

Article

Sustainable Urban Development Through Creative Film Industries: From HollyŁódź to Bollywood

Waldemar Cudny ^{1,*} , Sanjukta Sattar ² and Marek Barwiński ³ 

¹ Faculty of Geographical Sciences, Institute of Urban Geography, Tourism Studies, and Geoinformation, University of Łódź, Kopcińskiego 31, 90-142 Łódź, Poland

² Department of Geography, University of Mumbai, Kalina, Santacruz (E), Mumbai 400098, India; sanjukta.sattar@geography.mu.ac.in

³ Department of Political and Historical Geography and Regional Studies, Faculty of Geographical Sciences, University of Łódź, Kopcińskiego 31, 90-142 Łódź, Poland; marek.barwinski@geo.uni.lodz.pl

* Correspondence: waldemar.cudny@geo.uni.lodz.pl

Abstract

This conceptual article explores how the film sector within the creative industries contributes to sustainable development and the achievement of the Sustainable Development Goals (SDGs) in post-socialist and postcolonial cities. It develops a framework linking the creative industries to the SDGs and applies it to the film sectors of Łódź (Poland) and Mumbai (India). The analysis shows how film production supports the environmental, social, and economic pillars of sustainability by fostering social inclusion, strengthening urban economies, and promoting environmental responsibility. The study also highlights the sector's role in advancing green production practices and raising public awareness of sustainability issues. Overall, the analysis demonstrates that the film industry contributes to sustainable urban transformation, illustrating how cities can leverage their cinematic heritage to build cultural resilience, stimulate local development, and enhance social well-being.

Keywords: creative industries; Sustainable Development Goals (SDGs); film industry; sustainability framework; urban development; film heritage



Academic Editor: Mark A. Bonn

Received: 7 October 2025

Revised: 5 November 2025

Accepted: 7 November 2025

Published: 16 November 2025

Citation: Cudny, W.; Sattar, S.; Barwiński, M. Sustainable Urban Development Through Creative Film Industries: From HollyŁódź to Bollywood. *Sustainability* **2025**, *17*, 10256. <https://doi.org/10.3390/su172210256>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Creative industries (CIs) play a vital role in linking culture and creativity to sustainable urban development [1–3]. Encompassing sectors such as publishing, music, gaming, film, and fashion, they generate economic growth at multiple spatial scales while promoting and preserving cultural heritage. By addressing contemporary social and economic issues, CIs not only shape societal values and emerging cultural trends but also contribute to achieving the Sustainable Development Goals (SDGs). They provide educational opportunities, advocate for environmental protection through artistic production, events, and media, and highlight challenges such as social and economic inequality [4–8]. Through the combined impact of cultural and economic activity, CIs drive sustainable urban transformation by attracting cultural tourism, fostering creative employment, encouraging sustainable practices, and promoting intercultural understanding and global connectivity [9]. Within this broad sector, the film industry occupies a particularly significant position. It educates the public, raises awareness of contemporary social and environmental challenges, and advocates for reducing pollution and CO₂ emissions [10,11]. Moreover, through cinematic narratives

and festivals, the film sector promotes environmental awareness and wildlife preservation, demonstrating its capacity to link cultural expression with sustainability goals [12].

There is an urgent need for a deeper analysis of the relationships between sustainability, culture, and the creative sector within urban contexts [13]. Studies examining the sustainability of the audiovisual and film industries from environmental, socio-cultural, and economic perspectives remain scarce [10,14–17]. Accordingly, this study seeks to answer the following research question: how can the creative industries—particularly the film sector—contribute to the implementation of the United Nations Sustainable Development Goals (SDGs) across the environmental, social, and economic pillars of sustainability? Addressing this gap, the article develops a conceptual framework linking the Creative Industries (CIs) to the three pillars of sustainability and applies it to the film sector as a case. The scientific objective is to construct and apply a conceptual model that elucidates the mechanisms through which creative industries—and the film sector in particular—advance sustainable development within the creative economy. The proposed framework is acknowledged as a preliminary conceptual model intended to guide future research and subject to further empirical validation and refinement. As Łódź and Mumbai are not yet fully sustainable film cities, the study aims to identify potential pathways toward sustainability in these and other urban contexts and to outline a conceptual foundation that may facilitate this process.

The study examines the interrelations between the film industry and the wider creative sectors through comparative case studies of Łódź (Poland) and Mumbai (India). Despite their distinct geographical locations and historical trajectories, both cities reveal notable similarities rooted in their colonial and post-imperial experiences. Mumbai represents a postcolonial city that, following British domination, has evolved into one of the major economic and cultural centers of the Global South [18,19]. Yet its dynamic development coexists with deep social inequalities, the enduring legacy of colonial spatial structures, and persistent religious and ethnic tensions [20,21]. Łódź, in turn, situated within post-socialist Europe, exemplifies a postindustrial city grappling with the collapse of traditional industries and socio-demographic challenges such as depopulation and low income levels resulting from systemic transformation [22]. The difficulties faced by both cities are closely tied to their respective pasts—in India, to the legacy of British colonialism, and in Łódź, to the consequences of Soviet imperial domination. Post-communism can be understood as form of postcoloniality, as societies of Central and Eastern Europe experienced political, economic, and cultural dependence on an external empire comparable to that of formerly colonized regions [23,24]. After 1989, a process of “decolonization” began in Poland—an effort to regain agency, redefine identity, and seek new models of development [25]. In this sense, Mumbai and Łódź are connected by a shared historical experience: seemingly different yet, upon closer examination, strikingly similar as *de facto* postcolonial cities.

2. Materials and Methods

This study adopts a conceptual qualitative research design that prioritizes theory development and interpretive analysis over empirical testing. Conceptual research synthesizes existing knowledge to generate new theoretical insights and integrative frameworks. Such studies are characterized by their ability to construct coherent models, deliver value-added conceptual contributions, and identify directions for future inquiry [26,27]. In this context, the present study fills a gap by linking the creative industries—particularly the film sector—to the United Nations Sustainable Development Goals (SDGs) and the main pillars of sustainability. The analysis draws upon and connects literature from sustainability studies, creative-economy research, and urban cultural policy to develop a framework explaining how CIs, film production and creative ecosystems can foster responsible, inclu-

sive, and sustainable growth. Although primarily conceptual in nature, the framework is supported by qualitative observations, policy and industry analyses, and comprehensive reviews of academic literature, ensuring both theoretical depth and contextual relevance.

To illustrate and ground the conceptual framework, the study employs a comparative qualitative case study approach focusing on Łódź (Poland) and Mumbai (India), both UNESCO Cities of Film. These cases were purposively selected for their rich film heritage, dynamic creative industries, and distinct socio-economic trajectories. Łódź, often described as a post-industrial and post-socialist city, contrasts with Mumbai, a rapidly expanding post-colonial metropolis. This comparative design enables an examination of how divergent historical experiences, governance models, and cultural contexts shape the ways in which the film industry contributes to sustainability outcomes. The case studies of Łódź and Mumbai thus serve an illustrative and exploratory purpose, demonstrating how the proposed conceptual framework operates across different socio-economic and cultural settings.

The qualitative research design integrates secondary data analysis and interpretive synthesis. Key sources included institutional and professional websites—most notably those of the UNESCO Creative Cities Network [28] for Łódź and [29] for Mumbai—as well as film-sector organizations and facilities e.g. [30,31]. The research also encompassed academic and industry literature, policy and sectoral reports (e.g., [32–35]), professional blogs, media articles, and festival websites. In addition, the author’s own field observations—gathered through autoethnographic engagement with the film and cultural sectors—were incorporated to enhance contextual interpretation. These qualitative materials were systematically analyzed using interpretive synthesis, with a specific focus on references to sustainability, cultural policy, and film-sector development.

Building upon theoretical perspectives from sustainability studies, creative-economy research, and urban cultural policy, the study synthesizes and contextualizes these insights through comparative case analysis. This methodological orientation links the creative industries—particularly the film sector—to the Sustainable Development Goals (SDGs). The interpretive approach facilitates a nuanced understanding of how cultural assets such as film heritage, production ecosystems, and creative institutions can be mobilized for sustainable urban transformation. The resulting analysis identifies multiple pathways through which film industries contribute to social inclusion, local economic vitality, cultural heritage preservation, and environmentally responsible practices. Ultimately, the design prioritizes theoretical integration, contextual sensitivity, and practical applicability, providing a robust conceptual foundation for future empirical research and evidence-based cultural policy development.

3. Conceptual Framework

3.1. *Creative Industries and Their Relationship to the Film Sector*

Adorno and Horkheimer [36] introduced the term culture industry to describe the commodification of culture and mass consumption, criticizing how mass-produced cultural goods—such as books, magazines, and shows—were marketed to affluent audiences seeking novelty. Benjamin [37] later referred to this process as the industrialization of culture. O’Connor [38] identified a subsequent shift from this early critique toward broader notions of cultural and creative industries, highlighting how economic and cultural value became intertwined. The prominence of cultural industries, closely tied to cultural policy, peaked in the 1970s and 1980s amid the expansion of popular culture and cultural services [39]. Throughout the twentieth century, the commercialization of culture accelerated with growing wealth, leisure time, and advances in mass media. Culture increasingly contributed to

local and national development, as seen in the Greater London Council's cultural policy of the mid-1980s [40].

The broader concept of creative industries (CIs) encompasses sectors driven by creativity and innovation—advertising, architecture, design, film, television, and software development. These industries rely on the talents of the creative class [41,42] and prioritize commercial and technological innovation [43]. Turok [44] defined CIs as cultural and commercial activities combining artistic, imaginative, and intellectual effort while sustaining cultural production across fields such as film, television, music, and digital media.

Loots et al. [45] further described creative and cultural industries (CCIs) as those relying on creativity as a fundamental input. Potts et al. [46] emphasized their focus on novelty, originality, and resistance to standardization—distinguishing them from traditional mass-production economies. Rather than mere commodification, CCIs depend on innovation and collaboration between creators, firms, and audiences who value creativity in everyday life. Pratt [47] argued that cultural goods are not simply products but central elements of urban innovation, embedding social and spatial dimensions within creative production. Accordingly, CCIs align with the knowledge-based economy, fostering innovation, social well-being, and cultural diversity [48]. The rise of CCIs paralleled the transition to a post-industrial, service-oriented economy centered on creative cities [49]. Foundational thinkers—Galbraith [50], Fuchs [51], Touraine [52], and Bell [53]—highlighted how service-driven economies depend on knowledge, education, and creativity, while Castells [54] later linked this to the informational economy built on intellectual capital and innovation.

Cudny et al. [55] underscored the role of art, culture, and creativity in urban development—an approach that gained momentum during the urban decline of the 1970s and 1980s. Grassroots creative movements transformed abandoned industrial areas into cultural hubs, catalyzing regeneration and later inspiring culture-led development strategies [56,57]. By the 1990s, such approaches expanded to city branding and tourism development [9,55,58]. Contemporary perspectives on CIs emphasize attracting and cultivating human capital—particularly highly educated individuals who drive innovation and growth. These strategies aim to create vibrant urban environments appealing to the creative class through cultural experiences and events [45,59]. The creative economy thus represents the convergence of creativity, culture, economics, and technology, promoting income generation, employment, and social inclusion in urban contexts [60–62].

Despite its widespread appeal, the concepts of the creative class and creative industries have been criticized for oversimplifying the relationship between creativity and urban growth, privileging creative professionals while marginalizing other urban groups, and aligning with neoliberal urban agendas that prioritize economic expansion over social equity and inclusion [63]. Urban management policies grounded in the creative industries are often perceived as conflicting with the principles of sustainable development, as their predominant focus on economic growth driven by creative sectors tends to overlook long-term social and environmental dimensions. Viewing creativity primarily as an economic engine diverts attention from the genuine needs of artistic and cultural communities, as well as local residents. Consequently, deep inequalities often persist within the cultural economy: while a small minority reap substantial profits, most creators continue to face precarious, unstable, and poorly remunerated working conditions [64,65].

Film production represents a cornerstone of the creative industries, functioning simultaneously as a form of cultural expression and a catalyst for economic development across multiple spatial scales [44,66]. Through storytelling and visual representation, films articulate cultural identity, social norms, and historical narratives while fostering intercultural exchange and mutual understanding among diverse communities [67]. Increasingly, cinema also advances environmental and social sustainability through narrative persuasion

and awareness-raising [11]. From an economic perspective, the film sector generates employment, attracts investment, and stimulates income across production, distribution, and marketing chains [49]. It exemplifies innovation within the creative and cultural industries (CCIs), relying on the expertise of screenwriters, directors, actors, and digital specialists—the creative class described by Florida [41] and further elaborated by Coles [68]. Iconic film locations additionally contribute to tourism development and urban branding, linking film production to place identity and regional regeneration [69].

Globally recognized film cities such as Hollywood, Mumbai, Berlin, and Łódź illustrate how concentrated creative ecosystems can operate as dynamic hubs of cultural heritage, institutional support, and human capital. Within these networks, professionals, festivals, residents, and production companies collaborate to strengthen the cinematic landscape, stimulate local economies, and advance social cohesion and sustainability [67,70,71]. This interplay between creativity, culture, and economy underscores the film sector's capacity to serve both as a cultural driver and as a practical enabler of sustainable urban development.

3.2. *The Great Acceleration, the Great Inequality, and the Urgency for Sustainable Development*

The concept of sustainability addresses the challenges arising from the rapid development of civilization. Since the industrial era, human activity has increasingly transformed the natural environment—a process that has intensified in recent decades. Consequently, scientific discourse frequently references the Anthropocene, a term introduced by Paul Crutzen and Eugene Stoermer to describe a geological epoch dominated by human influence on the planet [72,73]. Some scholars, however, interpret the Anthropocene not as a distinct epoch but as an event—a rapid manifestation of human influence that underscores the continuous and transformative nature of environmental change rather than a fixed temporal boundary [74]. Within this framework, the Great Acceleration denotes the mid-twentieth-century surge in population, resource use, industrial output, and pollution [72]. Driven by technological advancement, urbanization, and globalization, this phase has amplified ecological degradation and resource depletion [75], creating what McMichael [76] termed planetary overload.

