

FEMISE RESEARCH PROGRAMME

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Intermediate Institutions for the growth of Governance processes in the Mediterranean Partner Countries (INGO-MED)

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In collaboration with MAGHTECH (Réseau Maghrébin pour l'intégration de la Science et la Technologie dans le Développement au Maghreb)

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Femise Coordinators





CONTENTS

EXECUTIVE SUMMARY		p.	2
1.	The project "Intermediate Institutions for the growth of Governance processes in the Mediterranean Partner Countries" (INGO-MED): main objectives and goals	p.	3
2.	INGO-MED organisation chart: research design and project timetable	p.	4
3.	Reports of the meetings and participants reactions	p.	7
4.	A theoretical framework: concepts and findings (WK1)	p.	11
	4.1 What is the meaning of governance? What kind of governance do we consider?	p.	11
	4.2 What do we intend for intermediate institutions?	p.	16
	4.3 Analysing governance in decision-making processes: the public utilities sector	p.	18
	4.4 Governance and the innovation process	p.	23
	4.5 Methodology of investigation: the case studies proposal	p.	28
	4.6 The innovation process case studies	p.	31
	4.7 The public utilities management case studies	p.	34
	4.8 Reactions and first lessons	p.	36
5.	The process of governance in the public utilities management (WK2)	p.	39
6.	Local practices for the innovation process: networks between international and local institutions (WK3).	p.	54
7.	Findings and conclusions	p.	61

EXECUTIVE SUMMARY

The ambition of this report is not to offer an answer to the complex challenge of improving governance but to enhance the dialogue among the scientific community of the Mediterranean Countries on governance issues. To accomplish this goal, it takes into account the results of the research project "Intermediate Institutions for the growth of "Governance" processes in the Mediterranean Partner Countries" (INGOMED), and it proposes an analytical framework for discussing and measuring governance. Its aim is to investigate the effectiveness of governance strategies and how different actors do actually participate to local development processes.

In order to obtain indicators of *governance* processes, INGOMED has taken into account two specific vertical processes: the public utilities management, in particular the water resources management, and the innovation diffusion. The first decision-making process, dealing with a shared common good, could be represented as a general-to-particular flow, from water resources to users. On the contrary, the innovation process starts from the individual, in the form of an invention, to become later on an innovation shared by adopting networks and the society at large. These flows can clearly indicate the evolution of *governance* in different contexts.

Therefore it has been analysed the kind of co-evolution of participatory environments and governance structures through some case studies from selected Mediterranean regions in Maghreb and in Italy. They have been analysed in order to highlight the fact that a satisfactory evolution of the "participatory environment" requires some preconditions as for the public authorities are concerned: first of all they should be endowed with competencies about negotiation processes and management; secondly, they should pursue results and networks building, not just the defence of their prerogatives.

Moreover, a continuous active participation by the other shareholders (like the private sector and the local communities) implies a full involvement during all the phases of analysis, co-decision, evaluation and control of a project or plan lifecycle. This means that these subjects must have an adequate access to information, to advisory boards and to negotiation with the relevant public bodies.

The case studies show how far these conditions are met in different regions. In this regard, the network analysis allows to evaluate the state of participatory processes, their suitability to the institutional environments, and some policy guidelines for enabling local communities to contribute to new forms of multi-level governance.

1. The project "Intermediate Institutions for the growth of Governance processes in the Mediterranean Partner Countries" (INGO-MED): main objectives and goals

The aim of the project INGO-MED was that to assess the effectiveness of governance strategies and the participation of public and private actors, as well as local communities in the definition and implementation of economic development strategies in the Mediterranean Countries.

In order to achieve a reliable proxy of the governance mechanisms, the study has focused on two specific vertical processes: the management of local public services, in particular the management of water resources, and the process of innovation.

As regard to local public services there is a strong correlation between political and institutional elements on the one hand with entrepreneurial rational. Together with the institutional framework, gain ground the concept of subsidiary according to which the increase autonomy of the public administration is linked on the one hand to the concept of effectiveness (social, quantitative and qualitative) and on the other one to the notion of economic efficiency. As result the traditional role of the public organizations is taken over in favor of a different function of the public entity which is engaged in new relationship with the system of ownership and the management of public utilities.

In this context several studies have underlined the need to develop managerial systems which follow the network notion, where the external relationships and the knowledge internal to the organization are the principal elements.

Those issues are frequent in the public utilities sector, however the water sector is that which allow to better highlight the dynamic of such issues. Seen as key sector to promote the development of local and regional areas in the Mediterranean context, it allows to develop a model which can be used as point of reference for the evolution of the public utilities in the urban context.

Moving to the process of innovation, new development in the study of economic growth have underlined the endogenous aspect of technological process.

Innovation is defined as a non linear evolutional process which create interaction with the enterprises and their environment. It is emphasized the role of cooperative interactions between the enterprises and external actor such as intermediary institutions and public administration, via territorial network that are instrumental for the dissemination of information and knowledge and promote the development of local and regional productive systems.

In this perspective the public actor should be able to promote a new way to share both knowledge and responsibilities, generating a conducive environment able to support the communities and their partners in the achieving of their legitimate objectives.

The proposal was based on the conscientious awareness that both the issues analyzed were at a critical point for which it was necessary that all the actor involved put together their efforts in order to steer and direct the decentralization in process, identifying participative mechanisms at local level, strengthening those exogenous elements able to promote local development.

Therefore, this study aimed to propose technical and analytical instruments to promote "multilevel governance" in the Mediterranean context, encouraging inter-institutional cooperation and strengthening capacity building in those sector such as public utilities and process of innovation believed to be strategic for economic development.

The results foreseen encompassed:

- 1. An analytical study of state of the art literature (models of governance, the evolution in the management of public utilities, local practice both formal and informal of innovation process);
- 2. the identification of the evolution and quality of governance in some mediterranean countries;
- 3. to evaluate through empirical cases the level of integration between the different actors of the processes of public utilities management and innovation.

2. INGO-MED organisation chart: research design and project timetable

The project was based on the partnership between an Italian research institution – the ISSM– CNR (- and the MAGHTECH (Réseau Maghrébin pour l'intégration de la Science et la Technologie dans le Développement au Maghreb) and was organized in **four workpackages**. The management of the project was organised in three levels:

- The General Coordinator;
- The MAGHTECH Coordinator;

• The Coordinators of the workpackages: one from each workpackage.

The first workpackage, which date of beginning was set in January 2003, was characterised by a theoretical approach and has investigated on: 1. different typologies of governance and on their effects on local development; 2. models of public utilities management, with particular reference to basic good as water resources; 3. innovation processes, and specifically the territorial knowledge management.

In the framework of the first workpackage there was a main phase, for a period foreseen of three months, and a assessment phase, for a period foreseen of six months, considering first results of second and third workpackages. Therefore during the development of the project the INGO-MED participants realized their different theoretical approaches and the absolute need to compare them in order to harmonize the theoretical framework and, consequently, the methodology of the empirical studies. Therefore the WP 1 has been operational for all the project, constituting the virtual place of wide debates that have enriched the investigation conducted with further elements of reflection but, at the same time, have constituted the principal cause of a notable skid of the planning of the whole project.

Deliverables:

- 1. Theoretical papers on governance, innovation diffusion and public utilities management
- 2. An information system on the selected regions.
- 3. Web-page of the proposal

The **second workpackage**, which date of beginning was set in May 2003, was based on empirical studies. It has analysed specifically the reform processes of public utilities at local level in the considered regions. Using a mixed of surveys, questionnaires, and interviews, the different team managed to investigate on the sectorial branch and on the companies presented in the considered regions.

The team was composed by an ISSM unit and three on-field units under the guidance of MAGHTECH, that was been the coordinating partner.

This second workpackage aimed at:

• Examinating the institutional capacity to manage the privatisation process, in order to realise an integration of the economic circuit and a contraction of bureaucracy, to achieve a political stability;

• Classifying companies on the basis of the typology of the contracts;

• Evaluating, through on-field interviews and questionnaires, the degree of

connection between different actors involved in the water management

• Analysing interdependence between the international, national and local level in

the water management and the role of intermediate institutions in the process.

The on-field work of this WP ask for more funding in terms on human resources in the

MAGHTECH and in more travel expenses in the ISSM team.

Deliverables:

1. Interim Report

2. Scientific papers

The third workpackage, on a empirical basis, was developed in parallel with WK2. It

has intended to analyse local practice of innovation diffusion in selected regions and the

connections between international networks and local intermediate institutions. As

WP2, the team was composed by an ISSM unit and three on-field units under the

guidance of MAGHTECH. To the team have participated an expert of management

economy (Prof. Eugenio Corti) and an expert of processes of territorial innovation

diffusion (Prof. Riccardo Cappellin).

The WP3 aimed at:

• individuating institutional mechanisms ands social practices to manage and

develop knowledge in the considered regions;

• analysing the relationships between intermediate institutions and entrepreneurial

systems, with particular reference to the civil society participation.

As the WP2, the on-field work asked for more funding in terms on human resources in

the MAGHTECH and in more travel expenses in the ISSM team.

Deliverables:

1. Interim Report

2. Scientific papers

The forth workpackage, through the surveys and data set collected in the previous

WPs, has synthesised the results and evaluated their effectively in terms of answering to

initial questions. It was defined several clusters of decentralising governance and

proposed recommendations of policy to improve local development and level of

governance.

Deliverables:

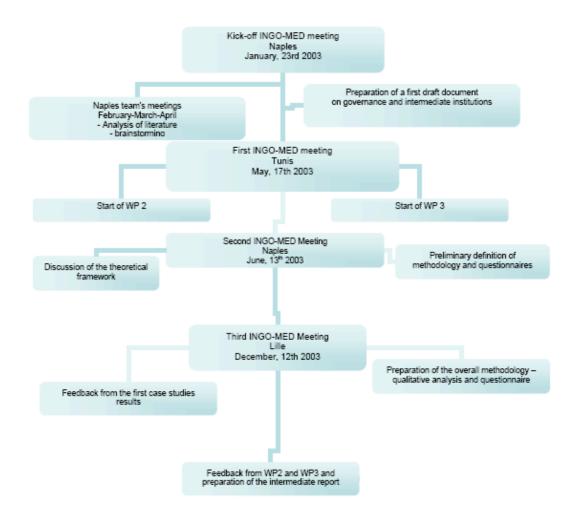
1. Final Report

6

3. Reports of the meetings and participants reactions

In order to confer solidity and distinctiveness to concepts like *governance*, interaction, cooperation, and intermediate institution it has been very important the theoretical-methodological package consisted in defining the general theoretical framework. Comparing and testing theoretical results in meetings with all the different groups of the project, it has been possible to conceive a methodology for the surveys on innovation processes and water resources management to be used in the regions selected as case studies.

Moving to a more circumscribed level, and looking for a methodological approach that could help the working group in defining a framework for an effective design of development policies (to be pursued at a micro, meso or macro level), the activities have been organised through several meetings, of three different typologies: internal operative meetings inside the ISSM unit in order to draft firstly the theoretical proposal and then the methodological one; technical meetings among all INGOMED units in order to discuss proposals and to give room for reaction; diffusion meetings, in order to verify the depth of theoretical and methodological propositions outside the group (Tab. 1).



Particularly, there was a Kick-off INGO-MED meeting in order to define roles and methodologies with Prof. A. Djeflat, coordinator of MAGHTECH, and the italian team, held in Naples from 23 to 26/01/2003. It was defined that the theoretical task aimed at:

- Analysing existent literature on the "governance", the evolution of public utilities management, and the local practices, formal and informal, of knowledge diffusion, with particular reference to developing countries;
- Locating and defining, for Maghreb countries, with the scientific contribution of MAGHTECH, intermediate institutions with reference to running administrative reforms and the evolution of public/private relationship at local level in the considered sectors;
- Determining possible indicators in order to have a proxy of the "governance" evolution and quality in the different contexts.

Then it was established the on-field team of MAGHTECH and fixed a technical meeting with his representatives in order to have their necessary feedback and comments to the project and to the theoretical approach.

On 24th January it was organised by ISSM unit a diffusion meeting at "Istituto Italiano per gli Studi Filosofici" of Naples with Prof. A. Djeflat and, as Referee, Prof. E. Corti about "Innovation in the Maghreb Countries".

This first technical meeting was held in Tunis from 14 to 18/5/03 with the participation of italian team, tunisian team and algerian team for disseminating theoretical information to WP2 and WP3 and receiving a feedback from WP2 and WP3 in order to advance in theoretical understanding. In this occasion a diffusion work about INGO-MED project was held in the proceedings of the International Conference « Les métiers et la sociodynamique du changement à l'ère des TIC », organised on 15th and 16th May in Tunis by the Faculty of Economic Sciences and Management (U.R E-MASIG), University of Tunis, El Manar.

The second technical meeting was held in Naples from 13 to 14/6/03 in order to discuss research design and methodology for empirical studies of WP2 and WP3 and to choose selected regions in the considered countries where it was possible to develop it. At he same time on 13th of June was organised by ISSM unit in Naples at the Chamber of Commerce a Seminar of diffusion, *Il ruolo delle istituzioni intermedie nei processi di governance mediterranei*, with all the INGO-MED participants and local and national experts and public decision-makers in order to have necessary feedback and comments to the INGO-MED project approach.

The third technical meeting was held in the University of Lille, at MAGHTECH meeting room, on the 12/12/03 in order to advance in the knowledge of the context analyses of the selected regions made by all the work groups and, at the same time, to obtain their first reactions to the methodology and to the questionnaires for empirical studies suggested by Italian team.

The fourth and last technical meeting was held in Tunis on 19th June 2004 in order to present by Italian and Maghrebian units the draft results and the data on public utilities and innovation collected for each considered region and to obtain the necessary feedback to evaluate them in terms of *governance* processes.

