Post-Occupancy Evaluation of Reused Confiscated Assets: An Application in the Campania Region

Yvonne Russo(✉), Daniela Menna, and Fabiana Forte

Department of Architecture and Industrial Design, University of Campania "Luigi Vanvitelli", 81100 Caserta, Italy
{yvonne.russo,fabiana.forte}@unicampania.it,
daniela.menna@studenti.unicampania.it

Abstract. Within public policies aimed at the reuse of the extensive real estate assets confiscated from organized crime, characterised by strong typological heterogeneity, the National Strategy for the Enhancement of Confiscated Assets through Cohesion Policies (2017) represents a relevant territorial development tool. Fundings are allocated to the renovation and adaptive reuse of properties for social and civil purposes, the strengthening of institutional capacity in confiscated assets management, and the promotion of legality and social inclusion. However, these interventions raise several evaluation issues. From an appraisal perspective, a key challenge concens the estimation of market-consistent rental values for publicly owned assets assigned to economic operators, given that such properties cannot be sold or mortgaged. Furthermore, in contexts characterized by high criminal intensity, contextual risk factors and negative externalities significantly affect real estate market performance. Despite numerous rehabilitation interventions, several confiscated assets, returned to the community, fail to meet local needs, sometimes becoming underutilized and resulting in a waste of public resources and, above all, important opportunities for territorial development. This inefficiency can potentially be overcome through more intense community involvement in decision-making processes, with the aim of identifying real problems and defining uses consistent with the needs of the territory. In this scenario, the paper explores the possibility of applying Post-Occupancy Evaluation (POE) as a support tool for public administrations, capable of helping both to define intervention priorities and to formulate improvement strategies. The application of the POE is proposed for a case study in the province of Caserta, in the Campania region (Italy).

Keywords: Post-Occupancy Evaluation (POE) · Confiscated Assets · Adaptive reuse

1 Introduction

Over the past few decades, European institutions have increasingly focused on the importance of developing effective legal and operational tools for the identification, seizure and subsequent confiscation of assets of illicit origin. Empirical studies show that assets

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2027
O. Gervasi et al. (Eds.): ICCSA 2026 Workshops, LNCS 16762, pp. 425–448, 2027.
https://doi.org/10.1007/978-3-032-30524-4_27

confiscated from organised crime constitute veritable investment portfolios, as demonstrated by the OCP (Organised Crime Portfolio) [1], which has enabled the mapping of the main investment sectors of the major criminal organisations active in Europe. The study found that the main countries affected by organised crime include Italy, Spain, Germany and the United Kingdom, with numerous sectors, assets and economic activities involved. In addition to the classic, now well-known illegal activities (tobacco, gambling, drug and arms trafficking, money laundering) and the relatively new ones (cybercrime, fraud, theft of medicines), the construction sector continues to be the most heavily involved in mafia activities, both due to its high labour intensity and the involvement of the public administration [2–3]. Within this sector, public works play a crucial role [4–7] particularly around public procurement [8, 9], where organised crime can exploit its capacity for corruption, intimidation and infiltration into the political and administrative spheres. In this sense, criminal investment in construction firms represents a more 'alarming' phenomenon than simple money laundering through restaurants or property, because it entails a more pervasive infiltration within the local political, economic and social community. The real estate sector – encompassing assets such as houses, villas, flats and other properties – is a prime area of investment for criminal groups, capable of generating high returns, as well as being well-suited to facilitating money laundering through the generation of seemingly legitimate income, such as rental payments. Furthermore, the ownership of such assets serves an operational and strategic function, as they can be used as logistical bases for illicit activities, storage facilities for illegal goods, or spaces facilitating the commission of further crimes [6]. For example, in Italy, real estate accounts for more than 50% of assets confiscated from organised crime over the last thirty years [10].

In southern Europe, they also contribute to the control of territory by international criminal organizations [10], strengthening their social and economic roots. Finally, the ownership of real estate, particularly high-value properties, also takes on symbolic and social status value, reflecting the power and prestige of criminal groups. In this scenario, the confiscation of assets is not only a repressive measure but also a fundamental tool for dismantling the economic foundations of organised crime and returning these resources to the community.

At European level, the regulatory framework governing the confiscation of assets has developed progressively through a range of instruments designed to strengthen harmonisation and cooperation between Member States, with the aim of making the financial fight against organised crime more effective. In this context, Directive 2014/42/EU [11] represented a fundamental step, outlining a comprehensive model for the asset recovery process, which includes the identification and tracing of illicit assets, their freezing or seizure, management aimed at preserving their value, confiscation and, finally, the transfer and reuse of assets, including for public or social purposes. On this basis, an evolving concept of confiscation has gradually gained ground, including at the international level, no longer limited to the purely punitive dimension, but understood as an instrument of restorative justice and social development. This approach is further reinforced by the recent Directive (EU) 2024/1260 [12], which introduces a more advanced regulatory framework, explicitly promoting the social reuse of confiscated assets and fostering greater integration among the institutional actors involved. However, despite significant

regulatory progress, substantial differences persist between Member States in terms of implementation: whilst some legal systems, such as Italy's, represent an advanced model of social reuse, others, such as Belgium and Germany, still have systems predominantly geared towards the liquidation of assets and their allocation to state budgets, although innovative local examples of reuse are emerging. Similarly, in France there has been a recent regulatory shift favouring the allocation of confiscated assets to public bodies and associations, marking a gradual transition from sale to social reuse. In this context, the effectiveness of European policies will depend largely on the Member States' ability to implement the new directive consistently, developing integrated models based on institutional cooperation, the efficient management of assets and their enhancement for the benefit of communities [13]. From this perspective, the public and social reuse of confiscated assets takes on a central role, as highlighted by the 2025 UNICRI report [14], which, in line with the principles set out in the United Nations Convention against Transnational Organised Crime and the United Nations Convention against Corruption, emphasises the value of reuse as a lever for inclusion, social cohesion and democratic strengthening.

Within this European context, Italy has a long-standing tradition of asset confiscation, which is regarded as a highly effective tool, particularly in the fight against organised crime [15], with a particularly advanced and comprehensive model based on a dual approach: on the one hand, there is a procedure based on a criminal conviction; on the other, there is a special procedure known as precautionary confiscation in the case of criminal organisations. This procedure was designed to tackle organised crime without being bound by traditional methods. The latter is particularly effective and is applied to individuals convicted of mafia-type offences, where the value of their assets is disproportionate to their legitimate income and they are unable to prove their lawful origin. This confiscation does not require a link between the asset in question and the specific offence but is based on an assessment of the danger the individual may pose to society and the disproportionate nature of their assets.

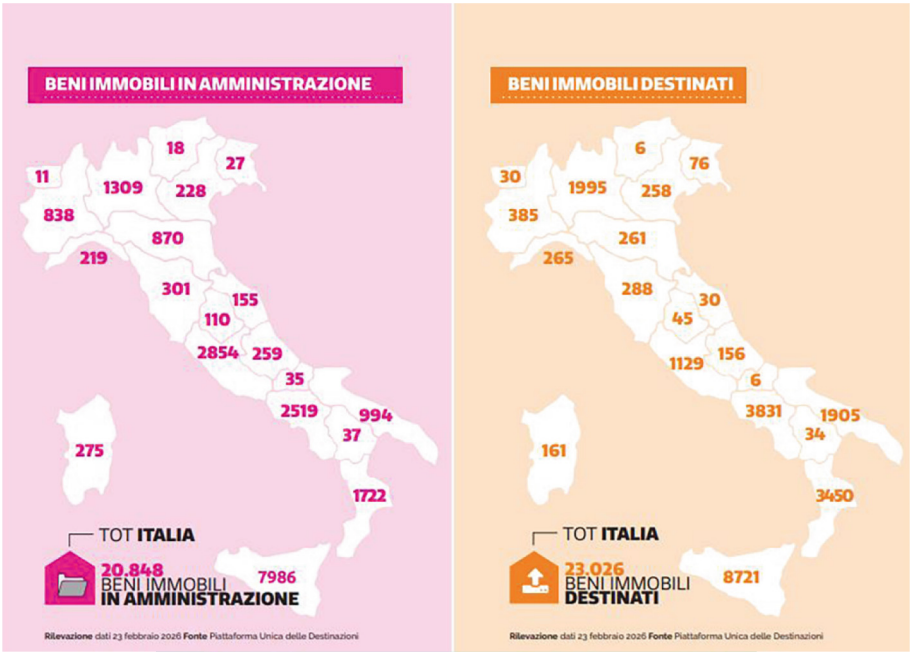
The Rognoni-La Torre Law of 1982 [16] was the first Italian legislative act aimed at combating the illegal activities and investments of organised crime, followed subsequently by the Anti-Mafia Code [17], which brings together and coordinates the body of legal provisions and instruments for the prevention and suppression of the mafia phenomenon. Of paramount importance in this context is the role played by the National Agency for the Management and Disposal of Assets Seized and Confiscated from Organised Crime (ANBSC), whose primary objective is to return assets confiscated from organised crime to the community. The Agency is a public body with organisational and accounting autonomy, subject to the supervision of the Ministry of the Interior and responsible for the integrated management of assets throughout the entire procedural process.