Human impact extends beyond ecology to socio-economic and cultural realms. Mass production and consumption have fueled corporate dominance that undermines local traditions, while globalized mass culture often distorts community identities. The Great Acceleration has also deepened inequalities between nations, producing what Steffen et al. [72] call the Great Inequality. Wealthier Western countries maintain intensive growth at the expense of others [77], while corporate concentration exacerbates social stratification [78]. Rapid urbanization further strains infrastructure and social equity, leaving marginalized groups—often lacking access to technology, education, or employment—most vulnerable to environmental and economic pressures [79]. These combined effects widen material and social disparities worldwide. Recognizing these interlinked crises, the United Nations (UN) has prioritized reducing inequality and eradicating poverty as foundations of sustainable development. The concept gained international prominence through Our Common Future [80], which defined sustainability as meeting present needs without compromising those of future generations [81]. This vision was reinforced by the 1992 Rio Earth Summit's Agenda 21 and later institutionalized in the United Nations' 2030 Agenda for Sustainable Development, which established 17 interdependent Sustainable Development Goals (SDGs) promoting environmental, social, and economic well-being.

An emerging discourse expands this framework by emphasizing the cultural dimension of sustainability. Liu [82] notes the limited attention given to culture and the creative industries, while Hawkes [83] argues that culture should be recognized as the fourth pillar of sustainable development. Cultural production promotes tolerance, stimu-

lates pro-environmental values, and raises awareness of global challenges. It also fosters inclusive growth through culture-led regeneration, generating local employment and empowering marginalized groups [84,85]. Cultural tourism exemplifies this contribution by redistributing visitor flows, reducing consumption, and encouraging responsible engagement with local resources [86]. Throsby [48] conceptualizes culture as cultural capital—a renewable resource that underpins both social and economic development through education and value transmission, but which requires sustainable management to preserve for future generations.

Culture encompasses tangible and intangible assets—heritage, values, traditions, and the arts—forming a dynamic system that evolves through human interaction with nature and society [87]. It functions as both an expression of identity and a mediator of environmental and social sustainability. Soini and Dessein [84] identify three principal roles of culture in sustainability: as a driver of transformation and cultural capital growth; as a functional element supporting community well-being and local knowledge; and as a holistic integrator linking cultural, social, and ecological dimensions of sustainable development.

From the perspective of this article, it is important to present the notion of sustainable urban development. It is defined as “a process of synergetic integration and co-evolution among the great subsystems making up a city (economic, social, physical, and environmental), which guarantees the local population a non-decreasing level of well-being in the long term, without compromising the possibilities of development of surrounding areas and contributing by this towards reducing the harmful effects of development on the biosphere” [88] (p. 6). The concept of sustainable urban development originates from the broader notion of sustainable development articulated in *Our Common Future* [80], which emphasizes meeting present needs without compromising the ability of future generations to meet their own. In the early 1990s, Agenda 21 [89]—particularly Chapter 7 on human settlements—provided foundational guidance for integrating environmental, social, and economic objectives into urban policy. Building on this groundwork, the Habitat II Conference and the Habitat Agenda [90] further advanced an integrated approach to urban planning and management. A major inflection point came with the Sustainable Development Goals [91], in which Goal 11—to make cities and human settlements inclusive, safe, resilient, and sustainable—positioned cities at the core of the global sustainability agenda. These efforts culminated in the Habitat III Conference in Quito and the adoption of the New Urban Agenda [92], which established a framework for implementing the SDGs through integrated spatial planning, social equity, economic efficiency, and environmental protection. The document underscores that cities are central to achieving the 2030 Agenda, serving as spaces where social, environmental, and economic dimensions of sustainability converge.

Another important term, green filmmaking, refers to the application of sustainable practices throughout the film production process with the aim of reducing its environmental footprint. It can be defined as “the process of filmmaking that is conducted with a view to minimizing environmental impact” [10] (p. 54). It encompasses strategies such as reducing energy consumption, waste generation, and carbon emissions; promoting recycling and reuse on set; and adopting environmentally responsible production design and logistics within film and media industries [14,16,93]. Within academic discourse, green filmmaking is often situated under the broader framework of sustainable audiovisual production. According to Lopera-Mármol and Jiménez-Morales [15], sustainability in this context is often limited to environmental considerations, while little research explores how the audiovisual sector can achieve sustainability from social and economic perspectives as well. Therefore, the concept should be expanded in current scholarship to encompass these additional dimensions. This approach aligns with global sustainability agendas, particularly the United Nations’ Sustainable Development Goals, by encouraging the

creative industries to mitigate their ecological impact while fostering cultural innovation and social awareness. In essence, green filmmaking represents a transformative shift in media production culture—from resource-intensive and high-waste practices toward ecologically conscious and ethically responsible modes of cinematic creation.

3.3. Creative Industries and Sustainable Development: A Framework

As previously discussed, numerous scholars emphasize the crucial role of creative culture in sustainable development [7,48,82,87,94]. While some regard culture as a foundational pillar of sustainability [83], others highlight the specific potential of the cultural and creative industries (CCIs) to operationalize sustainable development [95,96] and advance progress toward the United Nations Sustainable Development Goals (SDGs) [7,84]. The United Nations' proclamation of 2021 as the International Year of Creative Economy for Sustainable Development further underscores the recognition of the creative industries as engines of sustainable growth and innovation [97]. Building on these insights, this section introduces a conceptual framework linking the creative industries to the SDGs, illustrating how they align with the three classical pillars of sustainability—environmental, social, and economic [98]. This framework (Table 1) is later applied to the film sector as a representative case, showing how creativity can function as both a cultural and economic mechanism for sustainability.

Table 1. A framework presenting the role of Creative Industries in achieving Sustainable Development Goals.

Creative industries (CIs) play a significant role in raising awareness of CO ₂ emissions and the ecological importance of marine and terrestrial ecosystems through green production, diverse artistic projects, media initiatives, and public campaigns. Through the integration of environmental themes into creative production and cultural expression, CI can cultivate a deeper societal appreciation of ecological values and strengthen collective commitment to the preservation of both marine and land-based ecosystems			Environmental Pillar
SDG 13—Climate Action	SDG 14—Life Below Water	SDG 15—Life on Land	
Undertake urgent measures to address climate change and mitigate its environmental, social, and economic impacts	Conserve and sustainably manage oceans, seas, and marine resources to ensure their long-term ecological health and resilience	Protect, restore, and promote the sustainable use of terrestrial ecosystems; manage forests responsibly; combat desertification; and halt biodiversity loss	
Integrating arts and cultural education can improve learning outcomes, foster creativity, and enrich educational content by incorporating local cultural traditions and practices	The cultural and creative industries can advance gender equality by empowering female artists and ensuring equitable access to cultural resources, opportunities, and representation	Cultural expressions and heritage can serve as instruments for peacebuilding and reconciliation, promoting participatory governance, inclusive dialog, and social cohesion	Social Pillar
SDG 4—Quality Education	SDG 5—Gender Equality	SDG 16—Peace, Justice, and Strong Institutions	
Ensure inclusive and equitable access to quality education and promote lifelong learning opportunities for all individuals.	Achieve gender equality and empower all women and girls by challenging discriminatory norms, eliminating harmful practices, and ensuring equal rights and opportunities.	Promote peaceful, inclusive, and just societies by ensuring access to justice for all and fostering effective, accountable, and transparent institutions at every level.	

Table 1. *Cont.*

CIs generate substantial employment and drive economic growth by creating jobs across traditional craftsmanship, the arts, media, and creative tourism.		CIs promote responsible production and consumption by fostering green economy initiatives and sustainable practices. Through media and cultural expressions, they can advocate for the implementation of the Sustainable Development Goals (SDGs).	Economic Pillar
SDG 8—Decent Work and Economic Growth		SDG 12—Responsible Consumption and Production	
Promote inclusive and sustainable economic growth by ensuring full and productive employment, decent working conditions, and equal opportunities for all.		Encourage sustainable patterns of production and consumption by reducing carbon emissions, waste, and pollution; fostering a green economy; and integrating the SDGs into business and industry practices.	
CIs can help reduce inequalities by supporting marginalized communities and artists, among others from the Global South. They also stimulate economic recovery in crisis-affected areas by strengthening creativity, culture, and tourism.	Culture plays a pivotal role in urban and regional development by contributing to the social and economic vitality of places through heritage conservation, the growth of creative industries, and the promotion of cultural tourism.	CIs can foster international collaboration and build global networks that advance sustainable development. Through their influential platforms, they raise awareness of the SDGs and engage diverse audiences in intercultural dialog	Mixed
SDG 10—Reduced Inequalities	SDG 11—Sustainable Cities and Communities	SDG 17—Partnerships for the Goals	
Reduce social and economic disparities within and among countries by promoting inclusive policies, equitable opportunities, and fair access to resources.	Build inclusive, safe, resilient, and sustainable cities by enhancing infrastructure, improving accessibility, expanding green spaces, and fostering social and economic opportunities.	Strengthen and revitalize global partnerships to support the implementation of the Sustainable Development Goals through collaboration, knowledge exchange, and shared resources.	

Source: Authors' elaboration in Lucid software, based on UN SDGs.

Environmental Pillar: Creative industries raise awareness of critical environmental challenges such as CO₂ emissions, climate change, pollution, and ecological degradation through cultural and entertainment initiatives—including film festivals, environmental screenings, and thematic events [12]. Media campaigns incorporating sustainability narratives or adopting low-emission production practices [99,100] exemplify how CIs can integrate environmental advocacy into creative work. By promoting ecological consciousness, these industries directly contribute to SDGs 13 (Climate Action), 14 (Life Below Water), and 15 (Life on Land) (Table 1). Key indicators of environmental sustainability within the creative film industries include the adoption of green filmmaking standards, reductions in CO₂ emissions and energy use, greater reliance on renewable energy, and the implementation of waste-free production practices. Additional measures involve recycling and

material reuse rates, decreased travel and transport emissions, and the expanding use of digital technologies to replace resource-intensive methods. Another crucial indicator is the growing number of environment-themed films, festivals, and awareness campaigns that promote ecological values and shape public behavior. Through storytelling and creative expression, such initiatives engage audiences both emotionally and intellectually, fostering climate literacy and environmental responsibility.

Social Pillar: SDG 4 (Quality Education) emphasizes the value of arts and creativity in enhancing learning outcomes, fostering innovation, and supporting inclusive educational opportunities [101]. Similarly, SDG 5 (Gender Equality) highlights equitable participation within the creative sector, as film production and festivals increasingly showcase women's voices and diverse representation. Cultural heritage and creative expression also foster peacebuilding, participatory governance, and social cohesion—key components of SDG 16 (Peace, Justice, and Strong Institutions) (Table 1). In this sense, the creative industries act not only as cultural platforms but also as agents of social transformation and empowerment. Key indicators of social sustainability in creative film production include access to education and training in film and media, reflected in the number of educational programs, workshops, internships, and scholarships supporting skill development and creative literacy. Gender equality and diversity can be measured by the share of women and underrepresented groups in creative, technical, and leadership roles, as well as by the inclusion of diverse voices in film narratives and festival programming. Additional indicators involve community participation in production processes, the representation of marginalized groups, and the prevalence of socially themed content addressing issues such as justice, equality, and inclusion.

Economic Pillar: SDG 8 (Decent Work and Economic Growth) is closely linked to the creative industries' capacity to generate responsible employment and stimulate innovation-driven local economies. CIs create diverse job opportunities across traditional crafts, design, performing arts, the film sector, tourism (including film and heritage tourism), and media production [48,61,62]. This contributes to the creation of employment opportunities for local communities, firms, and creatives, helping them generate income and improve their livelihoods. Likewise, SDG 12 (Responsible Consumption and Production) is particularly relevant, as the integration of green economy principles within the creative industries promotes sustainable production models with a lower CO₂ footprint—for example, through green filmmaking practices that prioritize energy efficiency, waste reduction, and ethical resource use [15] (Table 1). Indicators measuring the economic pillar include employment and income indicators (e.g., number of creative-sector jobs, average earnings, share of creative employment in total urban or regional employment), innovation and productivity indicators (e.g., number of creative enterprises, start-ups, or patents, and the sector's contribution to local GDP), and sustainable production indicators (e.g., percentage of productions adopting green practices, reductions in resource use or CO₂ emissions, and use of recycled materials).

Cross-Pillar and Mixed Approaches: Several SDGs transcend the boundaries of individual sustainability pillars. For instance, SDG 10 (Reduced Inequalities) addresses social and economic disparities within and among nations. The creative industries contribute to this goal by empowering marginalized regions—such as postcolonial or developing countries [61]—and revitalizing cities in crisis, including post-socialist urban centers [9,55]. They also play a crucial role in supporting underrepresented communities, including ethnic minorities [102] and LGBTQ+ groups [103,104], through inclusive cultural expression—such as films and film festivals—alongside equitable participation and creative empowerment (Table 1).

SDG 11 (Sustainable Cities and Communities) further underscores culture's central role in urban development, where creative initiatives foster social cohesion, attract cultural tourism, and strengthen local economies. Likewise, SDG 17 (Partnerships for the Goals) emphasizes cross-sectoral collaboration, as the cultural and creative industries facilitate international cooperation, resource exchange, and the dissemination of best practices. Collectively, these interrelated SDGs illustrate the integral and cross-cutting function of the cultural and creative industries in advancing sustainable development across environmental, social, and economic dimensions (Table 1).

Although the creative industries—particularly the film sector—play a crucial role in promoting and shaping the discourse on sustainable development, it is equally important to acknowledge the challenges associated with their potential unsustainability. The literature highlights that while film production can stimulate economic growth and strengthen urban branding, it may also generate significant social, cultural, and environmental costs [105,106]. Processes such as gentrification, rising living costs in film districts, and the commercialization of urban space often displace local communities and deepen existing inequalities [62,107]. Gentrification transforms formerly neglected areas into attractive zones for the creative class and investors, driving up property values and marginalizing long-term residents. Similarly, commercialization frequently subordinates local culture and public space to market logic, turning them into promotional commodities at the expense of social functions and local authenticity. Furthermore, the rapid expansion of audiovisual production and streaming services entails intensive resource use, high energy consumption, and substantial greenhouse gas emissions [108–111], directly contradicting the core principles of environmental sustainability [112,113]. In recent years, professionals within the film industry have increasingly adopted green filming practices aimed at reducing the environmental footprint of production. While such initiatives are valuable and widely promoted, caution is necessary to ensure they do not devolve into greenwashing—superficially ecological actions serving primarily image-building and marketing purposes [15,114]. At the same time, critics warn of ongoing cultural homogenization, reflected in the dominance of global aesthetic and narrative models that marginalize local forms of expression [115]. Analyses of the creative film industries should therefore adopt a reflective and critical perspective that acknowledges both their transformative potential for sustainable development and their ambivalent social, cultural, and ecological consequences.

