

## LOCAL RURAL DEVELOPMENT, INSTITUTIONAL INACTION AND THE TRAGEDY OF LOCAL PUBLIC GOODS

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### ABSTRACT

Empirical observation can confirm that not all rural communities enjoy an optimal level of local public goods: some public goods are provided more often and in a better quality than others. Given the vital importance of public goods for the welfare of local communities (among which the management of the local natural resource base for sustainable development plays a relevant role), the relation between existing local political institutions and their competences represents a critical issue for the concrete possibilities to properly produce, manage and provide local public goods. A better understanding of the nature of local public goods may increase the awareness of interdependence between local economic, environmental and social development not only in order to stop their continuing eroding but also to increase the possibility to produce local public goods and to design the institutional setting to overcome generic problems of public goods provision.

**Keywords:** Local rural development, local public good, local institution, inertia, routine, innovation

## 1. INTRODUCTION

The introduction of innovation and new technologies and more robust contacts between centres of innovation generation and farms/rural firms are often seen as key-factors to overcome static conditions and production stagnation in a rural area. Rural development strategies should tend to create positive conditions to activate innovation flows towards a given rural area opening relations and channels of information with research centres and to investigate and eventually remove those mechanisms hampering or distorting the involving processes of change in environmental, economic and social terms. Direct contacts with farmers and rural entrepreneurs can help to evidence a wider set of issues and needs which seems capable of stimulating or/constraining innovation diffusion with positive contributions in the understanding of the problem of the resistances to innovation. Resistances to innovation are a phenomenon intrinsically inherent to social networks devoted to innovation and knowledge circulation: they are symptoms of these networks' reaction to various forms of internal/external stimulation being "normal" physiological phenomena of adaptation within network's interconnections during processes of knowledge flowing and relation re-modulation. Resistances are in a some extent necessary components in the process of re-negotiation assuming sometimes positive corrective effects, containing critical elements useful to acquire correct information about innovation definition and implementation and evidencing however a dynamic behaviour towards changes and re-orientation of the processes involved. Nonetheless at operational level, a deeper analysis on the difficulties in developing and implementing innovative processes can highlight that causes, types and sizes of the obstacles impeding the diffusion of innovation in a rural area and among the local agents can be of very different nature. Among the sources of impediments and failure of innovation, inertia, extensively analyzed in psychology, in organization science, in economics and in management studies, can play a not secondary role. Inertia and resistances are two distinct phenomena even if connected by eventual complex cause-effect feedback chains: resistances are characterized by dynamic re-actions to change while inertia is always linked to a (prolonged and reiterated) in-action. The main feature of inertia is scarce or no "involvement" and the unwillingness or incapability to be engaged with the creation of invisible "ghosts" rather than antagonists and opposing interlocutors (as in the case of resistance). In addition inertia in organizations consists of an indefinitely prolongation of time during the transition phase from a status condition to another

induced by innovation: inertia becomes the longest time period possible related to the initial status.

Resistances to innovation have been deeply analyzed in literature ([49], [38]): yet, considering a rural area as a "network of networks" (at economic, cultural, social and institutional level) operating within an environmental and human context, the effects of inertia generated by determined local agents in terms of under-development or mismanagement of local public goods stimulate many questions. What are the effects on local development if inertia affects a local administration? What are the consequences of institutional inertia on the (mis)management of local public goods in their provision and their progressive erosion? The aim of this study is to identify a theoretical framework for institutional inertia useful to relate this inertia to the quality of the management of local public goods as focal elements of local development: quality and quantity of local public goods produced can be linked to certain processes of local development characterized by type and quality of local institutional action/inaction and forms of cooperation among agents operating within local networks.

## 2. WHY IS AN INSTITUTION INERT? A CONCEPTUAL FRAMEWORK

The institutional setting can act as anchor and dynamo within local networks stimulating local development and synergies to attain common goals to solve development inadequacies. Local institutions play the anchor role if they are able to tie up the (key) agents in the area by creating versatile and intensive collaboration relationships with them and have the generator role if their activities generate replies to development inadequacies and inefficiencies.

Any transformation process, often composed of a mix of incremental/incremental changes, can stimulate inertia, resistances or both: inertia and innovation are thus opposite terms and innovations should break or overcome inertia. In particular relevant enclaves of inertia arise during innovation implementation where the concepts of "commitment", "engagement" and "involvement" (a firm intention and resolution to achieve a determined goal through the innovation adoption) play a critical role. In brief inertia's persistence impedes changes to occur ([42], [30]).