This process, implemented through public tenders, agreements with local authorities or entrustment to the third sector, is of strategic importance not only in terms of law enforcement, but also in symbolic and socio-economic terms, transforming illicitly accumulated assets into collective resources capable of promoting the rule of law, social cohesion and regional development. In particular, the management of confiscated businesses poses complex challenges in terms of maintaining production and safeguarding

employment, requiring targeted measures for revitalisation or conversion that preserve the economic and social value of the assets, whilst avoiding the risk of dispersing productive capital. When assets such as property, businesses, land or money are seized from mafias, clans or criminal organisations, it is the ANBSC that takes charge: it does not merely hold them in custody, but administers them, develops their potential and assigns them to public bodies or associations for social purposes. A confiscated asset can thus become a school, a cultural centre, an agricultural cooperative or a shelter, and this process is of immense value, transforming damage into redemption, and illegality into opportunity [18].

Analysing the objectives and actions set out in the ANBSC Strategic Programme means delving into the heart of the work of an institution that is one of the main tools for combating organised crime in Italy. It is not simply a matter of seizing an asset, but of restoring its dignity, function and value through a process involving the State, local institutions, associations and citizens. To achieve this aim, the Strategic Programme is structured around a series of priority actions: constant monitoring of the state, an efficient allocation procedure and the strengthening of collaboration between public and private entities. The ANBSC works to streamline the bureaucratic procedures leading to the final allocation of assets, seeking to prevent properties or businesses from remaining unused for too long due to administrative delays or legal difficulties [12, 19]. The national picture of confiscated assets, updated with data from the ANBSC's Single National Platform as of February 2025, shows a clear concentration in the South, where 73% of the total is located, compared with 15% in the North and 12% in the Centre. In total, there are 42,110 confiscated assets (property and businesses, both allocated and under management), with the highest number in Sicily (15,675 assets), followed by Campania (6,443) and Calabria (5,095); Lazio (3,853) and Lombardy (3,068) follow, confirming the now nationwide scale of this phenomenon, as can be seen in Fig. 1.

The reuse of assets confiscated from organised crime has effects that go beyond the purely financial dimension, significantly impacting the quality of the social fabric and the relationship between citizens and institutions. From this perspective, the conversion of properties, businesses and movable assets seized from mafia networks into spaces for public, social and productive purposes represents not only a form of collective redress, but also a concrete mechanism for territorial regeneration [20]. The impact of these processes is evident, on the one hand, in the creation of employment opportunities, the provision of services of general interest and the return of community spaces to local communities; on the other hand, in the creation of strong symbolic value, as places once associated with criminal power are transformed into bastions of legality and inclusion. In this sense, initiatives such as those developed in the Caserta area demonstrate how the development of confiscated assets can help to strengthen citizens' trust in institutions, highlighting the state's capacity not only to combat criminal activity but also to translate the outcomes of judicial action into tangible benefits for the community. Transparency in procedures, the involvement of local authorities, the third sector and civic networks, as well as the continuity of activities carried out in reused properties, are essential elements to ensure that reuse does not remain a mere formality, but becomes a sustainable process for generating public value, social cohesion and the consolidation of a culture of legality. Indeed, there is a growing spread of management entities at national level, with



(a) (b)

Fig. 1. Map of confiscated assets in Italian territory: on the left (a), real estate assets under Italian administration are shown; on the right (b), real estate assets confiscated and already destined for Italy are reported. Source: [13]

a particular concentration in the southern regions. The most recent data show that 384 management entities operate in Sicily, 205 in Campania, 193 in Lombardy and 154 in Calabria. In terms of type, assets allocated for social purposes consist mainly of residential units (39.8%), followed by villas and multi-unit buildings (17.3%), agricultural or building land (16%) and commercial or industrial premises (10.8%). These assets now serve as genuine social infrastructure, within which activities with a significant local impact are developed: 57.6% of organisations operate in the welfare and social policy sector, 23.2% in cultural, educational and tourism promotion, and 9% in the agriculture and environmental sustainability sectors. In this way, the reuse of confiscated assets is increasingly seen not merely as a restorative measure, but as a public policy capable of fostering processes of inclusion, social innovation and regional development [21].

In Campania, 55% of assets have already been allocated, whilst 45% are still under management: this figure appears more favourable for properties (59% allocated and 41% under management in the South) than for businesses, for which significantly lower allocation rates are recorded. The 6,443 confiscated assets in the Campania region are heavily concentrated in the province of Naples (3,534 assets, accounting for 55% of the total), followed by Caserta (1,841, 29%), Salerno (870, 13%), Avellino (126, 2%) and Benevento (72, 1%). The distribution at municipal level appears particularly widespread: 216 municipalities (39% of the total of 550) host at least one confiscated asset, with a

higher incidence in the provinces of Naples (70 out of 92 municipalities) and Caserta (60 out of 104), followed by Salerno (48 out of 158), Avellino (22 out of 118) and Benevento (16 out of 78) [22]. In Campania, the phenomenon of the confiscation and reuse of assets seized from organised crime is of particular significance, both due to the sheer scale of the operation and the strong symbolic value it conveys in the process of the community reclaiming the territory.

In this context, the reuse of confiscated assets stands out as one of the most effective tools for upholding the rule of law, capable of transforming illicit assets into resources for the public good. Civil society plays a decisive role, contributing both through the direct management of these assets and by promoting awareness-raising initiatives and lobbying institutions. Interaction between public and private social actors is often decisive for the success of reuse projects, as demonstrated by numerous local initiatives. Among these, the case of the Agrorinasce Consortium, active in the Caserta area, stands out as a well-established example of integrated governance of confiscated assets. The Agrorinasce Consortium, in collaboration with the ANBSC and the participating municipalities, publishes periodic analytical lists of confiscated assets in the area, which detail not only the structural characteristics of the properties but also their intended use and the current progress of the works. Over time, this mapping and monitoring work has enabled the conversion of properties previously linked to organised crime into spaces serving new social functions, including co-working spaces, community gardening centres and sports facilities [23]. A similar approach has also been adopted for assets earmarked for social housing initiatives and urban regeneration projects, in which the value of the properties is assessed not only in economic terms but also in relation to the impact generated on the local social fabric [24]. The body of empirical evidence analysed demonstrates that the Italian model for the management of confiscated assets goes beyond the mere seizure of illicit assets, constituting a system capable of promoting processes of conversion and reuse geared towards the public interest. From this perspective, confiscated assets are not merely the result of repressive action, but become active instruments of development, capable of generating social and economic value and contributing significantly to processes of territorial regeneration.

2 The Case Study: The Social Chocolate Shop “Dulcis in Fundo” in Casal Di Principe

In this scenario, the Province of Caserta is at the centre, an area particularly exposed to the presence of organised crime and, at the same time, an important laboratory for social reuse policies [25]. The criminal scenario in Campania is characterised by the presence of a multiplicity of Camorra groups, which show significant differences depending on their respective areas of influence. These include historically rooted Camorra organisations, alongside smaller, predominantly family-based criminal groups. According to Legambiente’s Ecomafia Report, in 2024 environmental crimes in Italy exceeded 40,000 cases (+14.4%), with an illicit turnover of over 9.3 billion euros. Campania is the region most affected by this phenomenon, followed by Puglia, Sicily and Calabria, which together represent a significant share of crimes. The most affected sectors are the construction and

waste sectors, while the role of environmental corruption as a link between illicit activities and organised crime is also increasing [3]. The provinces of Naples and Caserta remain the territories with the highest and most qualified mafia density, where large Camorra cartels and the most structured criminal groups are present. In these provinces, frequent cases of interference in public administration are found, aimed at influencing decision-making processes relating to public procurement, a sector of criminal interest. In the province of Caserta alone, approximately 25 municipalities (out of 104) have been dissolved due to proven infiltration by organised crime; many municipalities have been placed under special administration several times, demonstrating the deeply rooted nature of the phenomenon [26]. In 2024, the 240 anti-mafia seizures carried out in Campania, concentrated above all in the provinces of Naples and Caserta, highlight the growing capacity of Camorra organisations to adapt, increasingly oriented towards the diversification of their activities and infiltration into legal markets. The construction and real estate sectors appear to be the most exposed, followed by sectors such as waste management, environmental services, and other economic sectors, indicating an expansion of criminal strategies aimed at profit and territorial control.

