

## **The River Contract of the Tiber from Castel Giubileo to the Foce: An Innovative Practice for a Relationship between Tiber and Rome**

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**KEYWORDS:** *Tiber; Urban Landscape; Public Space; Sustainable Use; Active Participation*

### **ABSTRACT**

*The River Contract is a little-known practice and an unconventional planning procedure but an opportunity in many Italian Regions to overcome the problems of coherence between levels of Government and to promote participation. The River Contract is a voluntary agreement of strategic and negotiated planning, aiming the protection, proper management of water resources, recovery, and enhancement of the river territories, together with flood protection, contributing to the local development of such areas. In 2017, in Rome, started the procedure for the River Contract by Agenda Tevere Onlus. This paper illustrates a practice-oriented research built by multidisciplinary approach and a method able to mix cultural and participatory knowledge. Because the Tiber is the river of Rome, the research aims to raise the possibility of enhancing the strategic and fundamental role of the Tiber in relation to the City through four key issues: the urban landscape, because the Tiber is intrinsically related with the city; the public space, because the Tiber must be a good of the city; the sustainable use, because the Tiber must be for the city; the active participation, because the interventions on the Tiber must be shared in the city by those who live and work in Rome.*

## **INTRODUCTION (A. Galassi)**

“... Fresh water is a finite and vulnerable resource, essential to sustain life, development, and the environment .... water development and management should be based on a participatory approach, involving users, planners, and policy makers at all levels .... water has an economic value in all its competing uses and should be recognised as an economic good...” (Solanes & Gonzales-Villareal, 1999).

Water is a limited resource, and human beings can change, sometimes with drastic variations, its quality and quantity, changing the source’s related ecosystem. To avoid anthropogenic excesses and to protect the source itself as well the entire life system that it carries on, in 2000 the European Union decides to introduce a whole and innovative range of specific definitions, objectives and strategies regarding various aspects of water management, in order to prevent qualitative and quantitative deterioration, improve water status and ensure a sustainable use of it, based on the long-term protection of available water resources (EU Water Framework Directive - WFD 2000/60). In the same year, during the Second World Water Forum (2000), the first definition of River Contract was proposed. Such definition recognized the River Contract “the tool able to adopt a system of rules in which the criteria of public interest, economic performance, social values and environmental sustainability are equally effective in finding solutions for the redevelopment of a river basin” (Brun & Lasserre 2006). In 2007 another EU Directive established “a framework for the assessment and management of flood risks, aimed at reducing the negative consequences for human health, the environment, cultural heritage and economic activities...” (art. 1)<sup>1</sup>. From the set of these laws, originated from the pressing need to protect and safeguard the system of European water’s Basins, raised a lot of different tools for an integrated and interdisciplinary water management, including the tool of the River Contract (Meire and others 2007).

## **AN EUROPEAN BOOST FOR ITALIAN RIVER CONTRACTS (A. Galassi)**

The first River Contract took place in France at the beginning of the 80’s (Scaduto, 2017). In France the River Contract was defined a territorial water management tool for the rehabilitation and enhancement of aquatic environment, instead today, the *Contract de Rivière* it is one of the instruments of the most complete *Contract de Milieu*<sup>2</sup>, which include lakes, basins, bays and aquifer stratum, and has a remarkable

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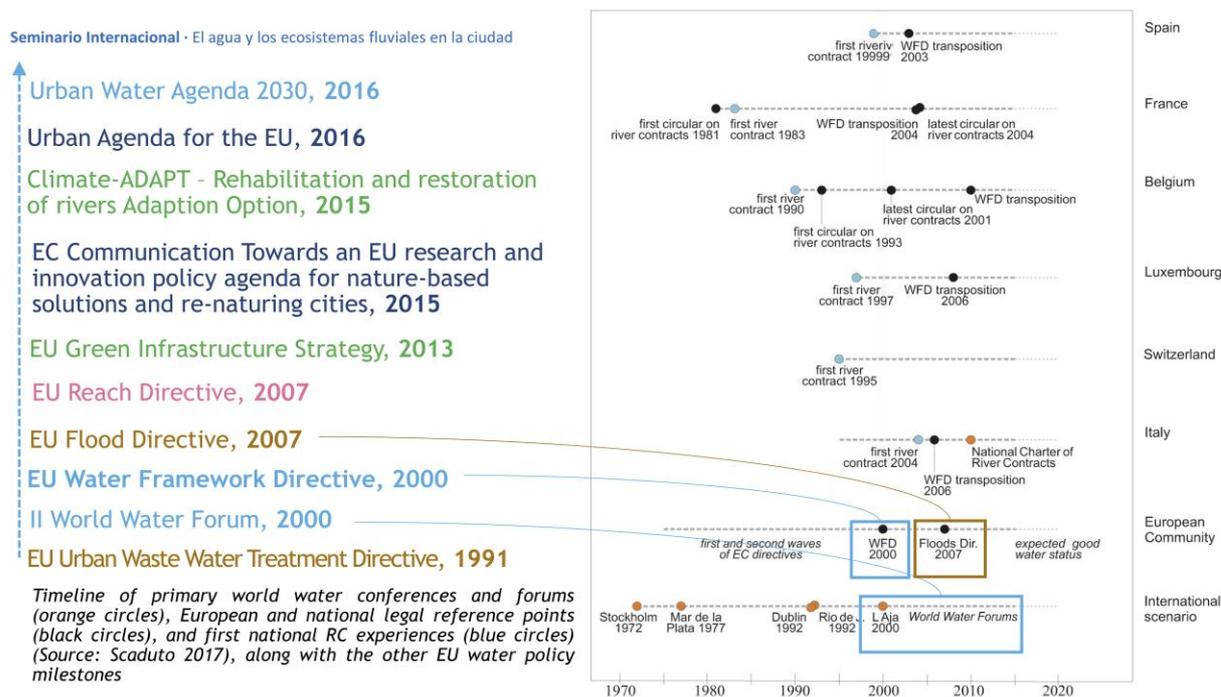
<sup>1</sup> This Directive provided indications already partially present in the Italian Legislation since 1989, year of institution of the Basin Authority to control and protect the Italian rivers and ecosystems.

<sup>2</sup> A French River Contract is insert in a *Schéma d’Aménagement et de Gestion de l’Eau* (SAGE) to recollect public funds, so, the River Contract and the SAGE can be considered as complementary tools. The SAGE allows local actors

character of integrated participation between public actors, stakeholders, and citizens (Brun, 2010).

From that moment, this tool was soon to be expanded and adopted in other European Countries: from France, before in Germany, Belgium and then Luxemburg, Switzerland, Spain, and Italy (Scaduto 2017 e 2018)<sup>3</sup>.

**Figure 1 - A Timeline of River Contract European experiences**



Source: M. L. Scaduto, Paper for *The International Seminar on Water and River Ecosystems in the Urban Environment*, 23-25th November 2018, Zaragoza (Spain).

Even if in the World there are approaches and tools different to protect and safeguard the rivers, in Europe the River Contract is the most useful tool for the water, environmental and spatial planning and management. So, inspired by European experiences, in Italy the River Contract was gradually gaining recognition, thanks to the National Table of River Contracts founded in 2007 with the aim of providing an