4. Results

4.1. Łódź Case Study

4.1.1. City Profile

Łódź is the fourth-largest city in Poland, with a population of over 648,000 as of 2024. Located in central Poland (Figure 1), it is known as the “Polish Manchester” for its 19th-century textile industry. This industrial boom attracted a diverse population—including Poles, Germans, Jews, and Russians—creating a vibrant multicultural community before World War II. After the war, Łódź remained an important industrial center and gradually evolved into a cultural and film hub [116]. Following the fall of communism in 1989, the city experienced rapid deindustrialization. The collapse of state-owned enterprises led to socio-economic instability and population decline. An aging demographic further strained social services and reduced economic productivity, while unemployment and poverty deepened social inequalities and lowered the quality of life [117]. Efforts to revitalize Łódź have since focused on economic diversification, infrastructure modernization, and improving living conditions. Significant progress began after Poland joined the European Union in 2004, with initiatives designed to transform Łódź from a post-industrial city into a modern, diverse urban hub. These strategies leverage the city's cultural and creative

sectors to drive socio-economic regeneration. The most recent development plan integrates art and creativity with production processes, research and innovation, and community engagement [55].

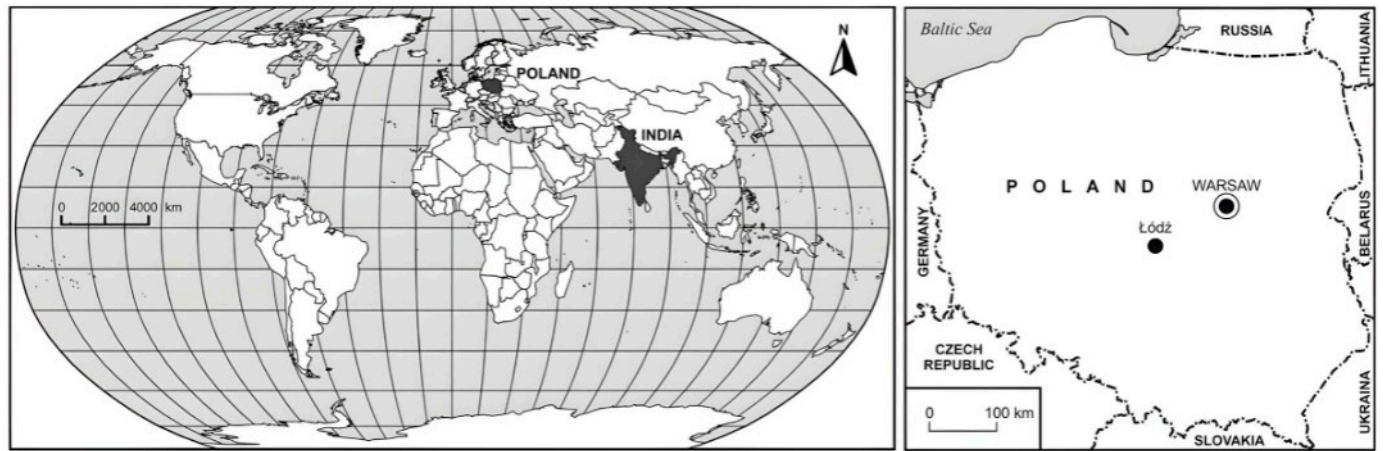


Figure 1. Location of Łódź (Poland). Source: Author’s elaboration.

Despite recent progress, Łódź continues to face a complex set of interrelated socio-economic, spatial, and environmental challenges characteristic of post-industrial European cities. Population decline, unemployment, social exclusion, and urban decay converge with significant ecological pressures and persistent social inequalities. Accordingly, any policy, planning, or cultural initiative aimed at addressing these issues—through urban revitalization, the development of green infrastructure, the expansion of creative industries, or the promotion of social inclusion—represents a crucial step toward the city’s sustainable transformation and long-term resilience [118].

4.1.2. Łódź Film Cluster

Łódź’s association with film heritage is so strong that it is often referred to as “Film Łódź” or “HollyŁódź.” The first film screening in the city took place in 1896, and by 1899, Łódź had opened the first cinema in Polish territories. In 1907, local filmmakers began producing short features, mainly newsreels and documentaries. After World War II, Łódź was one of the few Polish cities that avoided major destruction, which enabled the relocation of the Feature Film Production Company to the city. This move cemented Łódź’s status as the center of Polish cinema [119]. At the Łódź Feature Film Production Company, most Polish films were produced, and the city itself served as the backdrop for over 200 movies and 15 television series. While Łódź frequently portrayed itself on screen, it also stood in for other cities such as Warsaw, Moscow, Berlin, and Munich. Today, approximately ten different films and series are produced in Łódź each year. Notable historical productions include Andrzej Wajda’s *Canal* (1956) and *Ashes and Diamonds* (1958), Aleksander Ford’s *Knights of the Teutonic Order* (1960), and Roman Polanski’s Oscar-nominated *Knife in the Water* (1961). Other significant works include *Pharaoh* (1965), *Four Tank-Men and a Dog* (1966), *The Deluge* (1973, Oscar-nominated), *The Promised Land* (1974), *The Peasants* (1973), *Nights and Days* (1975), and *Amateur* (1979). Although the Feature Film Production Company ceased operations in 1998, its cinematic legacy continues through private studios such as Opus Film (Figure 2), which produced the Oscar-winning *Ida* (2013) [30,119].

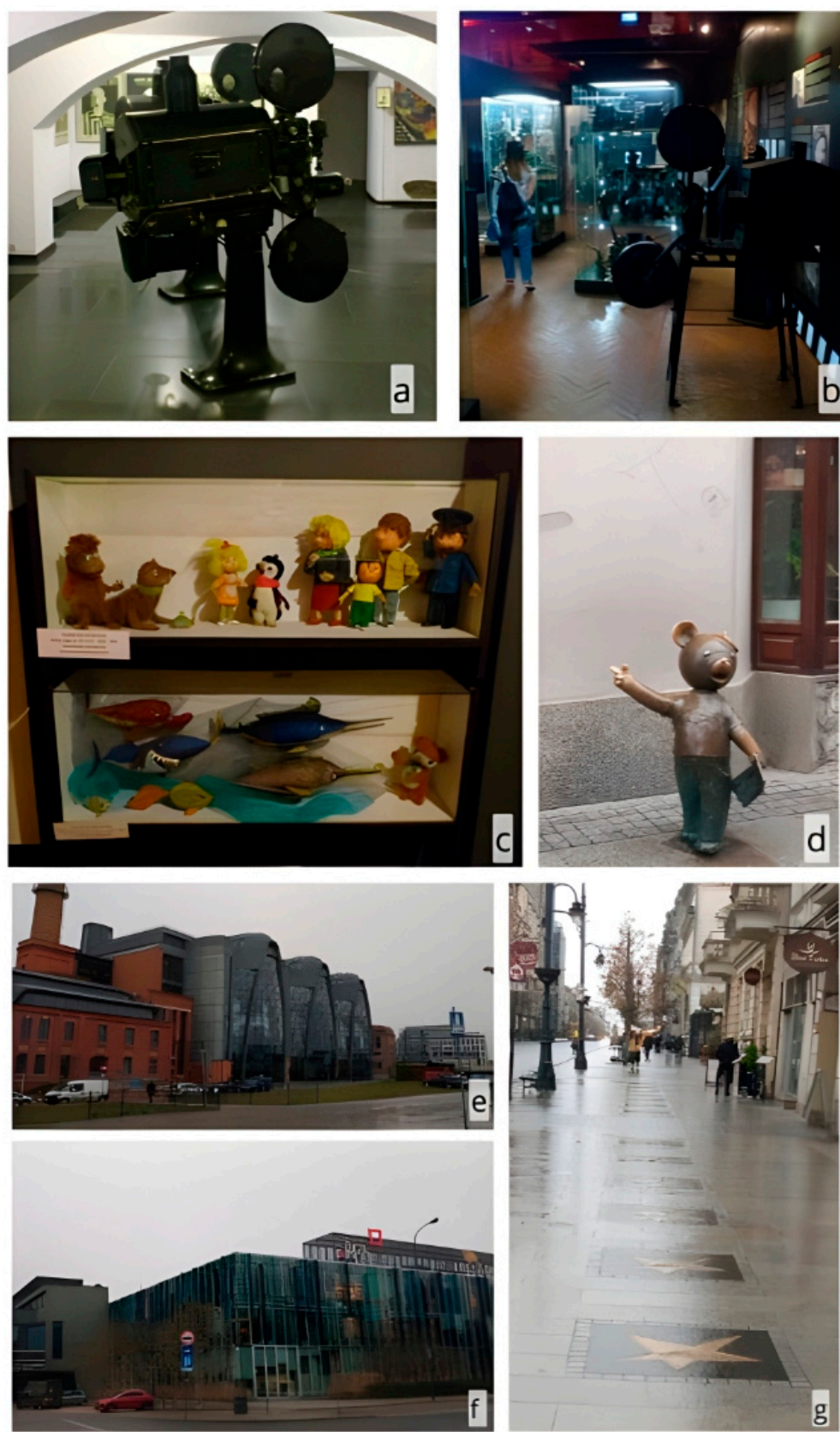


Figure 2. Łódź's film-related sites and institutions. (a–c): Collections of the Film Museum. (d): A sculpture of Miś Uszatek—a character from animated children's shows produced by the Semafor studio. (e): The historic EC1 power plant, home to the National Centre for Film Culture. (f): The Opus Film Studio building. (g): The Avenue of Stars on Piotrkowska Street in the center of Łódź. Source: Authors' elaboration.

Moreover, since the 1960s, Łódź was home to a large animation film studio, Semafor, which unfortunately did not survive the economic crisis of the 1990s. Throughout its existence, the studio focused primarily on producing animated puppet, cartoon, and experimental films for both children and adults. In 2009, a virtual film heritage trail was established in Łódź, featuring 50 locations and themed paths dedicated to animated films and Oscar-nominated productions. A crucial element of the city's cinematic heritage is the Avenue of Stars on the main street, modeled after Hollywood's Walk of Fame. Łódź also hosts several prominent film festivals that attract event tourists, and it has created a Fairy Tale Trail that leads through sites featuring sculptures of characters from animated series once produced by Semafor (Figure 2) [120].

Łódź is home to four higher education institutions specializing in the arts. The most important is the Polish National Film, Television and Theatre School (hereafter referred to as the Łódź Film School), established in 1948, with notable alumni including Andrzej Wajda and Roman Polanski—both Oscar-winning directors. The city also houses the Film Museum, founded in 1986, which offers a unique collection related to the history of cinema [121] (Figure 2). In 2015, the National Centre for Film Culture was opened in the revitalized EC1 power plant complex (Figure 2). The center serves as a hub for film education, promoting active participation in film culture through discussions, criticism, and filmmaking. In 2023, it officially opened its exhibition space and educational facilities [31,122].

In 2017, Łódź was admitted to the UNESCO Creative Cities Network (UCCN), earning the title of UNESCO City of Film. The UCCN, established in 2004, promotes creativity as a key factor in sustainable development and urban revitalization. The network now includes 350 cities from over 100 countries, recognized in one of seven fields: artistic crafts and folk art, media arts, film, design, gastronomy, literature, and music. The “Łódź UNESCO City of Film” brand has been instrumental in attracting investments to the creative sector and supporting tourism and the city's promotion [28].

According to Pożycka's [34] comprehensive report on creative industries in Łódź, the sector was driven primarily by advertising (1064 entities in 2010), architecture (685 entities), and the film industry (372 entities). In 2010, Łódź held one of the largest shares of Poland's film industry (about 11%), just behind Warsaw (about 12%). The city's film potential stems from the presence of the Łódź Film School, a well-developed production base with Opus Film studios, and its numerous film festivals. Besides Opus Film, Pożycka [34] highlights TOYA Studios, a private sound studio specializing in sound design for Polish films, dubbing, and producing trailers and advertisements [123]. Cudny et al. [55] similarly emphasize that film-related industries are crucial for Łódź's brand as a creative city. Examples of key initiatives supporting the preservation and development of film heritage include the establishment of the Łódź Film Commission in 2009 and the National Centre for Film Culture (NCFC), which received €6.2 million in financial support. Moreover, in 2016, Łódź joined the UNESCO Creative Cities Network as a City of Film.

4.1.3. Sustainable Development Perspective

The actions related to preserving Łódź's film history and institutions contribute to safeguarding cultural heritage from loss and ensuring its transmission to future generations. This effort aligns with the concept of sustainable development, which emphasizes the responsible use and preservation of resources—including cultural ones—for the benefit of the future. Moreover, film-related initiatives in Łódź support various Sustainable Development Goals (SDGs). The city's film sector plays a crucial role in restructuring the post-socialist urban fabric. The development of new film production companies and film-induced tourism generates income and employment, supports educational projects, and improves residents' quality of life. The film sector also creates growth opportunities

for creative individuals and local businesses, helping to reduce socio-economic inequalities in a post-socialist city in crisis while enhancing its overall sustainability (Figure 3).

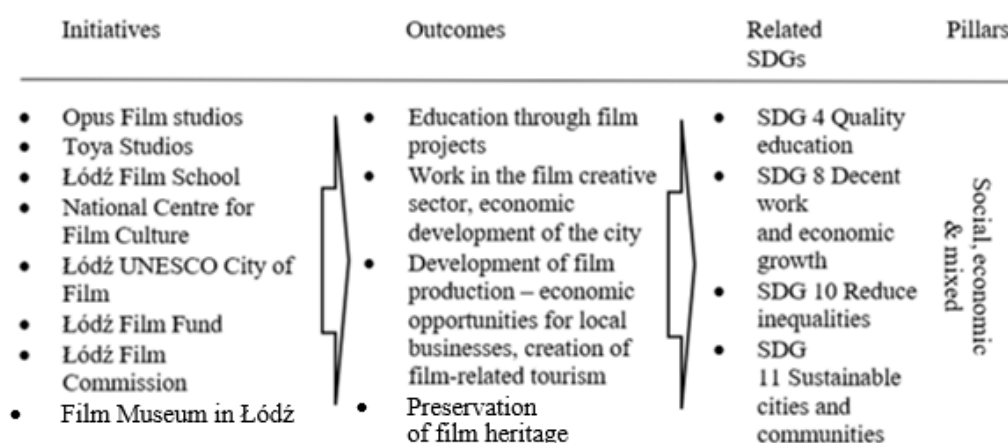


Figure 3. Alignment of film-related initiatives with SDGs in the social and economic pillars of sustainable development. Source Authors' elaboration.