In the province of Caserta, historically centred on the area of Casal di Principe, the mafia phenomenon takes on distinctive and deeply entrenched characteristics. Evidence gathered from asset seizures highlights the significant economic and financial clout of local criminal groups, which are active not only in traditional illicit trafficking but also in sophisticated forms of criminal enterprise. These organisations are in fact able to exercise monopolistic control over key segments of the legal economy, as well as to systematically infiltrate public procurement through corrupt and collusive practices, facilitated by well-established networks of relationships with institutional actors and businesspeople. The data reveal a large concentration of confiscated assets in the municipalities of the Agro Aversano and the Costa Domiziana, where municipalities such as Castel Volturno (206 assets), Trentola Ducenta (203), Santa Maria la Fossa (128) and Casal di Principe (124) record the highest numbers [10].

Similarly, the adoption of specific local regulations remains limited, indicating that governance remains fragmented and inconsistent. In this context, exemplary management practices take on particular significance, including those promoted by the Agrorinasce consortium [27], which has played a central role in the recovery and enhancement of numerous confiscated properties, facilitating their use for productive, social and social-healthcare purposes. The prevalence of productive uses, particularly in the agricultural sector, highlights how the reuse of assets can contribute not only to their symbolic return to the community but also to the creation of economic and employment opportunities. The municipality of Casal di Principe is one of the areas in the province of Caserta with the highest number of confiscated assets already allocated to public and social uses. The process leading to this result has developed progressively over time: starting in 1999, the year in which the first seven properties were allocated, there has been steady growth, with an average of around 3.6 properties allocated annually between 1999 and 2020 and a significant peak of 16 allocations in 2007. In recent years, partly thanks to the operational strengthening of the National Agency for Seized and Confiscated Assets (ANBSC), there has been a further increase in the number of assets allocated. Casal di Principe also stands out for several good administrative practices: it is one of the

few municipalities in the province to have published a complete and up-to-date list of confiscated assets within its territory and to have adopted specific regulations for their management. These regulations provide for various possible uses: institutional, social, for housing emergencies, and even economic and productive purposes, with the provision that any profits are reinvested in social activities or in the recovery of further assets not yet allocated [28]. In this context, the reuse of confiscated assets plays a central role in territorial regeneration strategies. A region seeking to free itself from the presence of organised crime and counter its potential reorganisation must necessarily invest in culture, education and civic participation. The distinctive feature of the initiative launched in Casal di Principe lies precisely in its ability to combine these objectives with the practical enhancement of confiscated assets, transforming them into tools for social development, inclusion and the promotion of legality. This context includes the case study of the social chocolate shop "Dulcis in Fundo" [29], located in the municipality of Casal di Principe, an area heavily affected by organised crime but now at the heart of significant social regeneration initiatives. The property in question was confiscated from a Camorra member, following a court order, representing a typical example of illicitly accumulated assets subsequently returned to the community. The process of revitalising the property began with its entrustment to Agrorinasce and its designation as the "Casa delle Associazioni", as part of a wider urban regeneration project funded by the Campania Region. Subsequently, in 2011, part of the property was allocated, via a public tender, to the Davar social cooperative, which launched a social enterprise project aimed at the employment inclusion of people with disabilities. After a period marked by bureaucratic delays, the facility became operational in 2016 with the opening of the social chocolate workshop "Dulcis in Fundo", also supported by co-funding from the Fondazione con il Sud.

The significance of this case study lies not only in the economic and productive aspects of the initiative, but above all in its symbolic and social value: an asset seized from a member of organised crime is transformed into a space for inclusion, training and civic participation. The chocolate shop provides a safe environment in which people with disabilities can acquire professional skills, develop independence and actively participate in the social and economic life of the local community. The experience of 'Dulcis in Fundo' demonstrates how the reuse of confiscated assets can contribute to the development of local development models based on legality, solidarity and social innovation. The conversion of a property that belonged to a member of organised crime into a place of social production and workplace inclusion represents a concrete example of 'restitution' to the community, capable of generating not only economic value but also cultural and symbolic value, thereby strengthening citizens' trust in institutions and the justice system. Thus, the proliferation of numerous examples of the reuse of confiscated assets in the Caserta area testifies to the value of such initiatives as tools for territorial development and social cohesion.

Although the formal allocation of assets does not necessarily equate to their full and effective use, there is a clear need to examine in greater depth the issue of how these assets are utilised for the benefit of the community, analysing their ability to meet local needs and generate lasting impacts [20]. It is essential to identify and adopt appropriate analytical approaches and evaluation tools capable of measuring the performance of

confiscated assets in a structured and comparable manner, in order to guide enhancement policies more effectively and improve management practices.

3 Methodology

It is well known that the mere allocation of confiscated assets and their return to the local community cannot guarantee their effective automatic valorization. Furthermore, in some cases, reassigned assets, despite being intended for public use, do not meet with the consensus of the community, especially when their new function does not address the real needs expressed by the local territory. When there is no alignment between need and intended use, or the actors managing the asset are not fully capable of fulfilling their role, the assets remain underutilized for long periods, losing the possibility of improving the territorial context and proving inefficient. Existing policies aimed at valorizing confiscated assets are, however, mainly focused on the "aesthetic" valorization of the asset, favoring public funding for building renovation interventions. This framework, mainly aimed at the physical rehabilitation of recovered assets, has at times relegated to a secondary role the definition of use functions, the involvement of local stakeholders, and the development of projects consistent with the actual needs of the territory. Experience has instead show that effective valorization requires the mobilization of territorial resources, the activation of participatory processes, and the involvement of specific expertises in the design of interventions with a strong social impact. When an asset returned to the community fails to meet users' expectations or needs, it risks falling back into conditions of disuse and abandonment, thereby becoming a waste of public resources and opportunities for territorial development. This highlights the need to strengthen both ex-ante analyses, aimed at intercepting real demand in the territorial area, and ex-post evaluations of the interventions implemented. Furthermore, the management of the recovered assets is never definitive, but rather subject to cyclical renewals regulated by the Anti-Mafia Code [17], upon request by the managing entity, which must be approved by the municipal administration following due verification. However, such assessments of project continuation are generally based on verifying the maintenance of the asset's intended social use and on anti-mafia checks - aimed at confirming the absence of criminal infiltration. The actual evaluation of the performance of recovered assets therefore remains excluded from these mandatory control processes, which, in any case, do not preclude conditions of underutilisation or inefficiency.

From this perspective, Post-Occupancy Evaluation (POE) represents a particularly effective tool, as it places the user at the centre of the assessment of an intervention or service; this is why the methodology has been widely debated, predominantly within academic contexts. It is generally described as a systematic process of collecting and analysing data relating to building performance following occupancy [30]. This process aims to assess such performance through the comparison between predefined performance criteria and the actual, current perceptions of direct or indirect users. In both architectural and managerial contexts, POE is regarded as a valuable learning tool - typically aimed at improving design and management quality - useful for both designers and those responsible for building management [31, 32]. The evolution of POE, from early assessments primarily focused on the technical aspects of building performance to the

integration of social, psychological, and managerial dimensions, reflects the dynamic and complex nature of the relationship between users and the built environment [33, 34]. It can therefore be understood as an interdisciplinary research methodology aimed at understanding and improving the interaction between buildings, technical performance, and human needs. In termini operativi, l'analisi preliminare dell'ambiente costruito implica il riconoscimento e l'identificazione sia delle criticità che degli aspetti positivi che caratterizzano il bene oggetto dell'analisi [35, 36].

From an operational point of view, the preliminary analysis of the built environment involves recognising and identifying both the critical issues and the positive aspects that characterise the asset under investigation [37, 38]. In this regard, the literature identifies several evaluation dimensions: technical and funcional, with particular attention to materials, construction techniques, and the structural and funcional elements of the building; and socio-behavioural, based on observation and user feedback [39, 40]. Similarly, evaluation may include varios equally important aspects for measuring building quality performance, focusing both on users' opinions regarding performance and on the purely technical characteristics of the building [41]. In recent decades, studies on the perception of the built environment have gained increasing relevance, highlighting the central role of user experience in assessing spatial quality. More recently, POE studies have assumed a new perspective and greater importance for designers, developers, and clients [42–44], also in relation to growing awareness and sensitivity towards environmental sustainability, building energy eficiency and user comfort [45]. Among its possible fields and scales of application, POE is also employed in the evaluation of the performance of public buildings [46–49] for assessing building quality.