Therefore, the largest part of the theoretical and methodological work has been conducted by the ISSM unit, while the empirical studies have been conducted by local team under the guidance of one coordinator for each workpackage and, in particular, of MAGHTECH coordinator for maghrebian units. All the theoretical contributions have been presented as discussion papers and debated in both the technical and diffusion meetings in Naples, Tunis and Lille, where the Algerian, Moroccan, and Tunisian partners contributed with remarks, suggestions and local context analyses on considered issues. These meetings have highlighted a need of developing a shared approach between advanced and less developed countries on theories, concepts and expressions created and studied in these countries.

Addressed to real world processes, thinking on governance has lost its character of untouchable utopia in order to become a more critical and tangible challenge. On one side, a relevant indicator of such difficulties could be the extended debate on the investigation methodology following the many remarks of the Maghrebian units, especially if compared with their minor remarks on the theoretical concepts, which nevertheless represented the fundaments of the methodology.

The continuous changes to the methodological package – relevant changes have also been made in the last meeting in Tunis (19th June 2004) – highlighted significant elements of discussion and brought several originalities to the programme. This delayed the completion of the final report and increased the team workload beyond its limit.

Dialogue among the units has been researched throughout the whole period of activity, using different communication sources. As a basis for the debate and the investigation, the WP1 has designed and built a web site (www.issm.cnr.it/ingomed), devoted not only to the internal communication, updating with all the documents produced by each unit of the group, but also aiming to create an open forum of discussion on *governance* and intermediate institutions.

Moreover, another important task has been to prepare a common geographical basis in order to homogenise the thematic maps of the regions produced in the course of the study. To fulfill this objective, a Geographical Information System has been designed and organized. The nature of any natural or economic activity with a spatial dimension

cannot be properly understood without reference to its spatial qualities. Spatial data have two essential parts: location and attributes. In the INGOMED project, GIS location references have been supplied from external consultants and any locality, defined by latitude and longitude, has a number of characteristics or properties associated with it: these attributes are kept in tables, containing basic information such as boundaries (national, regional, and province), main cities, hydrology, infrastructure, and land use.

4. A theoretical framework: concepts and findings (WK1)

In order to analyse the role of the intermediate institutions in achieving *governance*, this work-package aimed at defining the main concepts and to share them amongst the partners.

4.1. What is the meaning of "governance"? What kind of governance do we consider?

In our proposal's introduction, we suggested that today the hierarchical model of the State, based on the principle of authority, has been beaten by a multiplication of the players involved and of the layers of negotiation – international, national, and local – which require a different model of government, called *governance*, or *new governance*, or *good governance*, based on organizational structures of interaction and partnership that more and more characterize local societies.

This concept has been the object of an extensive literature and is used in order to clarify transformations underway in different fields such as those of International relations, State and local public politics, and industrial organisation. As a premise, we believe that the *governance* concept is not as polysemic as it could appear at a first sight. Rather, the diversity is due to an *air du temps*, common ways of understanding which are, could be, or should be the transformations of government joined in the term *governance*.

Moreover, we consider the *governance* not only as behaviour of public policies or schematically referred to as only the market dimension. There is a third dimension that we could define as *inter-active*.

Only when the State fails to function normally or satisfactorily, for the corruption of a ruling political group often holding a substantial economic power, institutionalists shift the attention from a vertex-centred view of development, to a more diffused

democratic control of these processes, introducing the concept of governance. In that case, an effective process of development asks for the active involvement of all the relevant *institutional actors* in the definition and in the subsequent implementation of the correlated policies. **But** institutionalists demonstrate a certain **ambiguity between** analytical and normative objectives, mainly not taking into account the existence of two different perspective of the "Action theory":

- 1. *Linear scheme* (the action depends by a pre-determined system of interdependencies and roles);
- 2. Circular and pluralistic scheme (the action is inter-action, and the main issue is the intentionality and its role in the interaction);

The second scheme is circular and pluralistic, the action is inter-action, and the main issue is the intentionality and its role in the inter-action. **Interacting, in fact, actors exchange both intentional and accidental effects, which could produce non-expected consequences**.

Moreover, by interacting, actors create and reproduce a plurality of frames, which are bargained or shared without complete intentionality. In this scheme, the construction of the consensus can not be based on the public legitimatization. Although sharing is not necessarily sharing of contents – and therefore does not imply consensus – the research of consensus could be based on a strategy of negotiation among institutional actors for short term, specific initiatives or on a non specific, long term, enlarged strategy without actors.

This pluralistic perspective can be used to portray decision making in networks, and to give a more general view of the concept of *governance*. In addition, associated to a strategy of "consensus without actors", it shapes the innovation process as a result of social learning practices, when situations of social interaction, characterised by "weak ties", can generate opportunities and resources for social learning and innovation.

From this scheme, a suggestion seems to emerge and to address our research: an analytical approach could highlight those ties that could be reinforced by a process of *governance*, in order to take advantage of the existing connections and to orientate and stimulate their availability to multiple objectives, instead of creating new connections finalised to specific objectives.

The intersection of different levels in *governance* has been pointed out by several scholars, which generated entirely new terms and concepts, such as *multi-level* governance, *multi-tiered* governance, polycentric governance, multi-perspectival governance, FOCJ (functional, overlapping, competing jurisdictions), fragmegration (fragmentation + integration), localization, and consortio and condominio.

Each of these terms has its own particularities, but all refer to the dispersion of authority away from central government upwards to the supranational level, downwards to sub-national jurisdictions, and sideways to public/private networks. Nevertheless, behind the bedrock agreement that governance has become multijurisdictional, there is no convergence about the organisation of the multi-level governance. According to Hooghe and Marks (2001), there are two contrasting visions: a "...first conceives of dispersion of authority to a limited number of non-overlapping jurisdictions at a limited number of levels. Jurisdictions in this system of governance

A second distinctive vision, described as Type II *governance*, "...pictures a complex, fluid, patchwork of innumerable, overlapping jurisdictions.

tend to bundle authority in quite large packages; they are usually non-overlapping; and

they are relatively stable". They labelled this *governance* as Type I.

The two visions have several similarities with the above mentioned linear and circular models of the action theory. In particular, **Type I could be compared with the linear model, and Type II with the circular one**.

Different institutional environments give place to alternative modes of governance, differing from one another in discrete structural ways and giving results not easily comparable.

Continuing in this direction, we must think about *governance* as an analytical cluster of different mechanisms, not a normative one. So, there is not an ex-ante *good governance*, but *governance* is "... an exercise in assessing the effectiveness of alternative modes (means) of organisation".

In this way, *governance* is a mode of regulation alternative to the market and to the **State**, which surpasses their opposition, introducing market logic – with the participation of private actors and the importance given to the adjustment of the interests - in the sphere of public powers.

We could accept a concept of governance as a "... a modality of coordination of the economic and social dynamics based on the involvement and participation of a plurality of actors", or as "... the interaction amongst a plurality of ruling actors that are neither all governmental nor public". Although we don't agree completely on these definitions – we consider the existence of several modalities (or to use modalities) – they bring us to face two unclear elements: the first definition has noticeably a normative goal because it considers governance as a means, the second is analytical, describing a process of interaction. If we contaminate these different approaches, we can define governance as a heterogeneous set of methodologies and practices able to create multi-level models of collective decision making based on interaction and flexibility.

Beyond these schematic definitions, *governance* has become object of an extensive use in several domains, characterised also by spatial distinctions. In particular, the concept of *local governance* has been used as a heuristic tool to explain the current transformation of local space.

Applied to a local level, the *governance* notion is very close to that of an **urban system**, **based on the exchange between private and public actors as a mode of government.**This could explain the success of this concept in environments marked by both

decentralisation of public powers – that developed the role of local public actors – and liberalism – that legitimised the private interests in modes of public management.

At a local level, the *governance* concept is adopted by two other different approaches: one normative - the so-called "strategic planning" – and another mixed – the "neo-regionalism".

The first approach aims at developing necessary planning means to organise and coordinate actions of the local stakeholders and to reduce conflicts, in order to create conditions for the local policy success (Bobbio, 1996; Perulli, 1997 and 2000). The second one considers a public strategy of decentralisation and entrepreneurial management of local institutions as the core of Administrative Governance (Metcalfe & Richards, 1990; Lefevre, 1999; Olsen & Peters, 1996).

The neo-regionalist approach, envisages the regional dimension no more as residual, but as an essential component of globalization processes. Its privileged metaphors are the *network* and the *archipel* (Veltz, 1996), which replace more "centred"

and hierarchical views (see also Perulli, 1998). In this framework, the growing responsibility of the local institutions in terms of efficiency and achievement of results is crucial, as well as the advanced training of the public workers. In addition, the literature of the neo-regionalist movement is attributing more and more importance to regional intermediate institutions (Cappellin, 1998) - public and private organisations such as universities, credit unions, trade associations, unions, informal lobbies, professional societies and other forums – in order to create and support regular and continuative models of social interaction at regional level (Saxenian, 1994).

One reflection could be advanced: perhaps, more than a function of theorisation and definition of models and processes, the *governance* should contribute to legitimise new values, as interaction, flexibility, adaptability, pragmatism, negotiation, partnership, effectiveness, and proximity, which could represent a new grammar of *governance*.

Considering governance as the exercise of political, economic and administrative authority to manage a society's affairs - comprising mechanisms, processes and institutions through which collective decisions are made and implemented, citizens, groups and communities pursue their visions, articulate their interests, exercise their legal rights, meet their obligations and mediate their differences – in our programme we make reference to the multilevel governance, as a result of the intersection of territorial and functional networks, transversal policy networks, a plurality of technical bodies, distributive coalitions and organised economic groups. Derived from the concept of *multilevel government* (also federation) – *multilevel governance* is used to refer to any form of decision-making that involves several actors situated at different levels, such as international institutions, national, regional, and local levels. However, the term also has acquired a more specific meaning, which calls into question above all the idea of a linear, hierarchical structure of regulatory and social control. In our idea of governance, power is dispersed into a multiplicity of sites, which constitute 'nodes' in a heterarchical network rather than layers in a hierarchical pyramid. The relationship between these nodes is one of (mutual) influence rather than one of control. Moreover, this idea of governance has a neutral value, if means as participation, partnership, empowerment and community focus do not foster trust, reciprocity, and equity in the networks.

Since '80, administrative decentralization, or "decentralizing governance", has been seen as the first step in order to change from a pyramidal governmental system to multilevel governance. Effectively, such restructuring or reorganization of authority can create a system of co-responsibility between institutions at the central, regional and local levels according to the principle of subsidiarity, thus giving impulse to share decisions at different territorial levels, to increase the overall quality and effectiveness of the system of government, and the authority and capacities of sub-national levels. However, decentralising represents an opportunity, which in some contexts has assumed a negative value, producing fragmentation of decisionmaking, dispersion of authority, reduction of responsibility.

4.2. What do we intend for "intermediate institutions"?

By describing *governance* as a dynamic, multi-centred, multidimensional, diachronic and non linear process, with changeable and strategically undefined actors, whose individual preferences are continuously re-negotiated and subject to mutations, it means to deal with confused frameworks, whose stability can be achieved only if there are institutions creating links and connections among fragmented and dispersed individual actors.

We've also highlighted the **crucial distinction between institutions and organisations**: both provide a structure to human interaction, but institutions represent the rule and organisations the players.

With the generic term of intermediate institutions we intend all the organizations that are between the central political authorities and the non-organized society. It is its function, more than its size that makes an institution "intermediate".

When it represents and/or connects different interests, and/or mediates among different parties, it may be called "intermediate". In particular, according Durkhaim, intermediate institutions are so vital that "...a nation can be maintained only if, between the state and the individual, there is interposed a whole series of secondary groups near enough to the individuals to attract them strongly in their sphere of action and drag them, in this way, into the general torrent of social life".

Institutions playing a mediating role can be represented by financial organizations, such as the banking system especially in its local expressions; cultural organisations, such as

schools, universities, religious organisations, and cultural centres; economic associations representing interests of some categories, such as the Industrial Category Associations, representative of workers as national syndicates, consortia among entrepreneurs, Chambers of Commerce, associations of consumers; but also by NGOs, representing wider interests since they are often created for universal instances, and voluntary associations, dedicating efforts to the solution of specific problems (e.g. assistance to some categories of ill or marginalised people); sometimes even association existing for aggregative purposes more than for representing interests of some specific actors.

The list is not exhaustive, neither explicative of the role these institutions can play in governance processes; what is generally argued is that intermediate institutions could be extremely relevant in defining the direction of development policies, because of their embeddedness in the territory. For a further in-depth analysis, their role in structuring local and multilevel governance processes should be explained, paying special attention to the meaning of their presence/absence in the making of specific processes.

In general, the organisation of intermediate institutions is specific to the place where they are established, characterised by regularities and peculiarities belonging to non-written rules and customs of such community, in both their own constituents and their established relations with the other local actors. They should also be able to survive the changing membership, and to preserve their policy continuity despite the change of some individual components. However, they are able to endorse novelties and to generate pressure for drastic and discontinuous changes, since they could play a more flexible role than centralized institutions. Evidently, the specific role that those organisations can play depends on the local background and on crucial social and economic issues.

The absence of a developed web of intermediate institutions - i.e. associations of craftsmen, trade associations, SMEs associations, syndicates, credit institutions for agriculture and co-operatives - seems to be one of the main problems of the Less Developed Countries (LDCs). Their territorial presence, as a matter of fact, can permit

the access to resources to different categories and to the medium classes, reducing the polarisation of the society between wealthy elites and the rest of the population, at the basis of social disputes and of the difficulty of introducing effective economic reforms.

When intermediate organisations do not represent and aggregate the so-called "civil-society", but are directly dependent on the State, other organisations, not yet institutions, rise in order to aggregate people for solving very specific and urgent social problems, without consuming their energies and resources in collateral activities. Although these voluntary groups are an invaluable resource for society, they can not embody institutions and their celebration promoted by many international organisations, is much more connected with serious attempts of "de-politicising development" (Harris, 2002).