Numerous films made in Łódź and co-produced by Opus Film studios (e.g., *Eddie*, 2002; *Welcome to Homelessness*, 2013) address contemporary social and economic issues, particularly in the context of the crisis of post-socialist cities. Film-related festivals, a vital part of Łódź's creative industries, also demonstrate strong connections to the goals and pillars of sustainable development. One notable example is the *Man in Danger Media Festival*, organized annually since 1990 by the Film Museum in Łódź. The festival showcases documentaries, television and radio reports, and hosts meetings with filmmakers, journalists, and experts. The presented works offer diverse perspectives—across nationalities, races, and genders—while addressing pressing global issues such as poverty, conflict, and social exclusion. Through this, the festival promotes multiculturalism, challenges stereotypes, and supports social inclusivity [124].

Film festivals form an important component of Łódź's film sector. The *Kamera Akcja Festival*, held annually since 2010, is the only European event dedicated exclusively to film criticism. It features screenings, interdisciplinary debates, and meetings with creators, aiming to popularize film culture and connect audiences from varied social and cultural backgrounds. The festival's educational events address topics such as economic and social exclusion, migration, multiculturalism, women's rights, gender equality, and LGBTQ+ representation—all viewed through the lens of film criticism [125].

Another key event is the *Łódź of Many Cultures Festival* (formerly the *Łódź Four Cultures Festival*), organized annually since 2010 by the Marek Edelman Dialogue Center. The festival celebrates Łódź's multicultural history, including its Polish, Jewish, German, and Russian heritage, through concerts, exhibitions, performances, film screenings, and workshops that promote intercultural dialog and understanding. A central component is *Kino 4 Kultur* (Cinema of Four Cultures), a film section that educates audiences about the traditions that shaped the city. In 2024, the event was renamed *Łódź Many Cultures*, reflecting the city's evolving identity as a place where German, Russian, Jewish, Ukrainian, Polish, and Romani cultures coexist alongside feminist, queer, folk, and youth communities. The festival is also aimed at combating antisemitism, promoting inclusivity, and fostering mutual understanding among diverse social and cultural groups—issues of particular importance in the context of Łódź's history and contemporary identity. It further emphasizes that human cultures are integral parts of broader ecosystems and that collective survival depends on their balance and sustainability [126]. From the perspective of sustain-

able development, these film-related initiatives strengthen the social and mixed pillars of sustainability in Łódź (Figure 4).

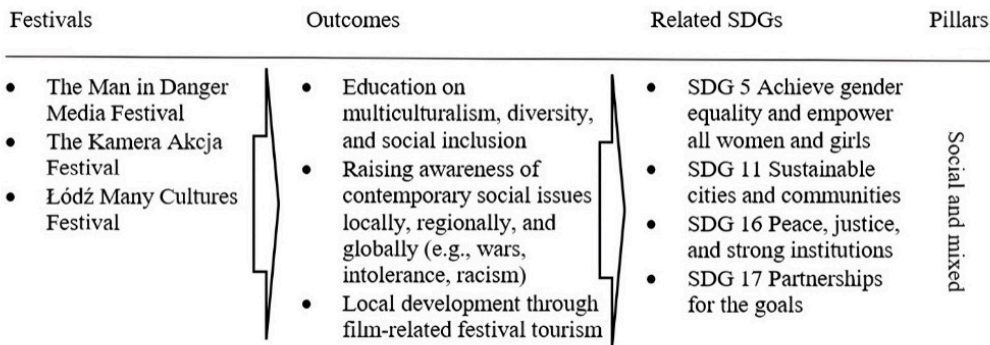


Figure 4. Alignment of film festivals with SDGs in the social and mixed pillars of sustainable development. Source: Authors’ elaboration.

Thanks to Łódź’s film festivals, equitable education, the presentation of other cultures’ values, and the raising of awareness of social issues have become possible. Moreover, these events facilitate contact between diverse communities and institutions, creating opportunities for joint initiatives and partnerships aimed at sustainable development. Festivals attract tourists, promoting urban regeneration through the event sector, expanding the job market, and generating income for local businesses such as catering and accommodation services (Figure 4). Cudny [12] noted that festivals within the creative sector play a significant role in promoting environmental protection and sustainable development. Such events contribute to global sustainability goals by addressing issues like environmental degradation and CO₂ emission reduction. Examples include the International Environmental Film and Video Festival in Brazil, the Environmental Film Festival in the Nation’s Capital (DCEFF) in the USA, and the Environment Festival in Belgium.

In Łódź, film festivals also promote ecological awareness. The most prominent event in this regard is the Włodzimierz Puchalski International Nature Film Festival, the largest international nature film event in Poland. The festival celebrates filmmakers, photographers, and activists dedicated to environmental protection and is part of ECOMOVE International, a network of nature film festivals from various countries. It aims to popularize achievements in nature filmmaking, assess the state and prospects of this genre, and educate younger generations about sustainability, nature, and conservation. Participants engage in film screenings, photography and painting exhibitions, lectures, discussions, and environmental excursions [127].

Another event integrating ecological themes is the Łódź Many Cultures Festival, which in its 2024 edition expanded its focus to include sustainable development. Through film screenings and artistic activities, the festival underscores that human cultures are integral parts of complex ecosystems that must be protected to ensure the survival and well-being of future generations [126].

Within Łódź’s creative film production sector, sustainability principles are also being implemented. The Łódź Film Commission promotes the concept of green filmmaking, and sustainable production guidelines have been introduced for entities receiving support from the Łódź Film Fund. These guidelines aim to minimize electricity and water consumption, reducing waste on film sets, and promoting sustainable transport such as public transit, bicycles, and electric cars. They also encourage the use of the sharing economy instead of purchasing new products and prioritize local resources to foster responsible production and consumption [128]. According to Kopeć and Materska-Samek [93], a major step toward sustainable film production in Europe was the 2019 signing of the Manifesto for Sustainable Filming by 28 members of Cineregio—an independent network of regional film funds that

includes the Łódź Film Fund. The initiative promotes the exchange of best practices and encourages the adoption of green standards across all stages of production. In Poland, the Polish Producers Alliance (KIPA), the Łódź Film Commission, and the Regional Film Fund in Łódź are leading efforts to advance green filmmaking, with the Łódź Film Fund becoming the first in the country to implement formal sustainability guidelines for film grant applicants.

In summary, the Łódź film sector supports sustainable development through its environmental dimension and promotes responsible production and consumption. It contributes to global climate action and biodiversity protection by combining education on nature conservation with practical measures that minimize environmental impact (Figure 5).

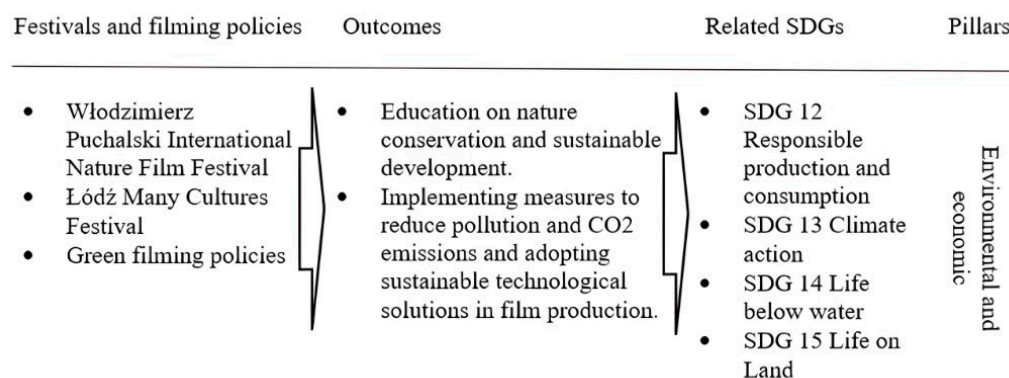


Figure 5. Alignment of film festivals and film production with SDGs in the environmental and economic pillar of sustainable development. Source: Authors' elaboration.

4.2. Mumbai Case Study

4.2.1. City Profile

Mumbai, formerly known as Bombay until 1995, is a vibrant metropolis that serves as both India's creative hub (home to Bollywood) and its financial capital [129,130]. Located on the western coast of India (Figure 6), the city is built around a deep natural harbor. Mumbai originally comprised seven islands inhabited by the Koli fishing community. Over the centuries, these islands were ruled by successive indigenous empires until the Portuguese took control. In 1661, they were transferred to the East India Company when Charles II of England married the Portuguese princess Catherine of Braganza and received the islands as part of her dowry. By the 19th century, large-scale land reclamation projects connecting the islands—along with the construction of major roadways and railways—had transformed Bombay into a key seaport on the Arabian Sea. The city played a pivotal role during the Indian National Movement and later became a center of economic and educational development. After India's independence in 1947, Bombay was incorporated into Bombay State and, in 1960, became the capital of the newly formed state of Maharashtra. In 1995, the city was officially renamed Mumbai after its patron deity, the Mother Goddess Mumba Devi, worshiped by the Koli community, the city's earliest known inhabitants [131].

Mumbai's multicultural roots can be traced to its long history of settlement by diverse communities, including the indigenous Kolis, followed by Parsi traders, Muslim merchants, Portuguese colonizers, and migrants from across India. This layered history shaped a vibrant melting pot of cultures, expressed through the city's religious and linguistic diversity, cuisine, and arts. After being transferred to the British East India Company in 1668—following Portuguese rule—Mumbai developed into a major port and commercial hub of the British Empire. Colonial maritime trade and industrial growth attracted populations from across India and abroad, further consolidating its cosmopolitan profile. However, despite independence and entry into a new era after 1947, the city continued to face deep socio-economic and political challenges. Mumbai hosts both India's wealthiest

citizens and millions living in poverty. Political and religious tensions remain high, and the city's infrastructure and environment are under severe strain due to its exceptionally high population density. The complexity and persistence of these issues are reflected not only in the everyday lives of its residents but also in the themes explored by Bollywood—the leading hub of Indian and global cinema [18,19].

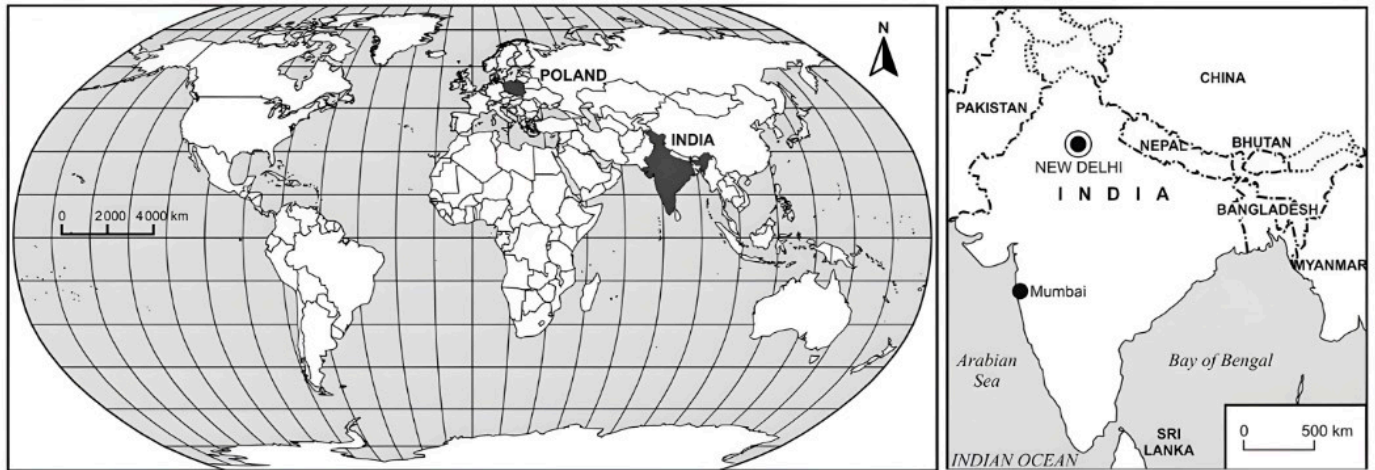


Figure 6. Location of Mumbai (India). Source: Author's elaboration.

Following India's independence from the British Empire, Bombay emerged as a symbolic "city of dreams," embodying the aspirations of a newly decolonized nation. It became a site of mobility and opportunity where migrants from across the country sought to help shape a modern, secular, and progressive society. The city came to represent postcolonial ideals of progress, equality, and cosmopolitanism, where religious and caste differences seemed secondary to labor, ambition, and civic participation. In the decades that followed, globalization elevated Mumbai's status as a global city—a hub of finance, media, and culture. Internally, however, this transformation was accompanied by rising inequality and urban fragmentation. Economic liberalization reshaped social relations while political movements challenged the city's once cosmopolitan character. Thus, the city that symbolized India's modernist optimism now also embodies the contradictions of contemporary globalization—global in scope yet deeply divided within [20,21].

Today, Mumbai is one of India's largest cities, with a population of 12.4 million according to the 2011 Census and an estimated 17.7 million in 2024. It is a major center of finance and commerce, hosting key financial institutions, corporate headquarters, and offices of both Indian and multinational corporations. This concentration of workplaces and business opportunities attracts migrants from across the country, making Mumbai a highly cosmopolitan, multicultural, and diverse metropolis. However, the city faces a complex mix of socio-economic and environmental challenges that significantly affect its path toward sustainability. Rapid population growth and extreme density have resulted in widespread informal settlements that lack adequate water, sanitation, and housing infrastructure. Persistent economic inequality, congestion, and overburdened public services further exacerbate social vulnerabilities. Environmentally, Mumbai is highly exposed to flooding, sea-level rise, and extreme weather events, intensified by its low-lying reclaimed terrain and insufficient drainage and waste systems. Industrial pollution, traffic emissions, and rising health risks from water- and vector-borne diseases underscore the urgency of coordinated action [132–134]. Given these intertwined pressures, any initiative—policy, technological, or cultural—that mitigates these challenges contributes meaningfully to strengthening the city's resilience and advancing its broader sustainability goals.