During the management phase - which is assuming an increasingly important role in the building process – POE enables the monitoring of the durability of the built environment throughout its life cycle and supports the planning of maintenance interventions, structural upgrades, and energy efficiency improvements. These activities are particularly relevant in the case of public buildings or assets intended for collective use, which are designed to have a long duration. In this sense, POE can be configured as a highly useful operational tool for public administrations, capable of systematically supporting decision-making processes throughout the entire life cycle of the asset. Through the structured collection of data relating to user experience, POE makes it possible to identify functional, managerial and perceptual criticalities in public-use buildings, detecting both physical and structural dysfunctions and those related to spatial organisation-such as accessibility, usability, and the quality of services provided-thus enabling a more efficient allocation of public resources.

A further field of application concerns the adaptive reuse and the valorisation or rehabilitation of existing building. In this context, POE can help check the coherence between the actual physical-spatial characteristics of a property and its newly intended functions, reducing the risk of incompatibility between container and content, and increasing the probability of successful valorisation interventions [50]. It is therefore possible to provide for the application of the POE also in the context of confiscated assets, where it can assume a dual role. When applied ex ante, it allows for the establishment of priority criteria for resource allocation, integrating technical analyses with the real needs expressed by the local context. When applied ex post, it allows for the assessment of user satisfaction

and the measurement of the effectiveness of the recovered asset's intended use. Moreover, through continuous monitoring over time, it becomes possible to identify early signs ot underutilisation or disengagement, thereby anticipating processes of decline and supporting the adoption of corrective strategies, including service enhancement or functional reconfiguration aligned with the evolving needs of users.

Regardless of the field of application, the process of applying the Post-Occupancy Evaluation methodology follows a well-defined framework, which can be broadly summarized in the phases illustrated in Fig. 2. Each phase was explored individually in Sects. 4 and 5, through the practical example of implementing the POE to the case study.

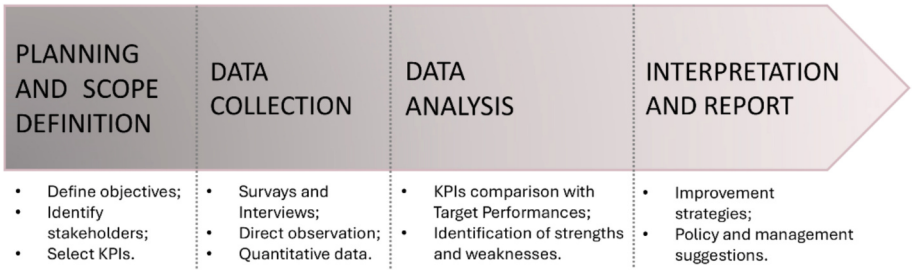


Fig. 2. Main phases of the Post-Occupancy Evaluation methodology. Source: author's elaboration.

4 Application of Post-Occupancy Evaluation to the Case Study

Starting from the assumption that this methodology can be employed as a tool capable of systematically collecting information on the performance of recovered assets, while at the same time being applicable to assets characterised by highly diverse uses, there emerges a need to make the evaluation process as objective, structured, and easily replicable as possible. Accordingly, this contribution - through the application of POE to the case study of the social chocolate shop "Dulcis in Fundo" - proposes the development of a set of standardised territorial indicators, organised into measurable dimensions, capable of integrating quantitative data with qualitative information derived from users' experience. The aim is to propose a clear operational model applicable across multiple cases, indipendently of the intended use of the recovered assets, thereby strengthening comparability between different experiences and supporting more informed decisions in terms of management, reuse, and valorisation.

Stage 1: Planning and Scope Definition. In the initial phase, the methodological framework was structured to ensure coherence between objectives, areas of analysis, and measurement tools, through a series of key steps:

– the primary objective of the POE application was identified as the evaluation of the overall performance of the confiscated asset, including its capacity to generate social, economic and territorial value within its reference context.
– The stakeholders to be involved in the evaluation process were identified, to simultaneously consider heterogeneous and complementary perspectives. In particular, the main actors included the asset manager, the employed workers and volunteers

involved in daily activities, partner associations and enterprises collaborating with the asset, as well as end users who benefit from the spaces and services provided.
– Three thematic areas were defined, corresponding to the main macro-domains of performance evaluation. For each area, specific aspects of analysis were identified, selected based on their ability to describe conditions of use, perceived quality and the effectiveness of asset management.
– These specific aspects were operationalised through the development of a set of Key Performance Indicators (KPI), designed according to criteria of objectivity, measurability and replicability. The aim was to define KPIs capable not only of supporting the analysis of the case study under consideration, but also of being applied in analogous contexts, thereby enabling comparisons and encouraging further applications of the methodology. The set of indicators is summarised in Fig. 3.

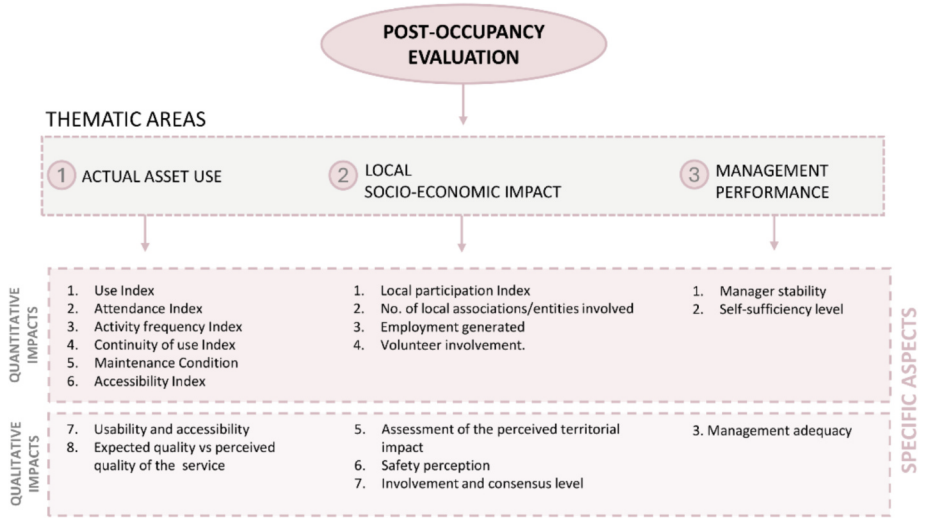


Fig. 3. Chart of the Thematic Areas and Specific Aspects of the Performance Evaluation of a Confiscated Asset. Source: author's elaboration.

Stage 2: Data Collection. This activity represents a crucial step in the overall POE application process, as it is aimed at constructing as robust and comprehensive an information base as possible. At this phase, the operational methods are defined to capture, in an integrated way, both the objective performance of the asset - and those related to its managementand the perceptions and expectations of its users. With reference to the specific case study, quantitative data were collected through direct on-site monitoring activities, aimed at observing both the implementation of activities within the asset and the state of conservation and maintenance of the building. These observations were complemented by quantitative data provided by the asset manager, which contributed to completing the information framework with managerial and operational elements. The quantitative data were collected through interviews with direct and indirect users of the asset and subsequently synthesised in the tables presented in Figs. 4, 5 and 6.

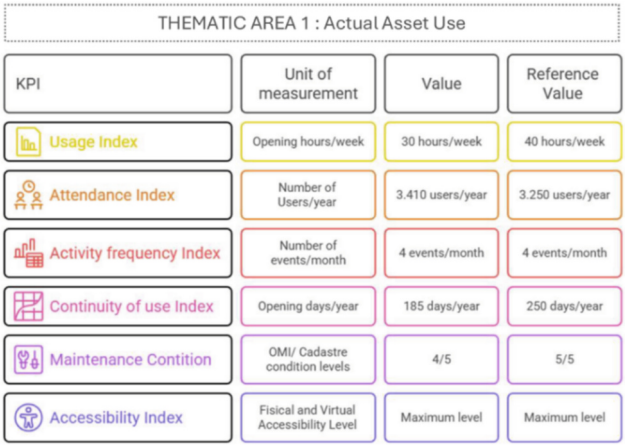


Fig. 4. Representative figure of the comparison between the current values – relating to the asset under examination – and the reference values, in relation to the specific aspects (quantitative impacts) of Thematic Area 1: Effective Use of Resources. Source: author's elaboration.