4.3 Analysing governance in decision-making processes: the public utilities sector

In order to manage fundamental shared resources for the community, the public utilities sector must face institutional and political issues, and the production system. In particular, water services are nested within domestic political processes, and thus popular demand for universal access should be exercised through democratic/governmental channels. The main costs relate to supplying it to the users, and operating maintenance, administration and management services for all aspects of water treatment and distribution system are mainly considered in terms of the accountability of the public sector.

Speaking about accountability, it is different if the public sector is acting as entrepreneur (also if through a regional or local agency) or as a controller (at national or regional level). That conceptual distinction is well known in the theoretic debate on public utilities management, for which the public role was justified differently; if intervening to provide a public utility service to correct a *market failure* or if directly taking on the task to supply such a service through public owned facilities. **Two major theoretical explanations support public intervention** – as: 1. **the social importance of services** in question and their **universal access** and security supply, which make it mandatory to guarantee them even when production costs exceeded profits; 2. **the poor self-dependence of the market** that in the presence of *market failures* (natural monopolies, externalities) calling for a corrective action on the part of the State which

could be both in the form of issuing laws for private businesses (as in the case of the US) or in the form of the direct management of the service by the State, which could even become the owner of the service itself (as in the case of Europe) (Bognetti, 1999). On the basis of this view, **social interests are apparently privileged over economic ones**. But, in recent times several studies verified a totally unsatisfactory situation, in terms of productive efficiency, price structure, and service quality for users/consumers. In addition, the confidence in the State's entrepreneurial capabilities has been eroded, and criticism is not only addressed at the public company's level of efficiency, but also the public interest of Government action and the limits imposed on the development of competitive mechanisms by traditional systems of regulation were put into question as factors causing non efficient results. **These factors produced the need to separate the functions of regulation and production, and determined the emergence of new processes including the privatisation and the liberalization of the public utilities.**

Our objective should not be to decide if public or private 'companies' are superior, but how to implement and enforce the 'rules of the game' under which private and public utilities or operators are efficient and responsive to social needs and desires.

By the way, our attention must be focused on an in-depth analysis of the subjects involved in the **post-privatisation "market construction"**, with a special focus on the multiple factors involved, including incentive mechanisms, the control of the management activity, the levels of interest, and the resources of institutional kind.

As declared by the Global Water Partnership (GWP), "the water crisis is mainly a crisis of *governance*" (GWP, 2002). In order to be shared and legitimate, decisions on policies for public utilities supply must be taken after sensitive processes of *governance* at national, regional, and local levels. For *governance* in the water utilities we intend "the range of political, organisational and administrative processes through which communities articulate their interests, their input is absorbed, decisions are made and implemented, and decision makers are held accountable in the development and management of water resources and delivery of water services".

In the most recent studies of Public Economics, the management of public utilities is correlated to the *governance* in terms of decentralisation.

As to privatisation, it is clear that decentralisation implies changes in *policy* networks that cause the fragmentation of the policy communities in a number of

issue networks, each one focused on different aspects. These meso-dimensional bodies are referred to intermediate institutions having the scope to connect and mediate between the State and the community. In these intermediate institutions, personal and particular relations co-exist, generating a mixture of flexible regulations that enable the same institutions to act as powerful mechanisms to stabilise and mitigate the tensions likely to occur between the micro and the macro level (Arrighetti & Serravalli, 1999).

The presence of these intermediate institutions makes possible, on the one hand, to control, rationalise, and plan the reproductive process of economic, social and political relations on a wide scale (national and international), and from the other, to guarantee margins of efficiency of the operational contexts within which stakeholders act. Within the operational system of public utilities, such a network of interconnectivity created through these intermediate institutions becomes particularly complex in a perspective of *governance*.

From this point of view, an indepth analysis of the different models of managing public utilities, as in the case of the water utilities, could better identify new opportunities and stakeholders.

In that specific literature, we find many business models, which exist for systems involving public and/or private companies. In the case of government-owned and – operated systems, the water utility may be a municipal utility, a municipal board or commission, a crown corporation, a community or corporatized utility. They can have different degrees of autonomy, varying considerably from the municipal utility (completely autonomous entity) to the water department (lacking of a separate financial budget and under direct control of government). Where private-sector actors are involved, the degree of autonomy again varies considerably. At one extreme is the private company to which a specific task has been outsourced for a limited period of time by the local government (regional or municipal). At the other extreme is the fully privatized utility, owned and operated by a for-profit private corporation. Each of these models presents some peculiarities in term of decision-making and participation, and so of governance. We can define more extended results about the private-sector, using other models based on the different attitudes

toward privatisation, such as the model of competition through tenders, the project financing strategy, and the multi-services (or multi-utility) companies.

Sometimes, when calls for tenders are issued, there is a tendency to a *tout court* privatisation in which service agreements rule the obligations taken by the companies, almost depriving local public authorities of their supervisory role. In any case, from the governance point of view, we can consider it a Type I governance process, and a linear model of decision-making, where there is an authority which makes rules and defines roles. The project financing (PF) is a financial tool aiming to attract capital for financing single projects, often destined to strengthen infrastructure, which the customers, the sponsors, and the public administration assign to a specific subject.

This model can recall a Type II governance, where stakeholders are not preliminarily defined. The multi-utility system connects infrastructure to territory in an integrated set of ecological networks and territorial systems, covering at the same time the distribution and sale of gas, electricity and water, the removal and disposal of waste and the supply of nonexclusively.

After having explored these *public utilities* management models, we focus our analysis on three cases of water "*decentralizing governance*" in the European context, providing some details of the adopted management systems for a first general identification of the various stakeholders involved and of the relations existing between them. They are:

- 1. Continental system (strong integration between Government and public companies).
- 2. *Anglo-Saxon system* (the Public is "separated" from the industry and control and management are acquired by one or more independent bodies).
- 3. German system (regulation and control are competence of the Lander and the management of the local communities).

The French water supply sector can be considered as a typical "continental system". In France, there is no Water Ministry and there are no regulators for any public utilities. In their place, each Ministry has preserved its undertaking in terms of water management (agriculture water management, drinking water management, etc.). The coordination among all the Ministries occurs through the Water Inter-ministerial Mission (MIE), whose task it is to keep the Government informed on all projects related to water resources management. It is formed by the representatives of all Ministries competent in

the water resources management field. In this organisational model, the Government asks to the Environment Ministry to coordinate the various public entities operating in the water sector, through a Water Management Office with the task of guaranteeing the application of the Water Law(1992) and enforcing the rulings of the Water National Committee that consists of public subjects (local authorities, basin committees and public administration representatives), private subjects (consumers associations, users' representatives, sector operators) and a consulting body.

In the second model considered, the *Anglo-Saxon system*, adopted in Britain, due to the past privatisation of public Water Authorities, it regulates public utilities through "offices" such as the Office for Water Services (OFWAT), which represent authorities independent of the Government. This "offices" structure, such as OFWAT, envisages the involvement of many stakeholders which are chosen from all the operators involved in the management of the service in question. In the OFWAT case, we can observe that it includes in its staff the Directors of the 10 Water Voice Committees (e.g. CSC = Customer Service Committees), which are the bodies (independent of water companies) representing consumers' interests. Their composition is very interesting from a governance viewpoint, since it is constituted in percentages of users' representatives, academic community representatives, water sector experts, and subjects belonging to commercial and industrial institutions.

With respect to the Continental model, this model has a higher degree of joint participation and a certain differentiation among stakeholders.

Between the two, there is the German model with regional authorities (*Lander*) responsible for the regulation framework and overall management and local communities responsible of the supply management. The model of management is based on the principle of self-government and its performance is based on the *responsibility* of municipalities to provide a high quality service, whose cost is completely covered by consumption fees, and to achieve goals of water policy. The legal framework defined by *Lander* delegates the water quality management and control to *Wasserverbande* – local associations of land owners, firms and local institutions – which are built on local autonomy and users participation. In substance, the main positive aspects of the German model can be found in the separation of the Government

from the service management, and in the stability of the decentralised decision making based on the German tradition of self-government.

The need to activate real cooperation mechanisms in water management is rather perceived and *water governance* based on the actual territory needs is flourishing.

The meaning of this *governance* could be associated with a "joint participation mechanism", aiming to define roles and prerogatives of the different subjects involved in service management, i.e. the subjects of local authorities, company administrative and management bodies, and all the other stakeholders (such as consumers' associations, lobbying groups, unions, suppliers, citizens-service customers, etc.), reducing levels of uncertainty and complexity. It is clearly more oriented to the Type I governance. **Instead of promoting interaction, it calls for setting up instruments and mechanisms for the "integration" between local authorities and associated companies**. In this case **objectives are pursued mainly through infrastructure and market synergisms, developing managerial network systems partially borrowed from organizational economics**. The network rationale appears particularly suited to the management of high quality public services, where the fundamental elements are: 1. the external relations with all subjects participating in the processes of co-production of local public services; 2. internal knowledge and innovative skills in the production of services.

4.4 Governance and the innovation process

Processes of innovation do not take place everywhere, because they need particular conditions to occur, like scientific and entrepreneurial competencies, but also adequate institutional set ups and decision making systems. As asserted by a vast body of literature, differences of performance in innovation can be attributed to a combination of resources, mainly intangibles, developed by firms and the local context, rather than to industrial structures as considered in Porter's analysis of the dynamics of competitive forces within market structures. Amongst these intangible resources, relational capital has a relevant role to create and develop *networks*, which have arisen as a significant characteristic in success stories of innovation processes.

Currently, many experiences of industrial development policy point out the network approach as a fundamental means to open local communities to external knowledge, combining endogenous growth theory with the heterogeneity typical of exogenous growth models. The network approach does not contradict the idea of innovation as an evolutionary, non-linear and interactive process between the firm and its milieu. In fact, the development of intermediate institutions and the improvement of local processes of *governance* support the localisation of innovation processes. *Governance* is seen as a means of technological and economic development, which could operate as a **sort of facilitator or catalyst at local/regional level**.

Our first theoretical step has been to analyse more in-depth the potential forms of industrial organisation and production systems at local level, the ways they are conceived, the modalities of their territorial development, and the stakeholders and institutions involved.

Organisational forms of agglomeration are based on **two main logics**. When firms have a vertical and hierarchical structure and there is a geographic allocation of activities for reducing production costs, the prevailing logic is **functional**. When there are solid ties between firms and local communities, with the existence of horizontal *networks* and relationships of cooperation/competition, generating synergies, complementarities, and learning processes, there is a **territorial** logic. In this case, the local *milieu* has an active role and firms develop a strong sense of belonging to it.

Merging functional and territorial logics, we can define two criteria – (1) the existence of exchange relationships between firms in the same region; (2) the structural nature of the relationships (horizontal or vertical) – by which we can identify four different types of territorial production systems:

- 1. Horizontal organisation of the production and absence of interactions of exchange. Territorial production depends on firms that operate independently, without establishing connections between them. the absence of interactions of exchange do not encourage interactive behaviours such as learning, innovation, and collective decision-making, reducing the potential of governance approach.
- **2.** Vertical organisation of the production and absence of interactions of exchange. This second system represents the case of the large firm localised in a specific region with all its branches totally internalised. There is not only absence of interactive

learning development and externalisation of knowledge, but also the absence of development of all the knowledge not strictly necessary to the firm.

- **3.** Vertical organisation of the production and presence of interactions of exchange. In this third system, territorial production depends on large firms more or less integrated, which have relationships of exchange with other actors localised in the region. Results in terms of interaction depend on the nature of the relationships established between the firm and its partners.
- **4.** Horizontal organisation of the production and presence of interactions of **exchange.** It is the case of a territorial productive system based on numerous specialised and independent SMEs, belonging to a limited or partially limited area of production. The interaction between actors is the rule of the system, whose coordination and coherence is guaranteed by mechanisms of cooperation/competition.

Numerous experienced showed that these systems are overlapping and non-static. Such evolutions demonstrate that is possible to change decision-making system and developing governance. Changes are not automatic and can be alternatively contrasted or stimulated by different factors related both to local culture and society, the existence of intermediate institutions, and the capacity of local actors to define collective actions and to share decisions.

Our second theoretical step has been to analyse more in-depth the network approach in innovation, which is focused on the importance of interactions and cooperations between firms and other external actors, like other firms, intermediate institutions and public administrations.

Taking origin from a network perspective, several models have been proposed to explain linkages between knowledge diffusion, among a variety of different "actors", and innovation processes, such as the innovative milieu (Camagni, 1995), the national and regional systems of innovation (Nelson R., 1993; Braczyk H.J., 1998; Castro E.A., 1998, Cooke P., 1997; Lundvall B.A., 1988, 1992, 2002) and the recent Triple Helix (Etzkowitz H., 2000; Leydesdorff L., 1998, 2001).

The idea of innovation systems – national and regional – came out with the objective of developing innovation where does not happen spontaneously. It presents an epistemological convergence with governance concept, in a way it could create confusion in terms of finalities and resources. Let us try to clarify this concept. By

linking the generation of knowledge with the diffusion, transfer, and use of R&D results, 'innovation systems' represent a considerable change in the way to conceive of Science & Technology (S&T) organisations. Initially applied to the national level and defined as "...the set of organisations, institutions, and linkages for the generation, diffusion, and application of scientific and technological knowledge operating in a specific country", innovation systems have seen their boundaries to become even more uncertain, up to become open systems, flowing partly upwards to supranational institutions and partly downwards to regional and local institutions (Cooke et al., 1998). The number of places and actors actively involved in the generation of knowledge has rapidly multiplied, inducing changes in existing institutions and the progressive appearance of new kinds of institutions and mechanisms as informal groups, networks and associations, consultancy firms, and venture-capital innovative businesses (Pace, 2003).

An outcome of this evolution has been the concept of 'learning region', whereby the competitiveness of a region can be directly influenced by local actors' ability to generate, access, understand and transform knowledge and information by means of an interactive learning (Maillat & Kebir 1999). This interactive nature involves groups of individuals both outside and inside the personal businesses (social networks) and calls for the development of links, networks and co-operative actions among different actors even outside the existing institutions (Pace, 2003).

