Sustainability and Large-Scale Events: The Case of the Extraordinary Jubilee of Mercy and the Application of Sustainable Development Goals

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Abstract

Large-scale events, which are characterised by a dynamic complexity involving different national public administrations and institutional levels, require special attention in order to select adequate event management systems. Consequently, the analysis of a best practice event may be useful to identify the main variables, in terms of sustainable strategic planning, execution and control -required to achieve the greatest level of efficiency with regard to cost optimisation and quality of service delivery- along with exhorting the public sector to seek a structural renovation that makes better use of its available resources and fosters global sustainable growth. From this perspective, one such relevant experience has been the Italian case of the 2016 Extraordinary Jubilee of Mercy, coordinated by the Prefect of Rome. Indeed, the latter decided to adopt actions consistent with sustainability standards due to an inter-institutional network design and the engagement of institutions at different levels. Within a very short period, the Prefect of Rome achieved three main results: the coordination of the activities of the working groups, the integration of internal and external surveillance and communication systems, and collaboration with higher education institutions to acquire and disseminate knowledge. Accordingly, the aim of this paper is to describe and analyse this best practice event organised and managed by the Italian public administration with reference to the achievement of the UN's Sustainable Development Goals (SDGs). To systemise and combine the outcomes of these processes, as well as to evaluate whether they were consistent with sustainable development, the systems thinking technique was used. This paper explores the concept of sustainable development and focuses on its traditional social, environmental and economic pillars within the context of planned events such as the 2016 Extraordinary Jubilee of Mercy.

Keywords: 2030 Agenda, event management, Italian public administration, multi-level institutional collaboration, quintuple helix approach, sustainable development goals (SDGs), sustainable events

1. Introduction

Events, especially large-scale ones, produce several impacts on a territory, which are not exclusively economic in nature. The evaluation of the environmental and social effects (according to a triple bottom line approach (Note 1)) of an event is very complex, not only because the effects are often indirect and intangible, and, therefore, difficult to perceive and measure in time, but also because the variables which affect the outcomes are manifold in reality. Moreover, because of the wide range of the goals pursued and of the heterogeneity of the subjects involved both directly and indirectly (stakeholders), it is extremely difficult to single out the parameters by which to measure the success of an event. In fact, several scholars have stated that these performance measures differ according to the subjects involved in the evaluation (promoters, organisers, communities and sponsors) and the goals pursued (Bowdin et al., 2011; Gartner & Lime, 2000; Richards & Palmer, 2010).

Specifically, in cases of religious events, the organisational efficiency not only needs to pivot upon the specific competencies of the civil authorities but also requires the involvement of the ecclesiastical ones. The hospitality accorded to the visitors will be attentive, inclusive and relished in so far as both categories of institutions are able to work in synergy and harmony. In this regard, interesting theoretical inputs can be obtained from the analysis of the case study of the Extraordinary Jubilee of Mercy, which was held during the whole of 2016 and co-designed and co-organised by two national governments (the Italian and the Vatican State) and involved the Catholic Church as a recognised universal international institution (Meneguzzo et al.,

2017). In keeping with this event, a sort of 'responsible cooperation' among the several stakeholders was enacted, with the initiation of bidirectional relations between all the involved subjects and concrete steps toward a long-term vision, while also keeping in mind what the event would bequeath to the territory, its so-called legacy (Allen et al., 2011).

This paper highlights some initiatives and operations carried out during the 2016 Extraordinary Jubilee of Mercy, which might steer the sustainable growth of the Municipality of Rome if implemented in the long term. To this end, this analysis focuses on several of the Sustainable Development Goals (SDGs) (Note 2) that will constitute the most ambitious challenge for the international community until 2030. Specifically, we answer the following research questions:

RQ1: What can guarantee a collaborative approach for the management of highly complex events?

RQ2: What is the connection between the 2030 Agenda and significant large-scale events?

Our contribution begins with the analysis of this event, in which the authors were directly involved as participants in the inter-institutional task force in charge of managing the event (led by the Technical Secretariat for the Jubilee). The paper is divided into three sections: the first is dedicated to the analysis of the existing definitions of events, with a focus on related sustainable planning, implementation and evaluation of large-scale events. In the second section, the case of the 2016 Extraordinary Jubilee of Mercy is examined, with reference to the management and organisational decisions taken by the Italian institutions. Finally, section three presents a conclusive evaluation of the issue.