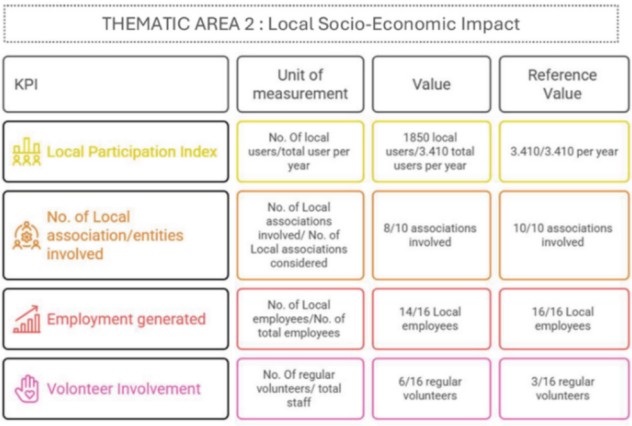


Fig. 5. Representative figure of the comparison between the current values – relating to the asset under examination – and the reference values, in relation to the specific aspects (quantitative impacts) of Thematic Area 2: Local Socio-Economic Impact. Source: author's elaboration.

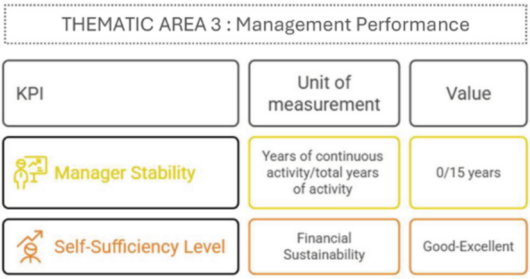


Fig. 6. Representative figure of the comparison between the current values – relating to the asset under examination – and the reference values, in relation to the specific aspects (quantitative impacts) of Thematic Area 3: Management Performance. Source: author's elaboration.

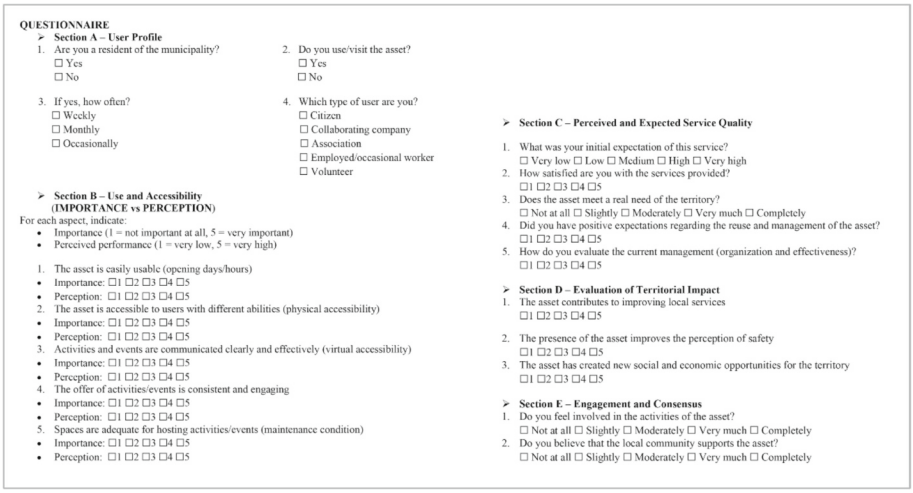
The reference values were established as follows:

- Usage Index: the reference value of 40 h/week was set in accordance with the maximum standard weekly working hours in Italy, as defined by Legislative Decree No. 66 of 8 April 2003, Art. 3 [50].
- Attendance Index: the reference value for the number of users per year was calculated as 15% of the total resident population (21,298 inhabitants). A maximum fluctuation up to 21,500 individuals was considered, also including non-residents who frequent the municipality during daytime hours. This reflects an average level of community engagement in local activities.
- Activity Frequency Index: similarly, the reference value for the number of events per month was established to reflect a moderate level in the quantity of activities offered.
- Continuity of Use Index: the reference value of 250 days/year was based on the standard number of working days in a calendar year in Italy.
- Maintenance Condition: the reference value for maintenance status is based on the official classification of building maintenance conditions in Italy. Based on the OMI Database Manual:

  Maintenance States: 1 = poor/to be refurbished; 2 = fair; 3 = moderate; 4 = good; 5 = excellent.
- Accessibility Index: the reference value for accessibility was defined according to three predefined levels, combining the requirements set out in Presidential Decree No. 503/1996 [51] for the removal of architectural barriers in public spaces, buildings and transport, with the degree of virtual accessibility, depending on the adequacy of communication and promotion of activities. The levels are defined as follows: L1 = Maximum Level (full physical and virtual accessibility; L2 = Medium Level (full accessibility either physical or virtual); L3 = Low Level (no full arcessibility).
- Volunteer Involvement: the reference value of three volunteers was also calculated as a proportion of the total resident population.

In parallel, a qualitative survey was developed, based on the direct user experience. A structured, closed-ended questionnaire was designed to collect subjective evaluations regarding expected and perceived quality, as well as the impacts of the asset within its territorial context. All indicators relating to the specific aspects of the analysis were included in the questionnaire. The questionnaire, presented in Fig. 7, was administered

to the previously identified stakeholders, who expressed their views both through the completion of paper forms on site and via the digital platform Google Forms, thereby ensuring greater accessibility and participation in the data collection process.



QUESTIONNAIRE

➢ **Section A – User Profile**

1. Are you a resident of the municipality?
   ☐ Yes
   ☐ No
2. Do you use/visit the asset?
   ☐ Yes
   ☐ No
3. If yes, how often?
   ☐ Weekly
   ☐ Monthly
   ☐ Occasionally
4. Which type of user are you?
   ☐ Citizen
   ☐ Collaborating company
   ☐ Association
   ☐ Employed/occasional worker
   ☐ Volunteer

➢ **Section B – Use and Accessibility (IMPORTANCE vs PERCEPTION)**

For each aspect, indicate:
- Importance (1 = not important at all, 5 = very important)
- Perceived performance (1 = very low, 5 = very high)

1. The asset is easily usable (opening days/hours)
   - Importance: ☐1 ☐2 ☐3 ☐4 ☐5
   - Perception: ☐1 ☐2 ☐3 ☐4 ☐5
2. The asset is accessible to users with different abilities (physical accessibility)
   - Importance: ☐1 ☐2 ☐3 ☐4 ☐5
   - Perception: ☐1 ☐2 ☐3 ☐4 ☐5
3. Activities and events are communicated clearly and effectively (virtual accessibility)
   - Importance: ☐1 ☐2 ☐3 ☐4 ☐5
   - Perception: ☐1 ☐2 ☐3 ☐4 ☐5
4. The offer of activities/events is consistent and engaging
   - Importance: ☐1 ☐2 ☐3 ☐4 ☐5
   - Perception: ☐1 ☐2 ☐3 ☐4 ☐5
5. Spaces are adequate for hosting activities/events (maintenance condition)
   - Importance: ☐1 ☐2 ☐3 ☐4 ☐5
   - Perception: ☐1 ☐2 ☐3 ☐4 ☐5

➢ **Section C – Perceived and Expected Service Quality**

1. What was your initial expectation of this service?
   ☐ Very low ☐ Low ☐ Medium ☐ High ☐ Very high
2. How satisfied are you with the services provided?
   ☐1 ☐2 ☐3 ☐4 ☐5
3. Does the asset meet a real need of the territory?
   ☐ Not at all ☐ Slightly ☐ Moderately ☐ Very much ☐ Completely
4. Did you have positive expectations regarding the reuse and management of the asset?
   ☐1 ☐2 ☐3 ☐4 ☐5
5. How do you evaluate the current management (organization and effectiveness)?
   ☐1 ☐2 ☐3 ☐4 ☐5

➢ **Section D – Evaluation of Territorial Impact**

1. The asset contributes to improving local services
   ☐1 ☐2 ☐3 ☐4 ☐5
2. The presence of the asset improves the perception of safety
   ☐1 ☐2 ☐3 ☐4 ☐5
3. The asset has created new social and economic opportunities for the territory
   ☐1 ☐2 ☐3 ☐4 ☐5

➢ **Section E – Engagement and Consensus**

1. Do you feel involved in the activities of the asset?
   ☐ Not at all ☐ Slightly ☐ Moderately ☐ Very much ☐ Completely
2. Do you believe that the local community supports the asset?
   ☐ Not at all ☐ Slightly ☐ Moderately ☐ Very much ☐ Completely

Fig. 7. Structured, closed-ended questionnaire for collecting qualitative data. Source: author's elaboration.

5 Results

It should be noted that the POE methodology does not constitute a static and definitive evaluation; rather, it fosters a cyclical process of learning and continuous improvement. Therefore, the results presented in this section should be considered reliable at the present phase, as they reflect performance at the time of application.

Stage 3: Data Analysis. The information collected during the Data Collection phase was analysed and processed in this step of the process. Regarding the analysis of quantitative impacts - based on the assessment of specific aspects that can be objectively measured - the comparison between the previously defined reference values and those observed for the asset under examination produced the results summarised in Fig. 8.