Another relevant approach has been suggested by Cappellin (2003), which takes into account the public decision making in industrial and innovation policies and identifies the following four models:

- 1. the centralist model of sectorial planning (government);
- 2. the free market model;
- 3. the public-private strategic partnership (model I governance;
- 4. the local networking and cooperation (model II governance);

These four models of policy-making are described according to their respective position within two major dimensions :

- Hierarchy vs. Autonomy
- Isolation vs. Integration

The first dimension measures the power of the central authorities. The second one measures the sharing of common values, the sense of belonging and the level of explicit economic interdependence. In this classification, the Public-Private Strategic Partnership can be easily compared with the linear model of decision making and the Type I governance and the local networking and cooperation with the pluralistic model and the Type II governance. Both these two models can be developed on a mix of bottom-up initiatives and top-down coordination. With the exception of the *government*, all the other models can be *multi-level*, which is supported by both the continuous technological evolution and the process of increasing international integration of national and regional economies.

In conclusion, we must consider interactive **learning** as a major key concept for innovation process in regional/local *networks*. It means to develop an ability to deal with various fragments of knowledge, know-how, skills, information and resources in special configurations. Instead of developing specific "high-tech" fields typical of the *dirigiste* modality, the *network* approach in learning and innovation put into evidence developed relations between enterprises inside the local productive system and the *cluster* sector, at vertical and horizontal integration level and, then, facilitating the creation of competitive productive chains at international scale.

Inside these systems, strong ties could made difficult the adoption of innovation, as pointed out by Granovetter's theory. People with strong ties share norms so thoroughly that little effort is needed to gauge intentions of others. On the contrary, **people with many weak ties live up to the expectations of several others in different places and at different times, which makes it possible to preserve an inner core — to withhold inner attitudes while conforming to various expectations. Therefore, weak ties better fit complex role sets and cognitive flexibility**, improving the need of communities to organize themselves. Accordingly, people with weak ties should be supported by a sense of *belonging* to the community as the fundament of both the *associative* approach to development and the *governance* in the productive system. It leads to the creation of associations, consortia, forums and other institutional instruments of collaboration. This interaction in productive and cognitive terms between firms could be crucial to promote new innovative enterprises. In fact, various studies demonstrate that a consisting portion

of new enterprises and above all of those surviving to the initial period of turbulence is represented by enterprises that can be defined "spin-off" of existing enterprises, rather than totally new enterprises.

The creation of new innovative enterprises demands, therefore, an unambiguous policy of local governments, which aims at increasing the significance of relations of complementarities between firms, at shaping more solid enterprises' relations with the market at national and international scale, and at securing their roots in the local productive system or cluster. On the other side, many SMEs networks or many local systems of innovation must face the existence of cognitive and functional blocks since they appear like hardened in the dominant ideas, partner consolidates and traditional technologies. In such cases, collective incentives can improve both accessibility and receptivity to the external knowledge. In addition, they prevent conflicts and rejection of external knowledge due to the differences of codes of communication and behaviour.

Another positive factor corresponds to the development of international networks between private organizations and public institutions.

4.5 Methodology of investigation: the case studies proposal

Theoretical results expressed a clear struggle to determine qualitative and quantitative indicators able to give a proxy of governance's evolution and thickness in different contexts. In particular, the specific processes considered – public utilities management and innovation diffusion process – could only offer qualitative governance elements, and not quantitative indicators. Therefore our analysis takes into account the two processes mentioned above, drawing specific case studies in Algeria, Morocco, and Tunisia (two per country). In order to make them comparable, we chose another two case studies in a Italian region classified by European Commission Structural Funds as Objective 1: the Campania Region.

Articulating the previously defined theoretical background, our research design aimed at **guiding investigators in the process of collecting, analysing, and interpreting data**. Because of the complexity of our approach, which tries to eliminate blurring and politically redundant normative concepts in order to let emerge the analytical approach,

we were prepared to take into account reactions, annotations, suggestion, and critics during the on-field analysis.

Basically, the research design has dealt with at least five problems: what question to study, what region to chose, what data are relevant and need to be collect, and how to analyse the results.

Besides traditional case studies forms, such as "how" and "why", "who" and "if" have been added. In fact, searching for governance through the analysis of processes having the end to produce something, we are not sure, in the event that governance exists, about who will participate at the decision-making. Therefore, our case studies can be included in the typology of "exploratory case study", that is our exploration began with some rationale and direction, even if our initial assumptions might be later proved wrong.

On such basis, **three main issues have been introduced**. In the first place, our case studies should answer to the following **questions**:

- Which specific attributes of the case study determine the existence/non existence and the resulting consistency of the *governance* process?
- How mechanisms of governance develop into the considered processes?
- Who are the actors involved and which is their role in the decision-making? In particular, for the latter we aimed at exploring the linking role of the *intermediate institutions*. Within our objectives, we stated some **propositions**:
- Organisations, in the case of innovation, collaborate not only because they derive mutual benefits, but also because of a complex set of social and cultural behaviours.
- Relationships are characterised by reciprocity and complementarities between the actors, which trust each other and fell belonging to the same community, reducing opportunistic behaviours.
- In the case of water management, our main proposition is that mechanisms of participation are finalised to give the opportunity to local authorities, administrative bodies, lobbies, consumers' associations, trade unions, suppliers, and service customers to define roles and prerogatives of the subjects taking part in service management, to predispose the suitable tools, and to encourage interaction between the company and the local community.

the need of comparing different case studies for each process has led to a rigorous definition of the units of analysis in both the innovation process and water management – for example, in innovation we decided a-priori the industrial sector, the industrial size, and the area – in order to limit the field and to analyse variations depending on the perspective of the different actors. However, units of analysis will maintain openness in order to be "territorialized". And this means that understanding the local/regional context of the case study can help to define units of analysis in a more discriminating manner, although investigators must separate actors included in the case study (firms, institutions, or social parties) from those who are considered part of the context. Finally, for each process, specific time boundaries are needed, in order to define the beginning and the end of the case.

A promising approach for **linking data to propositions** is the *pattern matching* (Campbell, 1975), whereby **several pieces of information from the same case may be related to some theoretical proposition**. In the water management analysis, single cases will be compared with the three models of reference (Continental, Anglo-Saxon, and German); also in the innovation process, the matching with theoretical models has been considered, although it was not sufficient to answer our questions.

For **interpreting the findings**, we need to acquire patterns noticeably different and sufficiently contrasting, in order to interpret findings in terms of divergence between at least two rival propositions. Therefore, it is fundamental the choice of case studies, comparable in size and belonging to the same sector, but immerged in wide-ranging socio-economic *milieux* with different institutional patterns.

This methodological assemblage requires **two distinct activities of investigation**. The **first** exercise is mainly **qualitative**, conducted on-desk on varied sources of empirical material and **aims at defining the case-study context and identifying preliminary the involved actors**. The **second**, **on-field** and empirical, is based on **interviews and questionnaires**, **which aim at defining the existence of** *networks* **and processes of** *governance*, putting into evidence several actors and their relationships with other actors (public and private), the role of intermediate institutions, and level of territorial interaction (local/regional/national/international).

Such data collection procedures are complex and not routinized. Because of the continuous interaction between the theoretical issues being studies and the data being

collected, well-trained and experienced investigators must be engaged to conduct these case studies. Such need created a problem of pertinence for the planned involvement of inexperienced researchers in Algeria, Morocco, and Tunisia. To solve this problem, during the meetings, it has been decided to foster the involvement of senior researches also in the case studies data collection and analysis. However, on the one side this adjustment could increase the INGOMED potential in terms of theoretical development, on the other side could delay the completion of the activities. Finally, each team has decided on the basis of its human resources, and this created misunderstandings and heterogeneousness in the preparation of case studies reports, especially on the innovation process, whose concepts - such us *local productive systems, network, complementarities, reciprocity, etc.* – were revealed as unfamiliar to many investigators.

The two questionnaires were prepared by the Italian unit, debated in the meeting of Lille (December 2003), submitted to the counter proposals of each Maghrebian unit, modified in no substantial way, and finally agreed. In the two following paragraphs, we will review the methodological approach of both the innovation process and the water management.

4.6 The "innovation process" case studies

The empirical analysis consisted in the elaboration of an in-depth analysis of various case studies in several regions of the considered countries, through the collection of a rather large set of data and interviews. The aim of the empirical investigation was to analyze knowledge and innovation networks in the four regions/countries selected, that led to concentrate the collection of data and the economic analysis on those firms/organizations playing the role of key nodes (gatekeepers) of such network.

The case studies on innovation process have been selected taking into account three dimensions. The first dimension is represented by the regional context. For each region/country under analysis, on-field units have to define economic, social, and institutional contexts. The second dimension is the industrial/technological sector, which should be enough unsophisticated to be found in all North African countries.

The selection has been done on a traditional sector, such as the transformation of agricultural products, the so-called Agri-Food. **The third one** corresponds to the firm

dimension. On the basis of our theoretical analysis, Small & Medium Enterprises (SMEs), ranging between 10 and 200 workers, should be more likely to develop networking and clusters. In order to identify networks, investigators should choose one or two firm leader of medium size (greater than 50 and less than 250 employees) with at least one of the following characteristics:

- which has introduced new productions in the local economy and has adopted major product or process innovation;
- which is leader in innovation, or which has explicitly assigned a major role to knowledge and innovation in his strategies;
- which is widely embedded in the regional production system;
- which is playing a role in some innovation programs of the regional government;
- which is active at the international level or which is controlled by a foreign firm.

The on-field work has been planned in two phases. The first one is partially on-desk and aims at identifying the network and the main involved actors, at analysing the context, through the use, if possible, of regional indicators on innovation - on the basis of the indicators selected in the "European Innovation Scoreboard". In order to help the investigators in the selection of the firms, our approach suggest to analyse preliminary the structure and the behaviours of the networks, taking into account that only relationships which have been stable in the last 3 years should be considered.

This first analysis should be helped by contacts with experts and telephone interviews with the individual actors (for which a qualitative guide has been prepared) in order to define the network, and to choose the actors for detailed interviews. A sequential procedure will be used starting from the identification of the **firms leader in the supply chain** to the identification of first level suppliers and then the identification of the **public authorities managing innovation policy** and the **service suppliers** (research, business services, finance) having had a key complementary role in these policy actions. Such first part aimed at isolating the following data:

- General information on the interviewed actor (i.e. size of the organisation and employment change in the last three years, sector of activity, main products/services, main establishments in the region or outside);
- History of innovation events (i.e. main result achieved, evolution in the innovation process, and main strategic aims in the last five years);

- Main innovation indicators (i.e. major new technologies adopted, improvement in existing production technologies, major organisational innovation in the last three years);
- Internal organisation of the considered actor;
- Organisation of the regional economy/sectoral cluster considered;
- Relationships with the local environment and the international economy;
- Relationships with the individual actors of the selected *network*;

We suggested that for each case study, results of preliminary analysis should circulate between the members of the INGOMED working group, and used in order to elaborate a draft of the second (quantitative) part of the questionnaire. That draft could be, then, presented and discussed with the various individual actors during a second and more detailed interview (the first, if the first contact was by telephone), in order to confirm or modify the provisional answer and to investigate the reasons for these changes. New major information collected during this second interview could then be added to the transcript of the preliminary analysis.

The second phase, completely on-field, corresponds to the quantitative questionnaires on the selected actors of the network. The firms and organizations to be considered in this phase have been chosen on the basis of the prior identification of the **key stakeholders or gatekeepers in these networks**, within the considered innovation system.

The main key questions investigate the structure of the network, the relationships with the local community, the behaviours (formal and informal) within the network, and the governance of the networks. The questionnaire discussed with all the INGOMED units and finally agreed contained 48 questions.

In particular, in order to reply to questions on structure and behaviours of networks, from the firms' point of view, it was necessary to analyse the existence of relations between each selected actor of the network. Questions on the internal organisation of firms could help to have a proxy of intellectual and innovation capital, entrepreneurship, financial performance and creation of value.

For linking data to innovation process propositions – organisations and individuals collaborate not only because they derive mutual benefits, but also because of a complex

set of social and cultural behaviours - we must remember our theoretical basis and consider the social value of *networks*. The methodological asset should represent and investigate intra- or inter-organisational relations, identifying interactions in local communities, lobbies, groups, and institutions and their relational structures. Social relations among a set of actors can be analysed with the *network analysis*, which have developed a set of distinctive theoretical perspectives, such as focusing on relationships between actors rather than attributes of actors; a sense of interdependence: a molecular rather atomistic view; structure affects substantive outcomes.

In our first methodological approach, using the *social network analysis* seemed the best solution to reveal *networks* and to give a weight to their *governance*. We chose between two basic kinds of network analysis: ego network analysis and complete network analysis. We developed the latter, which promised us to obtain our main goal: all the relationships among a set of respondents. INGOMED developed an application of Matrix INT (Cappellin, 2003), which is a quantitative framework for the evaluation of innovation policies, aiming at investigating the gap between the demand/needs in the innovation process and the supply/instruments of innovation policies in various regions and countries. In particular, its approach promised to facilitate the discussions on the tradeoffs between different aims and different capabilities of the local "stakeholders" in the field of innovation policies.

Disappointingly, this social network analysis revealed too much methodological and too little theoretical. In particular, after including all the data in a programme as UCINET, we were not able to test hypotheses statistically, because the data are by their very nature auto correlated, violating assumptions of independence (random sampling) built into most classical statistical tests.

For that reason, we restored the completely empirical *pattern matching* approach of the case study methodology, with the addition of qualitative graphs identifying strong and weak ties between firms, and their relationships with intermediate institutions.

4.7 The "public utilities management" case studies

As for to innovation process, the empirical analysis consisted in in-depth elaborations of various case studies in several regions of the considered countries, through the

collection of a rather large set of data and interviews. In this case, methodology has been simplified by the same structure of the process, which must be executed everywhere. Thus, Italian unit validated its case study approach by taking into account the water management in Campania region, and then proposing it to the other units.