2. Theoretical Framework for Sustainable, Effective, Accountable and Transparent Events

As Thomas et al. (2008) have pointed out, event management comprises the coordination of all of the tasks and activities necessary for the execution of an event in terms of its strategy, planning, implementation and control (Thomas et al., 2008). Commencing with several pioneering studies (Getz, 1991; Hall, 1992), the profile of event management has risen rapidly and it is now recognised as both a profession and a formal discipline, reflecting the need within all societies for the professional management of events in the private, public and not-for-profit sectors (Getz, 1997). The first step to understanding the meaning and scope of event management is the definition of the event itself. Etymologically, the term 'event' derives from the Latin word *eventus* which directly translates as occurrence or issue. Today, such events form an integral part of all societies (Ferdinand & Kitchin, 2012), and the recognition by practitioners and researchers of their role as an industry has gained importance in recent times. This importance is also a result of the quantitative and qualitative growths forecast for this market (Thomas et al., 2008). Nonetheless, within the academic literature, many authors from different disciplines have discussed the general meaning and definition of events and related concepts, failing to reach a consensus on standardised terms, definitions or categories. According to Shone and Parry, an event is a phenomenon arising from non-routine occasions which have leisure, cultural, personal or organisational objectives that are set apart from the normal activity of daily life, whose purpose is to enlighten, celebrate, entertain or challenge the experience of a group of people (Shone & Parry, 2004). Getz defines events as temporary occurrences, which may be either planned or unplanned (Getz, 1997). In order to emphasise the difference between unplanned and planned events, the term 'event' is preceded by the word 'special'. A special event could be a one-time or infrequently occurring event outside the normal programmes or activities of the sponsoring or organising body, as well as an opportunity for leisure, social or cultural experiences outside the normal range of choices or beyond everyday (Getz, 2005).

All the above definitions stress the unique and temporary nature of events. This is a feature that is also highlighted in the definition by Silvers, who considers an event to be the gathering of people at a specified time and place for the purpose of celebration, commemoration, communication, education, reunion and leisure (Silvers, 2008). Other authors, such as Jago and Shaw, have focused upon the tourism context, defining a special event as a one-time or infrequently occurring event of limited duration that provides the consumer with a leisure and social opportunity beyond everyday experience, often held to raise the profile, image or awareness of a region (Jago & Shaw, 1998). In sum, we can define an event as a unique or infrequent happening that occurs at a given place and time outside of normal activities for individuals or groups of people.

With regard to typologies, events are often classified according to different criteria. In terms of size, it is possible to identify four different types of events (Bowdin et al., 2011; Jackson, 2013): local or community events, which are generally small and linked to a particular geographical area; major events, which attract significant numbers of visitors and media coverage; hallmark events, which are not necessarily larger than major events, but are synonymous with a particular place; and mega-events, which are global and can influence the host country's economy.

In terms of form, while Bowdin et al. (2011) identified only cultural, sports and business events, Getz distinguished between cultural celebrations, religious events, political and state events, arts and entertainment, business and trade

events, education and scientific events, sports events, recreational events, private events and events at the margin (Getz, 2005).

Lastly, Raj and Musgrave (2009) differentiated between the following forms: religious events, cultural events, musical events, sporting events, personal and private events, political and governmental events, commercial and business events, corporate events, special events and leisure events (Jackson, 2013).

As described by Cherubini and Iasevoli, in the organisation of any of these events, it is possible to briefly identify some major variables that begin with the event idea in order to arrive at the post-event evaluation (Cherubini & Iasevoli, 2009):

- Event idea
- Service concept
- Economic analysis
- Feasibility
- Business plan and organisation
- Implementation
- Final results analysis
- Evaluation

In order to develop these phases, it has become increasingly necessary to contribute to the organisational complexity of an event. By means of a participatory and collaborative approach, the subjects present within the relevant territory can make their own contributions in economic terms, know-how, relationships and experiences. Taking into account this point of view, an event must be interpreted as a project so it can be led back to the experiences and methods of project management and its activities (Cherubini & Iasevoli, 2009).

In the evaluation of the impact of events, in addition to the immediate effects, it is fundamental to keep in mind those effects that arise in the medium-long term which, especially in the case of large-scale events, have a multidimensional impact and affect many aspects of life in the hosting community area. Such events may even deeply and permanently affect local welfare and lifestyle (Mount & Leroux, 1994).

To this end, if we consider the triple bottom line studies applied to the evaluation of the impacts of events, a broader analytical perspective can be obtained (Raybould & Wilkins, 2005). According to this perspective, the events are not merely a tool to attract tourists and, therefore, economic resources but also to promote sustainable tourism (O'Sullivan & Jackson, 2002), to strengthen social cohesion and cultural identity (Besculides et al., 2002; Rao, 2001), to build strong bonds within a community, to increase the endowment of social capital (Hilbers, 2005; Marmot & Wilkinson, 1999; Steel, 2003), to encourage the increase of skills, and to facilitate knowledge transfer processes, thus, boosting the development of entrepreneurial activities (Hede & Rentschler, 2005).