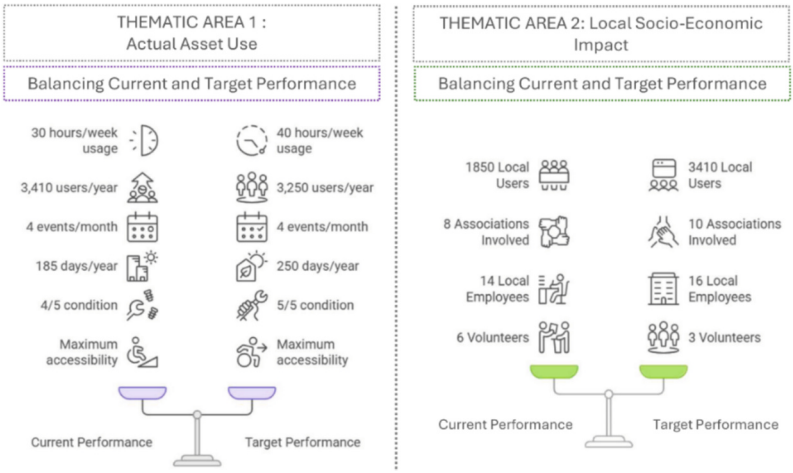


Fig. 8. Synthetic graphical representation comparing the established reference values (Target Performance) with the values detected for the asset under examination (Current Performance), with reference to Thematic Area 1 and Thematic Area 2. Source: author's elaboration.

The balanced representation visually highlights the deviations between current performance and reference benchmarks. For Thematic Area 1, relating to the "Actual Use of the Asset", a general misalignment emerges between its current and potential use, particularly with respect to weekly hours and annual opening days. However, it should be noted that the activity operates throughout the year, except for the summer months (June, July, and August). Given that the facility is a chocolate workshop and considering the high summer temperatures typical of this area of the country, the manager's decision to limit its temporal use is understandable to preserve product quality. Other indicators within this thematic area are aligned with the established standards-such as the number of monthly events and maintenance condition-or exceed performance targets, as in the case of the annual number of users and the level of physical and virtual accessibility, suggesting a strong capacity to attract users despite limited temporal availability. As regards Thematic Area 2, which concerns the "Local Socio-Economic Impact", the comparative analysis reveals a more complex situation. On the one hand, a significant gap is observed between the number of local users involved annually - primarily those who work, collaborate, or provide regular voluntary service and the total number of annual users. This suggests the need to strengthen territorial embeddedness and to develop innovative strategies for engaging local communities. On the other hand, the number of volunteers involved appears highly positive, representing a distinctive feature of a management model grounded in strong civic participation. This significant level of voluntary engagement, combined with the stability of the managing entity - whose activity has continued uninterrupted for fifteen years - and a solid degree of economic self-sufficiency, outlines a framework of excellent qualitative performance.

About the analysis of qualitative impacts - based on the evaluation of specific aspects related to user perception and the comparison between expected and perceived quality for each aspect - the results are presented in Figs. 9, 10, 11, 12 and 13.

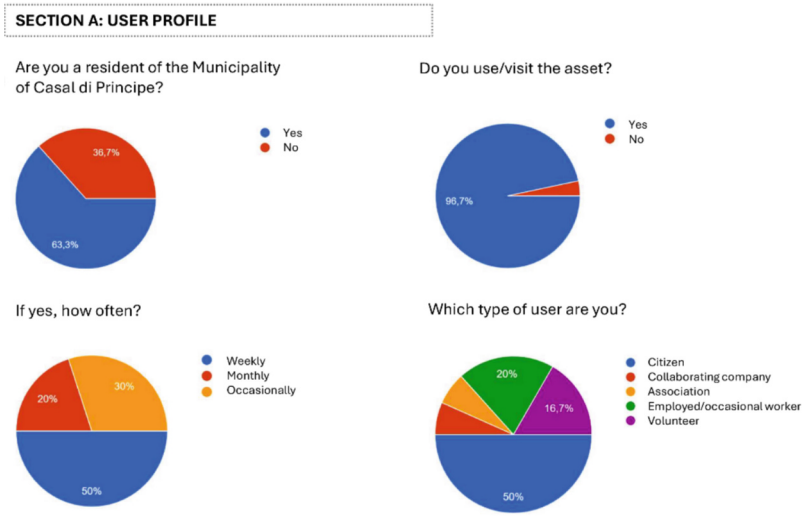


Fig. 9. Graphical representation of the questionnaire results compared to Section A: User profile. Source: author's elaboration.

Most of the users involved in the interviews were individuals who currently attend or have previously attended the social chocolate workshop, as respondents were required to express judgements primarily based on direct experience of the service and the asset. The stakeholders involved in the survey, depending on their user category, engage with the asset in different ways and were therefore able to provide diverse and complementary perspectives on its use and perception. Below in the Figs. 10, 11 and 12 are the graphically processed survey results, as required by the Stage 4: Interpretation and Report.

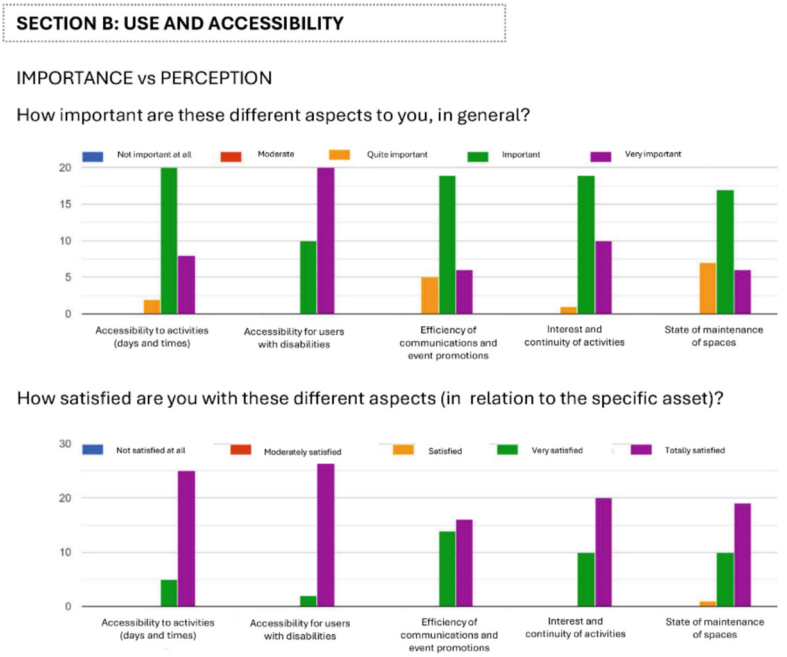


Fig. 10. Graphical representation of the questionnaire results compared to Section B: Use and Accessibility. Source: author's elaboration.

In the Section B of the questionnaire, users were asked to provide a combined assessment. For each specific aspect, they assigned a score from 1 to 5 both in terms of its importance at a general level, irrespective of the specific case and in terms of their level of satisfaction derived from its use in relation to the asset under consideration. Overall, the graphs indicate a positive outcome, with no significant gaps between expected and perceived quality across the performance dimensions considered. Users' expectations are either met or fully satisfied by the actual performance of the asset. Particularly noteworthy is the comparison between expected and perceived quality in relation to accessibility for users with diverse abilities, which highlights the exceptional inclusiveness of both the service and the use of the asset.



Fig. 11. Graphical representation of the questionnaire results compared to Section C: Percived and expected service quality. Source: author's elaboration.

The findings of the Section C of the questionnaire reveal an excellent level of user satisfaction regarding the services provided and the quality of asset management. The overall valuation of the asset, depending on the services offered, exceeds users' expectations. The presence of the good in the area is perceived as an added value, with a positive impact that far exceeds expectations.

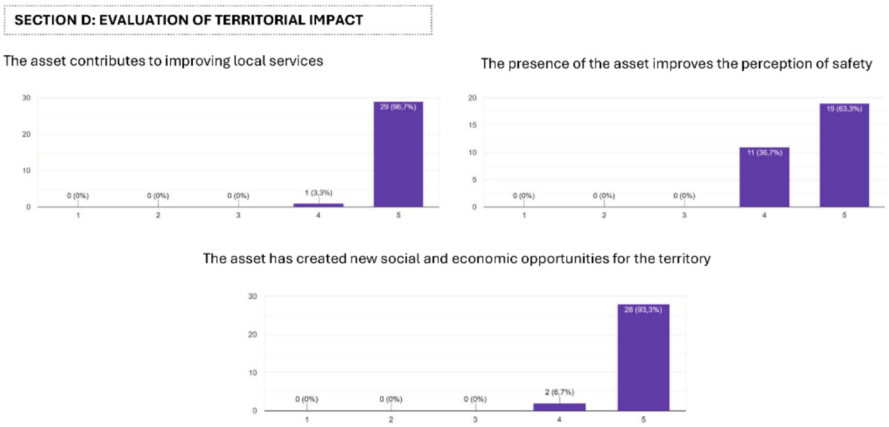


Fig. 12. Graphical representation of the questionnaire results compared to Section D: Evaluation of territorial impact. Source: author's elaboration.