4.2.2. The Evolution of Bollywood and the Mumbai Film Cluster

Mumbai is widely recognized as the entertainment capital of India and the principal hub of the country's film industry, popularly known as "Bollywood." The term combines "Bombay" (now Mumbai) and "Hollywood," reflecting the city's central role in global cinema. Over 70% of Indian motion pictures and television serials are produced in Mumbai [135]. In 1896, the Lumière Brothers introduced cinematography to India by screening six short films in the city, and in 1913, Dadasaheb Phalke—known as the father of Indian cinema—created the first Indian silent feature film, *Raja Harishchandra*. By the 1930s, Mumbai's film industry was producing more than 200 films annually, and in 1931, India's first talkie, *Alam Ara*, marked the beginning of sound in Indian cinema.

In 1977, the Maharashtra Film, Stage & Cultural Development Corporation Ltd. established Film City, later renamed Dadasaheb Phalke Chitra Nagari in 2001 in honor of Phalke. In 2019, the National Museum of Indian Cinema opened in Mumbai, showcasing the evolution of Indian cinema from silent films to the digital age (Figure 7). That same year, Mumbai was designated a UNESCO City of Film under the UNESCO Creative Cities Network (UCCN), which promotes creativity and cultural industries as key drivers of local development, sustainability and global cultural cooperation [136]. Mumbai also hosts numerous film festivals and events that celebrate Bollywood, regional, and international cinema, as well as documentaries. The city is home to several institutions offering film-related education, including the University of Mumbai, Whistling Woods International, and Mumbai Film Academy, which provide training in acting, directing, and technical production. Extensive studio complexes, outdoor shooting locations, film processing facilities, and advanced post-production infrastructure further reinforce Mumbai's global status as a filmmaking powerhouse [29].

The city's historic studios have been cradles of creativity, witnessing the transformation of Hindi cinema from silent black-and-white classics to contemporary digital productions. Early studios such as Jyoti Studio, Bombay Talkies Studio, Minerva Movietone, and Rajkamal Studio were sites of landmark films like *Alam Ara* (1931), *Sikander* (1941), *Mahal* (1949), *Jhansi Ki Rani* (1953), and *Do Aankhen Barah Haath* (1957). Other iconic spaces, including Mehboob Studio, RK Studio, and Kamalistan Studio, have also played significant roles—though some have since been converted into residential or commercial properties (Figure 7).

By the late 1970s, standalone studios began giving way to larger studio complexes such as Film City. Established by the Government of Maharashtra in 1977, Film City spans 520 acres and serves as a one-stop destination for movie-making facilities, connecting creative talent with state-of-the-art resources. It includes multiple recording rooms and permanent sets depicting temples, courtrooms, villages, gardens, and even artificial waterfalls. The complex accommodates productions of all scales and hosts international award ceremonies. In recent years, attention has shifted from traditional studio models to film clusters housing multiple production houses, further consolidating Mumbai's position as a global filmmaking hub [29,136].

Mumbai hosts numerous film festivals, including the Mumbai Academy of Moving Image (MAMI) Film Festival, the Mumbai International Film Festival, and the Mumbai Independent Film Festival. These events provide platforms for Indian and international filmmakers to present their work, exchange ideas, and explore new collaborations. They also offer access to information on filmmaking, funding, distribution, and market support, strengthening the city's role as a center of creative exchange and innovation. As a hub for progressive cinema, Mumbai is also home to the Mumbai International Queer Film Festival, *Kashish*, which reflects the city's inclusive spirit and "emphasizes Mumbai's stance towards supporting and encouraging greater visibility of Indian and international queer

cinema” [35]. The festival organizes workshops and masterclasses for skill development and offers free screenings for students in Municipal Corporation of Greater Mumbai schools, promoting early engagement with film and related arts [137].

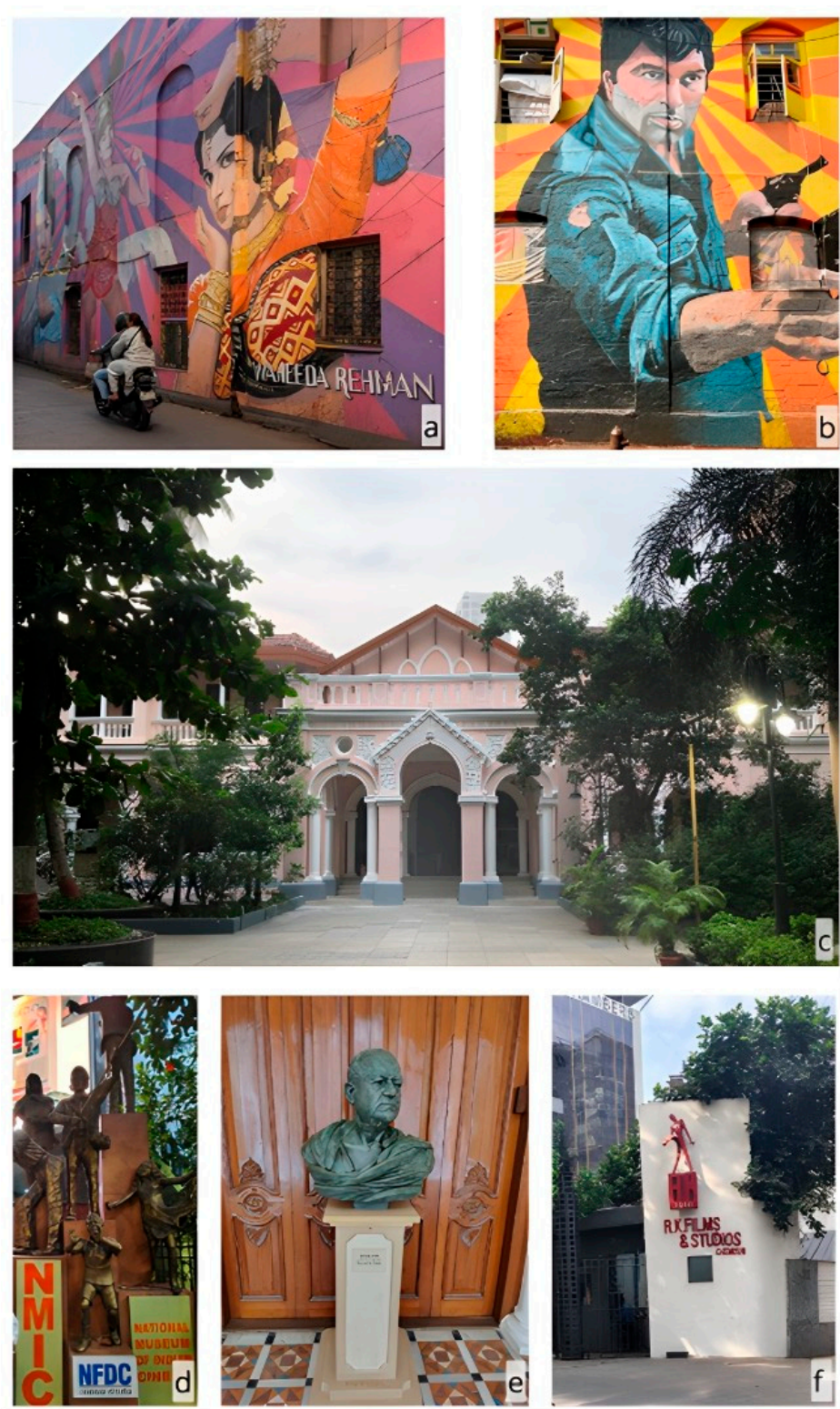


Figure 7. Mumbai’s film-related sites and institutions. (a,b): Wall murals, part of The Bollywood Art Project (BAP). (c): The National Museum of Indian Cinema-Gulshan Mahal’ building. (d): Entrance to The National Museum of Indian Cinema. (e): Dadasaheb Phalke, known as the father of Indian cinema. (f): RK Films & Studios. Source: Authors’ elaboration.

Bollywood, an iconic symbol of Mumbai's identity, is celebrated through the Bollywood Art Project (BAP) (Figure 7), a public art initiative led by artist Ranjit Dahiya. The project has transformed city walls into large-scale murals depicting classic scenes and legendary actors, visually preserving Mumbai's film heritage [138]. The city's cinematic synergy is further showcased through exhibitions such as Project Cinema City, organized by the National Gallery of Modern Art in collaboration with the Ministry of Culture. The initiative celebrated the long history of Indian cinema and explored how the city is negotiated through film, with participation from independent artists, educational institutions, and filmmakers. The project also honored the often-overlooked contributions of technicians, extras, and behind-the-scenes professionals integral to the filmmaking process [139].

4.2.3. Bollywood's Share and Impact

The Indian film industry is dominated by Bollywood, which produces films primarily in the Hindi language and accounts for roughly 40% of the industry's total revenue. In 2017, Bollywood's box office net revenue was estimated at USD 549 million [140], and projections suggest the industry will reach approximately USD 5 billion by 2024 [33]. The Bollywood film sector is highly labor-intensive, providing direct and indirect employment to millions of people from the city and surrounding region, including actors, directors, screenwriters, technicians, and production staff. It also sustains related creative sectors such as music and fashion, which are deeply integrated into the Bollywood ecosystem. In recognition of its rich cinematic heritage, Mumbai was designated a UNESCO City of Film in 2019 [137].

Bollywood's influence extends well beyond entertainment, particularly into tourism. Film-induced tourism has grown steadily, with rising numbers of both domestic and international visitors seeking locations featured in films [32]. To strengthen this connection between cinema and travel, promotional campaigns increasingly use movie clips to highlight destinations, while government-backed projects brand lesser-known sites of natural beauty and cultural significance [141]. States such as Rajasthan, Goa, Uttarakhand, Kerala, and Ladakh have reported increased tourist arrivals following the success of films including *Padmaavat*, *Bajirao Mastani*, *Jodhaa Akbar*, *Dear Zindagi*, *Kedarnath*, *Dil Se*, *Baahubali*, and *3 Idiots*. This trend has encouraged local authorities to introduce incentives and streamlined procedures to attract filmmakers. Film-inspired tourism has also created opportunities for small and seasonal enterprises. Local artisans, vendors, and tour operators benefit from increased visibility and income, contributing to more inclusive and sustainable community growth [142]. Moreover, film festivals and award ceremonies held in Mumbai attract significant tourist inflows, while Film City and organized Bollywood tours have become established attractions.

4.2.4. Mumbai Film Industry and Its Contribution to SDGs

The Hindi film industry, based in Mumbai, contributes to the United Nations Sustainable Development Goals (SDGs) in multiple ways. It provides opportunities for individuals from the city and surrounding region to transform creative passions into professional careers, thereby generating business opportunities, creating employment, strengthening the creative sector, and preserving cinematic heritage. These outcomes align with the social and economic pillars of sustainability, particularly with SDGs 4, 5, 8, and 11. Moreover, Bollywood's global popularity reinforces its function as a cultural ambassador, enhancing India's soft power and fostering international cooperation [143], thus reflecting SDGs 16 and 17 (Figure 8).

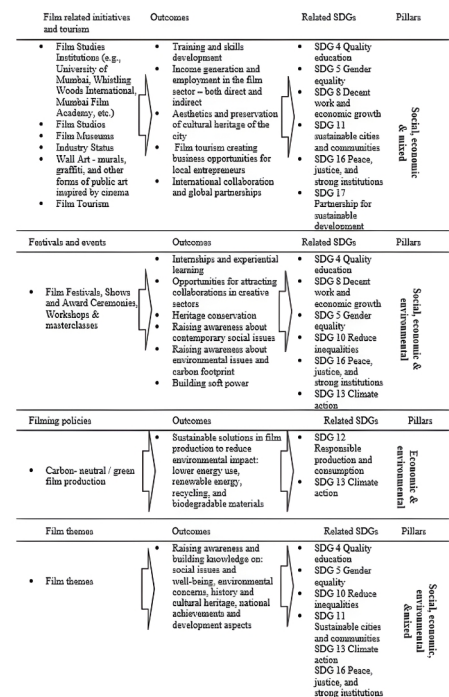


Figure 8. Contribution of Mumbai film sector to Sustainable Development Goals across different pillars of sustainability. Source: Authors' elaboration.

Many Bollywood productions address major social and environmental issues, consciously or implicitly incorporating SDG principles into their narratives [144]. Popular and critically acclaimed films alike explore themes of gender empowerment, socio-cultural and economic challenges, social harmony, community life, education, entrepreneurship, and urban concerns such as housing shortages, overcrowding, and unemployment—resonating with SDGs 4, 5, 10, 11, and 16. Other films highlight environmental crises, including droughts, floods, and pollution, as well as conflicts between humans and wildlife, reflecting SDGs 11 and 13 (Figure 8).

Historically, cinema has served as a key medium for cultural transmission, education, and entertainment, reaching vast audiences [32]. Bollywood continues this legacy, functioning as a platform for awareness and advocacy. Its films tackle pressing social and economic issues (CityLights, 2014; Gully Boy, 2019), challenge gender and religious stereotypes (Ek Ladki Ko Dekha Toh Aisa Laga, 2019), and address environmental threats such as climate change and pollution (Irada, 2017; Kadvi Hawa, 2017; Hamari Paltan, 2018).

Many popular Bollywood actors and actresses actively champion sustainable and environmentally responsible lifestyles. Dia Mirza, one of the most prominent figures in the industry, is widely recognized for her engagement in social and environmental causes. She serves as the Brand Ambassador for the Wildlife Trust of India and as an official Advocate for the United Nations Sustainable Development Goals [145]. Other actresses, including Bhumi Pednekar [146] and Alia Bhatt [147], are also deeply involved in environmental and social initiatives. Their advocacy promotes slow and circular fashion, climate action, animal and environmental conservation, renewable energy use, and recycling. Collectively, these efforts underscore Bollywood's contribution to SDGs 12 and 13 by inspiring sustainable behavior and awareness on a mass scale (Figure 8).

While Bollywood has explored environmental themes and produced Aisa Yeh Ja-haan (2015)—India's first carbon-neutral full-length feature film—advancing SDGs 12 and 13 (Figure 8), the industry still has considerable progress to make in reducing its overall carbon footprint. Sustainable and carbon-neutral filmmaking remain far from standard practice within the Indian film industry [148].