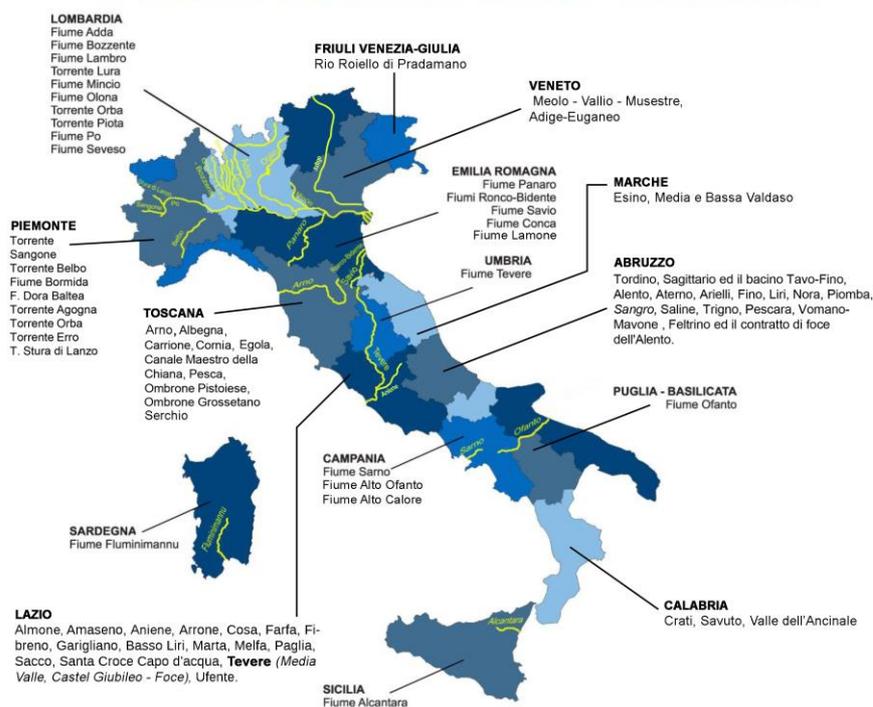
to intervene on the regulatory part of the territorial water policy, and the river Contracts encourage these actors to collaborate in the implementation of the programs. Respecting to the SAGE, the River Contract has no legal scope, but has a more operational and flexible character, with the function of identifying, through multi-actor negotiation, punctual interventions in response to specific problems and generally, it's the technical and financial coordinator of existing programs (<https://www.gesteau.fr/presentation/contrat>)

<sup>3</sup> A wide perspective of European policies, water management practices and River Contracts for innovation in territorial governance in the last thirty years is in the PhD research by Maria Laura Scaduto (2017).

opportunity to overcome the problems of coherence between levels of Government in Italian Regions and promoting participation on issues of recovery and enhancement of rivers<sup>4</sup>. “The River Contract is a voluntary agreement of strategic and negotiated planning, aiming the protection, proper management of water resources, recovery and enhancement of the river territories, together with flood protection, contributing to the local development of such areas. It brings together private and public partners to sign agreements and commitments and to carry out the maintenance of the territory, the implementation of the environmental role of agriculture, the development of ecological production areas, the proper land use and the integrated protection of the quality of water resources with the mitigation of hydrogeological risk. The public agreements or covenants on water have demonstrated to be very useful participatory tools to promote the involvement of the local communities in making decisions on river basins management” (Tavolo Nazionale Contratti di Fiume, 2015).

Figure 2 - The Italian River Contracts

## *I Contratti di Fiume in Italia*



Source: T. Innocenzi's Elaboration on data from Meeting *I Contratti di Fiume a che punto siamo?* (2016) and Osservatorio Nazionale dei Contratti di Fiume (2019).

<sup>4</sup> Article 68-bis of D. Lgs 152/2006 (called Collegato Ambientale) in 2016 recognizes that "The River Contracts contribute to the definition and implementation of district planning tools at the level of the hydrographic basin and sub-basin, as voluntary strategic and negotiated programming tools... "

Today, in Italy, a River Contract is an innovative planning practice for water management, an open and inclusive participatory process, and an effective measure to recover, improve and preserve a river through concerted initiatives based on the active participation of local actors. Even if it is a little-known tool and (believed) unconventional planning procedure, there are 276 River Contracts (101 announced, 82 started, 11 signed), as declared by Osservatorio Nazionale dei Contratti di Fiume (2019)<sup>5</sup>.

### **THE RIVER CONTRACT OF THE TIBER FROM CASTEL GIUBILEO TO THE FOCE (A. Galassi)**

In 2016, with the Law 17/2016, the Lazio Region recognized the River Contracts with a strategic role in achieving the environmental, defence and enhancement objectives of the common goods in its territory<sup>6</sup> and in 2017 in Rome, finally started the procedure for the making of the River Contract of the Tiber from Castel Giubileo to the Foce by Agenda Tevere Onlus with the approval of the Declaration of Intents (the Manifesto) by a group of Promoters. So, in 2018, Public Administrations, Universities, Research Institutes, Professional Orders, private Entrepreneurs and territorial and voluntary Associations could join and sign a Programmatic Document for the Tiber River, that is a Strategic Document in which are the programmatic decisions, the priorities and objectives of the first working step of the procedure; the formulation of the proposal of hypothesis for the creation of the working groups that had to implement the actions and to achieve the results expected during this step. In the same year, the group of Promoters defined and formalized the structure and the governance rules of the procedure, and the composition of the two Governance bodies: Inter Institutional Committee and Technical Secretariat.

The Technical Secretariat defined the thematic issues of the various working groups, identified the coordinators for each working group and explained the different phases and procedure for the conclusion of the River Contract for the Tiber, and in 2019 the first Action Programme started (the only one in Lazio).

The first phase of the Contract working Groups was a data survey (based on the existing data on the state of the river).

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<sup>5</sup> A wide review of past and recent experiences of River Contracts and a rich bibliography is available in the special issue of the online magazine *Reticula* No 22/2019.

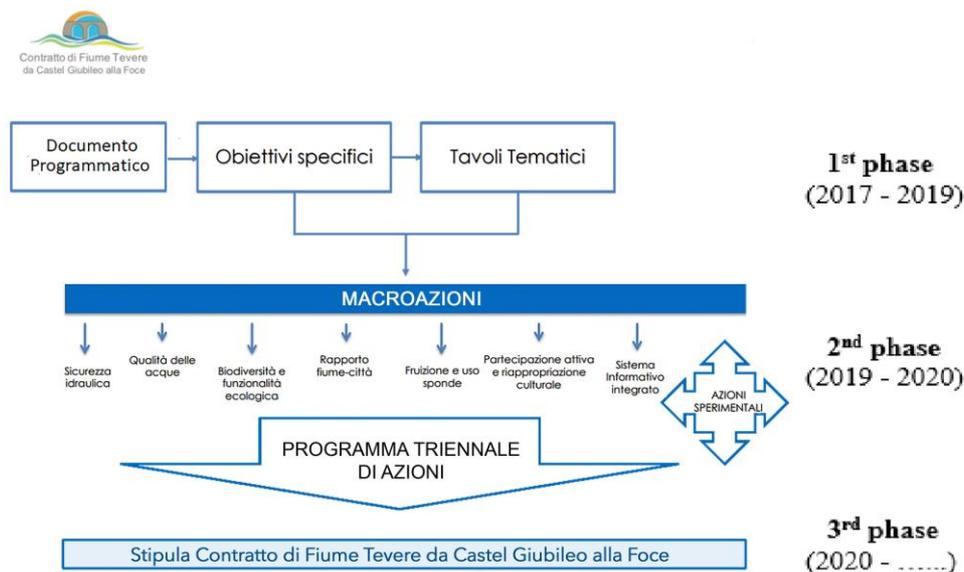
<sup>6</sup> In 2018 the Lazio Region created the "Small Municipalities and River Contracts Office", to support the President's activities for the enhancement of river territories, with the instrument of river contracts. In 2019 the Region established the "Regional Forum" and the "Technical Table" of the River, Lake, Mouth and Coast Contracts and distributed the € 300.000 allocated by law 17/2016, to support the signing of the Contracts.

**Figure 3: The making process of the River Contract for the Tiber**



Source: L. Clerici's Elaboration on data from Agenda Tevere (2018), updated 2020.

**Figure 4: The different phases of the River Contract working Group for the Tiber**



Source: Agenda Tevere, *Meeting Il Contratto Di Fiume Tevere Da Castel Giubileo alla Foce* (2019).

During this phase, each group studied the available data and defined values and critical issues according to the specific objectives of the Programmatic Document. In the second phase the groups distinguished action guidelines, common strategy and a series

of Macro actions that will be included in the first Action Programme. Finally, in the third phase, when the actions will be defined, it will be possible to understand which resources must be found and therefore which stakeholders (citizens, municipalities, public administrations, privates and other partners involved) are able to sign the River Contract, because they are able to find the funds for the implementation of the actions. The Department of Planning Design and Technology (PDTA) of Sapienza University of Rome coordinates the working group which focuses on the River-City relationship<sup>7</sup> and this paper illustrates the process of the practice-oriented research based on the principle that recognizes the Tiber as the river of Rome. This means that the river must return to being hospitable, attractive, and safe. Therefore, our research has set itself three general objectives: to reconcile natural, landscape and cultural values with the contemporary needs of the city and its citizens; recover the Tiber as a common good; rediscover the relationship between the city and its river.