Similarly, Section D of the questionnaire produces positive results. The territorial impact of the asset is excellently assessed, especially in relation to its ability to generate employment, social, and economic opportunities, especially given the complex and precarious socioeconomic balance of the area.

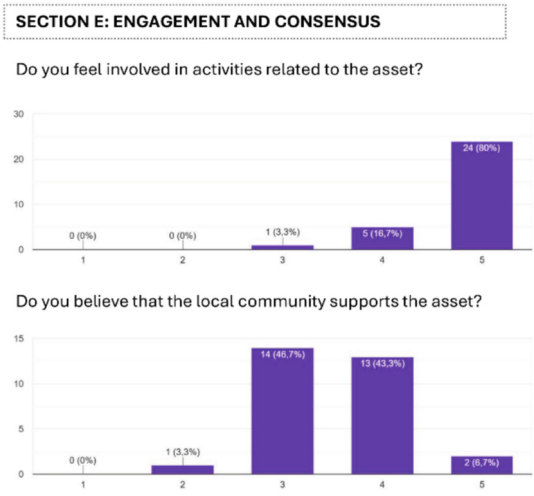


Fig. 13. Graphical representation of the questionnaire results compared to Section E: Engagement and Consensus. Source: author's elaboration.

The results of Section E of the questionnaire are more fragmented, especially compared to the analysis of the level of local community consensus. Direct users, who therefore know the asset and assiduously frequent it, by actively participating in the proposed activities, have obviously developed a strong sense of belonging to this project of inclusiveness and solidarity. Neverthenless, the level of consensus among the broader local community is less positive, suggesting a lower involvement predisposition and participation in the proposed activities. However, it is important to consider, once again, the complexity of the social context, in which organised crime continues to generate a shadow and influence the residents'lives, particularly older residents.

6 Conclusions

The study highlights how the reuse of confiscated assets in the Caserta area represents an area of intervention with high socio-economic potential, capable of generating positive effects in terms of local development, social inclusion and the strengthening of a culture of legality. The repurposing and return of confiscated assets to the community, as well as being a valuable tool for territorial management, creates opportunities, strengthens the sense of community and contributes to a development process that puts people at the centre [52]. The case study of the social chocolate shop 'Dulcis in Fundo', situated in a socially complex context such as the municipality of Casal di Principe, confirms how

the conversion of an asset seized from organised crime can result in a virtuous cycle, capable of generating economic, social and symbolic value for the local area.

The findings in this case highlight an excellent alignment between the asset's formal designated use and its actual utilisation, likely due to the significant social impact on the local area and the high level of user engagement with the service. However, it was only through an assessment of the actual impacts – and thus following the asset's real-world use – that it was possible to determine the effectiveness of the designated use. The research therefore highlights that designation alone is not sufficient to guarantee adequate performance; rather, a paradigm shift is required that places the assessment of actual use and the impacts generated at the centre, which translates into the necessary monitoring of assets over time. The application of the Post-Occupancy Evaluation (POE) methodology to the case study demonstrated the validity of an integrated approach, capable of combining quantitative indicators and users' qualitative perceptions.

On the one hand, there has been excellent performance in terms of service quality and management, as well as the site's accessibility and appeal. However, on the other hand, there are some critical issues, particularly regarding the site's roots in the local area and the broader involvement of the local community. In this regard, one of the main operational recommendations that has emerged concerns the need to strengthen engagement strategies, including through the active involvement of partner associations and local networks, to broaden participation and consolidate the bond between the site and the community.

In terms of methodology, the POE proves to be an effective and flexible tool for the evaluation of confiscated assets. The proposed set of KPIs can be adapted to different contexts and to assets with diverse intended uses, enabling not only the measurement of managerial efficiency and effectiveness, but also supporting more informed decision-making processes. In particular, the possibility of applying this model in an ex-post phase allows for the assessment of the assets' performance, including in view of the renewal of concessions, facilitating corrective measures or potential repurposing initiatives. Furthermore, the comparability between different cases paves the way for prioritising public interventions, which is particularly relevant in contexts characterised by limited resources.

The proposed methodology does, however, have certain limitations, mainly linked to the subjective nature of qualitative assessments, which may be influenced by individual interpretations of desire/need and by variations in perception. Nevertheless, this limitation can be mitigated by integrating quantitative data and by expanding the survey sample, to obtain statistically more robust results.

In conclusion, the research suggests that the methodology should be extended to other similar case studies, to build a broader and more consolidated empirical basis. Comparing different experiences of reuse would make it possible to identify recurring patterns, strengths and systemic weaknesses, as well as to promote the most effective practices as replicable models. In this sense, Post-Occupancy Evaluation can help transform the assessment of confiscated assets from an episodic and descriptive practice into a structured and continuous process, geared towards improving performance and ensuring the long-term sustainability of enhancement policies.

Acknowledgments. The authors would like to thank the social chocolate shop "Dulcis in Fundo" for its availability, as well as all the users involved, who offered their time and made their valuable contributions during the interviews.

Attributions. The authors jointly conceived and contributed to the contribution. Conceptualization: Y.R., D.M., F.F. Data curation: Y.R. Investigation: Y.R., D.M. Validation: Y.R., D.M., F.F. Methodology: Y.R. Supervision: F.F. Writing—original draft, Y.R., D.M., F.F. Writing—review and editing: Y.R., D.M., F.F. All authors have read and agreed to the published version of the manuscript.

Disclosure of Interests. The authors declare no conflict of interest.

References

1. From illegal markets to legitimate businesses: the portfolio of organised crime in Europe Final Report of Project OCP – Organised Crime Portfolio. https://www.transcrime.it/wp-content/uploads/2015/03/OCP-Full-Report.pdf
2. Mocetti, S., Rizzica, L.: La criminalità organizzata in Europa: un'analisi economica. In: Questioni di Economia e Finanza (Occasional papers). Numero 661. Banca d'Italia. Eurosistema (2021). https://doi.org/10.32057/0.QEF.2021.0661
3. Legambiente: Rapporto Ecomafia. In Attività scientifiche, Legambiente (2025). https://www.legambiente.it/attivita-scientifiche/rapporto-ecomafia
4. Sciarrone, R.: Mafie, relazioni e affari nell'area grigia. In: Sciarrone, R. (ed.). Alleanze nell'ombra Mafie ed economie locali in Sicilia e nel Mezzogiorno. Donzelli Editore (2011). https://iris.unito.it/handle/2318/84406
5. Sacco, S.: La mafia in cantiere. L'incidenza della criminalità organizzata nell'economia: una verifica empirica nel settore delle costruzioni. Palermo: Edizioni Pio La Torre (2010). https://www.piolatorre.it/public/pdf-pubblicazioni/La%20mafia%20in%20cantiere.pdf
6. Transcrime: Progetto PON Sicurezza 2007–2013. Gli investimenti delle mafie. (Rapporto Linea 1, Deliverable D1.3). Milan: Università Cattolica del Sacro Cuore (2013). http://www.investimentioc.it/files/PONGli_investimenti_delle_mafie.pdf
7. Riccardi, M., Soriani, C., Standridge, P.: Investment, management and ownership strategies of Mafia companies. Presented at the European Society of Criminology, Prague (2014)
8. Savona, E.U.: Infiltration of the public construction industry by Italian organised crime. In: Bullock, K., Clarke, R.V., Tilley, N. (eds.), Situational Prevention of Organized Crimes, pp. 130–150. Willan Publishing, Cullompton, Devon (2010)
9. Caneppele S.: Le mafie dentro gli appalti. Casi studio e modelli preventivi. Milano: Franco Angeli (2014). https://www.transcrime.it/wp-content/uploads/2015/04/Le-mafie-dentro-gli-appalti_Caneppele_2014.pdf
10. Ministero dell"Interno, Direzione Investigativa Antimafia, Relazione del Ministro dell"Interno al Parlamento "Relazione sull'attività svolta e risultati conseguiti dalla Direzione Investigativa Antimafia nel 2024". https://direzioneinvestigativaantimafia.interno.gov.it/2025/relazione-sullattivita-svolta-e-risultati-conseguiti-nel-2024/
11. Direttiva 2014/42/UE del Parlamento Europeo e del Consiglio del 3 aprile 2014 relativa al congelamento e alla confisca dei beni strumentali e dei proventi da reato nell'Unione Europea (2014)
12. Directive (EU) 2024/1260 of the European Parliament and of the Council of 24 April 2024 on asset recovery and confiscation (2024)
13. Libera. Associazioni, nomi e numeri contro le mafie, Raccontiamo il bene. (2026)

