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Corporate Social Responsibility (CSR) Model in Improving the Quality of Green Open Space (GOS) to Create a Livable City

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Abstract

Sustainable urban development leads to the creation of livable cities. The Green Open Space (GOS) of City requires the quality of life requirements to support the ecological, socio-cultural, and urban economic functions. In Indonesia, the provision of GOS is the city government's responsibility, which has to be carried out transparently and implemented with the involvement of stakeholders. The limited funding for the provision and improvement of the quality of GOS by the city government has developed a CSR scheme from the private sector. This CSR governance model enriches the use of CSR in addition to social assistance or charity activities, which can realize for the wider city community. The city government's role in using CSR models is significant to ensure transparency of costs, accountable design policies, and their implementation and maintenance.

Keywords: green open space (GOS), GOS improving quality, livable city, CSR role model

1. Introduction

Urban development in the global era has to provide solutions to climate change problems, both micro and macro, on a larger scale [1]. The Sustainable Development Goals are collective agreements that generally result in harmonious and sustainable development. Harmony contains understanding related to ecological, humanities, and economic aspects. Sustainable means development that aims to improve the quality of life of present and future generations [2]. In other words, sustainable city development leads to the creation of livable city ecosystems. A livable city is an ideal condition that can provide space for city life in a natural and sustainable city space.

Urban Green Open Space (GOS) is one of the micro-ecosystems of urban space that requires the quality of life needed to support ecological, socio-cultural, and municipal economic functions [3–6]. According to the Indonesian Spatial Planning Law, no. 26 of 2007, the provisions of the GOS are the responsibility of the city government, which has been carried out transparently and implemented by involving stakeholders [7].

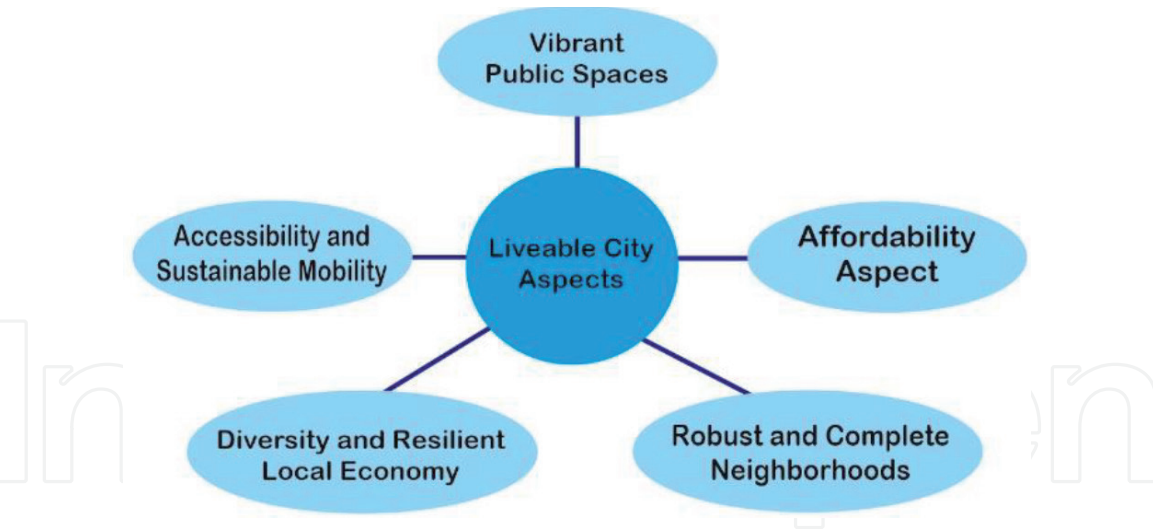


Figure 1.
Five principles of livable cities.

The development of GOS in Indonesia carried out through the Green City Development Program (GCDP) scheme initiated by the Ministry of Public Works and Spatial Planning. The GCDP is a city development program that integrated and in harmony with the environment. Use the principle of sustainable linkages between the environment, human activities, and the economy. The city government manages with a strong commitment, clear sense of responsibility, and work through the efforts of the participation of all stakeholders [1].

Limited funds to provide and improve the quality of GOS by the city government have developed CSR schemes from the private sector. Development of urban open spaces that can use through pedestrian space, jogging paths, play areas, and other facilities to create a livable city environment. This CSR governance model increases the use of CSR and social assistance or charity activities, which can realize for the wider city community. The city government's role in using the CSR model is significant to ensure cost transparency, responsible design policies, and implementation and maintenance. This paper is the best practice from GOS research results in the City of Malang, Indonesia. An overview of the City of Malang as a magnificent city, please click on the following link; www.bit.ly/malangdignifiedcity.

The concept of CSR involves the responsibility of partnerships between government, community resource institutions, and local communities [8], which are not passive and static, which are socially shared responsibilities among stakeholders. Implementation of GOS quality improvement due to the revitalization program indirectly reduced urban green space [9]. So, it is necessary to need a control mechanism to design the urban green space revitalization program that well implemented. On the other hand, CSR's financing aspects should limit the company's compensation in the form of advertising media of CSR product providers. Thus, the corporate engagement model and design negotiation process are an essential part of integrated planning and designing in sustainable GOS revitalization.