Our research was structured around four keys useful for River Contract:

- The first issue revolves around the urban landscape, because the Tiber is an integral part of the city and it is a distinctive element at the urban scale, as it represents a linear environmental and landscape system of crossings and connections, without a continuity solution, of the different urban and peri-urban areas that characterize the territory up to the mouth of the river. We believe that the River-Contract should aim at triggering environmental and landscape relations between the river and the surrounding territories, with the aim of identifying how to guide the different morphological, historical, cultural, social and economic processes and the related transformations in/of the urban landscape.
- The second issue is the public space, because the Tiber must once again be of the city, an essential urban component and a place of aggregation, representative of the heterogeneous fluvial and urban identities. We believe that the River-Contract should recompose the separation between the river and the city and make the river return to be the landmark of the territory, to foster morphological-perceptive, spatial and functional relations between public space/urban activities in the different parts of the city and river banks (through a direct or indirect or mediated relationship).
- The third issue concerns sustainable use, because the Tiber must be for the city, a place for contemporary urban uses, compatible with the different environmental and

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<sup>7</sup> The Working Group on the River-City Relationship is composed by: P. Bellagamba (Associazione Amici del Secondo Municipio Amuse); G. Bianchi, A. Galassi, G. Gori, T. Innocenzi, M.C. Romano e C. Valorani (Dip. Pdta Sapienza); A. Capillo F. M. Mascioli (Dip. Diet e Pomos Sapienza), M.E. Cattaruzza, V. Mastrangelo e F. Trinca (Associazione Italiana Architetti del Paesaggio Aiapp); L. Clerici (Comitato di Quartiere La Voce Di Porta Portese); G. Fangucci e G. Piantadosi (Autorità di Bacino dell'Appennino Centrale); V. Malara (Roma Capitale - Dip. Sicurezza e Protezione Civile); S. Murianni (Cittadinanza Attiva Flaminio); G. Russo (Uisp Acquaviva).

landscape components. We believe that the River-Contract should promote and develop public services and leisure, cultural, sporting, tourist activities, to improve and secure the longitudinal and cross-cutting use of the river and of its banks and to identify compatible uses and accessible ways. For this purpose, it would be interesting to organize a ‘sustainable and intermodal’ transport system with electric boats for tourist navigation and urban service, identifying interchange nodes useful to the city, and safe, light, removable docking infrastructures which can be easily integrated in the intermodal transport system.

- The last key issue is the most important for the River-Contract. It concerns active participation, because the transformation interventions on the Tiber must be shared in the city, involving the multiple associations that for years have been committed to the protection, requalification/enhancement of abandoned or degraded areas of urban waterfronts, to return the Tiber to a common good and to regain a different River-City relationship. On this issue, we believe that the River-Contract is the correct tool for communicating and publicizing the activities carried out or ongoing by the associations, and for the identification of common scenarios, but above all the admission of responsibility to change.

## **METHODOLOGY AND MATERIALS (A. Galassi)**

The experience of River Contract for the Tiber is very original in the review of regional and national Contracts, because it was promoted by a group of citizens' associations and only later Administrations and Public and private research institutes joined the initiative. This means that knowledge is not purely technical (cultured knowledge), but procedural and dynamic, continuously fed by the people who live and work in the area (participatory knowledge) (Cosgrove, 1990). Thus, our thematic table worked mixing and hybridizing cultured knowledge with knowledge from people. Consequently, our methodology used different ways of knowledge on an equal position in all stages of knowledge creation as well as programming and planning processes (participation); it worked with people from different systems of knowledge and with diverse views (transdisciplinary insight); focused on creating knowledge for action (practice-oriented research).

Our thematic table is composed of a multidisciplinary group of university researchers (planners, engineers, landscape architects, administrative lawyers), a group of technicians of the Basin Authority and representatives of citizens' associations engaged in cultural and social activities, so we have tried to cross and mix our singularities without overpowering, placing all the efforts of the different components on the same level, because we believe that the value of culture is the same as that of participation. This premise is important to understand why we set up our research by a direct knowledge of the river and its context (participatory knowledge) and by

continuous exchange among the different technical and multidisciplinary components (cultured knowledge). Our commitment was constant and periodic and allowed us to produce indeed a series of preliminary elaborations to formulate possible lines of action which will then be proposed within the Programmatic Document of the River-Contract.

The first elaboration concerns the cognitive aspects: we have conducted it in an indirect and direct way, that is: looking from above with aerial photos and updated maps, but also at a close glance, one at the level of the city (so walking on bridges and sidewalks facing the river) and one at the level of the river, looking from below, walking on the banks or rowing on the Tiber, a place to enjoy with fun. We believe that knowledge should not be an end in itself. Knowledge means the desire to live the river at all times and not only for a day or for some extraordinary event (Summer festival “Tevere Expo”, International Tiber Canoe Descent, Tevere Day...).

**Table 1: The Process of Survey, Evaluation and Proposal**

River Contract Tiber from Castel Giubileo to the Foce Relationship between Tiber and Rome											
Identification of the Part of the River											
1. Description	2. Objects	3. Values and Resources	4. Problems and Critical Issues	5. Risks and Hazards	6. Opportunities	7. Strategies	8. Proposals by Public or Private Subjects	9. Possible Lines of Action	10. Qualified institutions	11. Coherence with the Programmatic Document of River Contract	12. Compliance with objectives of the programmatic document

SURVEY	EVALUATION	PROPOSAL
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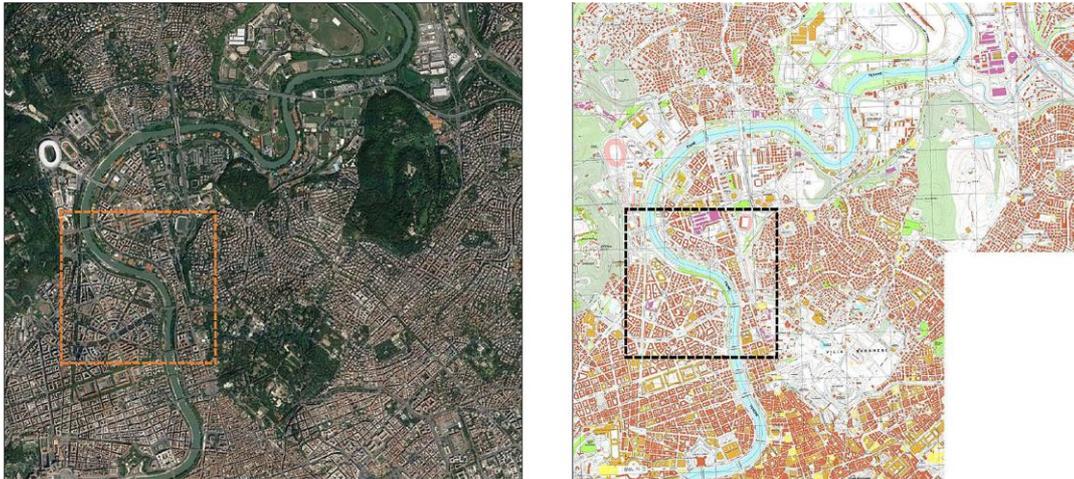
Source: A. Galassi (2018).

At this stage we moved in line with the sequence proposed by Geddes: survey, analysis and plan (Geddes, 1915). Knowledge means making a diagnosis and being able to assess what the correct therapy may be. This second type of elaboration, then, involved the construction of sixteen worksheets referring to the sixteen sections in which we virtually articulated the course of the Tiber from the northern urban dam (Castel Giubileo) to its mouth (Foce).

The worksheet built with the researchers and specialists but also with the Associations (citizens, users and workers) is organized in three parts.