In addition to "absolute inertia" (no change), "relative inertia" describes the concept according to which pre-existing inert organizations (firms, institutions, etc.) leave some space and resources available for new innovative configurations: this kind of inertia can act as pre-condition for innovation. Number, quality,

types and dimensions of the spaces of inactivity left by organizations are indicators of their inertia and innovation can grow in these open spaces created by the inertia of the existing organizations. The concept of “relative inertia” describes a condition not implying a total stability but rather an attitude in mature organizations to change in a very slowly and reticently way along pre-defined paths. Causes of relative inertia can derive from partial inability or unwillingness to change:

1) inability involves organizational problems, difficulties in decision making processes or incapability in perceiving opportunities and need to change.

2) Unwillingness is linked to consolidated and ossified interests, cultural and mental factors and fear to change.

Absolute/relative inertia defend the existing structures granting that the results of transformation processes are close to the status quo, reducing variability whose benefits are linked to the control of radical changes: disadvantages derive from the exclusion of potential radical benefits. This explains why in literature institutions are generally criticized for their inertia and for their inclination to strengthen forms of static efficiency reducing dynamic efficiency, which usually tends to decrease physiologically in the time course, to support agents in coping with given problems but hampering the management of the new ones: institutions are accused to facilitate coordination but make difficult adaptation choosing for too “soft options” for prevailing and more robust structures.

Three main problematic dimensions can be placed at the base of institutional inertia.

#### **Sunk costs**

Innovation and change involve high initial set up costs because agents must learn modified rules, practices, codes, etc. They need new skills, competencies and establish new relational contacts and these assets require time, money and efforts. Given these premises, it is often rational to confide to routine and familiar standards even after potentially better alternatives have become available.

#### **Uncertainty**

Knowledge about innovation is generally incomplete, its impact and consequences are difficult to predict than the effects of status quo. It is unclear how innovation will perform, when it will be fully operative and how it will affect the relative actors’ positions. Any changeover from old to new involves uncertainty (related to unknown probabilities), risk (related to known probabilities) and psychological discomfort: inertia and resistance to innovation are thus linked to a some risk aversion degree shared by actors.

#### **Potential conflict**

Innovative processes imply benefits and advantages for some actors than for others. The beneficiaries of status quo can support a widespread culture of inertia and innovators have to mobilize and convince followers and settle disputes through costly, time consuming and not necessarily successful actions which can generate dissatisfactions and tensions.

These dimensions can stimulate an institutional conservatism because the attractiveness of institutional change is progressively reduced and new barriers to change are created. In the time course, these barriers can gradually grow making difficult the possibility to escape inertia. Agents are finally blocked into the old institutional configurations and, despite their “human” nature, organizational structures and procedures are perceived as something vague, falling from above and resilient to changes.

For its capability to moderate sunk costs and transition problems, inertia appears as a feasible option in creating short terms advantages but short term benefits can become long term disadvantages: minimizing short term costs can preclude the maximization of long term benefits. Forms of everyday surviving impede the definition and implementation of organizational and institutional changes which are seen as “losses” in consolidated organization positions and the acquisition of risky improvements deriving from adaptation ([1]). The main rationale of inertia is thus “reliability” and the limitation, reduction and elimination of variability (in psychological and organizational terms) sometimes even in the presence of negative performances. In some circumstances reliability is more important than variability, for example, when status quo is likely to be comforting or when organization is not redundant. In other occasions variability can be more important than reliability for example when status quo is likely to be problematic or when an organization is competing with other structures ([29]).

### **3. INERTIA AND ROUTINES**

The analysis of institutional inaction is strictly linked to the concept of routine and its relations with inertia ([35], [2]). Innovation diffusion, good practices transfer, learning processes within institutions, management of forms of uncertainty, etc. always imply forms of inertia and routine solution and overcoming and this condition explains why they often show negative features and characteristics.

Routines can be defined as patterns, repetitive and persistent, collective, non-deliberative and self-actuating, of processual nature, context-dependent, embedded, and

specific, and path dependent. They materialize tools to co-ordinate and control, economise on cognitive resources, reduce uncertainty, lead to inertia, provide stability and enable and constrain, act as triggers, and embody knowledge.