For this reason, the level of attention paid to the sustainability of the event has increased. Sustainability is defined as a development that satisfies the needs of the present without compromising the ability of future generations to satisfy their own needs (World Commission on Environment and Development, 1987). In approaching an event evaluation in terms of sustainability, it is necessary to examine different points of view, that is, environmental, cultural, economic, political and social sustainability. Thus, for an event to be sustainable, it should be part of a larger strategic project of cultural, social and economic development (Richards & Palmer, 2010). The capacity to organise and manage events based on the principle of sustainable development implies the existence of strong and cooperative institutions able to initiate inclusive, representative and reactive decision-making processes that involve all the stakeholders, according to the quintuple helix scheme posited by Carayannis and Campbell (2010).

In this model, which is shown in Figure 1, the government, businesses, universities and civil society cooperate toward sustainable development by sharing resources, instruments and, especially, know-how. The virtuous circles initiated by the cooperative approach do indeed stimulate the cross fertilisation of sustainable ideas and projects (innovation), which are able to overcome the limitations of the mental models (knowledge mix, expertise, capacity) of the single subjects and the limited resources available. The diversity of the events is also accompanied by their complexity so that an event is increasingly configured as a real system that requires the presence of multiple protagonists of a different nature and with various goals to be successful (Cherubini & Iasevoli, 2009).

In this way, large-scale events cannot be clustered within the boundaries of a single public administration or agency but are characterised by a dynamic complexity that involves several offices and institutional levels (central/federal, regional

and metropolitan/local). Moreover, in times of economic crises and expenditure cuts, institutions emerge as solid only when they manage to operate soundly in terms of effectiveness, responsibility and transparency (as defined by SDG 16.6 of 2030 Agenda) but also with economy and efficiency.

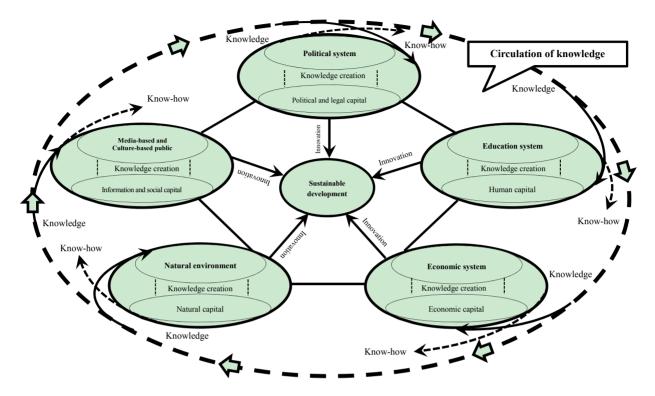


Figure 1. The quintuple helix model and its functions

Source: Presentation of the authors based on Carayannis and Campbell, 2009, 2010; Barth, 2011

For these reasons, in the next section it is important to examine the 2016 Extraordinary Jubilee of Mercy, an example of best practice by the Italian public administration. The need to achieve extraordinary objectives with ordinary resources led the Prefect of Rome, through the Technical Secretariat for the Jubilee, to identify modern, innovative, shared and long-term solutions for the management of the event. It was also based on the synergies between all the subjects involved and in line with the SDGs (Fiorani & Di Gerio, 2016). Such goals, for their importance at the international level, are considered a new universal language to assess the effects on sustainability in the context of wide range activities. Therefore, the aim is to incorporate SDGs into activities carried out during the Jubilee event in order to highlight social responsibility, sustained development, as well as the the impact of the event itself.

This case study represents a starting point for the enhancement of event management through a double analytical framework: the quintuple helix approach, which allows to identify those actors involved in the organization and management of the 2016 Extraordinary Jubilee of Mercy, and the application of the SDGs and the outcome evaluation resulting from the event itself. The method of analysis was based upon a review of the reports, memoranda and stakeholders' minutes drawn up during the meetings and debriefing reunions that were held across the year in which the event took place. The approach used for testing the evaluation of these documents was the system thinking technique (Note 3). The final output consists of a mapping table that helps to identify the linkage between stakeholders involved in the organization of the event and the carried out activities with the SDGs related to those activities.

3. The case of the 2016 Extraordinary Jubilee of Mercy

Within the Catholic tradition, the Jubilee is a major religious event that dates back to the fourteenth century and Pope Boniface VIII. The 2016 Holy Year was defined as 'extraordinary' not only because it did not fall within the traditional 25-year timeframe, but also because it was the first Jubilee to be 'thematically dedicated' to mercy and 'decentralised' in the history of Christianity. With this decision made by Pope Francis, the Holy Doors were opened in cathedrals and sanctuaries in all the dioceses of the world, involving 91 states and 560

Doors of Mercy (Note 4). In line with this 'globalist spirit', the first Holy Door was opened in Bangui in the Central African Republic on the 29 November 2015. The 2016 Extraordinary Jubilee of Mercy, announced by Pope Francis on the 11 April 2015, and formally inaugurated on the 8 December 2015, ended on the 20 November 2016. More than 21 million people arrived in Rome during 2016 from 156 different countries. Such inflow of visitors and notable personalities portended significant implications for the hospitality system in general and also for mobility services, infrastructure, and national security. Ultimately, as stated by Morcellini (2016), the Extraordinary Jubilee of Mercy established a milestone in Rome's capacity to organise large-scale events, offering a very different image of the Italian capital city from the one pictured in the media.