The on-field work has been planned in two phases. The first one was partially on-desk and aimed at identifying case study context and main involved actors. It could be helped by investigators' personal experience, contacts with experts, and telephone interviews with institutional stakeholders in order to choose the actors for the detailed interviews. Similarly to the innovation methodology, we suggested the preparation of preliminary reports on water management contexts for each case study, and their circulation between the members of the INGOMED working group, in order to achieve a better homogenisation of approaches. Relevant information concerned the analysis of:

- the hydro geological structure;
- the legislation and the relatives policies;
- the involved stakeholders:
- the problems related to the sector of the water public services at both the national and regional level.

These preliminary studies must be presented and discussed in the following phase with the stakeholders - during a detailed interview - in order to confirm or modify the provisional answer and to investigate the reasons for these changes. New major information collected during these interviews could then be added to the transcript of the preliminary analysis.

The second phase, completely on-field and empirical, corresponded to the quantitative questionnaires on the selected stakeholders. It aimed at analysing more specifically the technical-dimensional and managerial characteristics of the local public utilities. For this purpose, a questionnaire has been set and the most representative stakeholders selected for interviews. Questionnaire foresaw the subdivision of the data to collect in different levels:

Level A finalized to identify the model of the local water services management, to verify the presence of a public-private management, and to investigate the economic sustainability of the managements.

Level B focused on the investigation related to the identification of the role of the different actors (Firms, Local Authority, Associations of category / Industrial Federations of the water sector, the consumers' Associations, Consortia, trade-union Organizations, Chamber of Commerce) involved in the definition of the public utilities managerial and decisional assets;

Level C aimed at verifying the presence of a network originated from the interaction among the actors and to define its characteristics.

The objective of the empirical investigation was to **analyse the key relationships and the structure of the decision making in water management**, and then to compare each case study to the three models of reference (Continental, Anglo-Saxon, and German) with a *pattern matching* approach, with qualitative graphs identifying organizational system of the water services for every country as well as the degree of interaction among the various subjects involved in national, regional and local level.

4.8 Reactions and first lessons

The methodology, and particularly the questionnaire, gave rise to many reactions from Maghrebian units and the subsequent debate brought to light several theoretical divergences, which asked for an accurate reflection also on the programme's objectives. In fact, some remarks were motivated by misunderstandings on the basic INGOMED concepts. For some members, intermediate institutions were a third aspect of the *governance*, to study apart with a specific questionnaire, instead to represent a potential catalyst in all the two considered processes. On the contrary, others believed necessary to add *governance* to public utilities and innovation as a third specific process.

Also the concept of innovation process has given room to some reactions. For example, the Moroccan unit had seen a clear relation between innovation and water management and proposed a larger definition of innovation process. On the same subject, the Algerian unit recommended to give centrality to the innovation process at local level, studying *governance* as a modality of developing innovation in the sectors of the water management and the Agri-food industry.

Such preliminary remarks drew attention to a partially undervalued element of INGOMED proposal: a wide cultural divergence on these subjects, and particularly on networks, governance, and innovation, between the two shores of Mediterranean.

It was evidently necessary to look back at the theoretical part, in order to find a common view of such issues, to define a shared glossary, and to use almost the same language.

Thus, developing a collective vision on governance amongst the members of the INGOMED working group has been our first relevant result.

All the theoretical divergences came out from the debate followed the launch of the on field analysis. The main problem - quite shared amongst the different Maghrebian units-was that chosen methods of analysis, particularly the questionnaire on local networks for innovation cases studies, were only applicable to European productive systems, and not to their local contexts. Moreover, the meanings of local productive system were obscure to their approach to industrial location.

Therefore, in order to improve case studies quality, the original methods have been subjected to a comprehensive integration of concepts and experiences. Some methods and tools have been adapted to the Maghrebian context, and others substituted from new approaches and tools, as the case of the social network analysis or the innovations indicators.

In general, considering the difficulties to find relevant data and statistics on innovation in industrial production of less developed countries, we decided to diminish those investigations considered as not-a-priority and to concentrate our attention on the harmonisation of the understanding of the programme objectives and, only then, to analyse the selected case studies.

The originality of the proposal was also the major difficulty in terms of understanding: an instrumental use of two different entities – water management and innovation – in order to identify *governance* and the intermediate institutions role was too much ambitious from the conceptual point of view. First of all, can these two entities be considered such as processes? If the innovation is a process without a doubt, public utilities are generally contemplated as a service sector. Think are clearer if we consider that the programme does not take into account the overall subject, but only its mechanisms of decision-making and the involved stakeholders, and it can be demonstrated as a process.

Remarks and uncertainty were highlighted about the geographical dimension of the case study. For the water management process, Maghrebian experts preferred the urban size to the regional one, because of the priority of drinking water supply in urban area to the water supply for irrigation in rural areas. On the contrary, the regional dimension is preferred in the case of innovation processes, because intermediate institutions and existing *networks* could go beyond the boundaries of a single city.

Another problematic issue was the identification of *networks*, particularly for innovation processes case studies. Our methodological approach set the existence of a *network* as a criteria for the selections of regions, *clusters*, and productive systems. On the contrary, it come into view that many industrial agglomerations were not organised as a *network*, and also intermediate institutions have not local relations of *networking*. The strongest ties were materialised with the central government. Therefore, we could face the risk to not intercept a *network* in the chosen case studies. Without a *network*, questionnaire and social network analysis were not the best instruments. The only solution was to identify strong and weak ties between firms, and their relationships with intermediate institutions, accepting that respondents could not know anyone in common, and no attempt is made to link up the networks. In this way, using a sort of ego network analysis, investigators verified the quality of the actor's network (size, diversity, average income, etc.) and relating attributes of ego with attributes of their alters, giving idea of the *network* potentiality and the constraints to its development. Also the existence of a local productive system could be discovered after the analysis and not a priori.

Finally, the choice to direct the questionnaire only to firms and not to intermediate institutions created some disconcert in the teams. The rationale of this preference is related to the need of having comparable and coherent data from the most interested category of actors, from which should become apparent ties, relations, and interactions between them and intermediate institutions.

Obviously, the questionnaire remains the main fundament for collecting data, which in many cases are profoundly subjective – such as the feeling to be part of a local professional community, and the concepts of reciprocity and complementarity.

About public utilities management, the major remark has been purely economic, putting

into discussion the priority given to privatisation of public sectors and suggesting an indepth reflection on the identification of means and objectives of water management, in order to evaluate their congruity in terms of cost-benefit and cost-opportunity.

5. The process of governance in the public utilities management (WK 2)

The quantity and quality of any public services delivered depend on the relationships and interactions among three parties: politicians or policymakers; service providers, whether bureaucrats in public service agencies or private vendors on behalf of government; and citizens, as clients, who are beneficiaries of the service and who act both individually and as members of civil-society intermediaries.

Within the relationship's regulation among the public body and other subjects, public or private, called to guarantee the pursuit of the social finalities in conditions of effectiveness and inexpensiveness, exemplificative appears the case of the water services, a phenomena strongly linked to a wider participation of economic, social, political agents in the processing and implementation of decentralised decision-making. Moreover, the water services have called to conjugate essential factors such as the economic sustainability of the managements, the collective well-being and the problems of water shortage.

The analysis, taking into account the Italian case, has extended the study in comparative way to Algeria, Morocco and Tunisia. Particularly, in a first phase the second workpackage has foreseen the elaboration of context studies concerning the hydrogeological structure, the legislation and the relatives policies, the involved actors and the problems related to the sector of the water public services at national level. Subsequently, the workpackage has been essentially based on an empirical analysis in some select regions, aimed to analyze more specifically the technical-dimensional and managerial characteristics of the local public utilities. Particularly, we have analyzed the case of the Campania Region in Italy, the case of the Oran Region in Algeria, the case of the Souss Mass Drâa Region in Morocco, and the case of the Gafsa and Tozeur Region in Tunisia. For this purpose, it has been set a questionnaire and some interviews to give to the most representative subjects of the water sector; therefore the different italian and maghrebian working groups have conducted the investigation on the base of

the methodology suggested by Italian team and discussed with the partners. The first and more evident consideration emerged by the comparative analysis is that related to the difference of the examined national contexts, but above all the different priorities that characterize every context in relationship to the water sector. In fact, if for Italy it is a matter of problems related to the model of management and the interaction among the involved actors, for Maghreb countries, the discourse concerns above all the allocation and the safeguard of the water resources to the goals of their exploitation. In detail, it notices for Italy the problem of the excessive fragmentation of the managements that, in many cases, has determined a deceleration in the realization of the objectives fixed by the law Galli (in according to an ISTAT investigation conducted in '99, the managers of the services water assets were 7.848, included both the managers of the whole cycle of the water services and the managers that operate only to some phases like sewerage and purification of the waters reflue). To this problem, it is added a missed measurement of great quantities of water destined to public uses, the diffusion of collectings and unauthorized connections to the net, losses of the net. Above all, these problems and the observed data underline the necessity of incisive politics at level of the single administrations. Therefore, in the Italian case, the challenge set is that relative to a greater coordination of the local actors, together with contemplated actions and greater controls on the territory. Different is the case of the Maghreb where the shortage of the water resources ties to diversified ecosystems, a variability of the pluviometric levels, a strong vaporization and salinity phenomena but also, in many cases, to a geographical distorsion between the location of the water resources and the basins of use. Therefore, in this case the managements must to compare themselves not only obstacles of technical, structural and financial order, but also with

a strong unbalance between the demand and the offer; then the challenge is that related to the efficient exploitation of the water resources, more and more rare, in a perspective of durable development.

These considerations are made even more evident if we observe the general data related to the water availabilities and the index of exploitation in percentage of the Mediterranean Countries, where differences are evident between the countries of Europe and those of the North Africa. The same countries of Maghreb manifest characteristics not similar. Particularly interesting to this intention are the data related to the indexes of exploitation and consumption and the same annual availability, that express, in substance, as we will see subsequently, different ways and times adopted by every country in the realization of the strategies related to the sector. It is interesting also to notice in terms percentages, the preponderance of the water quota destined to the agricultural uses in comparison to that destined to the urban areas. It emerges that the water's concentration in agriculture to sustain the agricultural development of these countries, is tied up to a low water price, sometimes inexistent, to detriment of the high costs that the water purifying requires for the urban uses.

Particularly, synthesizing the principal elements characteristics of the different national contexts, as it regards **Italy**, the country can count on a coverage of the nearly total service (99,5% of the Communes and 96% of the resident population) and it has enough quantity of water to guarantee the general drinking water supply. The water introduced on net is of 303 l/p/d, that disbursed to the consumer is equal to 267 l/p/d (year 1999), 297 by more recent data furnished by the ISTAT. The South, in comparison with the North and the Center, has a quota pro-capite equal to 228 l/p/d. From the comparison of the data related to the water introduced on net with those of the disbursed water evident differences emerge at national level and among the different regions. In fact, while at national level the difference percentage among disbursed water and water introduced on net is equal to -29%, in the southern regions and in the Islands same difference increases reaching respectively -37% and -35%. Therefore, the observation of the data brings the discourse on the politics defined in theme of government of the resource and it recalls to the responsibilities of the actors involved to the different levels and their interaction

Algeria is placed among the poorest countries for the water availability, in comparison with the threshold of water stress fixed from the WORLD BANK to 1000 m³ for year for inhabitant (urban water consumption is equal to 135 1/p/d up to 85 1/p/d in some zones). The water potential is equal to around 20 million m³ of which 75% renewable (60% of waters of surface and 15% of those underground). Currently, the total demand in drinkable and industrial water is estimated equal to 2,4 million m³ for year for a population of 30 million inhabitants; the supply is, instead, equal to 1,6 million m³ for year, with a deficit of 34%. To this, difficult climatic conditions are added, irregular pluviometry, obsolete nets of distribution with losses equal to around 30%/40% of the total water distributed. Therefore, the institutional actors have defined a full-bodies program of exploitation and transfer of the conventional and not conventional resources that requires important investments and asks for notable costs, not sustainable from the public subject by oneself. In this direction the sector of the water resources is object of deep reforms and, at the same time, of partnership projects, activated with foreign operators too.

In **Morocco**, currently the available water potential is esteemed to 20Md of m³ of which 16 million m³ of surface waters and 4 million m³ of underground waters. There is geographically an unbalanced division: the South and East are the zones less favourites and need the realization of important adduction system to allow the regional transfers. In urban circle, the production of drinkable water reaches in 1998 the 800 Mm³s, with a quota equal to 100 l/p/d in the principal cities (108 l/p/d Casablanca, 146 l/p/d Rabat, 112 Fès, 128 Tanger). The water requirements are in growth and it is estimated that in the year 2020 will reach the 1390 Mm³s. The politics currently sustained by the government has the tendency to manage the demand redirecting it, reducing the losses, protecting the qualitative aspects and maximizing the socio-economic strategies of use of the resource.

Also in **Tunisia** the characteristics of the territory determine problems of shortage and distribution of the resource with evident unbalances (60% located in the North, 18% in the Center and 22% in the South) and salinity phenomena. The water potential is equal

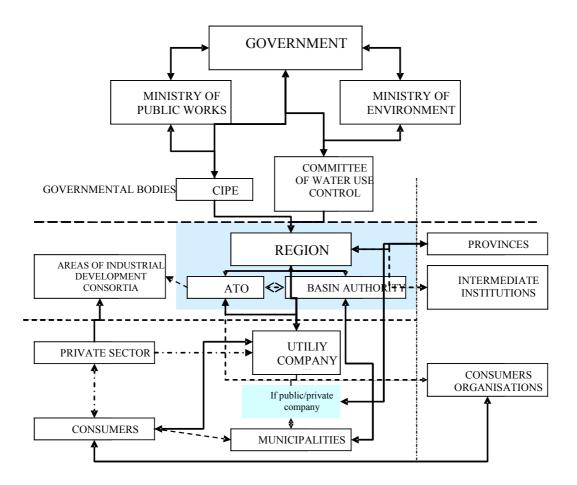
to around 4,67 Md of m³ of which 2,67 originate from the superficial waters and 2 from those underground. The water resources are mainly destined to the irrigation (around 80%, 15% for the civil uses and 5% for those industrial). The percentage of population that has drinkable water in 2003 is equal to around 94,5% (in the urban areas the coverage is almost total, in the rural areas 66% of population has direct access to the drinkable water while 34% makes use of wells and derived nets. The specific urban average consumption is of 85 l/p/d while in the rural areas it is of 28 l/p/d. Therefore, in the last 35 years for the public powers the exploitation of the resource has been central through investments equal to 40% / 65% of the budget of the Ministry of the Agriculture.