An analysis of routines' inner nature can provide useful contributions in the understanding modalities, mechanisms and processes through which they can easily drive to inaction and definitive inertia. Routines are interaction patterns and express a collective dimension (while habits are typical individual patterns) thus resulting from collective phenomena ([35], [18], [21], [10], [28]). They are repetitive ([11]) and, without repetition, a routine is inconceivable. Repetition without much change renders routines stable ([12]): stability, in turn, gives rise to predictability ([35], [27]). Routines are also self-actuating because they are virtually carried out in an automatic manner ([6]): reflection and volition are absent or not necessary. Individuals perform routines in a non deliberative manner, without ascribing to them awareness or explicit attention ([39], [37], [14], [28]) and this fact explains why routines are related to monotony or absence of particular events (uneventfulness) linked to them and to smooth performance ([42], [45], [14]). Due to the lack of attention, usually individuals are not aware of the routines' presence as long as they proceed in a smooth way: individuals become fully aware when they are interrupted ([48]). Routines denote also a processal nature deriving from the fact that an institution operate implementing specific procedures, protocols and practices which are often repetitive: in brief these are routines. Furthermore, routines show context-specific features ([11], [32], [22]) on the base of historical, spatial and relation specificities which make difficult their transferring to other contexts.

Routines detains structural elements and functions mainly linked to decay phenomena in processes (which push to the adoption of forms of maintenance of routines) and time restriction (time scarcity) and other forms of time limitation in the preservation of routines ([18], [20]). Routines coordinate ([35], [13], [14]). Routines imply that tasks can be carried out smoothly ([42]): this appears particularly evident when these coordination forms are broken up due to the interruption of the key-routine. The coordination power of routines derives from their capability in:

- maintaining a quite high level of "simultaneity" and to allow the execution of a rather long sequence of interactions;
- providing forms of regularity, unity and systematisation to a team;
- allowing the simultaneous execution of many

activities;

- providing team components an anticipated knowledge about the other components' behaviour.

The control over stimuli of individual decision processes, integrating a sequence of individual decisions within a cohesive set without conscious efforts, expresses how the routine's coordination activity can be carried out ([26]). In addition, routines can act as controlling tools when they are definitively standardized because a routine behaviour can be easily monitored compared to a non-routine one.

Routines are capable to economize cognitive resources which are generally scarce reducing the space for undesired events and bad surprises and exploiting the advantages from known events ([23], [44]). Routines allow individuals to avoid mental fatigues economizing time and efforts in elaborating processes based on scarce information ([15], [52]) and through automatic and mechanical processes agents are capable to cope with complex and uncertain events ([50], [27]). Agents can operate choices and adopt the related actions even when the evaluation of all the possible alternatives, in a limited time course, becomes problematic and when the cause/effect relationships are not evident. This approach allows individuals to cope with uncertainty also introducing elements of predictability fixing some parameters ([36], [21]): comprising criteria of predictability, uncertainty is reduced and routines are activated when uncertainty is particularly pervasive.

Summarizing these characteristics and features, the main resulting effect of routines is that they generate stability ([34]) being also linked to the management of sunk costs in particular the cognitive ones. In normal conditions, this stability can be essential for uncertainty management and to grant a continuity for the institutional activities' conduction. An excessive pathological stability generated by ossified routines can produce inertia: routines and inertia emerge when certain processes produce result just little above the average and persisting even in case of negative performances ([42], [20]) not activating however conscious cognitive problems required to identify forms of alternative action. Routine and the consequent inertia allow individuals to operate thanks to implicit contacts ([16]) requiring form of re-negotiation only when they are interrupted ([34]). The role of routine in activating inertia is mainly connected to its capability to quickly crystallize practices and procedures hampering the adoption of changes in particular at local level ([33]).

#### **4. DEFINING LOCAL PUBLIC GOODS**

The essential core of any process of local development is always linked to the provision of goods and services dealing with “public goods”. Literature provides a wide range of studies about this issue ([43], [31], [9], [46], [5], [41]), from which it is possible to identify three interrelated characteristics of “public goods”: 1) they generate significant externalities; 2) they are at a considerable degree “non-rival” and “non-excludable” and 3) they create opportunities for the enhancement of welfare through collective actions. “Local public goods” differs from other public goods for their more limited geographical reach of the benefits conveyed. These local public goods are a class of public goods connected to regional and national goods whose production can require a cross-area collective action (that can engage neighbouring territories also from different administrative regions) for the presence of cross-area problems and cross-area externalities ([40], [3], [4]). A clear definition of a conceptual framework for local public goods is justified by recent trends towards fiscal and political decentralization in many countries, by the question of how and whether this process of decentralization is welfare enhancing or not and by an evident scarce literacy by local public administrations about these issues. A basic conceptual framework of public goods ([43]) can be delineated useful also to design guidelines for the identification of public goods in empirical contexts (table 1).