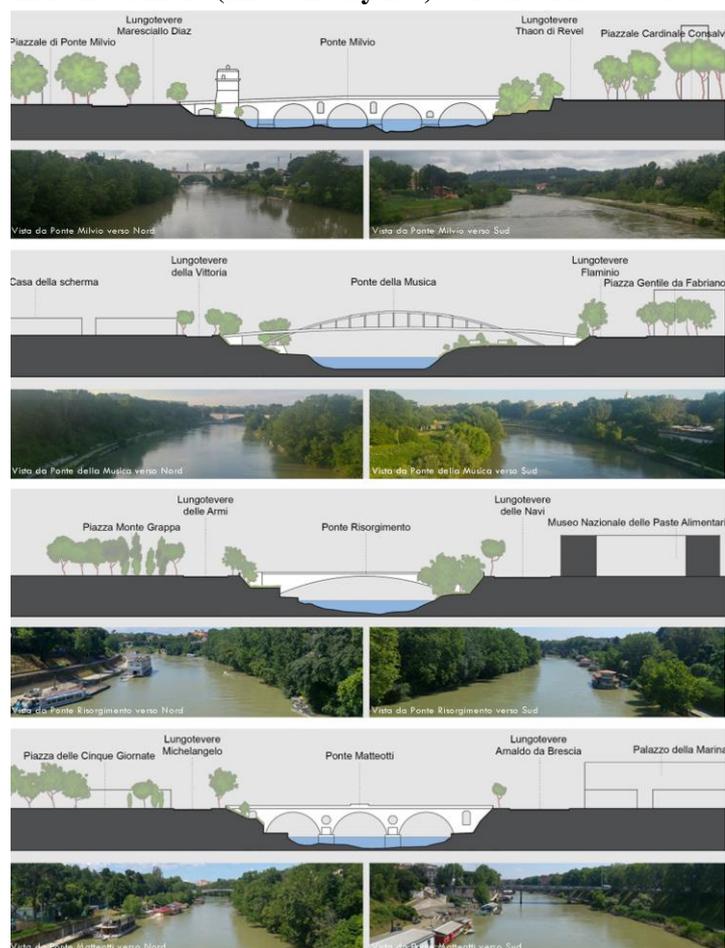


**Figure 6: Google Earth photo (2018) and Regional Technical Map (2016)**



In the coloured square the river goes into the historical city close to Monte Mario reserve (at West) Villa Glori and Villa Ada Parks (at the North East) and Villa Borghese Park (at South West).

**Figure 7: Characteristic sections and photographic views of the part of river from Ponte Milvio (2nd century BC) to Ponte Matteotti**



Giulia Gori's Original Elaboration (2019)



Each Macro action is divided into several types of Activities.

- (knowledge) update, integration, development of the Cognitive Framework (monitoring) and multidisciplinary analysis of the Tiber River (actions 1 and 2);
- (planning and management) recognition of the Tiber as a common good of the City in a single strategic and systemic vision and in an integrated River - City vision for the recovery of the spatial/perceptive relationship of the Tiber with Rome in urban and peri-urban areas (action 3);
- (design experimentation) promotion of a contemporary vision of the system of public spaces at the city level and at the river level, improvement of longitudinal and cross-cutting use of the banks and the river, development of leisure, cultural, sporting and tourist activities (actions 4, 5 and 6);
- (civic education) active participation and involvement of associations and social forces for the protection and redevelopment of the Tiber, thanks to the promotion of knowledge, environmental education, social integration, sustainable use and activities of entertainment along the river and on the river (action 7).

The timing of the actions depends on the type of them, so if the actions are related to knowledge, they must start and end preferably within one year, but if they are related to monitoring, they go on for three years and perhaps even beyond. Planning and management actions can take up to two or three years, and finally experimental actions should have short preparation times and be completed within the first year. The actions related to civic education start immediately and continue over time.

**Table 3: Example of the Macro action sheet regarding the knowledge**

<b>AZIONI di SISTEMA: CONOSCENZA</b>	<b>1</b>	<b>Aggiornamento, integrazione, sviluppo del Quadro Conoscitivo</b>	
<b>Tipologia di AZIONE</b> <b>Rapporto Fiume - Città</b> <i>(spazio pubblico; paesaggio urbano; fruizione e mobilità; partecipazione attiva)</i>			
<b>Obiettivi specifici</b> <i>Individuati Rispetto agli obiettivi generali del Documento Programmatico Del CdF Tevere da Castel Giubileo alla Foce</i>		<i>Aggiornamento, integrazione, sviluppo del Quadro Conoscitivo per: Tevere della Città-spazio pubblico Tevere con la Città – paesaggio Tevere per la Città – fruizione e mobilità Tevere nella Città – partecipazione attiva</i>	
<b>ATTIVITA'</b> <i>Le attività dovranno essere svolte con la rilevanza della diagnostica partecipata.</i>	<b>1 A</b>	<b>1 A 1</b>	Censimento e monitoraggio continuo delle criticità ambientali e paesaggistiche.
		<b>1 A 2</b>	Censimento puntuale dei sistemi di accessibilità e fruizione (trasversale, spondali. Pedonale, ciclabile). Rilevamento delle criticità (stato di fatto, continuità-discontinuità). Redazione di elaborati grafici strumentali all'analisi.
		<b>1 A 3</b>	Rilevamento dello stato di navigabilità del fiume (mobilità fluviale e fruizione sportiva). Criticità, continuità-discontinuità, approdi, attracchi.
	<b>1 B</b>	<b>1 B 1</b>	Costruzione – implementazione di un Data base Unico del Tevere.
		<b>1 B 2</b>	Costruzione – implementazione di una Piattaforma Informatica integrata: editoriale e forum partecipazione
		<b>1 B 3</b>	Costruzione dell'inventario delle Proposte per il Tevere
	<b>1 C</b>	<b>1 C 1</b>	Ricostruzione sistemica del quadro Normativo Urbanistico (da PRG, PSS, ...) Elaborazione documentale ed elaborazione di mappa interattiva (per ogni tratto dell'articolazione del fiume possibilità di conoscere la normativa urbanistica relativa).
<b>Attori/referenti</b>		Ufficio Speciale Tevere, Roma Capitale, La Sapienza PDTA, DICEA e DIET/POMOS, AIAPP, ABDAC, CNR, Protezione Civile, Dipartimento Programmazione e Attuazione Urbanistica, Roma Città Metropolitana – GIS, sistema partecipativo territoriale (cittadini, Associazioni, Comitati, Reti). ACEA, Agenda Tevere-DUT-PIIT, Regione Lazio, Legambiente, ISPR, Soprintendenza Speciale Archeologia Belle Arti e Paesaggio di Roma	
<b>Soggetto Coordinatore Azione</b>		Ufficio Speciale Tevere Roma Capitale con La Sapienza DICEA	
<b>Soggetto finanziatore/Risorse finanziarie</b>			

Source: L. Clerici & A. Galassi, (2019).

## **DISCUSSION AND RESULTS**

In the following pages some of the research team members describe the results of their work and emphasize, for the discussion with the scientific world, some first conclusions to which their work has come to.

### *The Features of the Tiber Valley Landscape General Overview and Investigations Method (C. Valorani)*

Knowledge of the landscape of the Tiber Valley means doing indirect investigations and survey on site (at river level as well as at the city level). This approach allowed us to identify four landscape units and these units can be further articulated in relation to the urban, social and economic features in sixteen sections (compare the descriptions and evaluation in the sixteen worksheets).

From a properly eco-systemic point of view, the Tiber is a primary structural element at a regional and urban dimension. In the extensive system of tufaceous platform that characterizes Rome, the Tiber alluvial valley is the main incisive geomorphological gap. The long permanence of man in this area developed, through the time, a stratification of widely different territorial and urban organizations, characterized by different relationships between man and river. So, today we can find traces of these phases in the articulated anthropic context that characterizes the Tiber valley, especially in its urban section.

Since ancient times, the Tiber valley has been the preferential place for trade and business thanks to its morphological conformation and its strategic territorial location. It has been the place of the main north-south regional connections and between the inner hinterland and the coast. The city of Rome was born and developed in relation to this specific strategic position, so the Tiber and its valley are one of the main elements of identity for Roman landscape and environmental context, both on the territorial scale as well as on the urban one.