Departing from these premises, the second phase of the WP2 has foreseen, in collaboration with the partners of Maghreb, the carrying out of the empirical analyses in the select regions within the considered countries. The results achieved have allowed to trace the following schemes that underline the organizational system of the water services for every country as well as the degree of interaction among the various subjects involved in national, regional and local level.

In detail, it appears evident the distinction among the different levels: it shows a centralization upwards (central government), while in the intermediate level there is a limited number of actors according to the functions held. The level of base gathers, instead, an elevated number of actors whose role and whose functions result strategic but, at the same time, in the most greater part of the examined cases, "un-connected". Particularly, in Italy the water sector has been object of numerous interventions that has redefined the role of the involved actors at national and local level. The principles, that govern the division of the competences among central Organs, Regions and local bodies, attribute to the first general assignments (with value on the whole territory of the country) while the Regions have powers essentially finalized to the definition and realization of the regional laws and to the attribution of the assignments and the roles to the local bodies. If, in fact, it is reserved to the State the cornerstone role in the definition of the juridical and strategic pillars of the new system, the local powers are the principal protagonists of the implementation of the reform as well as of its supervision. The law Galli 36/94- law of the water sector resettling in Italy- is founded

on the separation between public and private of the ownership and of the integrated water service managerial responsibility.

Scheme of the relations among actor of the water resources management in Italy.



If, in fact, the public powers, particularly the local authorities, in addition to the ownership of the resources, have the responsibility to furnish strategic policies and to be supervisors of the system efficiency and the equity, the private operators assume the role of protagonists in the management but also in the realization of the investments and the innovations of the system.

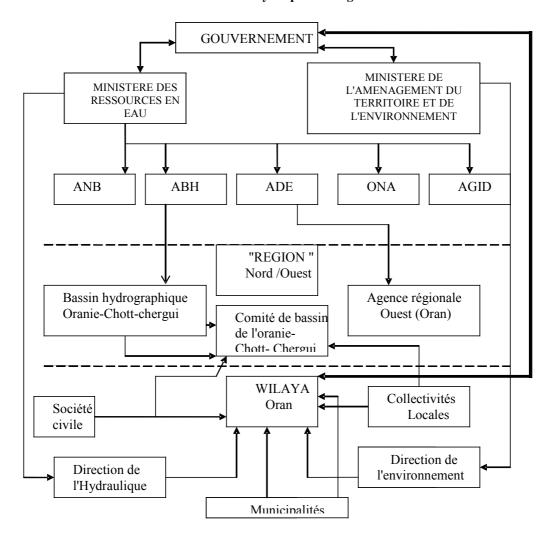
According to these first evaluations, the italian organizational model, founded on the principle of self-government, would induce to believe that the Regions are strongly made responsibles both for the adjustment to the qualitative standards, both for the achievements of water politics objectives. In reality, from the investigation conducted on the case study of the Campania region, it emerges, instead, a different picture, in

which specialistic and/or sectorial plannings have overlapped to territorial plannings of general character, often without establishing some useful ways of interaction. In the most greater part of the cases a plurality of decisional centers, of administrative procedures and control interventions, as well as of expense channels, often overlapped in incoherent way, have conducted to situations of conflict among the administrations, to uncertainty in the operators but, above all, they have engraved on the territory and on the same local communities, creating a discrepancy between the demands of the service and the satisfaction of the needs of the citizens.

Otherwise from the Italian case, the comparative study of Algeria, Morocco and Tunisia has underlined a preponderant role for the State, even if strategic differences must be noticed from country to country.

Particularly, the characteristics of the Algerian model underline a strong centralization and a consequent bureaucratization that prevent a real autonomy and attribution of assignments and responsibility to the competent local public authorities. In the actual phase, public powers are intensely operating on the restructuring of the water sector, mainly through the Code des eaux (promulgated in 1983 and amended in 1996) and its decrees of application. The priority goal is that to get a grouping of the activities related to the water and its uses under the guardianship of the *Ministère des ressources en eau*, in a gradual perspective of privatization of some segments of the activity. The empirical analysis on the case study of Oran confirms the necessity to intervene in the expansion of the local powers to support of the national politics, currently in phase of redefinition. In this context, the consolidation of the partnership policies, already partly inaugurated by the government, it constitutes an useful element to attract financings, both public and private, and to conceive programs and incentives finalized to the expansion of the education in the sector. Among the actors taking part to the mechanism of management of the water utilities, it is to notice, besides, the weak (or, some times nonexistent) presence of the associations of the consumers. This condition, in a key of multilevel governance, doesn't allow the necessary share of the consumers in the assumption of the decision. Therefore, it is translated in a weakening of the organizational structure that doesn't allow the correct realization of some of the sector politics, in terms, above all, of the community safeguarding.

Schéma: Structure du réseau des différents acteurs qui interviennent dans la gestion des ressources hydriques en Algérie.



Légende:

ANB: Agence nationale des barrages et des transferts

ABH: Agence des bassins hydrographiques

ADE : Algérienne des eaux

ONA : Office national d'assainissement

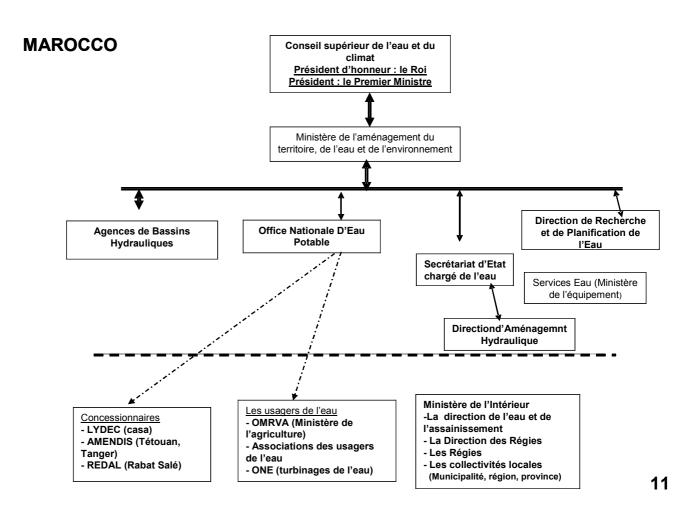
AGID : Agence de gestion et de réalisation des infrastructures pour l'irrigation et le drainage

Note:

- Le comité de Bassin de l'Oranie Chott- Chergui est composé de 24 membres dont des présidents d'assemblée de Wilaya, des présidents d'assemblées communales, des représentants du bassin hydrographique Ouest et des représentants de la Société civile.
- Le wali représenté par la Wilaya est le représentant du gouvernement à l'échelle locale d'où la flèche pleine

Concerning this, the cases of Morocco and Tunisia appear different. Particularly, in Morocco the community and consumers representation is provided, according to the legislation of reference founded on the new water law n° 10-95, adopted in July 1995, both at level of the great basins and at provincial level. In the case of the *Agences de*

Bassins Hydrauliques, that act as catalysts of the management at regional level, the users representatives have involved, testifying the passage from a "administered" management of the water to an "agreed and concerted" management that allows to draw the widest benefits from the water use. Instead, the Comité technique de l'eau, an "administrative" place of local agreed planning, foresees the presence of the local community so that the same inhabitants of the interested communes can express their own suggestions and claims with the purpose to facilitate an integrated planning of the water resources at regional level. Moreover, the same role of the Comité technique de l'eau assumes an increasing importance in the management of the resource also at national level, through the elaboration of the Plans de développement intégré des ressources en eau des bassins hydrauliques and the Plan national de l'eau. These accomplishment tools can periodically be revised according to the needs of the territory, also on the basis of the community recommendation.



The empirical study on the Souss Mass Drâa Region underlines as the characteristics of the Moroccan model are assimilables to the Italian case whereas the start of collaborations with the local subjects doesn't put aside from the view of a resource integrated planning at level of the basins. This with the purpose to be able to guarantee the preservation of the territory, to assure useful interventions, to avoid and to prevent technical difficulties, as well as to realize an effective transfer of resources from "surplus" zones to zones showing a water deficit. It is necessary, nevertheless, to underline that an opportune work of users sensitization would support, in effective way, the efforts realized for the development of the participation model; in fact, from the analysis it emerges that there is a diffused lack of information on the same mechanisms of functioning of the representation organisms.

In Tunisia, the State still has a strong role in the water politics definition and it is considered central in the amplest context of the sustainable development. Nevertheless, the non governmental organizations play a role of privileged interlocutors between the central authorities and the community.

Particularly, the Tunisian case study in the regions of Gafsa and Tozeur is characterized by a condition which come up often in the other countries with a shortage of resources: the experimentation of politics that destine the water resources to those sectors resulted more productive. In Tunisia, not by chance, the attention of the public powers is turned, above all, to the support of the agricultural sector, with particular reference to the crops that maintain an elevated market share for quality and quantity produced. This factor has induced to experiment, besides, crops in greenhouse, to the detriment of the quota of water resources destined to the other uses. Therefore, in the sector of the water resources destined to the human consumption there is the distribution of de-salted water that asks for elevated costs of production. Particularly, the Tunisian government has privileged the coastal areas with a strong water consumption because of the tourist and industrial structures location. These politics has aimed to strengthen the use of innovative technologies and to introduce mechanisms focused on the water saving through the definition of master plans. In such context, the role of the local public authorities, that we can defined of average intensity in relationship to the other cases study analyzed, can essentially be considered of coordination between the national and

local level. The role of the consumers associations, consolidated by a long historical tradition, appears conclusive and it has been institutionalized by the national laws. The Tunisian associationism constitutes, in this way, a specific and characteristic phenomenon that mirrors the country demands of change. In fact, Tunisia, also respecting the agricultural vocation of territory, pursues objectives finalized to the passage by a water management administered to one participated. The phenomenon still appears more interesting if we consider the importance of the Associations in the definition of the water politics. The water policy, in fact, foresees, to the goals of an effective use of the resources, a narrow coordination between the public powers and the Associations, in the circle of an extensive program that aims to involve the consumers in the management of the common water patrimony. The participation model proposed is based on the opinion that the heavy investments sustained by the government can be valorized and, at the same time, preserved thanks to a rigorous management in which the consumers themselves have called to intervene.

Nevertheless, the empirical analysis in Gafsa and Tozeur have allowed us to conclude that, even though the Associations offer a best formula of management and assumption of the decision, they remain lacking in the technical support, in the regulation and in the control. Also in Tunisia it appears opportune, therefore, a greater sensitization of the associates and the citizens on the strategic role of the Associations with the purpose to guarantee a more effective division of the assignments among the different subjects. In conclusion, it is necessary to redefine the attributions in the general interest, to clarify the different responsibilities, to develop the initiatives and the measures favouring the complementarity between the roles of the State and of the Associations.

Glossaire:

DGGR: Direction Générale de Génie Rurale

CRDA: Commissariat Régional de Développement Agricole

GR: Génie Rurale

AIC : Association d'intérêt collectif

Légende :

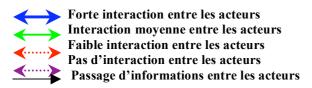
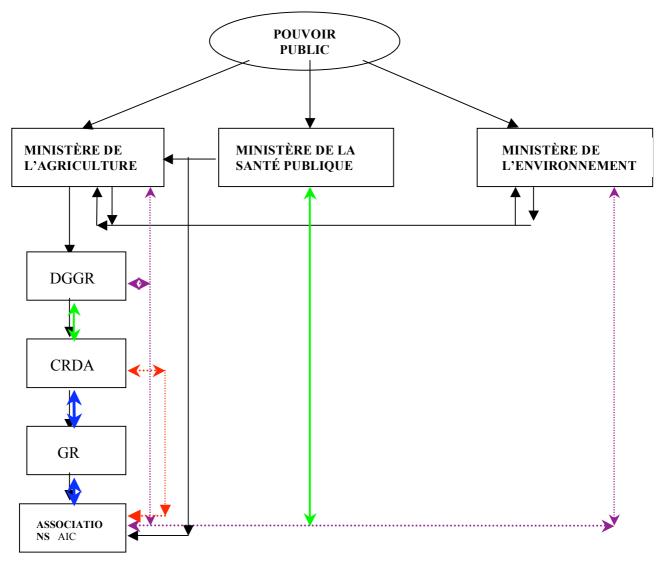


Schéma du passage d'informations et des relations entre les acteurs en Tunisie



As regards the State, the comparison underlines in the Italian case a role rather of supervision, while in the Maghreb countries the role of the State is still strong, because of an excessive centralization or a process of decentralization not yet fully realized. This consideration is confirmed by the data on the local authorities role: it is a strong role in Italy (even if, sometimes, it doesn't express itself at the most of its capacities), remarkable in Algeria (but poorly effective), in expansion in Morocco and Tunisia where the State has the tendency to decentralize all or part of its functions. In the comparative analyses it appears interesting the data on the consumers associations that underlines the different importance given to these subjects in Italy and in the maghrebian countries.

