School stands for a deep knowledge of human realm and for a new solidarity, the Political Ashram for creating a spiritual life practice in the service of global healing.

### *The Fundaments and the "Gift Economy"*

In its 18th Summer University course, Tamera experimented a commitment for a "gift economy". This means the beginning of a new culture on that "replaces the fear of scarcity to thinking with confidence and generosity", even in the areas of money issues.

The basic idea is that nature shows the way. As Charly Ehrenpreis described in the beginning of the experience,

nature is a living gift economy. Living beings give away what they do not need and, as a consequence, they receive everything they need for their lives in the growing field of global ecology.

So, the inspiration for mutual giving and cooperation in Tamera is in its genetic code. No one is paid for his work. The ideal is that when we are all in service of a common goal (a healed Earth), we give our actions to each other and cooperate in the utilization of the resources. This experience shows that such a gift or balance economy works in the degree to which the community is alive and creates trust and transparency among its participants. Of course, Tamera is surrounded by a capitalism driven economy, but it has been capable of getting its resolution. The answer is the humanization of money for a gift economy.

In terms of Ostrom analysis we can say that they are not aware of the problems of exclusivity. When 250 guests from different countries came to the summer university they experienced the problem of the "new entrant". But it was limited in time. After, as Lichtenfels reminds we must all return to a deep level of trust in order to be able to implement a global economy of giving in a limited group of co-owners. The operationalization of the sustainable strategy, especially in terms of natural resources use, implies a co-operation between a (finite) group of defined partners.

This does not mean that the economic traditional problems of getting the resources to implement the strategy are inexistent. According to Leila Dregger, the community maintains, economically, in two different ways. The investment in new spaces is made with donations and the search of funds from several foundations and "mecenaz". Basically, these are people interested in those types of actions. For the day-to-day activities the rents come from the seminars and workshops, from the visitants that stay temporarily in the community. Now, the co-operators have assumed a commitment to contribute every four months when the funds analysis is made, if it is necessary. This is possible because some of the members take some time of the year out of the community, working in several activities, and they can invest in the community in the rest of the year.

In the recent book from Dieter Duhm, *Towards a New Culture*, we can find a metaphoric presentation of the fundamental principles that are in the center of this responsible posture, facing internal and external communities. In his words, "The world stands on the brink of an abyss. How will life go on after the collapse of the globalised political and economic systems? The drafting of a desirable future, one that a growing number of people will find plausible and realistic, in the face of so

many failed attempts in the past, is the number one priority on today's agenda". A dream is becoming reality. Of course, this change cannot occur overnight, not even in small communities, but these centers will be able to facilitate the transforming of human society, if we replace fear as a regulating principle by something he calls LOVE. This is not a finished product; it remains in constant historical development

In the Tamera Manifesto the basic ethical principles of such a community e presented: Truth, mutual support and participation in the whole. These principles follow for the areas of sexuality, love and partnership. Also, if we accept that the Earth can be healed, we must recognize the basic animal rights, no religious barriers, the principle of "no revenge but reconciliation", water healing principle, sacred alliance of all living beings, etc.

## **CONCLUDING REMARKS: LESSONS FROM THE TAMERA CASE**

Without substantial quantitative information about the development of the village project is not easy to make an evaluation of its results and to compare the case-lessons with the practical indications that result from Professor Elinor Ostrom research.

In two different studies made on the subject, two student teams put questions via net to the coordinators

of Tamera project, trying to get information about the mission and goals of this experience, actions made, evaluation, success factors, limitations and risks, etc. (See Silva et al (2012) and Brito et al (2012)). Sometimes, it is not an easy task to “read” the information that the coordinators (always with an extreme sympathy) gave in its answers, because there is a “cryptic” language that highlights the special form that the leaders of this project experience the objectives and results of this collective action. The experience of “Co-management” is presented into a metaphoric, sometimes romantic, form that imposes a special approach from the investigator. Taking this in mind, we can stress the following lessons from the Tamera Case; see, again, Silva et al (2012):

- The problem of desertification can be solved without massive funding, just by investing in technologies that can be easily used and maintained. The same can be said about the resource use without abuse (as it is the case of permaculture methods). These result approaches clearly the indications of Elinor Ostrom about the capacity of several groups of co-owners, using natural resources in a sustainable mode.

- Communal understanding of the different areas in which they work (solar village, water or waste treatment and management) helps the continuity

of the project. Ostrom reminded that the acquired knowledge can be a strong factor of success especially in communities that have a long time story of living and solving common problems.

- To be successful, the experiences of co-management must have in mind the problem of population growth and the “new entrant” issue. “Common” property rights systems can be a winning answer to commons tragedies only if they struggle the open access situations. Only within a defined, exclusive, group of co-owners (that is, in a situation of res-communes) we can approach sustainable solutions in common resources use.

- The existence of leaders strengthens collective action. It had a big contribution to the success of Tamera. This result is conforms the research findings of other studies that identify strong leadership and robust social capital as important factors of success. In this case, we also can add that the social infrastructure is just as important as the physical infrastructure (silva et al, 2012). Also, the identification of the local social organizations (especially those coming from the political powers in Odemira municipality) and the healthy integration in the local surround community (Relíquias and S. Luís little villages) were success factors of Tamera’s model of Governance.

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