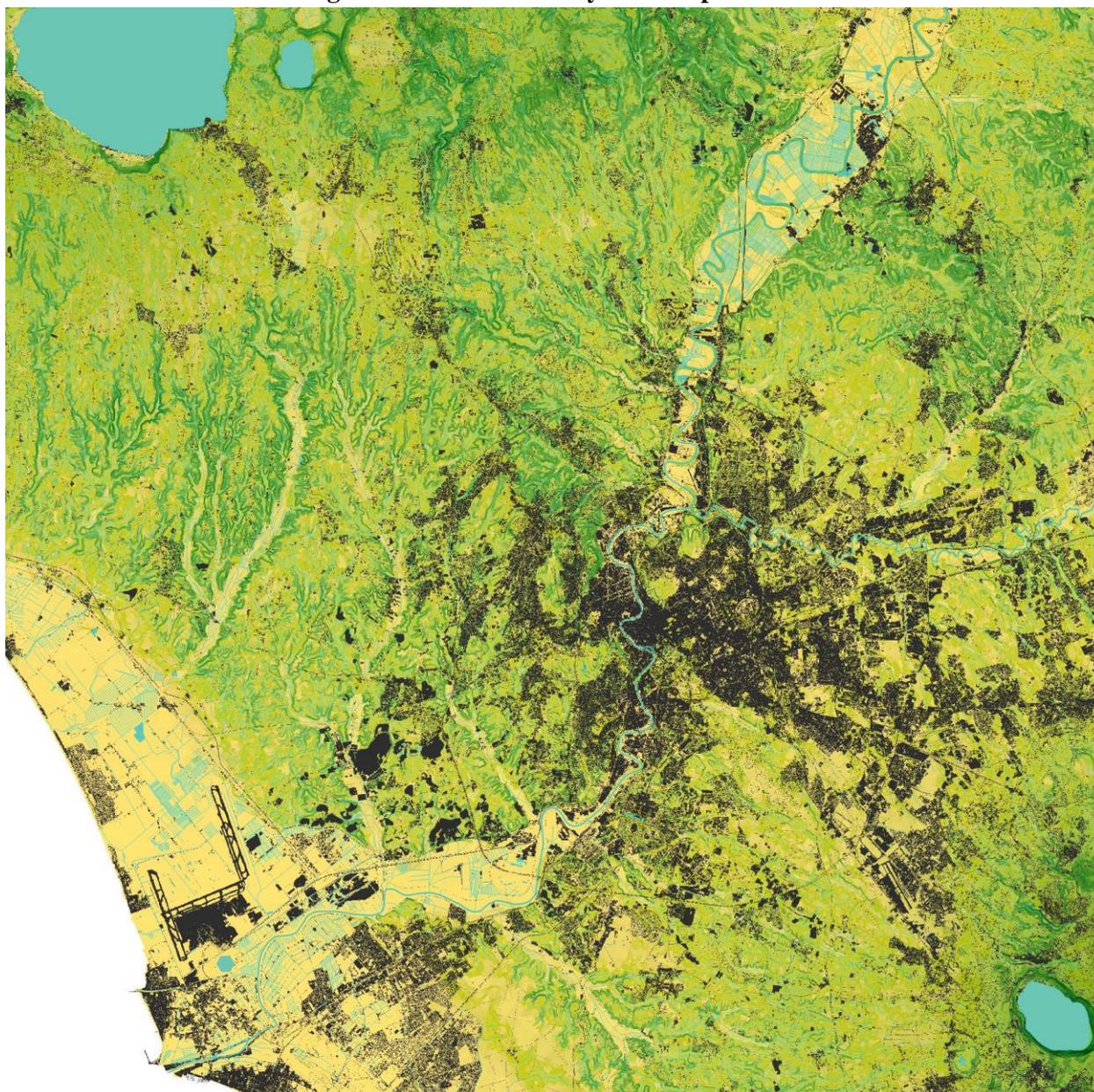
The Tiber is the leading actor of the structural relationships that links the natural system to the cultural-settlement one, assuming a key role on the identity and landscape level (Calzolari, 1999). In assuming this role, our research needs a transdisciplinary method which can lead to an interpretation and understanding of the relationship between the Tiber and Rome and its physical and human environment and the features of its perception (De Matteis, 1995, Vallega 2008, Valorani, 2016).

Even if the landscape units built over time have well-defined characteristics, people tend to have an indistinct perception of them and an indistinct perception of place in which they live. This causes that nowadays people often feel a sense of insecurity in many areas along the river: areas placed just on the fringe of urban main heavily frequented areas but neglected and lacking basic maintenance.

In this sense, the River Contract can be a useful tool for raising in the Community the awareness of the river and of its ecological, social and cultural potential.

So, in the River Contract, we need a synthetic framework of coherence of different components (physical, natural, anthropic-historical, economic and social components) for the role that the perceived landscape assumes within the cultural system of its users, starting from the sense of identity of the inhabitants (Turri, 1998).

**Figure 8: The Tiber Valley Landscape**



Source: C. Valorani (2019)

*The Features of the Tiber Valley Landscape*

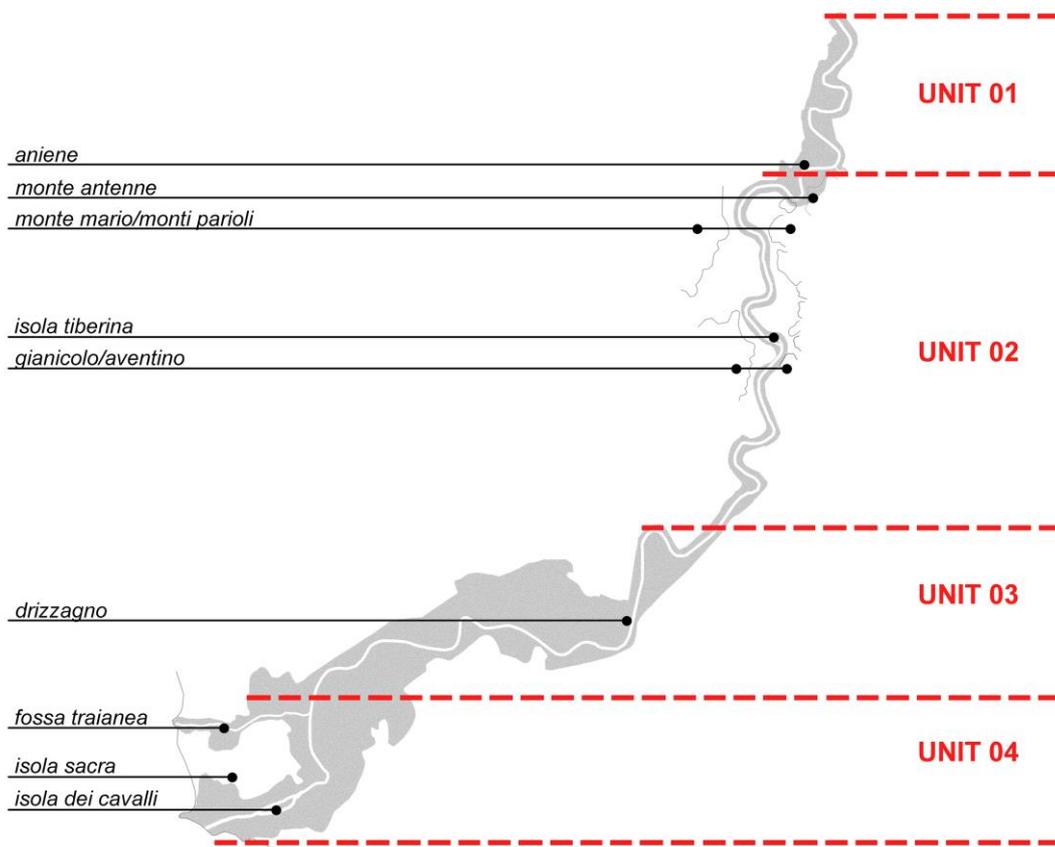
*The Tiber and its Landscape Units (M.E. Cattaruzza)*

One specific research activity has focused on the landscape features of the Tiber.

We identified four basic units through the study of landscape features.

The main unit is where the river meets the urban built area of Rome, while in the other units the river has relationships with the environmental system, the agricultural layouts and with significant cultural and landscape assets. From the hydrographical point of view the river flows through the valley with a series of subsequent loops and few tributaries (like the Aniene River and the Malafede and the Galeria streams).