Accordingly, the strategic management of the event was assigned by the Italian and the Vatican State governments to the Prefect of Rome. The latter was in charge of defining the planning framework for managing the event and of ensuring that all the information and communication systems worked. In view of these objectives, the Italian government (Prime Ministerial Decree of the 4 September, 2015) resorted to an innovative instrument: the Prefect of Rome was supported by the Technical Secretariat for the Jubilee (from now on TSJ) (Note 5) which was a task force aimed at fostering cooperation among the several local administrations and the integration of their operations.

Under the management of the TSJ, the Prefect of Rome created eight thematic working groups (media, volunteering, Italian-Vatican relations, safety and security, telecommunications, essential services, healthcare, and mobility) tasked with linking the different areas and invited all interested institutions to participate (Figure 2). All the parties involved were proactive and accepted the sharing of their resources, information and competencies. This led to the creation of a new concept for a religious large-scale event, which capitalised on the synergies between all the involved institutions, both at the intra-institutional and at the inter-institutional and inter-governmental levels, and between the eight working groups.

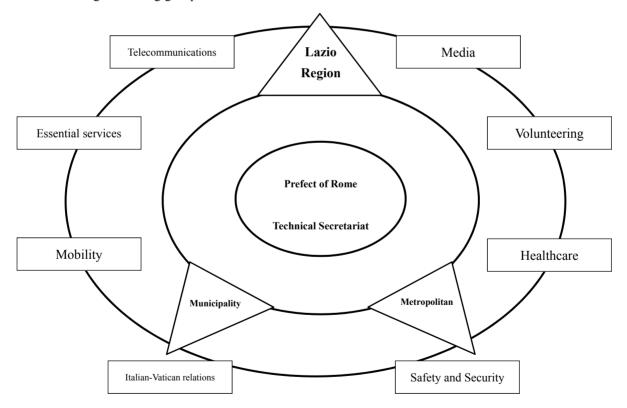


Figure 2. Inter-institutional synergies

Source: Di Gerio and Fiorani, 2018

The involvement of so many actors stemmed from the fact that the Jubilee is a great religious celebratory event, which may involve a global objective, offers an extremely wide set of attractions, and presents itself as a main 'box event' with many other minor events and other initiatives incorporated within it. Based on the hypothetical inflows of

pilgrims and tourists to these events, the Technical Secretariat for the Jubilee identified five 'scenario types' useful for the integrated planning of the events and the days dedicated to them (an event may have more than one day dedicated to it).

Table 1 shows the classification of events starting from level 0 (ordinary type) which identifies the so-called 'white days' in which there were no special events for pilgrims (except the canonical prayer activities) and which were not related to any specific occurrence. The days classified from level 1 to level 3 were dedicated to specific events and organised initiatives and had medium, high and very high inflows of pilgrims, respectively. Finally, level 4 classified an event as an extraordinary scenario type both for the importance of the days dedicated to it and for the comprehensive planned participation of pilgrims and tourists.

Level	Scenario-type	Expected number of pilgrims	Events	Dedicated days	JMR configuration
0	Ordinary	-	0	239	Ordinary
1	Medium	<30.000	49	49	Medium
2	High	30.000-50.000	32	34	
3	Very high	50.000-70.000	12	16	Event
4	Extraordinary	>70.000	3	11	
TOTAL			96	349	

Table 1. Events classification according to scenario-types

During the 2016 Extraordinary Jubilee of Mercy, 96 religious events were organised covering 110 days (32 per cent of the 349 total days of the Holy Year). Forty-nine were Sunday masses of the Angelus (51 per cent of total events) and were a part of a level 1 scenario. Thirty-two events (corresponding to 33 per cent of the total events and 34 dedicated days) were classified as level 2, while 12 celebrations (equal to 12.5 per cent of the total events and 16 dedicated days) were categorised as level 3 events. Finally, only three events were classified as extraordinary level 4 scenarios and were specifically held on the 8 December 2015 (Opening of the Holy Door in Rome), 3–11 February 2016 (Exhibition of the relics of St. Pius and St. Leopold) and on the 4 September 2016 (Canonisation of Mother Teresa of Calcutta). For these events, the extent of the involvement and of the forces deployed by the administrations and involved institutions were considerable.

To arrange the operational procedure connected to each event and coordinate the necessary interventions, the Jubilee Management Room (from now on JMR) was established, in accordance with the TSJ and Municipality of Rome, with the task of assessing the scenarios in real-time and continuously monitoring all the micro and macro events. This operations room allowed all the data to be connected and, therefore, provided a complete view of the city resulting in a system that was integrated between the police departments, the Local Police Department Corp, the National Fire Corps and the municipal companies through video conference and radio system tools.