MANAGEMENT: ACTORS AND ROLES

Country Characteristics	Italy	Algeria	Morocco	Tunisia	France	England	Germany
Role of central government in the management of water services	Crucial: Supervision and definition of strategies to regulate and manage water services	Strong: High bureaucracy and centralisation of decisions	Strong: Regulate and define mechanisms of negotiation between regions and users	Strong: Planning and definition of a policy of sustainable development	Very Strong Ministries have a relevant role, among them Ministry of Environment and the Water Department	Authority Supervision role due to the fact that the sector is largely in private hands	Medium Due to the strong role plaid by local communities
Role of Local Government	Very Strong Often there is little knowledge of the given opportunities given by national laws	Relevant but of little impact Little decision-making power, just consultative power	Increasing Planning, monitoring, implementation and management	Medium Coordination between National and local government	Little Due to central gov. Role.	Little due to the fact that the sector is largely in private hands	Very Strong Each Länder has control and management authority on water resources
Role local actor	Forte: Private sector inter act with local government via private-public consortium	Important Definition of regional policies –technical operation and management- Under the supervision of central government	Strategic, Responsible for investment and management of water services as well as for relations with users	Limited Universities and civil association are consulted (mainly for sectoral studies)	Consultative Both at central and local level	Very Strong The OFWAT include both local actors and strategic partners	Very Strong Wasserverbande (Local association) manage water services at local level, they are formed by both local, public and private actors
Role consumer association	Very Little	Little Civil society is represented but has little impact since any decision is under government supervision and control	Relevant Users consulted in the elaboration of actions to solve management problems.	Relevant Substitute public powers, which keeps supervisory control	Consultative Both at central and local level	Relevant Present in OFWAT	Very Strong Present in Wasserverbande

MANAGEMENT SYSTEMS: FINANCIAL RESOURCES, STRENGTHS AND WEAKNESS

Country Characteristics	Italy	Algeria	Morocco	Tunisia	France	England	Germany
Financial Sources	Very important the role of European Funds (QCS). Increasing methodologies of PPP and project financing	Public Funds Increasing involvement of private sources, also foreign actors, through partnership and outsourcing of management activities	Public Funds Increasing involvement of private sources especially in the infrastructures construction	Public and Private Funds Mainly Obtained via payment of AIC associative quotes Direct Public Fund in specific cases	Public Funds As result of public management of water services	Levies Paid by private company managing water services (based on annual Turn-over)	Tariffs Paid by users
Weakness of the system	Little dialogue between public institutions and other sectors. Private sector little funds contributions (mainly involved in management) Civil Society and users involvement very scarce	Excessive centralisation and little involvement of civil society in decision power	Little knowledge of users of the way community associations operate hence underutilisation of them despite opportunities given by legal system	AIC operate only partially still important the use of public sector Important to strength complementarities between public sector and consumers	Strong bureaucratic system Little use of local actors, Inefficiency due to duplication in the use of financial resources	Cases of lack of coordination at national level	Tariffs very high paid by users
Strengths of the system	Public propriety and supervision should ensure equity in the use of resources. The distinction between public and private sector, with the institutional aspect dealt by the former and the management by the latter should increase local actors governance skills	Strong possibilities of decentralisation at decisional level in favour of regional structures Strong possibilities for local communities to get involved in the implementation of projects co-financed by foreign actors	Despite strong public control, consumers associations become partners with public sectors especially in agriculture sector	Participatory approach has the advantage to share "responsibilities" of management with users and ensure a more strict control of resources	Effective coordination between regional and national policies in the economic, social and environmental sectors	Strong participation of local actors. Strong level of efficiency in water services Good public-private partnership	Excellent quality of services offered Excellent level of involvement of local actors Good public-private partnership

In the scheme above it is underlined, instead, the principal sources of the different financing systems, that record a common trend to searching and employing funds both public and private. The different countries, however, used unlike methodologies, in confirmation of the different ways, realization's times and maturity of the privatization processes in progress.

As regards the management models, among their points of weakness, it is underlined once more for **Italy** a dialogue full of gaps between the institutions and the other subjects, as well as an involvement nearly empty of the civil society and of the consumers, for **Algeria** the excessive centralization and the scarce contribution of the civil society and the consumers to the formation of the decision, for **Morocco** the scarce knowledge from the consumers of the rules of the category associations, whose impact stays weak in comparison to their potentialities, attributed by the legislation, for **Tunisia** the necessary appeal from the associations to the public powers in some activities tied up above all to the equipment maintenance, a problem connected to the vocational training and the high cost of the system, not completely covered by the water rate. The strong points of the management systems adopted, instead, are fundamentally tied to the model pursued that it is for all the considered countries a potentially participative model.

To the light of the preceding reflections and the developed analyses, it can be affirmed, in fact, that, also in presence of governments that have adopted different ways of water resources management, however, at general level, it is recorded a common trend in the pursuit of strategic lines for:

- ➤ to optimize the demand management, with the purpose to avoid wastes and to valorize the possible synergies of use;
- ➤ to improve the supply in terms of quality and safety, through practices of efficient and effective management, technological innovation etc.;
- ➤ to act on the managerial capability of the local actors through a specific vocational training of managerial staff and a greater sensitization of the consumers;
- > to consolidate the nets of relationship among public and private subjects;
- ➤ to better define the role of the government, strengthening its functions of address, support and control.

Therefore the long-term priority objective of such strategies seems to be that to effect, in the management of the water services, a strength model of multilevel governance.

To this intention, nevertheless, the conclusions derived by the observation of the empirical data induce to underline the distance between the politics and the routine procedure, a distance recorded in all the considered countries, even though at different levels. It must be to attribute, in the most greater part of the cases, to a lack of coordination among the public and the private, the central and regional or local level, that appears essentially due to a scarce or nothing definition and understanding of the respective functions and ways of relationship. This factor frustrates a series of politics focalised on the territory also whereas, as in the Italian case, the legislation founds the whole model of management on the principle of the self-government of the regions, or whereas, as in the case of Tunisia or Morocco, the local authorities and the consumers associations have a aggregation and representative function of extreme importance, becoming the direct interlocutor and the "shuttle" for the realization of the local politics.

6. Local practices for the innovation process: networks between international and local institutions (WK3).

The third workpackage, intended to analyse local practice of innovation diffusion in selected regions of the Maghreb and the connections between international networks and local intermediate institutions. It aimed at:

- individuating institutional mechanisms ands social practices to manage and develop knowledge in the considered regions;
- analysing the relationships between academic and entrepreneurial systems, with particular reference to academic spin-offs and the civil society participation.

In a more precise manner, it intended to conduct an empirical survey on a sample of innovative SMEs with a leading role in their own either sectorial or local SMEs clusters and with well-established co-operative work with others involved actors.

The main results have achieved to a great extent these targets with regards to the two major components of the research conducted:

-the existence of networking dynamics amongst firms at the local level and to what extent this helps knowledge diffusion and innovation

-the role of intermediate institutions in the process of local governance.

They show in the case of Italy that weak relationships exist among interviewed actors and the other district firms; namely the absence of co-marketing policy with the suppliers with some exceptions such as one which carries out a control policy on the raw materials; absence of a common strategic policy of buying technologies. The firm that appears the most isolated in terms of relation with the other firms and with institutions and associations considers the relation with the other firms only in terms of competition on prices. Not surprisingly this firm works mainly on the commercial distribution (with its own brands) of cans produced by other firms of the district, and its innovations are only devoted to machineries that allow to save in terms of employment. On the opposite side there is the case of the most influential firm in terms of its turn over, number of plants (3), number of employees, which appears to be very well linked with a huge number of firms in the district (so that it could be defined a node of a network) and strongly active in Associations and in the relations with the institutions. A company that produces exsiccated plants that are bought by tomato-preserving industries appears to be a very innovative firm in terms of environmental impact, preservation of the typology of productions and quality, despite the small industrial dimension. Not surprisingly, it is a well connected firm in the local network, and it is very active in Associations, Consortia and in the relations with SSICA (see below).

Particularly, after our on-field investigation we had the impression that all the actors contacted are aware that the potential of the network is strictly related with the growth of cooperative attitudes and propensity to informal relations. Nonetheless, we had the worrying impression that the current relationships among the interviewed actors and the other district firms tended to be quite weak (sometimes even beyond the official declarations of the enterpreneurs).

These doubts are a strong incentive for a future refinement of the research: it would be interesting to check for the validity or the generalizability of many of these information for a wider sample of firms; and it would be moreover interesting to articulate a parallel

investigation where the other relevant actors of the territory (intermediate institutions, political bodies, civil society associations, banks, etc.) are contacted. All these crossing information would certainly be the basis for a better understanding of the relational resources of this area, and of the development perspectives.

Another interesting line for future research would be trying to understand the consistency of the presence of "groups of enterprises" in a district area where we could ideally imagine the co-existence of small and medium independent, autonomous firms whose economies are not scale economies, but agglomeration, marshallian economies, due to cooperative attitudes and "industrial atmosphere".

Actually, we know that a big corporate operates in the district (La Doria, actor 3), in fact, on average, a percentage of 5-6% of the sales of the whole district is due to the actor 3. This percentage of course increases until 30% for the district firm shared by the actor 3, such as the actor 23 (as it is estimated by actor 23 in our interview).

Furthermore, the strategy of La Doria is acquiring a majority sharing in those firms which are considered as strategic suppliers, with the aim to exert a stronger control on local supply chain. Probably this corporate governance policy explains the weaknesses of the trading relationships inside the district between the actor 3 and the other firms not shared. A deeper investigation would be crucial for understanding if a network cooperative attitude could be prevalent in this area, or if a concentration (via sharing and control policy) in the hands of La Doria and probably of other few relevant firms (AR may aspire to play this role) could design other strategic paths.

In **Sfax** (**Tunisia**) local enterprises cannot operate in isolation but are closely connected with their own environment. Those that have engaged into intense interactions with the environment were in a better position to face that challenges put to them. Their integration into existing networks gave them the possibility to identify opportunities for innovative activities. They were in a better position to solve part of their problems and

Italy », in the recent volume edited by Cainelli and Zoboli, *The Evolution of Industrial Districts*. *Changing Governance, Innovation and Internationalisation of Local Capitalism in Italy*, Physica Verlag, 2004).

Important studies on the topic have been pursued by a research group coordinated by the CNR Institute « CERIS-DSE » in Milan, and by a research group based in the University of Ancona (see Brioschi, Brioschi and Cainelli « Ownershio linkages and business groups in industrial districts. The case of Emilia Romagna » and Iacobucci « Groups of small and medium-sized firms in industrial districts in Italy », in the recent volume edited by Cainelli and Zoboli, *The Evolution of Industrial Districts*.

overcome their handicap in technological innovation in the sense that they increased their capacity to acquire disembodied technology, to planning, design and training.

In Morocco, in the agri-food industry in Souss-Massa, relationships within networks exist and a case of a local productive system is found in one situation working under the form of a cooperative organisation, (COPAG) in charge of cattle breeding. Its main features are a relatively high membership, an integration of all categories of actor, a relatively good internal organisation, a strong identity link with the territory and integrated channel of production, processing and commercialisation of their produces. This example shows that LPS are perfectly within the realm of Maghreb enterprises and by no means is an utopia. With a strong will and a minimum of institutional conditions, other enterprises should be able to improve develop similar set-ups in order to improve their competitivity and their innovative capacity, their bargaining power while creating employment, and improving the working and living conditions of their employees.

This success story is not found in other sectors, notably in agriculture. They cannot be considered as Local productive systems even if their development led to a real transformation of their territory through employment creation and the upgrading of the productive capacity of several local units to become amongst the most efficient agricultural units in the country. Their shortcomings are that several of the members of the production set-up do not originate from the territory and a significant share of the produces are commercialised outside the territory. Consequently, the effects of these sector on the improvement of the economic and social conditions of the local populations remains relatively limited.

The different enterprises of the agri-food sector could greatly benefit from the success stories such as the cooperative *boards*, which could be assigned the same types of missions (logistics, insurance and transportation, sharing of quotas etc.), or broaden the scope of their intervention and the type of instruments they mobilise. They could notably encourage informal and social relations, which proved to be and important vehicle of confidence and spontaneous cooperation. This is necessary for the strengthening of the networks and the creation of further closeness (organisational, cognitive and cultural) amongst the enterprises of the sector. This contribute on the other hand to the strengthening of their bargaining power both internally and externally and a better coordination from and organisational and temporal point of view.

In the case of the agri-food SMEs in Algeria, the field investigation shows that elements of networking exist nonetheless, enterprises are not integrated into completed networks, and in the process of building. Relationships with other enterprises and other institutions are not fully established and are not sufficiently dense. The greatest part of the relations in the would-be network are market relations notably through subcontracting, the rest being based on information exchange and joint projects. Training and exchange of know-how which are essential for any innovative activity are strangely missing. Consequently, the competitive behaviour of local enterprises appears to have inhibited collective action which are fundamental for handling the risk which any innovative action needs.

With regards to the role of intermediate institutions, the situation differs greatly between Italian and Maghreb situation. In Italy, in general, all the interviewed actors describe a weak presence of the public institutions (even if most of them receive public money in terms of incentives, funds for de-localizing industrial plants, etc.); but the existence of several Associations and of formal and informal relationships among them seems to play a really effective role in terms of development of innovative potentials. The example of SSICA (Experimental Station for the Industry of Preserved Food) is the place where Consortia of firms and the representative Association of the sector (Anicav) meet regularly. In the opinion of many entrepreneurs, this organization could play a stronger role for innovation if it will become autonomous from the Parma branch. The potentialities of SSICA also regard the environmental questions (to make clean the Sarno river, the most polluted river of all Europe). More generally, all the actors are aware that the potential of the network is strictly related with the growth of cooperative attitudes and propensity to informal relations. The hopes for the future appears to rest on the possible improvement of the relations with Universities and with other intermediary organizations, via the Regional Centre of Competence in the agro industrial sector (Salerno).

In the case of Sfax, the contribution of the various intermediate institutions to the innovation process varies according to the actor. The most powerful is the contribution of the bodies which are geared towards providing assistance and support to promote

innovation, These bodies are often public institutions and their role differ (ministries, technical centres, chambers of commerce, universities, export promotion centres etc). These bodies constitute a real knowledge accumulation centres where local enterprises can find ideas, competences and know-how and undertake projects more in line with their needs. These are mostly universities, technical centres, publics research centres and they all provide the necessary competencies to the innovative SMEs. This strengthens the idea that the opening of SMEs towards outside partners enhances the possibility of taking advantage of their innovative potential and their technological competencies. Hence the need to promote networking and external partnership.