In conclusion, Bollywood, as a vital component of India's creative economy plays a pivotal role in advancing the SDGs and promoting an inclusive, sustainable future across all three pillars of sustainability—social, economic, and environmental (Figure 8). To fully realize this potential, the industry must expand its commitment to green filmmaking, adopt sustainable production methods, and leverage innovative technologies to minimize environmental impact [148].

5. Discussion

The article examines the interplay between sustainability, the creative industries, and the film sector within urban contexts. While much of the literature has focused on the environmental dimension of sustainability [98], more recent research increasingly emphasizes its social and economic aspects [84,149]. However, a comprehensive understanding of how sustainability, culture, and the creative sector interact across different urban environments remains limited [13]. To address this gap, the study positions the film industry within the broader creative industries (CIs) framework, as supported by existing scholarship [44,66,67]. It first establishes a conceptual model linking the Sustainable Development Goals (SDGs) to creative industries (Table 1) and then tests this framework using the film sector as a representative case.

Drawing on comparative case studies of Łódź and Mumbai—both UNESCO Creative Cities of Film—the analysis demonstrates how these cities leverage their film industries and heritage to stimulate creative-sector growth and align with the SDG agenda. The analysis reveals the film sector's multifaceted contribution to sustainable development by enhancing cultural tourism as a sustainable travel form [86], supporting local economies, preserving cultural heritage, and promoting social inclusion see [39,44,69,71,150].

Both Łódź and Mumbai demonstrate a multidimensional contribution of their film sectors to sustainable development, spanning environmental, social, economic, and mixed sustainability pillars (Table 2). Environmentally, both cities advance SDG 13 through carbon-neutral production and climate-awareness themes, while Łódź additionally emphasizes ecosystem-focused festivals aligned with SDG 14 and 15. Socially, their shared engagement with SDG 4, 5, and 16 manifests in film production, training programs, and festivals that foster gender equality, inclusivity, and intercultural dialog. Economically, both contribute to SDG 8 and 12 by generating creative-sector employment, supporting local and regional entrepreneurship, and introducing sustainable production practices. Finally, in the mixed pillar, they align with SDG 10, 11, and 17 through inclusive and diversity-driven festivals, urban revitalization linked to film heritage and tourism, and global cooperation under UNESCO's City of Film network. Collectively, these parallels reveal that both cities integrate culture, sustainability, and innovation, using cinema as a catalyst for inclusive, environmentally conscious, and globally connected urban development (Table 2).

The film industry is recognized as a key component of the creative industries, drawing on advanced technologies, local heritage, and a specialized workforce—the creative class—including directors, actors, screenwriters, and technicians [44,66,67,151]. This sector drives technological innovation, skill development, and socio-economic progress across multiple scales. The proposed framework demonstrates how creative industries contribute to the SDGs through the environmental, social, and economic pillars of sustainability.

From an environmental perspective, the film sector engages with global challenges such as climate change, carbon emissions, and biodiversity conservation. Events such as the Włodzimierz Puchalski International Nature Film Festival in Łódź raise public awareness and promote sustainable practices [12]. The adoption of green technologies and low-carbon production processes in Łódź and Mumbai further exemplifies efforts to minimize ecological footprints and align the sector with nature-related SDGs [10,15].

In Mumbai, Aisa Yeh Jahaan (2015) was India’s first carbon-neutral full-length feature film, while in Łódź, sustainable production guidelines have been introduced for projects receiving support from the Łódź Film Fund.

Table 2. Comparative summary of Łódź and Mumbai: film-sector contributions to Sustainable Development Goals (SDGs).

Pillar	Related SDGs	Actions/Contributions	City
Environmental	SDG 13 (Climate Action)	Carbon-neutral film production, climate-awareness themes	Łódź/Mumbai
	SDG 14 (Life Below Water)	Nature-themed film festivals on ecosystems	Łódź
	SDG 15 (Life on Land)	Environmental education through film	Łódź
Social	SDG 4 (Quality Education)	Film schools, festivals, workshops, internships, and museums	Łódź/Mumbai
	SDG 5 (Gender Equality)	Gender equality in film themes and festivals, and women’s empowerment	Łódź/Mumbai
	SDG 16 (Peace, Justice and Strong Institutions)	Promoting tolerance, justice, inclusivity, and intercultural dialog through film themes and festivals	Łódź/Mumbai
Economic	SDG 8 (Decent Work and Economic Growth)	Jobs in the film sector, creative entrepreneurship, festival economy	Łódź/Mumbai
	SDG 12 (Responsible Consumption and Production)	Green filming, sustainable production	Łódź/Mumbai
Mixed	SDG 10 (Reduced Inequalities)	Inclusive, diversity-focused festivals and film productions promoting equal opportunities	Łódź/Mumbai
	SDG 11 (Sustainable Cities and Communities)	Urban regeneration through film heritage and tourism development	Łódź/Mumbai
	SDG 17 (Partnerships for the Goals)	International film partnerships and exchanges	Łódź/Mumbai
		UNESCO Film City cooperation, co-productions	Łódź/Mumbai

Source: Authors’ elaboration.

Socially, the film industry advances inclusivity, equality, and justice—values fundamental to sustainability [103,152]. Through their narratives, films frequently confront issues such as discrimination, social inequality, and human rights, thereby raising public awareness and fostering dialog. Illustrative examples from Łódź and Mumbai include Eddie (2002), Welcome to Homelessness (2013), CityLights (2014), Gully Boy (2019), and Ek Ladki Ko Dekha Toh Aisa Laga (2019). Film festivals further reinforce these themes by promoting social awareness and advocating for inclusive communities. Notable examples include the Łódź Many Cultures Festival and Mumbai’s Kashish International Queer Film Festival. Moreover, the film industry provides opportunities for diverse professionals, supporting Sustainable Development Goals (SDGs) focused on inclusive societies, equal participation, and social justice.

Economically, the film sector generates employment and stimulates the growth of the creative class—both essential components of sustainable development [151]. It exerts a strong influence on local, national, and global economies by revitalizing cities, attracting investment, and fostering innovation. In Łódź, the film industry has contributed to the regeneration of a post-industrial city in crisis [34,55], while in Mumbai, it supports economic expansion and helps mitigate socio-economic disparities within a developing context [153].

While the film industry within the Creative Industries can generate substantial benefits across the three pillars of sustainability, it is equally important to recognize the numerous challenges accompanying its development and the broader expansion of the creative economy. These include an excessive emphasis on economic growth and the commodification of culture—prioritizing profit over equality and redistribution in the urban context [62,105–107]. Another concern involves policy frameworks that privilege large enterprises, particularly global film corporations, often at the expense of smaller local firms and independent creators. This dynamic reflects the neoliberal logic of contemporary urban entrepreneurialism [154]. Moreover, the sector's tendency toward cultural over-commodification and the overestimation of the creative class as the main driver of urban development can marginalize local artists and communities [63]. A further, closely related challenge is the industry's environmental footprint—CO₂ emissions, high resource consumption, and ecosystem degradation during production [15,114]—which can only be partially mitigated through green filming policies [15,112,113].

In this sense, the expansion of the Creative Industries, including the film sector, gives rise to a sustainability paradox. While sustainability is rhetorically embraced—cities and cultural industries present themselves as green, inclusive, authentic, locally rooted, and innovative—their practices often reproduce unsustainable dynamics such as short-term profit orientation, over-commodification of place and culture, gentrification, precarious cultural labor, displacement of local communities, and resource-intensive production [62,107,155–157]. Therefore, assessing the impact of the film industry requires a critical and comprehensive evaluation of its effects across social, cultural, economic, and environmental dimensions, and the promotion of genuinely sustainable policies to avoid this paradox.

The study acknowledges certain limitations, notably its focus on only two cities, which constrains the generalizability of the findings. As a conceptual investigation, it relies primarily on literature review and qualitative observations, underscoring the need for more in-depth empirical research incorporating quantitative data and stakeholder perspectives. The proposed framework would clearly benefit from further empirical validation. Future studies should therefore broaden the geographical scope and apply mixed or comparative methodologies to enhance understanding of the film sector's contribution to sustainable development and the achievement of the SDGs. Moreover, while these examples underscore the film industry's potential to contribute to the SDGs, they also expose persistent structural challenges. Thus, the initiatives observed in Łódź and Mumbai should be regarded as early steps in an ongoing global process of embedding sustainability more deeply within the film industry.

6. Conclusions

The research highlights the film industry's pivotal role in advancing environmental, social, and economic sustainability. It promotes social inclusion and justice, stimulates urban economies, and creates growth opportunities for cities and their communities while enhancing education and public awareness. Moreover, the industry fosters eco-friendly production methods and advocates for environmental protection. The findings indicate that the film sector is a key driver of sustainable urban transformation, showing how

cultural and creative industries can stimulate growth while addressing major sustainability challenges. The study underscores the value of leveraging cinematic heritage to support local economies, preserve cultural identity, and strengthen social well-being. In conclusion, it establishes a conceptual foundation for understanding the contributions of the creative industries—particularly film—to sustainable development. By linking creative production to the implementation of the SDGs across environmental, social, and economic dimensions, it offers a coherent framework for future research and policy application.

Mumbai and Łódź are both in the process of developing sustainable film industries rather than having fully established them. In each city, initiatives are underway to integrate sustainability principles into film production and related activities. In Łódź, these efforts are evident in the preservation of the city's cinematic heritage for future generations, while in both contexts, various film projects and events address themes such as gender equality, religious diversity, and social exclusion, thereby fostering inclusivity. Both cities also host film festivals featuring screenings, workshops and discussions that promote diversity, equality, and environmental awareness. As integral components of their respective film clusters, these festivals reinforce the social and cultural pillars of sustainability and align with the broader objectives of the Sustainable Development Goals (SDGs).

The study highlights several key policy implications regarding the role of the film industry within the broader creative industries (CIs) and its contribution to the Sustainable Development Goals (SDGs). As part of the CIs, the film sector plays a critical role in advancing sustainability and should be recognized as a strategic industry integrated into urban development frameworks. Such inclusion would enable cities to leverage its potential for long-term growth by fostering responsible tourism, promoting sustainable lifestyles, and stimulating innovation. By showcasing the work of local artists and firms and building on film-related heritage and creative talent, cities can strengthen their cultural identity while attracting cultural tourists—thereby enhancing local economies and preserving cinematic heritage as a core element of urban identity. At the same time, investment in the film sector supports skill formation in areas such as digital technology, streaming, branding, and production management, contributing to innovation and sustainable employment.

Equally important is the film industry's social and environmental impact. The sector can advance inclusivity and justice by adopting equity, diversity, and inclusion standards and producing content that addresses gender, racial, and ethnic issues. Social networks—both digital platforms like streaming services and physical spaces such as festivals and conferences—strengthen collaboration and cultural exchange, boosting the creative and economic vitality of cities. Finally, the wider adoption of green filmmaking practices and the promotion of environmentally responsible production methods are essential for aligning the film sector with sustainability goals. Collaboration among public institutions, private companies, and industry professionals can drive eco-friendly innovation and raise environmental awareness, demonstrating the industry's tangible commitment to sustainable urban development.

Author Contributions: Conceptualization, W.C., S.S. and M.B.; methodology, W.C., S.S. and M.B.; formal analysis, W.C., S.S. and M.B.; writing—original draft preparation, W.C., S.S. and M.B.; writing—review and editing, W.C. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author(s).

Conflicts of Interest: The authors declare no conflicts of interest.