After the organisational analysis of the 2016 Extraordinary Jubilee of Mercy, a thorough evaluation of the direct and indirect effects, both in the short and medium-long term, was an essential part of the reviewing phase of the event management. Similarly, the social and environmental impacts needed to be assessed in line with the UN's SDGs. The system thinking map (Figure 3) shows some of the effects related to the Jubilee.

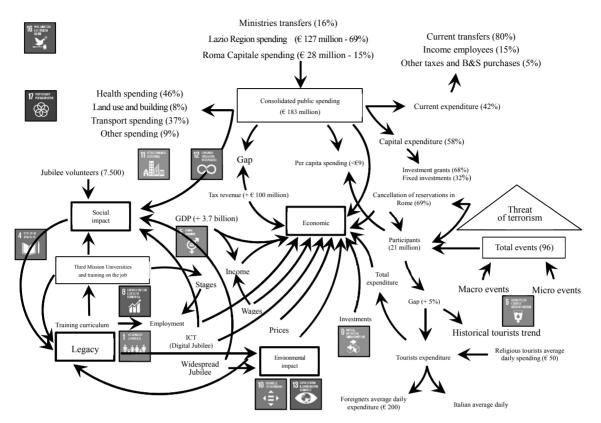


Figure 3. Multi-dimensional impacts: a sustainable Jubilee

Source: Di Gerio and Fiorani, 2018

As Figure 3 indicates, the partnerships (SDG 17, Partnership for the goals), that is, the inter-institutional collaborations between the public administrations, non-profit institutions and enterprises by means of the eight thematic working groups coordinated by the TSJ, together with the presence of strong institutions (SDG 16, Peace, justice and strong institutions), were the key factors of the Jubilee. In this regard, the cooperation with the universities proved to be paramount (SDG 4, Quality education). Goal 4, which underlines the link between primary education and professional training, was achieved through a memorandum of understanding between the Prefect of Rome and the three state universities of Rome (La Sapienza, Tor Vergata and Roma Tre), which ensured scientific and organisational support for the planning, management, communication and post-event evaluation of the activities. In the 'Third Mission' field, the three public universities contributed significantly to the success of the event, sharing their know-how and resources (teachers, recent graduates, spaces and equipment) and offering students the opportunity to serve internships, with the aim of allowing them to put into practice what they had learned theoretically.

Many of the existing technological tools (SDG 9, Industry, innovation and infrastructure) were jointly employed, for the first time, during a large-scale event like the Jubilee and had a pertinent positive impact on the responsible production and consumption models (SDG 12, Responsible consumption and production) A vivid example was the inter-institutional centralised JMR, hosted by the System Room of Rome's local police forces, which played a major role in coordinating the Jubilee-related operations in the field, in monitoring the unfolding of events and assessing the different scenarios in real-time. The JMR took advantage of an innovative shared cartographic system, named IRIN, to support the operations of all the authorities watching the Jubilee events and support the operation rooms of the single national and local police corps. Within the JMR, the creation of an integrated communication system based on TETRA radio also allowed the numerous security forces in the field to share information through a single radio frequency. The JMR also had control of a comprehensive video-surveillance system based on the feed from each local administration to ensure a high degree of security for both the pilgrims and the local community. Owing to the shared software and hardware, the numerous entities involved via inter-institutional and public-private partnerships managed to rationalise their projects and intervention policies.

The JMR and the coordination activity of the Prefect of Rome allowed public value to be created and the initiation of an 'intelligent' management process through the sound use of the resources available in the territory, thus, constituting a best practice model to be applied to future complex events. It is noteworthy that the planning activity carried out by the TSJ during the 2016 Holy Year was characterised by paying particular attention to maximising savings and spending more efficiently. The short timing involved (with an advanced notification coming just eight months before the inauguration of the event) and the scarcity of financial resources demanded the employment of innovative solutions, including zero cost measures, considerable private capital contributions and the exploitation of the equipment already in the possession of the national and local administrations.

The 2016 Extraordinary Jubilee of Mercy was also modern, digital and built on a network basis. The 2016 Holy Year was, in fact, the first to be held in the age of social networks, tablets and smartphones in the era of continuous connection to the Internet. The Jubilee website and application (app) provided information on monuments and churches, pedestrian itineraries and mobility services during the event as a whole. Communication was coordinated by the Italian institutions through the creation of a single website dedicated to the Jubilee called 'Roma per il Giubileo' and a single physical Press Point from which all relevant information was conveyed. The JMR and the single Press Point constituted the best examples of the integration of the several entities and administrations which, progressing beyond their identities and traditions, were called upon to join their forces within a single operations room, under the same supervision and with a shared 'Roma per il Giubileo' logo. To explain more exhaustively the success of this religious large-scale event and the efforts made by the governmental institutions, it is necessary to address the link between the Jubilee and the other SDGs.