**Figure 9: The Tiber Landscape Units**



Source: M.E. Cattaruzza (2019)

Close to the seacoast, the ancient Fossa Traiana doubles the natural Tiber's mouth and gives rise to Isola Sacra. From the geomorphological point of view, the Tiber's flood plain has orographic edges that differ in shape and mutual distance.

To the north, the valley widens slightly to the confluence with the Aniene River and a first landscape unit is characterized by a constant width of the valley and low orographic margins. In the second unit, the valley goes on southwards between a series of opposing morphological reliefs. Further south, the third unit is identified where the river plain gradually widens, and the orographic horizons gradually move away. Finally, starting from the confluence of the Galeria stream, a fourth ambit is identified: the river valley reaches the wide coastal plains and integrates into them.

Over the course of time, the river and the urban portions where the river flows have established a significant system of physical and symbolic relationships (Turri, 1998) that have given rise to landscape distinguishing features. This long stratification process originated highly distinctive landscape complexes.

When the Tiber reaches Rome's riversides, the extensive system of signs (Eco, 1976), outcome of the millennial relationship between river and city, thickens. Elements which are directly connected to the river (like Isola Tiberina and ancient roman ruins), or pieces of urban landscape that overlooks the river valley (Monte Mario, Castel Sant'Angelo and San Pietro, the Aventino, ...), and elements which are partial evidence of urban structures now lost (Arsenale Pontificio and Ripa Grande, Porto di Ripetta and the ancient churches), define a landscape system of strong identity. In this framework the main evidences of urban growth are the bridges (like old Ponte Milvio and Ponte Sisto or recent Ponte della Musica) because they are the places where physical, functional, and perceptive links between river and 'civitas' are intensified. Each of them, more than twenty in the Rome's central area, is a symbolic element.

At the same time, each bridge is often the edge between different river segments which are each characterized by own landscape features.

When the Tiber passes through the oldest city, the river landscape is currently recognizable for the massive walled banks, called 'Muraglioni', built starting from 1875. These embankments have profoundly altered the ancient relationships and nowadays are a heavy barrier between river and city.

At the water level, the floodable quays and the walls over ten meters high strongly characterize the visual field; but at the level of the city, the 'Lungotevere' avenues, are the distinctive elements. But really, the continuous row of large plane trees planted along the road, with their seasonal chromatic dynamism, is the extraordinary landscape feature from the river and the city levels and from distant horizons (Gianicolo, San Pietro, and Aventino). In the other landscape units, a settlement organization, essentially identifiable through signs of the mobility system, some big urban service centres and some scattered residential areas, overlaps morphological and environmental landmarks and agricultural structural shapes (still preserved in some large portions).

A series of economic activities often sent away from urban area (car depots, warehouses, landfills, ...) as well as areas for sports and leisure are added to this already complex framework of territorial structures, while at the Tiber's mouth productive facility related to boating, fishing and recreational tourism are added.

In each unit we can find elements of remarkable value belonging to the cultural and natural heritage that identify places with an impressive significance: punctual evidence (like Castel Giubileo Dam), extensive archaeological and naturalistic areas (like Claudius and Trajan's marine harbours on the Tiber mouth) as well as relevant ecosystem assets (like the Drizzagno or the Isola dei Cavalli). The recent settlement evolution, often without a coherent planning, implies that this landscape heritage is often difficult to locate and notice.

The River Contract could be the opportunity to identify environmental and landscape values and to reassemble and give new meaning to the relationships between the river and the landscape heritage (material and immaterial assets), to support the development of a sense of Community belonging to the places (Giani Gallino 2007; Signorelli 2009).

#### *Public Good and Common Good (L. Clerici)*

First, we need a reflection on the concepts of 'public good' and 'common good' since they must necessarily be distinguished. The specific characteristics of the public good are no competition and no excludability.

As reported in the Italian Dictionary of Economics and Finance (Vannini, 2012) under the term 'public good', the first characteristic indicates that the use of an asset by someone does not affect the capability to fully enjoy it by third parties. The term no excludability means, however, that it is not possible to exclude third parties from the consumption of a particular asset. The concept of the public good does not imply that the use of the good requires forms of aggregation of people or forms of community, that is, the use of the public good takes place in an individualistic form.

Otherwise, the concept of the 'Common Good' differs from that of the 'public good' because it requires an instrumental dimension in which people are called to act for the common good and for its existence. The whole of people's rights must tend to the common good. Every human act should tend to the common good. By the means of common good, human potential reaches full fulfilment. The common good is functional to the exercise of the rights of the person. The common good is the tool that a society must use to guarantee freedom, opportunities for development, ethics. Therefore, the common good exists and lives for the commitment of all people, a community and not only someone. The importance and relevance of the common good issue is today linked to the interpretation of a new relationship between the universe of people and the universe of goods that for a very long time has been entrusted mainly

to the logic of the market. As Stefano Rodotà (2012) pointed out, the focus should not be on the person who owns the good but must be placed on the function that an asset must perform in society. From this reflection, Rodotà defines as common goods those goods that are functional to the exercise of the fundamental rights of the person and to the development of the personality. For this reason, common goods must be safeguarded, and their protection becomes a priority of society to guarantee the same fundamental rights to future generations. If one good is for everyone without distinction and it is shared, this good is a common good. If one good is recognized as a common good, then the relationship between people and common goods must be characterized by sharing and not by the exclusion of the other (Rodotà, 2017). And this means that the common good requires a certain sharing of the fruition of the good itself. The environment, its legal protection, is consistently in the list of common goods as it is linked to the rights of future generations, to the conception of community and to the responsibility of people. The Tiber River is a common good as such the value of the river crosses the objective sphere to necessarily include the size of the subject. The common good is shared, attended by all the members of a specific community. The Tiber common good is of each, of one another, considered as subjects who take responsibility for the good.

The Tiber common good cannot exist except in the indissoluble relationship between the river and the city. “The common good of the city [...] is the good human life of the multitude, of a multitude of persons; it is their communion in good living. It is therefore common to both the whole and the parts into which it flows back and which, in turn, must benefit from it. [...] It includes within itself as principal value, the highest access, compatible with the good of the whole, of the persons to their life of person and liberty of expansion” (Maritain, 1947).

The relationship between the Tiber and the city, and how it is determined, cannot ignore the awareness of the value of the good and that the river is a common good and the awareness is acquired only through knowledge and use.

#### *The Tiber: Public Space and Common Good (A. Galassi)*

The notion of the Common Good, in the case of the Tiber, might be realized through the guarantee of participatory forms, management and regeneration of the Public Property areas existing along its course. We need to replace an individualistic and mercantile logic with a community logic, functional to guaranteeing fundamental rights. Therefore, the qualification of the Tiber River as a Common Good, aims to recover the active role of citizens and associations in the management, protection and enhancement of the river ecosystem and urban public space. The Tiber must be a place for the development of city life, not only an urban space where it is possible to increase

economic development, but above all a place where citizens can rediscover the original community vocation.

If the Tiber must be a public space, there is an urgent need for the redevelopment of degraded areas, also thanks to the initiative of private actors and associations.

The notion of Common Good also supports the aspiration to return to the community an urban resource removed from public access through the concessions for the private use of public property (floodplain areas). The concessions, in fact, are characterized by the exclusionary use and end up hindering the configuration of urban commons open to the individualities regardless of ownership links (Marella, 2012).

The Tiber can return to be a public space, therefore, if it regains its status as a place, because only a place sums together the concept of identity, historical memory and relationship and interaction between the urban pieces. Over time, but it should be said especially from the 60s of the twentieth century onwards, the Tiber River seems to cross Rome secretly, its inhabitants do not perceive it, they no longer feel it, they do not use it and do not live it daily as in the past.

The intense 'inhabiting' of the river, which from ancient Rome has persisted to papal Rome, has been lost, after the unification of Italy, due to the construction of the 'Muraglioni', embankments in travertine built to defend Rome from the floods and resulting devastations, destruction and deaths. The construction of the embankments begun in 1870 and ended in 1926. Since then, the close union between the Tiber and the city has been drastically interrupted and over time the estrangement of the Tiber from city life and the loss of the role of the Tiber as a Common Good has been highlighted over time (Caviglia, 2018).