References

- Oyekunle, O.A. The contribution of creative industries to sustainable urban development in South Africa. In *Science, Technology, and Innovation in BRICS Countries*; Patra, S.K., Muchie, M., Eds.; Routledge: Oxfordshire, UK, 2020; pp. 104–113.
- Stevenson, D. Rethinking creative cities?: UNESCO, sustainability, and making urban cultures. In *Re-Imagining Creative Cities in Twenty-First Century Asia*; Gu, X., Lim, M.K., O'Connor, J., Eds.; Palgrave Macmillan: London, UK, 2020.
- Bertoni, A.; Dubini, P.; Monti, A. Bringing Back in the Spatial Dimension in the Assessment of Cultural and Creative Industries and Its Relationship with a City's Sustainability: The Case of Milan. *Sustainability* **2021**, *13*, 10878. [\[CrossRef\]](#)
- Comunian, R.; Chapain, C.; Clifton, N. Creative industries & creative policies: A European perspective? *City Cult. Soc.* **2014**, *2*, 51–53. [\[CrossRef\]](#)
- Kagan, S.; Hauerwaas, A.; Holz, V.; Wedler, P. Culture in sustainable urban development: Practices and policies for spaces of possibility and institutional innovations. *City Cult. Soc.* **2018**, *13*, 32–45. [\[CrossRef\]](#)
- Jung, S.; Draper, J.; Malek, K.; Padron, T.C.; Olson, E. Bridging theory and practice: An examination of how event-tourism research aligns with UN sustainable development goals. *J. Travel Res.* **2024**, *63*, 1583–1605. [\[CrossRef\]](#)
- Gao, Y.; Turkina, E.; Van Assche, A. The nexus between the cultural and creative industries and the Sustainable Development Goals: A network perspective. *Reg. Stud.* **2024**, *58*, 841–859. [\[CrossRef\]](#)
- Mair, J.; Wood, E.; Quinn, B. Social sustainability in Event Management- a critical commentary. *Event Manag.* **2024**, *28*, 1101–1108. [\[CrossRef\]](#)
- Garcia, B. Cultural policy and urban regeneration in Western European cities: Lessons from experience, prospects for the future. *Local Econ.* **2004**, *19*, 312–326. [\[CrossRef\]](#)
- Victory, J. Green shoots: Environmental sustainability and contemporary film production. *Stud. Arts Humanit.* **2015**, *1*, 54–68. Available online: <https://www.sahjournal.com/article/6006/galley/13750/view> (accessed on 30 October 2025). [\[CrossRef\]](#)
- McCormack, C.M.; Martin, K.; Williams, K.J. The full story: Understanding how films affect environmental change through the lens of narrative persuasion. *People Nat.* **2021**, *3*, 1193–1204. [\[CrossRef\]](#)
- Cudny, W. Festival tourism—The concept, key functions and dysfunctions in the context of tourism geography studies. *Geogr. J.* **2013**, *65*, 105–118.
- Kirchberg, V.; Kagan, S. The roles of artists in the emergence of creative sustainable cities: Theoretical clues and empirical illustrations. *City Cult. Soc.* **2013**, *4*, 137–152. [\[CrossRef\]](#)
- Kääpä, P. *Environmental Management of the Media: Policy, Industry, Practice*; Routledge: Oxfordshire, UK, 2018.
- Lopera-Mármol, M.; Jiménez-Morales, M. Green shooting: Media sustainability, a new trend. *Sustainability* **2021**, *13*, 3001. [\[CrossRef\]](#)
- Hayward, K. *Green Filmmaking: A Guide to Sustainable Movie Production*; Routledge: Oxfordshire, UK, 2024.
- Tunio, M.N.; Sánchez, A.; Hatem, Y.M.L.; Zakaria, A.M. (Eds.) *Sustainability in Creative Industries: Sustainable Entrepreneurship and Creative Innovations—Volume 1*; Springer: Cham, Switzerland, 2024.
- McFarlane, C. Postcolonial Bombay: Decline of a cosmopolitanism city? *Environ. Plan. D Soc. Space* **2008**, *26*, 480–499. [\[CrossRef\]](#)
- Ranjan, A. Postcolonial Mumbai: The paradoxical city. In *From the City as a Project to the City Project Volume I: History*; Mena, F.C., Alvarez, S.R., Eds.; Springer Nature: Cham, Switzerland, 2025; pp. 127–140.
- Varma, R. Provincializing the global city: From Bombay to Mumbai. *Soc. Text* **2004**, *22*, 65–89. [\[CrossRef\]](#)
- Ashcroft, B. Urbanism, mobility and Bombay: Reading the postcolonial city. *J. Postcolonial Writ.* **2011**, *47*, 497–509. [\[CrossRef\]](#)
- Cudny, W. Socio-Economic Changes in Lodz—Results of Twenty Years of System Transformation. *Geogr. Časopis* **2012**, *64*, 3–27.
- Moore, D.C. Is the post-in postcolonial the post-in post-Soviet? Toward a global postcolonial critique. *Publ. Mod. Lang. Assoc.* **2001**, *116*, 111–128. [\[CrossRef\]](#)
- Sandru, C. *Worlds Apart? A Postcolonial Reading of Post-1945 East-Central European Culture*; Cambridge Scholars Publishing: Newcastle upon Tyne, UK, 2013.
- Tlostanova, M.V.; Mignolo, W. *Learning to Unlearn: Decolonial Reflections from Eurasia and the Americas*; The Ohio State University Press: Columbus, OH, USA, 2012.
- Jaakkola, E. Designing conceptual articles: Four approaches. *AMS Rev.* **2020**, *10*, 18–26. [\[CrossRef\]](#)
- Gilson, L.L.; Goldberg, C.B. Editors' comment: So, what is a conceptual paper? *Group Organ. Manag.* **2015**, *40*, 127–130. [\[CrossRef\]](#)
- Available online: <https://www.unesco.org/en/creative-cities/lodz> (accessed on 5 September 2025).
- Available online: <https://citiesoffilm.org/mumbai/> (accessed on 5 September 2025).
- Available online: <https://www.opusfilm.com/> (accessed on 5 September 2025).
- The National Centre for Film Culture in Lodz. Available online: <https://ec1lodz.pl/narodowe-centrum-kultury-filmowej/onckf/czym-jest-nckf2> (accessed on 1 September 2025).

32. Chenoy, D. Foreword in Film Tourism in India—A Beginning Towards Unlocking Its Potential. FICCI. 2019. Available online: https://creativefirst.film/wp-content/uploads/2020/02/Low-resolution_EY-FICCI_Shoot-at-site1.pdf (accessed on 1 September 2025).
33. Dematdive. How Much Can the Indian Film Industry Contribute to the Indian Economy: 2023 and Beyond? 2023. Available online: <https://dematdive.com/indian-film-industry/#:~:text=In%20the%20third%20quarter%20of,and%20resurgence%20post%20the%20pandemic> (accessed on 1 September 2025).
34. Pożycka, P. *Łódź—Miasto Kreatywne: Badanie Potencjału Kreatywnego Łodzi na tle Wybranych Miast Polski*; University of Łódź: Łódź, Poland, 2012. Available online: https://nck.pl/upload/attachments/302509/d_miasto_kreatywne.pdf (accessed on 5 September 2025).
35. Sangeet Natak Akademi. *Ministry of Culture, Government of India*; Creative Cities Network: Mumbai, India, 2024.
36. Adorno, T.W.; Horkheimer, M.K. Aufklärung als Massenbetrug. In *Dialektik der Aufklärung*; Adorno, T.W., Ed.; Suhrkamp: Frankfurt am Main, Germany, 1947; pp. 141–191.
37. Benjamin, W. *Illuminations: Essays and Reflections*; Zohn, H., Translator; Fontana: London, UK, 1970.
38. O'Connor, J. *The Cultural and Creative Industries: A Review of the Literature*; Arts Council England: London, UK, 2007.
39. Cunningham, S. Culture, services, knowledge: Television between policy regimes. In *A Companion to Television*; Wasko, J., Ed.; Blackwell: Oxford, UK, 2005; pp. 199–213.
40. Hesmondhalgh, D.; Pratt, A.C. Cultural industries and cultural policy. *Int. J. Cult. Policy* **2005**, *11*, 1–13. [CrossRef]
41. Florida, R. *The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life*; Basic Books: New York, NY, USA, 2002.
42. Florida, R. Cities and the creative class. *City Community* **2003**, *2*, 3–19. [CrossRef]
43. Galloway, S.; Dunlop, S. A critique of definitions of the cultural and creative industries in public policy. *Int. J. Cult. Policy* **2007**, *13*, 17–31. [CrossRef]
44. Turok, I. Cities, clusters, and creative industries: The case of film and television in Scotland. *Eur. Plan. Stud.* **2003**, *11*, 549–565. [CrossRef]
45. Loots, E.; Betzler, D.; Bille, T.; Borowiecki, K.J.; Lee, B. New forms of finance and funding in the cultural and creative industries: Introduction to the special issue. *J. Cult. Econ.* **2022**, *46*, 205–230. [CrossRef] [PubMed]
46. Potts, J.; Cunningham, S.; Hartley, J.; Ormerod, P. Social network markets: A new definition of the creative industries. *J. Cult. Econ.* **2008**, *32*, 167–185. [CrossRef]
47. Pratt, A. Creative cities: The cultural industries and the creative class. *Geogr. Ann. Ser. B Hum. Geogr.* **2008**, *90*, 107–117. [CrossRef]
48. Throsby, D. *Economics and Culture*; Cambridge University Press: Cambridge, UK, 2001.
49. Scott, A.J. Beyond the creative city: Cognitive-cultural capitalism and the new urbanism. *Reg. Stud.* **2014**, *48*, 565–578. [CrossRef]
50. Galbraith, J.K. *The New Industrial State*; Princeton University Press: Princeton, NJ, USA, 1967.
51. Fuchs, V.R. *The Service Economy*; National Bureau of Economic Research Distributed by Columbia University Press: New York, NY, USA, 1968.
52. Touraine, A. *La Société Post-Industrielle*; Editions Denoël: Paris, France, 1969.
53. Bell, D. *The Coming of Post-Industrial Society: A Venture in Social Forecasting*; Basic Books: New York, NY, USA, 1973.
54. Castells, M. *The Rise of the Network Society: The Information Age: Economy, Society and Culture*; Blackwell Publishers: Oxford, UK, 1996; Volume 1.
55. Cudny, W.; Comunian, R.; Wolaniuk, A. Arts and creativity: A business and branding strategy for Lodz as a neoliberal city. *Cities* **2020**, *100*, 102659. [CrossRef]
56. Bianchini, F. Remaking European cities: The role of cultural politics. In *Cultural Policy and Urban Regeneration: The West European Experience*; Bianchini, F., Parkinson, M., Eds.; Manchester University Press: Manchester, UK, 1993; pp. 1–20.
57. Milestone, K. Regional variations: Northernness and new urban economies of hedonism. In *From the Margins to the Centre: Cultural Production and Consumption in the Post-Industrial City*; O'Connor, J., Wynne, D., Eds.; Arena: Aldershot, UK, 1996; pp. 91–116.
58. Richards, G. Creativity and tourism in the city. *Curr. Issues Tour.* **2014**, *17*, 119–144. [CrossRef]
59. You, H.; Bie, C. Creative class agglomeration across time and space in knowledge city: Determinants and their relative importance. *Habitat Int.* **2017**, *60*, 91–100. [CrossRef]
60. Landry, C. *The Creative City: A Toolkit for Urban Innovators*; Earthscan Publications: London, UK, 2000.
61. Howkins, J. *The Creative Economy: How People Make Money from Ideas*; Penguin: London, UK, 2001.
62. Evans, G. Creative cities, creative spaces and urban policy. *Urban Stud.* **2009**, *46*, 1003–1040. [CrossRef]
63. Peck, J. Struggling with the creative class. *Int. J. Urban Reg. Res.* **2005**, *29*, 740–770. [CrossRef]
64. Ratiu, D.E. Creative cities and/or sustainable cities: Discourses and practices. *City Cult. Soc.* **2013**, *4*, 125–135. [CrossRef]
65. Van der Hoeven, A.; Hitters, E. Live music and the New Urban Agenda: Social, economic, environmental and spatial sustainability in live music ecologies. *City Cult. Soc.* **2023**, *32*, 100490. [CrossRef]

66. Kong, L.; Gibson, C.; Khoo, L.M.; Semple, A.L. Knowledges of the creative economy: Towards a relational geography of diffusion and adaptation in Asia. *Asia Pac. Viewp.* **2006**, *47*, 173–194. [\[CrossRef\]](#)
67. De Valck, M. *Film Festivals: From European Geopolitics to Global Cinephilia*; Amsterdam University Press: Amsterdam, The Netherlands, 2007; p. 280.
68. Coles, A. Creative class politics: Unions and the creative economy. *Int. J. Cult. Policy* **2016**, *22*, 456–472. [\[CrossRef\]](#)
69. Cudny, W. The Influence of The “KOMISARZ Alex” TV Series on The Development of Łódź (Poland) in The Eyes of City Inhabitants. *Morav. Geogr. Rep.* **2014**, *22*, 33–43. [\[CrossRef\]](#)
70. Namyślak, B. Cooperation and Forming Networks of Creative Cities: Polish Experiences. *Eur. Plan. Stud.* **2014**, *22*, 2411–2427. [\[CrossRef\]](#)
71. Wray, M.; Croy, W.G. Film tourism: Integrated strategic tourism and regional economic development planning. *Tour. Anal.* **2015**, *20*, 313–326. [\[CrossRef\]](#)
72. Steffen, W.; Broadgate, W.; Deutsch, L.; Gaffney, O.; Ludwig, C. The trajectory of the Anthropocene: The great acceleration. *Anthr. Rev.* **2015**, *2*, 81–98. [\[CrossRef\]](#)
73. Ellis, E.C. *Anthropocene: A Very Short Introduction*; Oxford University Press: Oxford, UK, 2018; Volume 558.
74. Edwards, L.E.; Bauer, A.; Edgeworth, M.; Ellis, E.; Finney, S.; Gibbard, P.; Gill, J.L.; Maslin, M.; Merritts, D.; Ruddiman, W.; et al. The Anthropocene serves science better as an event, rather than an epoch. *J. Quat. Sci.* **2022**, *37*, 1188. [\[CrossRef\]](#)
75. Shoshitaishvili, B. From Anthropocene to noosphere: The great acceleration. *Earth's Future* **2021**, *9*, e2020EF001917. [\[CrossRef\]](#)
76. McMichael, A.J. *Planetary Overload: Global Environmental Change and the Health of the Human Species*; Cambridge University Press: Cambridge, UK, 1993.
77. Görg, C.; Plank, C.; Wiedenhofer, D.; Mayer, A.; Pichler, M.; Schaffartzik, A.; Krausmann, F. Scrutinizing the Great Acceleration: The Anthropocene and its analytic challenges for social-ecological transformations. *Anthr. Rev.* **2020**, *7*, 42–61. [\[CrossRef\]](#)
78. Brou, D.; Chatterjee, A.; Coakley, J.; Girardone, C.; Wood, G. Corporate governance and wealth and income inequality. *Corp. Gov. Int. Rev.* **2021**, *29*, 612–629. [\[CrossRef\]](#)
79. Lee, W.K.M. The economic marginality of ethnic minorities: An analysis of ethnic income inequality in Singapore. *Asian Ethn.* **2004**, *5*, 27–41. [\[CrossRef\]](#)
80. United Nations. *Our Common Future: Report of the World Commission on Environment and Development*; Oxford University Press: Oxford, UK, 1987. Available online: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (accessed on 30 October 2025).
81. Sachs, J.D. *The Age of Sustainable Development*; Columbia University Press: New York, NY, USA, 2015.
82. Liu, Y.-D. Event and Sustainable Culture-Led Regeneration: Lessons from the 2008 European Capital of Culture, Liverpool. *Sustainability* **2019**, *11*, 1869. [\[CrossRef\]](#)
83. Hawkes, J. *The Fourth Pillar of Sustainability: Culture's Essential Role in Public Planning*; Common Ground Publishing: Altona, VIC, Australia, 2001.
84. Soini, K.; Dessein, J. Culture-sustainability relation: Towards a conceptual framework. *Sustainability* **2016**, *8*, 167. [\[CrossRef\]](#)
85. Yang, C.-H.; Sun, Y.; Lin, P.-H.; Lin, R. Sustainable Development in Local Culture Industries: A Case Study of Taiwan Aboriginal Communities. *Sustainability* **2022**, *14*, 3404. [\[CrossRef\]](#)
86. Kowalczyk, A. *Turystyka Zrównowazona*; Wydawnictwo Naukowe PWN: Warszawa, Poland, 2010.
87. Duxbury, N.; Cullen, C.; Pascual, J. Cities, culture and sustainable development. In *Cultural Policy and Governance in a New Metropolitan Age, Cultures and Globalization Series*; Anheier, H.K., Isar, Y.R., Hoelscher, M., Eds.; Sage: London, UK, 2012; Volume 5, pp. 73–86.
88. Camagni, R. Sustainable urban development: Definition and reasons for a research programme. *Int. J. Environ. Pollut.* **1998**, *10*, 6–27. [\[CrossRef\]](#)
89. United Nations. Agenda 21: Programme of Action for Sustainable Development. United Nations Conference on Environment and Development (UNCED), Rio de Janeiro. 1992. Available online: <https://sustainabledevelopment.un.org/outcomedocuments/agenda21> (accessed on 30 October 2025).
90. United Nations. The Habitat Agenda: Istanbul Declaration on Human Settlements. United Nations Conference on Human Settlements (Habitat II). 1996. Available online: <https://www.un.org/en/conferences/habitat/istanbul1996> (accessed on 30 October 2025).
91. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development (A/RES/70/1). 2015. Available online: <https://sdgs.un.org/2030agenda> (accessed on 30 October 2025).
92. United Nations. The New Urban Agenda. United Nations Conference on Housing and Sustainable Urban Development (Habitat III). 2016. Available online: <https://habitat3.org/the-new-urban-agenda/> (accessed on 30 October 2025).
93. Kopeć, K.; Materska-Samek, M. Green Filming in Poland. An Interplay Between Necessity, Environmental Responsibility and Green Incentives. *Eduk. Ekon. I Menedżerów* **2024**, *68*, 61–78. [\[CrossRef\]](#)