The interventions to make the Municipality of Rome more inclusive, safe, flexible and sustainable during the event were manifold (SDG 11, Sustainable cities and communities). Concerning the mobility aspect, the public transport service was strengthened in order to meet the peaks of high demand during the celebration days and to guarantee the social and environmental sustainability of the event. Consequently, the 89 per cent of pilgrims preferred the public transport service to reach religious places, whilst only the 11 percent decided to move by private car or taxi.

Moreover, thanks due to the singular administration of the mobility information, it was possible to synchronise the messages about eventual service disruptions or delays and to convey urban and extra-urban mobility updates when necessary (Note 6). The further development of public transport made the Municipality of Rome more sustainable in terms of the road systems, emissions reductions and liveability. The positive environmental impact (SDG 13, Climate action) of the Jubilee was also related to its global and widespread character, which minimised the movement of pilgrims by allowing them to obtain an indulgence even in their own countries. Indeed, over 950 million of devoted people crossed 560 Holy Doors opened around the world. The presence of these doors also allowed the attainment of indulgences by believers within the poorest and most disadvantaged populations without physically travelling to the Municipality of Rome (SDG 1, No poverty). This conferred a double environmental and social benefit.

To make the Municipality of Rome safe and affordable for everyone and ensure effective event management for all the pilgrims, it was also necessary to consider the sanitation section (SDG 6, Clean water and sanitation). In fact, according to the scenario types, and, therefore, depending upon the number of pilgrims expected during the single Jubilee event, plans with a varying number of temporary chemical baths (to ensure the appropriate hygiene conditions for pilgrims and residents), and 'water points' (indication of public drinking fountains and water bottle distribution points) were prepared.

In order to clamp down upon the illegal and unfair treatment of tourists and raise the perception of security in Italy's capital city, Codacons, a network of associations for consumer protection, carried out a project called 'Sportello del Pellegrino' aimed at providing legal assistance to pilgrims in more than 100 languages, which was fully managed by 7.500 volunteers. Furthermore, instrumental support to disabled pilgrims (SDG 10, Reduced inequalities) were guaranteed the get them the righteous access to services. Finally, the app for urban mobility (Mapful) provided information on accessible routes for disabled people.

The Jubilee was also the driver for the economic and employment growth that occurred in the Municipality of Rome and its province, in particular in the tertiary sector (SDG 8, Decent work and economic growth). Nevertheless, the tourist inflow forecast in 2015 was considerably reduced by the threat of ISIS terrorist attacks, the characterisation of this event as a 'widespread' Jubilee and the recourse to unconventional accommodation options such as flat-sharing platforms and ecclesiastical buildings. As opposed to the Jubilee event which was held in 2000, with 25 million pilgrims attended, during the 2016 Extraordinary Jubilee of Mercy data registered a

total of 21 million participants.

The fair representation of women both among pilgrims and inside the technical sector of the management of the event was also important to ensure that they had full and effective participation and equal leadership opportunities in planning and processing the coordination of the 2016 Extraordinary Jubilee of Mercy (SDG 5, Gender equality). In this regard, there was a female presence of 60 per cent of pilgrims.

To summarise, the TSJ introduced all the necessary tools to develop the best strategies to manage and coordinate the event. As shown in Table 2, the high number of actors involved in the organisation (invited to participate during the working groups), especially when assessed in relation to the intensity of the meetings (every three weeks or monthly), can be regarded as a measure of the efficiency of the TSJ's strategic coordination activity. The 2016 Holy Year will, therefore, be remembered as the first Jubilee 1) extraordinary and thematic, that is, dedicated to mercy; 2) decentralised and widespread; 3) digital because it was the first to take place in the era of social networks, tablets and smartphones; and finally 4) sustainable, as it was in line with the 2030 Agenda SDGs.

Table 2. Collaboration, activities and results of stakeholders: achievement of SDGs by the working groups

Working group	Involved actors	Activities	Results	SDGs
Media	Technical Secretariat for the Jubilee; Municipality of Rome; Metropolitan area of Rome; Lazio Region; Ministry of Transport; Local Police Department Corps; Autostrade per l'Italia; Civil Protection; Ministry of Economic Development; Fire Department Corps; Grandi Stazioni; Ferrovie dello Stato; Atac; Cotral; Autorità del Porto di Civitavecchia	Infomobility service management Identification of responsible authorities in case of an emergency Management of tools (official sites, apps and social media) Coordination of the information flows Logo and image management (Roma per il Giubileo)	Integrated Communication Plan Implementation of the Multimedia Center Press Point Creation of the Pilgrim Help Desk, to assist pilgrims and citizens and avoid frauds	
Volunteering	Technical Secretariat for the Jubilee; Municipality of Rome; Metropolitan area of Rome; Lazio Region; Local Police Department Corps; Civil Protection; Unitalsi; Ferrovie dello Stato; Grandi Stazioni; Trenitalia; Atac	Definition of profiles, activities and presence of volunteers Management of relations among the voluntary associations Collaboration between Civil Protection and public service providers	Volunteers performed the following tasks: information and reception of pilgrims; first aid activities; support to the Local Police Department Corps for the management of the flows of pilgrims	
Italian - Vatican Relations	All the involved stakeholders of the single working group	Support for tasks performed within the working groups	All the results achieved by each working group	