Today, in fact, the idea of the Tiber as a Common Good, survived and respected for centuries even by the Pope Kings, is faded: only users of exclusive sports clubs or of trendy restaurants can use its banks and only the 'river fans boatmen' furrow its waters. The river has lost its relationship with both the *urbs* (the built city) and the *civitas* (the city of men), it has become estranged and has become increasingly distant from the city and from the people. If a person feels, within a space, safe and at ease, the stronger will be his relationship of identity with that space (insideness) and the desire to make it become a place of meetings and aggregation (public space); vice versa, a person may feel separated or frightened by a space and perceive it as hostile (outsideness) and therefore to be avoided (Relph, 1976). Unfortunately, today, between the roman citizens and the Tiber, there is apparently an ambiguous relationship that oscillates between indifference, disinterest, estrangement, repulsion and sympathy, interest, attraction, passion.

Therefore, the River Contract must work to return the river to be charming and attractive, to rediscover the River as a public space of the City. The Tiber can become a linear centrality and therefore a place where slow and natural rhythms and the

protection of the embankments make possible to rebuild a kind of perfect harmony between man and place (placeness) and to realize a sustainable fruition away from the chaos of Rome.

**Figure 10: The Relationship between the Tiber River and the Roman Territory from Castel Giubileo to the Foce**



Source: A. Galassi (2019).

*A Sustainable Fruition – Which Sustainability?* (T. Innocenzi)

The idea of a ‘sustainable fruition’ is recent and offers multiple interpretations. The word ‘fruition’ comes from Latin verb *frūor*, which means ‘to enjoy, to be delighted, to find satisfaction in’, while the word ‘sustainability’ has various meanings that change depending on the context (Musco, 2016). The most common meaning is that of support, ‘to give a backing to someone or something’. Sustainable fruition therefore takes the following meaning: a pleasure to support something. But, what?

If the Tiber River were recognized as a common good (Galassi and others, 2019), as an element of public property to be protected and enhanced, ‘support’ should be understood as a support to the river environment, to be achieved with interventions such as the reduction of human impact on the banks or the enhancement of natural components. However, since the fruition of the Tiber is based on the man and its relationship with the river, the concept of ‘sustainability’ takes on different nuances, and interventions on the river should be thought of both in favour of man and of the river landscape.

Firstly, we need to ask to ourselves what we want from a river, what fruition, and what kind of sustainability, we want to carry out: either the city gives support to the Tiber, or it is the Tiber that gives support to the city.

There is a great difference in this double lecture: if city gives support to the Tiber, then it is allowed to actively intervene on its course, using the banks for its own purposes; if Tiber gives a contribution to the city, then this must be read as the natural contribution that the river offers to Rome – and therefore the river will pass undisturbed through the city, as an element in itself, with its natural characters regaining the banks.

This dual vision of sustainability - one promoted by those who see the economic possibilities of the Tiber, the other by those who want to preserve it as a natural monument - is unfortunately very evident in the different proposals of private and public actors, generating confusion and conflicts about the goals, proposals and interventions carried out. Therefore, we need a balanced and unique vision, that allows both active use of the river, even with economic gain, and a preservation and development of its most natural characters. Sustainability, in the Tiber as a common good, passes through a joint vision of its use, which cannot set aside neither the gain nor its protection.

The protection of the river should, in perspective, become a gain for the community. If you look at the urban banks characterized by thick riparian vegetation, you will notice how, on a thin strip of land, the city gains a new green area, and provides the birds and migratory birds a convenient shelter. Providing an area of riparian green easily accessible to citizens, means a new and different perception of greenery, with flora and fauna in a continuous conversation with a mobile element, such as river water. The experience assumes an educational aspect, teaching the use and respect of the river world. There is already a phenomenon of re-naturalization of the urban banks, which provides the city with a series of riparian areas in close contact with the urban fabric, but generally difficult to access. In this case, a greater number of gates and entrances to the river would be needed, previously agreed with the nature associations to avoid subjecting some areas to excessive human impact, and to provide for periodic cleaning of the banks after the floods (Autorità di Bacino del Fiume Tevere, 2006).

The establishment of a series of a 'protected shores', or riparian oases, can be an opportunity for the creation of a river park, thought as a protected network of riparian forests along the banks, recovering degraded areas in the middle of the urban tract. But we must also consider the sporting fruition of the river: it has an impact limited in time and space, does not disturb either the fauna or the flora of the river and can be an economic profit for the city.

The roman citizens might have at their disposal a public and low-cost offer of river sports, less elitist than the current many private clubs on the river bank and would be encouraged to spend time on the river waterfront for sport, walks, morning runs or cycling on the cycle path on the right side. The establishment of one or more public sports clubs, open to all, managed by the Municipality, on the model of the swimming pools of the municipal circuit, could be a good idea for a sustainable and daily use as well as more democratic fruition of the river. Moreover, the continuous use of the river for water competitions and sporting challenges could attract attention to the abandoned dock spaces. To talk about fruition, it is necessary to talk about the attractiveness of the Tiber, that is, the interest that the river can arouse in the citizen or tourist. An exemplary case is that of the summer event on the river, with nightclubs on the right

bank in the historic centre, where annually the Tiber returns to public fruition, but worsens its degradation at the same time.

Artworks such as the murals by the artist Kentridge, made in 2016 in a section of the ‘Muraglioni’ (the Embankments) of the historic city, show how we can arouse the interest of the population and tourists on the docks and the same river in a ‘different way’. The attention of people and Institutions becomes increasingly important, because today the Tiber has lost its ancient commercial function, and lives, in terms of public money investments, of its own image. In fact, the more river arouses indifference or embarrassment of the city, the less the Administration will be stimulated to exert decisive intervention on the banks (Sennett, 2018).

**Figure 11: G. Vasi, View of the Garden Farnese and Villa Farnesina, 1747**



**Figure 12: Current view of the Murals by William Kentridge (2016) and the Villa Farnesina**



The River Contract should pay attention to the sustainable fruition of the Tiber River according to its usability: the river should not be a mere source of gain or an untouchable natural monument observable only from the walls of Lungotevere.

In both cases the river would be deprived of its history, nature, and identity.

On the contrary the River Contract must develop a holistic fruition strategy, including both natural and social aspects, in an osmotic relationship with the territory, not one-sided. The aim is the enhancement of the natural components of the river, its possibility of public and democratic sporting fruition, the safe and clean access to its banks: just a few interventions, if well designed, can transform the Tiber to a new urban centrality.

#### *Active Participation (L. Clerici)*

At the Technical Meeting of the National River Contracts Observatory on participation in the management of water bodies and on the involvement of stakeholders, the General Director of the Italian Institute for Environmental Protection and Research, ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale) pointed out that the active and informed participation in the construction and implementation of local environmental protection policies, implies knowledge.