These criteria highlight the presence of goods that only partly meet either or both of the defining criteria which for this reason can be named “impure” public goods ([25], [24]) evidencing also that empirical examples of pure public goods are quite few. For this reason the discussion on local public goods has to include further

relevant subclasses of these goods: club goods, common pool resources, and joint products.

**Club goods**

A club good is a public good with non-rivalry consumption but for which, because of an institutional arrangement, consumption is restricted to members charging a toll or a user fee to exclude consumers not willing or able to pay. A road for which a toll is extracted is an example of a club good. Non-rivalry consumption characterizes club goods (once produced) whose extra cost of consumption is zero. A pure public good can be transformed into a club good, but in this case potential consumers unable to pay and to join the club may be excluded from the benefits eventually leading to various forms of social inefficiency ([24]).

**Common pool resources**

Common pool resources can be defined as goods for which exclusion is difficult to uphold and consumption can provoke agents’ competition whose external negative effects are not immediately attributed to the specific actors involved but distributed within the group of good’s users.

In this case, an agent improves its own performance by adversely affecting the context for other agents by making greater use of the context’s resources normally shared by all the agents. The increased demand provokes in the shared resource an un-proportional reduction in its value to all other agents with growing transaction costs associated with the increased use. This condition is well known in literature which provides a number of examples of the occurring of this circumstance known as “Tragedy of the Commons” or TOC ([19], [17], [47], [51], [7]).

Table 1: Conceptual Framework for Public Goods

	<i>Excludable</i>	<i>Non-Excludable</i>
<i>Rivalry Consumption</i>	Private Goods	Common Pool Resources
<i>Non-Rivalry Consumption</i>	Club Goods	<u>Pure Public Goods</u>

Table 2 Public Goods classified by spillover range and type

<i>Spillover Range</i>	<i>Pure Public</i>	<i>Impure Public</i>	<i>Club Goods</i>	<i>Joint Products</i>
<i>Global</i>	Global Warming	Communicable Diseases	Patented Knowledge	Forest Protection
<i>National</i>	Defense	Transportation Networks	Cable/satellite television	Education
<i>Regional</i>	Pest Eradication	Fish Stocks	Extension Services	Trans-regional River Purification
<i>Local</i>	Landscape	Monuments of Local Value	Wood or fruit picking in municipal fields	Traditions’ Protection and Promotion

### Joint Products

A public good can be defined a joint product when one specific activity generates two or more outputs: these public goods produce external effects in the form of indirect outputs. In literature the differences between a “joint product” and an “external effect” are not always clear: nonetheless the major distance between joint product and the initial good should differentiate this category of goods from “direct external effects”.

The features in terms of the reach of their benefits together with the characteristics of these benefits and how the overall level of the good depends on individual contributions, ignite some questions about the spillover range of the externalities of local public goods (Table 2)

## 5. DISCUSSION: LOCAL INSTITUTIONAL INERTIA AND LOCAL PUBLIC GOODS

The identification of the characteristics of a public good, the range of externalities which defines its geographical reach and the availability of the specific institutional competencies are at the base of the possibilities of its management. The well being of local communities clearly depends on the production and provision of both private goods (which are expected to be obtained through the market) and public goods: the market often fails to provide goods with such properties optimally thus justifying the public intervention, but this condition doesn't exclude the possibility of public goods' provision also thanks to the contribution of inputs from any other actor group. Nonetheless public agents have the primary responsibility for the provision of a public good although outsourcing the production of a growing number of these goods' components to privates through public-private partnerships. The eventual presence, quality and dimension of intentionally/unintentionally executed forms of institutional inertia thus influence the public agents' capability to avoid and correct development discrepancies linked to public goods created by market failures.