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Working group	Involved actors	Activities	Results	SDGs
	Technical Secretariat for the Jubilee; Municipality of Rome; Local Police Department Corps; Civil Protection; Guardia di Finanza Corps; Carabinieri Corps; Fire Department Corps;	Definition of an integrated planning framework for the event management Collaboration among all security and security operators Management of critical situations and	Security Plan, in accordance with the integrated planning framework Implementation of the Jubilee Management Room, Local Police Department Corps Implementation of a shared map system, in	
Safety and Security	Department Corps; Agenzia per la Mobilità; Ares-118	implementation of corrective actions	collaboration with the Department of Technological Innovation of the Municipality of Rome and SOGEI	
			Implementation of SIGIS, an environmental monitoring system, owned by the Fire Department Corps of Province of Rome, which can detect the presence of abnormal substances in the air with a range of up to 5 km	
Telecommunications	Technical Secretariat for the Jubilee; Municipality of Rome; Civil Protection; Ministry of Economic Development; Italian National Police; Local Police Department Corps; Telecom Italia; Wind; Vodafone; Fastweb	Management of the communications system Use of the integrated comm unication system Radio TETRA which allowed to ensure simultaneous radio communications among all operative forces at the events	Optimization of the communication systems, especially for what concerns the Wi-Fi spots and signals	
Essential Services	Technical Secretariat for the Jubilee; City of Rome; Ministry of Economic Development; Acea; Ama; Atac; Italgas Telecom Italia; Terna; Wind; Vodafone; Fastweb	Planningandprogrammingessentialinterventionsandmanagingtheurgent onesurgent onesDefinition of therelationshipsbetweentheJubileeManagementRoomandthepublicservicesand utilitiescompanies	Essential Services Plan, to plan and manage resources and activities supporting the event and to identify possible operational synergies Implementation of a new IT tool to ease the live integration of information	

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Healthcare	Technical Secretariat for the Jubilee; Municipality of Rome; Lazio Region; Croce Rossa Italiana; Unitalsi; Ares-118	Coordination of programming activities in the healthcare sector by administrations and entities involved in the Jubilee, and integration with the planning made by the other working groups	Healthcare Plan, to manage first aid and emergency activities, as well as to monitor and manage infective diseases	
Mobility	Technical Secretariat for the Jubilee; Municipality of Rome; Metropolitan area of Rome; Lazio Region; Local Police Department Corps; Agenzia per la Mobilità; Autostrade per l'Italia; Trenitalia; Grandi Stazioni; Reti Ferroviarie Italiane; Strade dei Parchi Anas; Atac; Cotral; Enac; Autorità del Porto di Civitavecchia	Shared planning of the interventions by transportation companies during the events Identification and monitoring of mobility needs, especially for people with disabilities	Mobility Plan, to ensure an efficient management of the transportation services: the interventions concerned the Urban Network (by improving the streets in the Grande Viabilità Capitolina area), the rail transport (the railway transportation to and from San Pietro's train station was strengthened), the pedestrian mobility (new pedestrian paths were realized, and existing ones were improved), the management and control system for touristic buses and intelligent systems to control the traffic	

Table 2. Cont.

4. Discussion and Conclusions

The case study presented here demonstrates that not one of the seventeen 2030 Agenda SDGs is feasible without the involvement of strong institutions. Within this particular framework, the so-called quintuple helix cooperation, made up of governments, businesses, non-profit organisations, civil society and the universities, emerged as vital to ensuring the success of the 2016 Extraordinary Jubilee of Mercy.

Moreover, the issues of sustainable development were deeply rooted in an innovative, efficient, digital, open and cooperative relationship between public administrations. Based upon this recent experience, the extraordinary spirit of sharing and cooperation, which inspired the activities of all those involved in the success of the Jubilee, might constitute a valid example for all future large-scale events in Italy and abroad. The challenge of grand events is to devise a development model in terms of sustainability and efficiency that favours integration, cooperation, social innovation and is able to create inclusive networks. Hence, the engagement of several public actors is considered the rule rather than the exception.