94. Plutalov, S.; Iastremska, O.; Kulinich, T.; Shofolova, N.; Zelenko, O. Symbiosis of Creativity and Sustainability: Modelling the Dynamic Relationship Between Sustainable Development and Cultural and Creative Industries in the EU Countries, Great Britain and Ukraine. *Probl. Ekorozwoju* **2024**, *2*, 166–185. [\[CrossRef\]](#)
95. Gao, Y.; Wang, C.; Geng, H. Digital Creative Industries in the Yangtze River Delta: Spatial Diffusion and Response to Regional Development Strategy. *Sustainability* **2025**, *17*, 7437. [\[CrossRef\]](#)
96. Iodice, G.; Bifulco, F. Sustainability in Purpose-Driven Businesses Operating in Cultural and Creative Industries: Insights from Consumers' Perspectives on Società Benefit. *Sustainability* **2025**, *17*, 7117. [\[CrossRef\]](#)
97. Pyykkönen, M.; De Beukelaer, C. What is the role of creative industries in the Anthropocene? An argument for planetary cultural policy. *Poetics* **2025**, *109*, 101971. [\[CrossRef\]](#)
98. Purvis, B.; Mao, Y.; Robinson, D. Three pillars of sustainability: In search of conceptual origins. *Sustain. Sci.* **2019**, *14*, 681–695. [\[CrossRef\]](#)
99. El Hana, N.; Kondrateva, G.; Martin, S. Emission-smart advertising: Balancing performance with CO₂ emissions in digital advertising. *Technol. Forecast. Soc. Change* **2024**, *209*, 123818. [\[CrossRef\]](#)
100. Zhang, H.; Zhang, J.; Pai, C.H. Promoting carbon neutrality and green growth through cultural industry financing. *Humanit. Soc. Sci. Commun.* **2024**, *11*, 1–8. [\[CrossRef\]](#)
101. Hauge, E.S.; Pinheiro, R.M.; Zyzak, B. Knowledge bases and regional development: Collaborations between higher education and cultural creative industries. *Int. J. Cult. Policy* **2018**, *24*, 485–503. [\[CrossRef\]](#)
102. Gilbert, H. Indigenous festivals in the Pacific: Cultural renewal, decolonization and nation-building. *Pac. Am. Stud.* **2020**, *20*, 41–56.
103. Walters, T.; Stadler, R.; Jepson, A.S. Positive power: Events as temporary sites of power which “empower” marginalised groups. *Int. J. Contemp. Hosp. Manag.* **2021**, *33*, 2391–2409. [\[CrossRef\]](#)
104. Ong, F.; Lewis, C.; Prayag, G. This is what being queer looks like: The roles LGBTQ+ events play for queer people based on their social identity. *Tour. Manag.* **2025**, *106*, 105012. [\[CrossRef\]](#)
105. Gündüz Özdemirci, E. Greening the screen: An environmental challenge. *Humanities* **2016**, *5*, 35. [\[CrossRef\]](#)
106. Cubitt, S. Unsustainable cinema: Global supply chains. In *Ecocinema Theory and Practice 2*, 1st ed.; Rust, S., Monani, S., Cubitt, S., Eds.; Routledge: Oxfordshire, UK, 2022; pp. 19–33. [\[CrossRef\]](#)
107. Pratt, A.C. The cultural contradictions of the creative city. *City Cult. Soc.* **2011**, *2*, 123–130. [\[CrossRef\]](#)
108. Vaughan, H. *Hollywood's Dirtiest Secret: The Hidden Environmental Costs of the Movies*; Columbia University Press: New York, NY, USA, 2019.
109. Marks, L.U. Let's Deal with the Carbon Footprint of Streaming Media. *Afterimage J. Media Arts Cult. Crit.* **2020**, *47*, 46–52. [\[CrossRef\]](#)
110. Marks, L.U.; Przedpeński, R. The carbon footprint of streaming media: Problems, calculations, solutions. In *Film and Television Production in the Age of Climate Crisis: Towards a Greener Screen*; Kääpä, P., Vaughan, H., Eds.; Springer International Publishing: Cham, Switzerland, 2022; pp. 207–234. [\[CrossRef\]](#)
111. Vaughan, H.; Kääpä, P.; Hjort, M. 'Film education and the environment'—Special issue of the Film Education Journal. *Film. Educ. J.* **2025**, *8*, 1–4. [\[CrossRef\]](#)
112. Uhlin, G. Sustainable filmmaking: Understanding image as resource. *Teach. Media Q.* **2016**, *4*, 1–10. Available online: <http://pubs.lib.umn.edu/tmq/vol4/iss3/4> (accessed on 5 September 2025).
113. Jones, C. Greening the screen: Environmental sustainability and film production. In *The Routledge Handbook of Sustainable Film*; Mundy, P.C., Sundaram, S., Eds.; Routledge: Oxfordshire, UK, 2020; pp. 15–32.
114. Vaughan, H.; Kääpä, P. Introduction: Film and television production in the era of accelerated climate change—A greener screen? In *Film and Television Production in the Age of Climate Crisis*; Vaughan, H., Kääpä, P., Eds.; Palgrave Macmillan: Cham, Switzerland, 2022; pp. 1–16. [\[CrossRef\]](#)
115. Scott, A.J. *The Cultural Economy of Cities: Essays on the Geography of Image-Producing Industries*; Sage: London, UK, 2000.
116. Liszewski, S.; Young, C. *A Comparative Study of Łódź and Manchester: Geographies of European Cities in Transition*; University of Łódź: Łódź, Poland, 1997.
117. Kazimierczak, J.; Szafrńska, E. Demographic and morphological shrinkage of urban neighbourhoods in a post-socialist city: The case of Łódź, Poland. *Geogr. Ann. Ser. B Hum. Geogr.* **2019**, *101*, 138–163. [\[CrossRef\]](#)
118. Szpakowska-Loranc, E.; Matusik, A. Łódź—Towards a resilient city. *Cities* **2020**, *107*, 102936. [\[CrossRef\]](#)
119. Kronenberg, M.; Wawrzyniak, M.; Jonas, A. *Przewodnik po Filmowej Łodzi*; Centrum Inicjatyw na rzecz Rozwoju "Regio": Łódź, Poland, 2010.
120. Available online: <https://lodz.travel/turystyka/co-zobaczyc/lodz-filmowa/> (accessed on 5 September 2025).
121. Available online: <https://www.filmschool.lodz.pl/> (accessed on 5 September 2025).
122. Available online: <https://lodzcityoffilm.com/> (accessed on 5 September 2025).
123. Available online: <http://toyastudios.pl/> (accessed on 5 September 2025).

124. Available online: <https://czlowiekwzagrozeniu.pl/o-festiwalu/> (accessed on 5 September 2025).
125. Available online: <https://kameraakcja.com.pl/en/homepage/> (accessed on 5 September 2025).
126. Available online: <https://lodzwielukultur.pl/o-festiwalu/> (accessed on 5 September 2025).
127. Available online: <http://www.festiwalpuchalskiego.pl/en/about-the-festival> (accessed on 5 September 2025).
128. Available online: <https://lodzfilmcommission.pl/aktualnosci/green-filming-w-lodzi> (accessed on 5 September 2025).
129. Shaban, A.M. *The Wiley Blackwell Encyclopaedia of Urban and Regional Studies*; Orum, A.M., Ed.; John Wiley & Sons: Hoboken, NJ, USA, 2019. [CrossRef]
130. Shaban, A.; Vermeylen, F.; Handke, C. *Creative Industries in India*; Routledge: Oxford, UK; New York, NY, USA, 2023.
131. Government of Maharashtra. Mumbai City. 2024. Available online: <https://mumbaicity.gov.in/history/> (accessed on 3 September 2025).
132. Patankar, A.; Patwardhan, A.; Andharia, J.; Lakhani, V. Mumbai City report. In Proceedings of the International Workshop on Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities, Bangkok, Thailand, 22–28 August 2010.
133. Sperling, J.; Romero-Lankao, P.; Beig, G. Exploring citizen infrastructure and environmental priorities in Mumbai, India. *Environ. Sci. Policy* **2016**, *60*, 19–27. [CrossRef]
134. Sinha, S.K.; Shekhar, R. Problems and development of slums: A study of Delhi and Mumbai. In *Sustainable Smart Cities in India: Challenges and Future Perspectives*; Sharma, P., Rajput, S., Eds.; Springer: Cham, Switzerland, 2017; pp. 699–719.
135. MCGM. Mumbai: The Hub of Indian Cinema. Available online: <https://www.mcgm.gov.in/irj/go/km/docs/documents/HomePage%20Data/Film%20Industry%20in%20Mumbai.pdf> (accessed on 1 September 2025).
136. Available online: <https://citiesoffilm.org> (accessed on 5 September 2025).
137. Available online: <https://www.unesco.org/en/creative-cities/mumbai> (accessed on 5 September 2025).
138. Curiositea. Mumbai, Wall Art and Bollywood. 2015. Available online: <https://indiancuriositea.wordpress.com/2015/06/04/mumbai-wall-art-and-bollywood/> (accessed on 1 September 2025).
139. Pal, D.; Dream Factory. A Journal of Politics & Culture. 2021. Available online: <https://caravanmagazine.in/reviews-and-essays/dream-factory> (accessed on 5 September 2025).
140. Delloitte. Economic Contribution of the Film and Television Industry in India, 2017. Delloitte Touche Tohmatsu India LLP (DT-TILLP). 2018. Available online: https://www.mpa-apac.org/wp-content/uploads/2018/05/India-ECR-2017_Final-Report.pdf (accessed on 1 September 2025).
141. Chavan, V. Pune: MTDC to Cash in on Popular Film Locales to Boost Tourism. *Mumbai Mirror*, 29 September 2017. Available online: <https://mumbaimirror.indiatimes.com/mumbai/other/pune-mtdc-to-cash-in-on-popular-film-locals-to-boost-tourism/articleshow/60878734.cms> (accessed on 1 September 2025).
142. KPMG. Transforming Location into Vacation: A Report on Film Tourism. 2024. Available online: <https://assets.kpmg.com/content/dam/kpmg/in/pdf/2024/03/transforming-location-into-vacation-a-report-on-film-tourism.pdf> (accessed on 1 September 2025).
143. Kumar, A. The Popularity of India’s Cinema and the Role of Soft Power. Centre for Studies of Plural Societies. Available online: <https://cspindia.org/the-popularity-of-indias-cinema-and-the-role-of-soft-power> (accessed on 5 September 2025).
144. Broskhan, P.; Rajesh, R. Sustainability communication in Indian film: Are popular Bollywood films promoting sustainable development goals (sdgs)? An analysis of Jhund (2022). *Bol. Lit. Oral.* **2024**, *11*, 99–112.
145. Available online: <https://www.imdb.com/name/nm1069850/bio/> (accessed on 30 October 2025).
146. Available online: <https://tinyurl.com/y5xz295d> (accessed on 30 October 2025).
147. Available online: <https://news.wildlifesos.org/bollywood-actress-alia-bhatt-joins-the-wild-side/> (accessed on 30 October 2025).
148. Gautam, N. How Bollywood, OTT Platforms Are Adopting Sustainable Practices to Combat Climate Change. *Outlook, Planet*, 10 August 2024. Available online: <https://www.outlookbusiness.com/planet/industry/how-bollywood-ott-platforms-are-adopting-sustainable-practices-to-combat-climate-change> (accessed on 3 September 2025).
149. Soini, K.; Birkeland, I. Exploring the scientific discourse on cultural sustainability. *Geoforum* **2014**, *51*, 213–223. [CrossRef]
150. Liu, Y.; Chin, W.L.; Nechita, F.; Candrea, A.N. Framing film-induced tourism into a sustainable perspective from Romania, Indonesia and Malaysia. *Sustainability* **2020**, *12*, 9910. [CrossRef]
151. Gibson, C. Sydney’s creative economy: Social and spatial challenges. In *Talking About Sydney: Population, Community and Culture in Contemporary Sydney*; Freestone, R., Randolph, B., Butler-Bowdon, C., Eds.; UNSW Press: Sydney, Australia, 2006; pp. 185–198.
152. Klinsky, S.; Golub, A. Justice and sustainability. In *Sustainability Science: An Introduction*; Heinrichs, H., Martens, P., Michelsen, G., Wiek, A., Eds.; Springer: Berlin/Heidelberg, Germany, 2016; pp. 161–173.
153. Zeng, M.; Wang, F.; Xiang, S.; Lin, B.; Gao, C.; Li, J. Inheritance or variation? Spatial regeneration and acculturation via implantation of cultural and creative industries in Beijing’s traditional compounds. *Habitat Int.* **2020**, *95*, 102071. [CrossRef]
154. Harvey, D. The right to the city. *New Left Rev.* **2008**, *53*, 23–40. [CrossRef]

155. Gill, R.; Pratt, A. In the social factory? Immaterial labour, precariousness and cultural work. *Theory Cult. Soc.* **2008**, *25*, 1–30. [\[CrossRef\]](#)
156. Hahn, J. Creative cities and (un)sustainability: Cultural perspectives. *Cultura* **2010**, *21*, 1–20.
157. Hesse, M.; Lange, B. Paradoxes of the creative city: Contested territories and creative upgrading—The case of Berlin, Germany. *Erde* **2012**, *143*, 351–371.

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.