On the base of the previous analytical framework, a survey has been conducted in the rural area involved in the research activities of the project “Development Dynamics and Increases in Competitiveness of Rural Areas” (DICRA) resulting from an agreement between the Research Team on Development and Innovative Processes at the Institute of Chemical Methods (I.M.C.) of the National Research Council of Italy (C.N.R.) and the Municipality of Vitorchiano (a 4000 inhabitants village in the province of Viterbo, about 100 km north of Rome in Central Italy). It has been examined the local administration both in objective (structure and

organization: offices, departments, working groups, budget, number of employees, etc.) and in subjective terms (adaptation times, gratifications, motivations and general job satisfaction, sensibility to problems, sense of responsibility, etc.) ([8]) to delineate the organization “profile” and the prevailing mentalities. This survey outlined two complementary problematic dimensions of inertia at institutional level: at a objective level inertia is frequently injected, in the respondents' opinion, by too many heavy detailed norms (at local, regional, national and EU level), by duplications and normative conflicts which slow down procedures (often these norms are very complicated and they must be also interpreted). A too long time in analyzing and interpreting norms and regulations acquires the characteristics of inertia.

Incompetence (culpable or innocent) is another source of institutional inertia: in the first case, adverse selection phenomena can contribute to populate public offices with individuals without adequate intellectual and technical expertises and skills. This condition may weaken the institution and prolong its reaction time. In the second case the increasing number of tasks and duties in which local institutions are involved to (decentralization) and the growing complexity of the related issues, create a gap between these issues and the quantity and quality of the human resources available with unavoidable impacts in prolonging the time of the administrative action. The quality of selection criteria and the internal systems of controls and incentives also influence the overall quality of the institution and its action/inaction capacity and even the presence of a sound regulation and procedural framework cannot prevent the organization from inertia. Many of these subjective sources of inertia find their causes in the characteristics of inner incentive schemes: working more or less, bad or well, the personnel cannot see any gratification, modification in retributions or in job careers' opportunities (motivational erosion).

Combining these two analytical facets, the analysis delineated the presence of many crystallized operational and “physiological” routines but, in the same time, the difficulty in introducing routines' interruptions and changes, the presence of rigidities, low motivation, laziness, limited attitude in changing the everyday practices and excessive stability from ossified routines (inertia). In particular we have reported scarce tolerance to risk and very limited space to innovators within the organization generating forms of inertia capable to induce further inertia among its internal human resources and contributing to create discouraging mechanisms among local territorial agents (figure 1).

We have determined the links among these inertial factors and provided some weighted measures of their

pressure degrees: the survey evidenced that in particular the existence of deep rooted values gained the highest score as main and more frequent oblique source of inertia in the organization involving both incremental and breakthrough innovations and changes highlighting the relevant role played by forms of “cultural inertia” in any innovative and transformation process.

A critical issue is related to the space, generated by inaction and relative inertia, the local administration leaves to other (mainly private) organizations which it should occupy and the related problem of the management of local public goods (environment, landscape, public services, etc.). In some cases (in particular land management for residential use) the local administration tends to massively involve in the production of these goods’ components private firms as a consequence of mediation of private interests with relevant effects on environment or landscape quality. Continuing pressures from construction firms can create severe market failures caused by biases and particular interests inserted in the processes of territorial planning which can heavily interfere into the landscape provision process: landscape management ultimately depends on the interplay between these factors. This topic is strictly related to the administration coercion power which involves controls and inspections: safety controls, environmental norms, hygienic requirements, etc.

Here a local institution’s inertia is likely to be remarkably sensitive because it determines those discrepancies

between particular and general interests for example when deciding to make or not to make controls and inspections, rigidly apply or not to apply norms and regulations. In this case (formal) institutional inertia can be the reason why many local public goods tend to be under- or mal-provided, presenting themselves more as public “bads” than public goods.

The objective image of the landscape and its perceived quality among respondents (including many local administrators) has been used in the survey as most visible key factor among local public goods. Landscape, like other local public goods, is diffused throughout the local jurisdiction and its value depends also on how facilities are spaced, located and aesthetically built. A rather chaotic spatial distribution of houses and other buildings in the area (aggravated by recent state laws legalizing illegal constructed buildings and illegal modification of the existing buildings) is an easily visible result of different forms of pressures and competition for the land destination. In addition, the questionnaire and the interviews revealed that on the one hand respondents consider that the main environmental components exposed to degradation are air and water while landscape lags quite behind. On the other hand respondents believe that the economic activity producing higher pressures on local environment is construction mainly caused by the “do it yourself” philosophy and the consequences of arbitrary choices in land management.