The other relevant aspect that emerged from the paper concerns the introduction of a multidimensional assessment of the impact of the event, since the adoption of both the quintuple helix approach and the application of the SDGs analytical frameworks. Short and medium-long term aspects should be taken into consideration, such as social and environmental impacts and legacies in line with the UN's SDGs. Goal 16 (Peace, justice and strong institutions) is the goal closest to a religious event such as this and is the one which best met the aims of the Jubilee: to promote peaceful and inclusive communities and societies for sustainable development. The extension of the event to several countries (i.e. the widespread Jubilee); the legal support provided by the 'Sportello del Pellegrino'; the operations countering corruption and criminality; the public access to information; the promotion of initiatives to reduce inequalities; and the role played by the institutions in a representative, inclusive and reactive decision-making process are all examples of effectiveness, responsibility and transparency. Consequently, we are able to answer the research questions.

For what concerns RQ1 (What can guarantee a collaborative approach for the management of highly complex events?), the case of the 2016 Extraordinary Jubilee of Mercy highlights the need to work towards a cooperative approach by developing collaborative networks among interested actors. In fact, a new concept of a religious large-scale event has been provided and capitalises on the synergies among all the institutions involved at the inter-governmental (between the Italian and Vatican State), inter-institutional (among organisations which collaborate in the same working group) and intra-institutional (among the different working groups) levels. Hence, a collaborative approach has been able to solve arising problems about the management of extremely complex events. On the one hand, it was possible to overcome lack of dialogue and shared actions among all the actors involved in the event (provided with a proper human and instrumental capital). On the other hand, it was possible to implement systemic actions to solve the lack of financial resources. The aforementioned procedures regarding the coordination and centralisation of operations constituted a novelty in the Italian field of large-scale event management, with the TSJ as a highly innovative solution for avoiding errors among the different entities involved in the management of complex events. Ready-to-use technologies, the employment of available equipment and the interaction between public and private administrations were the key factors in delivering a high degree of efficiency and quality.

Concerning RQ2 (Which is the connection between 2030 Agenda and significant large-scale events?), the integration of economic, environmental and social measures allows us to obtain a holistic view of the impacts generated by an event and, at least, its real level of sustainability. From this point of view, 2030 Agenda becomes a useful tool with a universal language, since clear and precise objectives of this action programme, and grants an immediate comprehension of results and impacts in the field of sustainability. In this sense, Agenda 2030 is considered perfectly suited to a large-scale event analysis. As such, material and immaterial legacies are added and considered to be the starting point for the creation of a sustainable and smart city, which is attentive to improving the quality of life of its citizens, businesses and institutions and the general well-being of the community.

As shown by ASviS (2017) and GlobeScan (2016), additional governmental efforts are required over the next ten years to guide the countries of the world to the full implementation of the 2030 Agenda, and this is also true for event management. In this regard, the Italian government has committed itself to this aim with resoluteness and resilience.

Lastly, the case of the 2016 Extraordinary Jubilee of Mercy provides useful theoretical and empirical indications for the field of public management and governance and represents an important conceptual and operational challenge for the Italian public administration system. The integrated system for the management of the event, based on the quintuple helix approach and integrated networks, provides important intimations for the future management of large events (sports, culture, promotion of the economy and the image of the country) and for the management of intervention policies coping with environmental emergencies (such as recent earthquakes in Italy). This change in approach may be very useful for turning a best practice into an ordinary reality.

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Notes

Note 1. The triple bottom line (economic, social, environmental) approach was originally introduced by Elkington (1980; 1997) in order to indicate the ability of companies to create or destroy value within a broader economic, environmental and social analysis perspective. Several studies (Getz, 1984;1997) also highlighted how events are a tool capable of triggering substantial value creation processes with far-reaching consequences for not only economic development, but also environmental and social development (Izzo & Masiello, 2009).

Note 2. The 2030 Agenda is a plan of action for people, planet and prosperity. It was promoted by the 193 member countries of the United Nations (UN) in September 2015 and includes the 17 Sustainable Development Goals (SDGs) and 169 targets to achieve by 2030.

Note 3. System thinking is a technique which is able to represent systems as a set of multiple components that interact with each other and analyses their dynamic behaviours (Fiorani, 2010). It is applied through the realisation of simulation models which are run on special software. We ran the system thinking on the Vensim software.

Note 4. Door of Mercy (and in general Holy Door) expresses the concept of salvation trough a symbolic path of faith. Hence, the opening of a Holy Door represents, for a pilgrim, the opening towards this path to obtain the eternal salvation.

Note 5. The Technical Secretariat for the Jubilee included 10 experts representing public administrations and territorial institutions (Ministry of the Interior, Lazio Region, Municipality of Rome), as well as delegates from Civil Protection, the Carabinieri Corps and Fire Corps.

Note 6. The use of ICT to support pilgrims and tourists' mobility and transport. The use of the electronic equipment during the working table of mobility by those involved was aimed at conveying the same message, both in case of inefficiencies or disservices and if it was necessary to transmit instructions or suggestions to the community. This granted all users the possibility to consult the data related to the urban and suburban mobility areas in the portal of the Italian institutions (Agenzia per la Mobilità).

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