In the Moroccan case, the role of intermediate institutions, notably local authorities is not negligible. They have to succeed their own restructuring, and to play a key role in the diffusion of 'best practices', success stories on top of their conventional role of developing public services (roads, ports, airports etc.). The political choice of strengthening local and provincial authorities is implemented through the modification of the local election system, the creation of autonomous technical capacity of local counsels to draw their own development plans and a real financial autonomy. This is also done through the experimenting and generalising very rapidly mechanisms which helps reorient the tasks of external public services at the provincial level towards a more efficient technical and financial support to local and provincial authorities.

This appears as one of the necessary condition for intermediate institutions to play a more dynamic and more efficient role in the structuring, the management and the promotion of networking, LPS, etc.

The achievements and the difficulties met by the different associations and professional in putting up joint innovation projects stress the need to put the emphasis on changing both individual and collective mentalities and the restructuring of institutions which favour these changes. Governance problems of networks stress the need to favour all that facilitate coordination and promotes cooperation between private, public and other types of intermediate institutions in order to stimulate and to give the necessary support to research and innovation of enterprises and their competitivity. The numerous limits of existing structures relate much less to human and material resources and more to organising and mobilising capacity. Finally, professional associations are more and more aware of the need to mobilise their members for innovative projects and are

getting them more sensitive to the need to take part to fairs and exhibitions and the modernizing of their management tools and practices.

In the Algerian case, observed networks are considered as incomplete and 'poor' in terms of the complexity and the richness of the relations between economic and institutional actors. The results show clearly the omnipotent role of the owner (boss) of the enterprise who manages on his own the whole set of relations with the other partners. The weakness and often the absence of the role of intermediate institutions (chamber of commerce, trade unions, local councils, Universities locales, research centres etc) in influencing and promoting innovation activities is quite endemic with the exception of central government (the State) and some private bodies. Consequently, Governance of the innovation process remains fully centralised and need to incorporate gradually local actors and institutions.

Informal relations appear to be relatively important in the conducting of business as a result of complex institutional environment which is not highly conducive to exchange of flows of capital, knowledge, know-how and immaterial asset in general. While informal ties gives good opportunities to develop friendly and trustworthy relations, which are undoubtedly necessary to the innovative process, it does not go towards strengthening formal and contractual relations required by the market. Thus informal ties appear to be simultaneously the source of trust and suspicion.

Networks are mostly of the local type and sometimes regional. This is the result of network members to favour close relations which are better guarantee for maximum trust in an environment where mistrust tend to prevail, mostly due to the commercial character of the relations.

In spite of the friendship, solidarity and the drive to help the others which are often proclaimed by the various enterprise leaders of the network, mistrust appears to be the dominant feature. This could constitute an important barrier to cooperation and efficient partnership for the development of the network. The major sources of conflict include the fear of the actors to see the other party little respectful of its engagements and the terms of the contract. This is an important aspect as it translates dimensions related to the legal instrument in the setting up and functionning of the network.

Findings and conclusions

During the development of the project INGO-MED the final objective was to verify the presence of a governance process related to public utilities management and to innovation diffusion in the countries object of the study. In a positive case, it was necessary to decode strengths and weaknesses and to highlight, within the existing dynamics, the role of intermediate institutions. To this aim, a theoretical framework has been suggested: the one functional for identifying the conditions necessary to activate a governance process related to water services management and innovation diffusion in the agri-food sector. A preliminary methodological note and a global policy indication are the first conclusions. The methodological note is related to the underlying query and concepts, which are somehow the preliminaries to the creation of the theoretical framework: What kind of governance shall we consider? How much has governance been effective in the MPC? How could constraints and barriers to local economic development be overcome in MPC?

Generally, with respect to the concepts, it is necessary to make an introduction, noticing how the appropriation of elaborate concepts at an international level needs not only an information global system able to move all the interested parts at a national level – through information's transfer and sharing –; but also – upstreams – an even and representative participation to the drafting of such concepts. As a matter of fact, this participation – through the aim to find a common language and common meanings – becomes the mean to guarantee the adherence to the very concepts.

So, our methodological indication is favourable to an inductive approach in the creation of a theoretical framework based not only on the information's collection, but also on the knowledge of some relevant matters deriving from the local contests themselves.

Starting from these premises, the methodological approach used aimed to – as its first aspiration – a scrupulous research of information and available data concerning public utilities' management, with particular reference to water supplies and innovation's diffusion in the countries object of this study. To that end, surveys and researches - coming out of specific studies, able to outline a first identification of the local governance procedures - represented a very useful element in this work's start-up phase.

Although, these first sources led to excessively broad acquaintances, therefore insufficient for our work's purposes.

This project's objectives could not disregard the scientific and cognitive approach, coming out from the work's empiric phase, that had to be done in the regional contexts chosen as study cases. Meetings *in situ* represented a decisive occasion to establish a *vis-à-vis* relation with local partners and institutions, and – besides other things – to make them aware of the project's themes. Among the results, not least has been to obtain precise indications about institutional dynamics, which join into policy-making local processes related to this regard. We also collected technical information about institutional organization charts (Ministries, municipalities, appointed specialized agencies) and about political management different aspects of the examined sectors (centralization/decentralization, interests' coalitions, responsibilities committed to local boards).

From the empirical analysis some interesting hints – related to policy's new directions of water sector in the Maghreb countries- emerged. With no doubt, a newness factor is the Government's gradual disengagement in this sector, that reveals itself through the appointed management of public services to private operators and through the creation of autonomous public industries. To this regard, the case of Casablanca in Morocco seems to be very meaningful. After two years of negotiations, the council of the *Communauté Urbaine de Casablanca* (CUC) decided to give to a private consortium (leaded by *Suez Lyonnaise des eaux*, named ONDEO) not only water distribution and depuration's management, but also energy supplies management within the CUC perimeter and 13 peripheral municipalities. LYDEC – *Lyonnaise des eaux de Casablanca* – born in 1997, thank to an appointed management's agreement, represents the first case of this kind of agreement in the Maghreb area. Doing so, CUC appointed to the private sector investment's realization and services' management, saving for itself the role of fixing the overall interventions' objectives, with the aim to:

- Carry on a long terms vision and a planning intent for a better development of Casablanca urban area;
- Improve life conditions of this city's inhabitants, thanks to an optimisation of water resources and supplies management;
- Make use of external investments and shorten interventions' length;

• Benefit from know-how and technology's transferral put at disposal by LYDEC. As the case of Casablanca clearly shows up, policies and devices are up to the individual municipalities, often oppressed by such a load of responsibilities. Consequently, the lack of specific expertise and of necessary infrastructures usually leads municipalities to appoint this sector to external groups or institutions.

Also the case of Tunisia is very interesting. The juridical tool to manage water resources – *Code des eaux* – inspired to muslin and consuetudinary legislations, introduced fundamental directives such as the water public ownership, the central role of Government in planning, the introduction of water economy concept, etc.

Besides, Tunisia is one of the few Mediterranean countries which elaborated a national policy for recycled water, mostly used in agriculture. In summary, among the priority actions that Government undertook to face water emergency, have to be mentioned: water quality checks; solid waste pollution prevention; industrial waste infusion's reduction; treated waters use's limits in the hotel industry. In order to achieve a deeper consumers' sensitisation respect to water issues, very intensive advertising campaigns have been undertaken. Also, with a very positive contribution of the *Ministère de l'Agricolture et des Resources Hydraliques MARH* and of the Associations, vigilance committees at a regional level have been created. These group together the outside private technical services related to depuration, regional authorities and trading association's representatives.

The vigilance committees make sure that water shares allocated to different sectors are respected, they check over water leaks in the net and watch over all the implemented standard at a regional level. Local Agenda 21's experience in Tunisia surely showed the way to a larger and more structured participation of local communities with different levels of public administration, such as individual municipalities, regional levels and central Government reporting members, represented by the *Comité de Pilotage local* (CPL). Nevertheless, this is a newborn way and shows clearly its experimental levels, so the success margins are very different depending on the different local contests.

It is also very important to keep in mind that the four analysed countries, even if with different timings and procedures, undertook deep institutional and juridical reforms regarding water services' sector. They also have been undertaking - during the last few decades- revisions related to organization, revisions that deeply changed the scenarios

and the actors involved in this management and altered their relations' system. These reforms' application, although, is still rather recent and in progress, and this has to be carefully considered during the evaluation phase.

The tendency to decentralise functions related to water services' management turns into a deeper issues' consciousness at a local level, even if local institution (overall this is the case of Maghreb contries) complain about a scarce financial autonomy, and, in some cases, about the virtual continuous predominance of central Government. Other intermediate institutions' role also appears to be weak, particularly the consumers' associations one. Even having a very important function – legally sanctioned – of aggregation and representation, virtually the consumers' association do not completely practise it, especially in terms of decisional power.

This evolving scenario maybe is the right one to establish international partnerships able to lead partners of the Mediterranean countries to gain greater ability in ruling water resources management and, through the resources' actuation in an international area, to go beyond the limits imposed by funds' lack at national and local levels.

About governance and innovation, the theory and evidence from four different productive areas in Italy and Maghreb countries underline the importance of the relational capital concept. Relational capital is -in fact- defined as the set of all relationships-market relationships, power relationships, cooperation-established between firms, institutions and people, which stem from a strong sense of belonging and a highly developed capacity of cooperation typical of culturally similar people and institutions. Therefore in the project much emphasis has been put to determinants which are external to the firm and refer to the positive externalities that firms receive in terms of knowledge from the environment in which it operates.

To this respect, the undertaken analysis highlighted how in all the examined cases the priority objective to reach is the reinforcement of research and innovation partnerships between public structures and private firms in a key sector such as the agri-food one. This, for the consumers' tutelage, considering that today very upsetting questions about food's quality, authenticity and safeness are arising. Another important related issue concerns making more consistent research and cooperation's actions. As a matter of fact, both the identified nets and governance processes that characterize them are still in the making and typified by a relatively "poor" system of relations, in terms of

complexity and richness, between economic and institutional actors. More in general, we monitored the weakness, and sometimes the inexistence of the intermediate institution role in influencing and stimulating the innovation process. In terms of impact – even noticing the exception of some isolated cases in the actions of central Government and some private organization – the difficulties found to realize innovation common plans underline the need to focus on individual and collective mentality's change and to consolidate structures and institutions able to support this change. In this perspective the network expansion becomes very important, since, in most cases, it is blocked at a regional and local level; and so are the density and the diversification of the relations, that in most cases are informal, not structured and principally based on trading. Therefore, it is necessary to joint the concept of space proximity to the concept of relations proximity, where knowledge sharing and innovation diffusion are tied to language sharing and therefore to the existence of a "code" more than a spatial localization.

To this regard, for as much as it concerns Maghreb countries, the awareness of the strategic value -with the objective of innovation- of knowledge and, mostly, of information has conducted to establish the State Secretariat of Telecommunications and Information Technologies in Morocco and the Industry Promotion Agency in Tunisia. This last aims to collect different kinds of information and to distribute them to all the operators, using a great variety of communications means such as bulletins, internet, intranet, e-mail.

This agency owns a data bank containing 9300 companies and realized about 10.000 "researches- actions". Besides, two years after its creation, Government launched a plan to realize within it an "Economical Information System", with the aim to collect strategic information related to all the activities of Tunisian firms and to register the main tendencies of international economy. In the same way, this project aims to provide SME with specific information regarding the national industrial sector, so that all the Tunisian firms might evaluate their strengths and weaknesses, comparing themselves with their foreign homologous.

Definitely, the key idea expressed in INGO-MED development is that a governance process to be effective has to be perceived not as an exogenous imposition, but as a reflection of an endogenous process of mutually shared behaviours. So that, to result

fully functional to its economic development policy's objectives, it has to promote from the bottom diffusion mechanisms and incentives system in order to induce actors to bear maintenance costs for the implementation of the opportunities' sets mainly shaped by strategies. The cost is represented by the sacrifice of the economic agents and other actors to converge and sustain cooperative behaviours, either giving up or mitigating opportunistic behaviours. This undoubtedly seems to generate a trade-off between actual individual performances and social future performances. So we stand for the essential integration of the themes related to governance mechanisms in the development's drivers. The themes' horizontal mainstreaming in the different development sectorial policies have to be matched their mainstreaming on planning and implementation different levels (local, regional, national, international) in an integrate way. As a matter of fact, interdependence ties all the spaces- from the local to the global one- up in one system. So it is necessary to act simultaneously on the interconnections of all these space regions. It comes from here the importance of the interaction among the international Community, the National Governments and the local authorities in a multilevel governance. To this note are attached some policy's general indications, finalized to identify the appropriate strategies and support standard in order to implement successfully the governance objectives at a local level in respect of the real structure of our case studies, characterized, on one side, by planning abilities and isolated cooperative behaviours, on the other, by negative externalities.

One of the policies standard to support efficiently from the bottom the governance implementation process refers to take steps as: tools and interventions to generate a change in the cognitive sphere of the actors; tools to favour information's diffusion and knowledge related to efficient practice's transferral; tools to promote cooperation; educational tools to improve both capacity building and managerial competences. The composite combination of these immaterial resources represents the policy production factors and therefore the maintenance costs of the efficient implementation of the governance process. A further policy indication deriving from our study- cases is that even if they would configure as exemplifying of the best practice in a national contest, they represent the well known problems of a governance model exportability, reinforced from the fact that, generally, the condition for success is tied to a leadership

conditioned by the context situations, provided of specific experiences and strongly motivated (history role).

In the end, for an efficient governance implementation the actors' socio-economic game identifies two elements that have to act simultaneously: institutionalised connection and actions' complementarities. Institutionalised interactions refer to strategic coordination of individual actions in different game's domains, through these interactions are produced externalities deriving from actions complementarities.