14. United Nations Interregional Crime and Justice Research Institute (UNICRI): the social re-use of seized and confiscated assets: Good policies and practices (2025). https://unicri.org/sites/default/files/2025-10/Social-Reuse-of-Seized-and-Confiscated-Assets-Good-Policies-and-Practices-Oct-2025.pdf
15. Sammarco, A., Del Medico, G.: Proposta di un modello di governance per la valorizzazione dei beni e aziende confiscate alla criminalità organizzata, Unioncamere, Roma, p. 27 (2015)
16. Legge 13 settembre 1982, n. 646, Disposizioni in materia di misure di prevenzione di carattere patrimoniale ed integrazioni alle leggi precedenti (1982)
17. Decreto legislativo 6 settembre 2011, n. 159, Codice delle leggi antimafia e delle misure di prevenzione, nonché nuove disposizioni in materia di documentazione antimafia, in attuazione degli artt. 1 e 2 della legge 13 agosto 2010, n. 136. (2011)
18. Imbalzano, P.: La confisca dei beni immobili alla criminalità organizzata di tipo mafioso. Il ruolo dell'agenzia nazionale dei beni sequestrati e confiscati ed i rapporti con …. Liritti Ed., s.l. (2014)
19. Relazione sull'attività svolta anno 2023, ANBSC (2023). https://www.benisequestraticonfiscati.it/wp-content/uploads/2024/08/ANBSC-Relazione-2023.pdf
20. Zizzania, P., et al.: Transdisciplinary impact-oriented strategies through a design-evaluation approach: the case study of confiscated assets from the mafia in Naples. In: Gervasi, O., et al. (eds.) Computational Science and Its Applications – ICCSA 2025 Workshops (2026). https://doi.org/10.1007/978-3-031-97660-5_25
21. Libera. Associazioni, nomi e numeri contro le mafie aps, Le pratiche di riutilizzo sociale dei beni confiscati alle mafie i numeri, le esperienze e le proposte, 2026. https://www.libera.it/documenti/schede/2026_pubblicazione.pdf
22. Piano strategico per i beni confiscati della Regione Campania 2025–2027, Regione Campania (2025). https://www.regione.campania.it/assets/documents/piano-strategico-2025-2027-e-programma-annuale-2025-beni-confiscati.pdf
23. Ofria, F., David, P.: L'economia dei beni confiscati, FrancoAngeli, Milano (2014)
24. Nazzaro, S.: Il valore educativo dei beni confiscati alla mafia, Pacini, Pisa (2021)
25. Agrorinasce, Report Beni Confiscati 21/22 (2021)
26. Ministero dell"Interno, Direzione Investigativa Antimafia, Relazione del Ministro dell"Interno al Parlamento "La criminalità organizzata nel casertano 2023". https://direzioneinvestigativaantimafia.interno.gov.it/wpcontent/uploads/2023/09/DIA_secondo_semestre_2022Rpdf.pdf
27. Allucci, G.: La valorizzazione dei beni confiscati alla camorra: occasione di sviluppo e di rafforzamento della legalità. L'esperienza di Agrorinasce, Rivista Economica del Mezzogiorno **3**, 455–484 (2020)
28. Assovoce, Aggiornamento dei dati relativi al patrimonio dei beni confiscati e all'adozione del Regolamento per l'amministrazione condivisa dei beni comuni in provincia di Caserta (2024). https://csvassovoce.it/wp-content/uploads/2024/05/REPORT-BENI-CONFISCATI-E-BENI-COMUNI_2024.pdf
29. Cioccolateria sociale "Dulcis in Fundo", official site https://www.dulcisinfundo.eu/
30. Preiser, W.F.E., Rabinowitz, H.Z., White, E.: Post-Occupancy Evaluation. Van Nostrand Reinhold, New York (1988)
31. Aliyu, A., Muhammad, M., Mohammed, B., Singhry, I.: A review of post-occupancy evaluation as a tool and criteria for assessing building performance. In: Proceedings of the Academic Conference on Agenda for Sub-Sahara Africa, no. 4 (2016)
32. Mosca, E.I., Capolongo, S.: Towards a universal design evaluation for assessing the performance of the built environment. In: Transforming Our World through Design, Diversity and Education; IOS Press: Amsterdam, The Netherlands, pp. 771–779. (2018). https://doi.org/10.3233/978-1-61499-923-2-771

33. Normann R.: La gestione strategica dei servizi. Etaslibri (1999)
34. Ferrante T.: Valutare la qualità percepita. FRANCO ANGELI, Milano (2014)
35. Zimring, C.: Post-occupancy evaluation and organizational learning. In: Council, F.F. (ed.), Learning from our 77 Buildings: A State-of-the-Practice Summary of Post-Occupancy Evaluation, pp.42–53. National Academy Press, Washington, DC, USA (2001)
36. Castro, J., Lacerda, L., Penna, A.: Avaliação pós-ocupação: saúde nas edificações da FIOCRUZ. FIOCRUZ, Rio de Janeiro (2004)
37. Ornstein, S., Roméro, M.: Avaliação pós-ocupação do ambiente construído. São Paulo: Studio Nobel/EDUSP (1992)
38. Preiser, W.F.E., Nasar, J.: Assessing building performance: its evolution from post-occupancy evaluation. Archnet-IJAR, Int. J. Archit. Res. **2**(1), 84–99 (2008). https://doi.org/10.26687/archnet-ijar.v2i1.179
39. Salgado, M.: O QDF – Quality Function Deployment – Como ferramenta para o planejamento da Qualidade do Projeto Arquitetônico. Caderno 01 do Programa de PósGraduação em Arquitetura da Universidade Federal do Rio de Janeiro. Rio de Janeiro: PROARQ (1997)
40. Forte, F.: Edilizia residenziale Sociale: aspetti valutativi ed esperienze in Regione Campania. Rivista Siev, Roma (2013)
41. Forte F.: Architectural quality and evaluation: A reading in the european framework. J. SIEV - Valori e Valutazioni **23**, 37–45 (2019). Dei, Roma. https://siev.org/wp-content/uploads/2020/02/23_07-_-FORTE_eng.pdf
42. Mundo-Hernández, J., Valerdi-Nochebuena, C., Sosa-Oliver, J.: Post-Occupancy evaluation study: occupant's perception vs. occupancy survey. Eur. Sci. J. ESJ **11**(2) (2015). https://eujournal.org/index.php/esj/article/view/4964
43. Heerwagen, J.: Green buildings, organizational success, and occupant productivity. Build. Res. Inf. **28**(5), 353–367 (2000). https://doi.org/10.1080/096132100418500
44. Preiser, W.F.E.: Building performance assessment- from POE to BPE, a personal perspective. Archit. Sci. Rev. **48**(3), 201–204 (2005). https://doi.org/10.3763/asre.2005.4826
45. Preiser, W.F.E., Vischer, J.C.: Assessing Building Per formance, Elsevier, Oxford, United Kingdom (2005)
46. Brasil, P., Erthal, V., Salgado, M., Santos, M.: Post-occupancy evaluation in public buildings. In: CIB 2013 World Congress (2013)
47. Forte F., Russo Y.: Evaluation of user satisfaction in public residential housing - a case study in the outskirts of Naples, Italy. In: IOP Conference Series: Materials Science and Engineering, vol. 245, 052063, WMCAUS-IOP Publishing (2017). https://doi.org/10.1088/1757-899X/245/5/052063
48. Borriello, L., Forte, F., Russo, Y., Scardapane, S.: Suburban landscape and public housing: the post-occupancy evaluation as a tool for built environment regeneration: a case study in the city of Naples, Italy. Land **14**, 211 (2025) https://doi.org/10.3390/land14020211
49. Veloso, M.: Reusos adaptativos como estratégia para conservação do patrimônio edificado. In: Anais do III Seminário Projetar – 2007. Porto Alegre: PROPAR/UFRGS (2007)
50. Decreto Legislativo 8 aprile 2003 N. 66: Aspetti dell'organizzazione dell'orario di lavoro. https://www.gazzettaufficiale.it/eli/id/2003/04/14/003G0091/sg
51. Decreto del Presidente della Repubblica 24 luglio 1996, N. 503: Regolamento recante norme per l'eliminazione delle barriere architettoniche negli edifici, spazi e servizi pubblici. https://www.bosettiegatti.eu/info/norme/statali/1996_0503.htm
52. Marchetti, M.C., Millefiorini, A.: Partecipazione civica, beni comuni e cura della città, FrancoAngeli, Milano (2017)