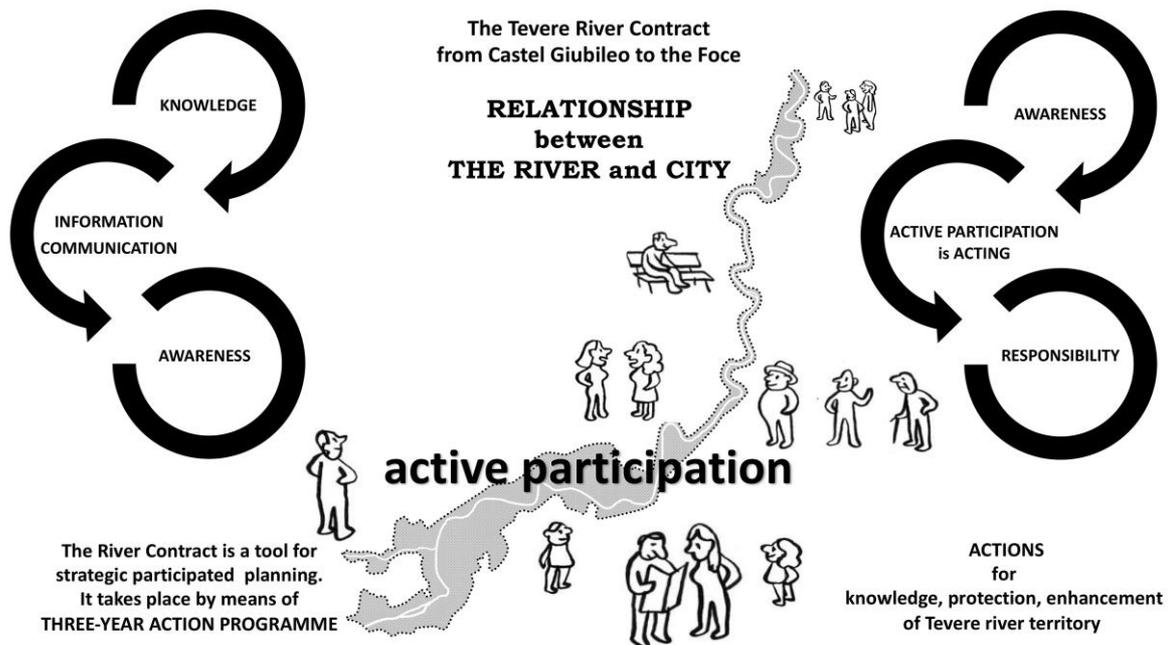
A conscious participation cannot be exercised unless proper information and communication on environmental issues is not implemented (Bratti, 2019). Knowledge, information, and communication determine the awareness of having to exercise active participation in protection and enhancement of the river common good. The River Contract is a form of expression of active civic participation. Active civic participation in environmental protection policies which results in a structured path of sharing, discussion, and planning on environmental issues of public relevance that involve a plurality of subjects: public institutions, bodies, experts, associations and committees, individual citizens. Active civic participation in environmental policies holds together citizens and various public and private subjects (stakeholders), interested in decision-making and/or the adoption of projects starting from its inception and until the final decision. Active civic participation is a process that can be activated from the bottom up (required by civil society) or promoted from above.

The River Contract is indeed an innovative tool for active civic participation that allows to reaffirm the principle and essence of Tiber common good in the city. The protection and enhancement of the common good cannot be separated from a participatory path. Active participation in the protection and redevelopment of the common river is a territorial resource that becomes a rule for the success of both the construction process and the life of the River Contract itself.

Today in the Roman Urban Territory (as it occurs in the rest of the world) there are always more associations and voluntary groups of citizens that actively engage in the protection of the environment and the requalification and regeneration of their city

through cultural activities and voluntary social service. This civil service is the expression of a major sensitivity regarding “common space” and its “common use”. Because the city government is often immobile or unable to implement urban and environmental policies, the citizens unite and take care of the common good.

Figure 13: Active Participation



Source: L. Clerici (2019).

The growing active civic participation is also the effect of some new legal instruments that are beginning to assert themselves in Italy: the regulations and resolutions on common goods and urban civic uses<sup>8</sup> and, in the cultural field, the new 2016 public contract code updated in 2019 which provides for the activation of special partnership agreements by the Ministry of Cultural and Environmental Heritage, among public institutions, entrepreneurs and non-profit organizations, and citizens, for cultural projects with a social function. The voluntary social capacity of citizens to self-organize for the care and regeneration of the “Tiber common good” is what allowed the activation of the River Contract.

<sup>8</sup> The Municipality of Naples was the forerunner with the establishment of a Department of Common Goods to strengthen the theme of forms of use of the heritage favouring the collective interest: in 2011 it modified the Municipal Statute and introduced the legal category of common good, among the purposes, objectives and fundamental values of the City. Bologna in 2014 approved the Regulation on forms of collaboration between citizens and Administration for the care and regeneration of urban common goods.

For this reason, the River Contracts represent an experimental practice of reaffirmation, reactivation of local communities capable of exercising self-government functions for the care of river systems.

The River Contract reveals and affirms the existence of a community of interdependent actors who can self-organize and self-govern with the aim of achieving collective benefits, for the present and for future generations, by preventing free-riding, selfish and opportunistic behaviours (Ostrom, 1990). It is a direct and collective engagement of responsibility, an act of commitment for the management of the natural resource with the guarantee of its long-term economic sustainability.

The Tiber River Contract connotes the territory and represents it as an institution of a "robust common pool of resources", that is an agreement with collective rules that lay the foundation of the enactment of policies for the management of the river "common good" (Ostrom, 1990). Which path must the River Contract take to see active participation? Throughout the process of building the River Contract, it is necessary to define and implement actions of civic participation, communication, and information.

**Table 3: Example of Proposed Actions for the River Contract of Tiber from Castel Giubileo to the Foce**

<b>TYPE OF ACTION:</b> experimental action	<b>Tevere is a common good</b> <i>"Tevere in the city"</i>		
<b>ACTION</b> Relationship between the River and City: Active Participation			
<b>SPECIFIC GOALS</b> Position Paper of "Tevere River Contract from Castel Giubileo to Foce"			
<b>ACTIVITIES</b> Actions should be designed to promote responsibility for the change: re-appropriation of the river as common good. Actions should promote knowledge, environmental education and social integration, sustainable use and animation activities along the river and on the river	<b>7 A</b>	7 A 1	<i>"Going to River"</i> : promote knowledge by living the river. Wellness, sports and free time activities along the river
		7 A 2	<i>"Adventurous River"</i> . Promote the tourist and sports navigability (canoeing, slalom, free style, rafting, dragon boat)
		7 A 3	<i>"Tevere Day"</i> : Participation and Responsibility
		7 A 4	<i>"Tevere Prize"</i> : environmental education
		7 A 5	<i>"Live the river enjoyng food"</i> . Promote food and wine circuits along the river
		7 A 6	<i>"Tevere for anyone"</i> . The river should be accessible to all citizens. Social integration
<b>Actors and Handlers</b>			
<b>Action Coordinator</b>			
<b>Financial Resources</b>			

Source: L. Clerici (2019).

An appropriate participation plan is needed to involve citizens, communities and stakeholders who insist on the territory, through the organization of special moments of public discussion. The participation plan is the tool for information, consultation,

and negotiation. It is necessary to disseminate and publicize information, objectives and actions provided for by the River Contract. Active participation must characterize the process of building the River Contract and be a permanent action during the life of the Contract itself. Actions should be aimed at promoting accountability for change for the re-appropriation of the Tiber common good, thanks to knowledge, environmental education and social integration, sustainable use, and animation activities along the river and on the river.

The River Contract must therefore propose actions shared in the city, so that citizens can always be active subjects, actors of the process of protection, requalification and enhancement of the Tiber River as common good, in a contemporary vision of the relationship between the River and Rome.

## **CONCLUSIONS**

A first assessment of the experience carried out highlights some reflections about the role and the importance of our working group in the River Contract to repair the relationship between Tiber and Rome. Among the main strengths that have characterized the experience of our working table is its multidisciplinary composition; the mixed and various structure determined a result that let us contribute to the success of the River Contract for the Tiber, indeed one of the positive aspects can be seen in the interaction and collaboration that has been achieved, within the research group, made up of different disciplinary and operational members, because this good agreement has been a goal of the process and a key element in enabling the work of the researcher to be integrated well with that of the participatory path. Furthermore, we noted the interest and involvement shown by some association of citizens on the themes of their river, perceived as a strong identification element of the landscape of the Roman territory.

Another reflection is focused on the issue of the double feature (cultural & participatory) of the knowledge, which is a salient character in our working table and essential for the River Contract, because it translates into a focal point as it strengthens the collective responsibility around the river. The collective responsibility means ensuring that the Tiber returns to be a public space and a common good for all citizens and not just for a few users.

The Tiber “common good-public space” is a right linked to the concept of community and to the responsibility of people. It is the expression of the social bond among citizens because a common good should be used and lived "together with others", and its safeguard is released from any immediate or specific interest carried out by others. Unfortunately, we found a persistence of two distinct positions: there are citizens, technicians and administrators who see the river as an economic resource to be

exploited and those who, instead, have developed a different sensibility that leads them to consider the river an urban resource.

The Tiber River Contract, in its value as a territorial pact, guarantees a balance between the multiple possible uses of the river and the achievement of those objectives that belong to everyone: environmental and landscape quality, accessibility and use, enjoyment and well-being, safety and local development. Therefore, it is structured as a model of government and management capable of avoiding the "tragedy of common goods" (Hardin, 1968).

In conclusion, we would like the River Contract to clear these the conflicting positions and the Tiber to be considered by all as a 'natural capital' to protect and enhance.

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