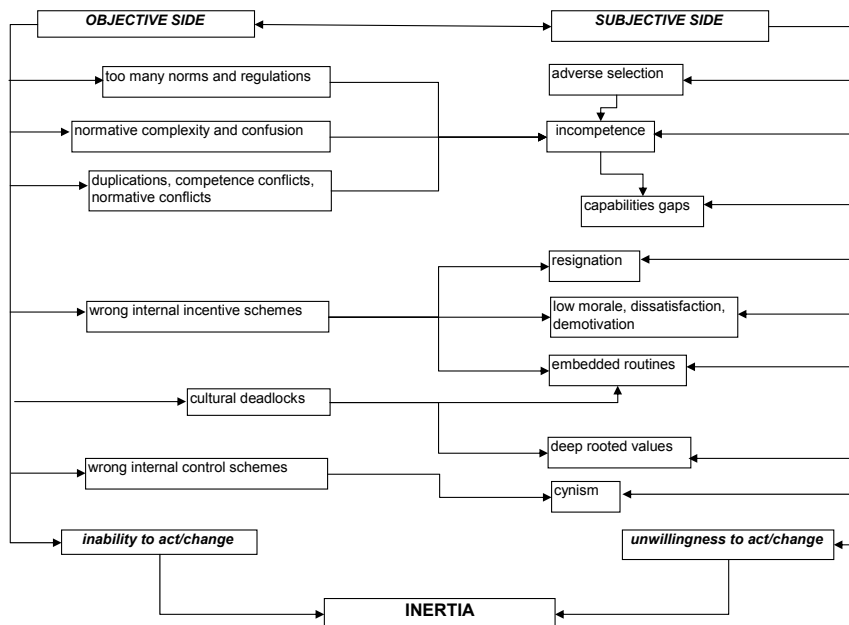


Figure 1 Sources of inertia at institutional level

The survey generally evidenced that a) landscape is not considered in the respondents' opinion, as a local public good but b) the arbitrary utilization of space produces however some "visible" distortions.

This means that land for construction use appears to be highly "capitalized" capable to capture the whole value to which other local public goods are attached: the bias is "locating" and the optimal sitting of this location is not an (aesthetic/ethic) issue. In this case a massive land capitalization represents the sole guide in landscape management causing an inefficient provision of this local public good (which is not recognized as such) and other public goods attached to it completely determining: a) how space is allocated; b) the value of local externalities and c) the impact of residential choices on other local public goods.

## **6. CONCLUSIONS**

The strategy of "doing nothing" often can be seen as an easier path, in economic, technological, management and psychological terms, when compared to unknown consequences of initiative and innovation: empirical observations can confirm that local under-development based on perverse mechanisms of erosion and massive exploitation of public goods can derive from an institutional unwillingness/incapability to change and/or to manage change (institutional inertia). These observations can highlight also that the required skills and competencies to produce and manage local public goods do not necessarily coincide with the established political and economic local organizations. The relation between existing local political institutions and these competences thus represents a critical issue for the concrete possibilities to properly manage local public goods with important effects in the improvement of quality of life in rural areas linked to the quality of environment and local natural, cultural and economic resources. A too generic nature of the concept of public goods contributed to facilitate a common separation of various actions and initiatives with a disconnection among different intervention sectors all involving a rural area as a whole: the underestimation and the lack of awareness about these interdependences can be translated not only in their continuing eroding but also in the reduction of the possibilities to produce local public goods and to design the institutional setting to overcome generic problems of public goods provision. Institutional inaction can produce severe impacts in local development and in the production and transparent management of local public goods caused for example by the opaque allocation of financial resources according to political fidelity resulting from the vacuum in the

administrative action or the lack of any form of territorial planning: an efficient and effective provision of public goods thus points out the complex interdependence among the behaviours and approaches of the agents involved in their management. The condition of local public goods can be thus symptomatic of the direct link between the quality of the local governance and the possibilities to achieve a correct and virtuous local economic and social development which could also imply the erosion of ossified interests and long term strategies based on realistic actions. Abuses and forms of mismanagement (not to say of illegal practices), too many and too complex and confused norms and regulations, scarce transparency, infiltration of private interests within the public entities, institutional inertia can be translated in a real tragedy of local public goods.

The local landscape quality and management can be a visible expression and an indicator of the local institutional literacy on local public goods and its capability to cope with them: institutional inertia in fact easily and immediately reverberates its consequences on environment and landscape. Landscape and environment are examples of forms of materialization of bundles of local public goods which are in the same time bundled with production and socio-economic opportunities: for this reason a rural area expresses a network of networks based on different bundles of local public goods and the difficulties in implementing efficient and effective local development strategies depend often not only on the scarcity of financial resources but rather on forms of institutional inertia generated by the lack of a "culture of local public goods" among local agents and decision makers.

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