According to Mc Phearson 2015, [10], the establishment of a private participation model through CSR in urban green space development, a comprehensive and integrated approach needs to meet the principles of transparency and accountability in CSR funds. The preparation of the CSR Model framework (see **Figure 1**) in improving the Quality of GOS carried out through three essential steps, namely:

1. Determine the factors that influence the CSR model in improving the quality of GOS through literature review;

2. Identifying specific and integrated model characteristics in creating livable cities;
3. Generating a CSR model based on good practice CSR-based implementation in GOS revitalization in the field.

2. Livable City as an objective

Livability is becoming an increasingly important factor in sustainability. Based on that, livable City works to improve cities' quality of life [11, 12]. That shows the importance of creating a city with pleasant city spaces, roads, and an entire environment that makes walking, biking, and transit the best choice for urban communities. Urban public area, well designed, and well maintained, and safe housing is more and more affordable [13]. There is a global trend toward livable cities because this is a practical approach to sustainable urban planning and design.

Sustainable city development aims to improve the quality of life [11] of citizens and reduce cities' impact on outside resources. The revitalization of GOS and urban structures forms the basis of sustainable urban planning in cities [14]. Urban ecosystems with excellent urban governance in preparing plans and diversity of local ecosystem services [10]. The rapid development of urban areas is a challenge and opportunity to design more livable, healthier, and more resilient cities. It can be adaptive to the effects of climate change [10]. Planner and Urban Designers play an essential role in determining livable cities' physical quality and characteristics [15]. Environmental conservation efforts with an adequate investment are necessary to realize ecological infrastructure, ecological restoration, rehabilitation of urban area ecosystems, and revitalization of urban open spaces, which are ecologically and socially desirable and often economically beneficial [10].

Improving the quantity and quality of GOS will increase biodiversity and the environmental variety of urban ecosystems [16]. Application of landscape ecological principles [17–19] to green structure planning [20–23] also corresponds to two patterns: nature in cities [14], and urban patterns in nature [24]. According to Frischenbruder and Pellegrino, [25], in their study in eight cities in Brazil, green networks could make meaningful contributions to more livable cities by uniting planning and ecology [14]. In 1996, the United Nation's Habitat Conference introduced live ability and noted that every City should be habitable [26]. Hahlweg [27] states that City as a family defines a city that can live as a city for all people or a city that can accommodate all the city community's activities and is safe for the entire population.

According to Timmer [28], a city that can live in refers to an urban system that makes physical, social, mental, and personal contributions to its inhabitants. There are five fundamental aspects of great, livable cities: robust and complete neighborhoods, accessibility and sustainable mobility, a diverse and resilient local economy, vibrant public spaces, and affordability (**Figure 1**). An essential aspect of realizing livable cities related to spatial planning is the realization of dynamic urban open space following quality standards and its facilities' needs. The existence of urban public areas following its function (social, ecological, and esthetic functions) makes it increasingly evident that increasing the quality of urban open space will contribute to the sustainability of urban development. In this chapter's discussion, the City's GOS Revitalization program is the focus of efforts to provide a better public space.

Improving the quality of urban GOS related to social, ecological, and esthetic functions contributes significantly to the realization of Urban Resilience [29–31]. Success in improving the quality of social space will contribute to the provision of community social space, space for social interaction, space for relaxation, and sports that are important for improving people's physical and spiritual health. Improved urban areas' ecological functions will contribute to biodiversity and animals, improve the quality of the microclimate of the city/region, air purification, ground-water conservation efforts, and increase rainwater absorption by reducing surface runoff rates [32]. It is significant for the improvement of urban ecosystems. The successful revitalization of urban space will also improve the visual quality of urban areas, which is essential for realizing a harmonious city environment between the natural environment and the landscape architecture as an artificial environment.

3. A livable city; resilient toward the face of climate change

At present, city resilience has become a new focus in landscape ecological research and urban problem research. Holling [33] was the first to define resilience's concept in ecology and discuss ecological systems' strength. Further understanding develops the socio-cultural, economic, and urban environmental problems also has implications for the shifting elements of the development of the concept of urban resilience. Timmerman [28] then developed the idea of social resilience by equating with the ability to cope with climate change. The resilience defines as a system's ability to overcome interference [34], rearrange while maintaining function, structure, identity, and feedback to normalize the already running system [30].

The implementation of the urban resilience Concept is now expanding to include human social networks [29], adaptability to disaster recovery [35], security resilience [36], even resistance in populating the Covid-19 pandemic. Based on previous research, this discussion defines resilience as the ability to respond to internal and external risk pressures through absorption, adaptation, and transformation within existing basic structures and functions. The application of the idea of the strength to the City's ecological system aims to address urban problems related to climate change [37] and disasters to take action to prevent and mitigate urban hazards [38]. Thus, urban resilience as a process can interpret as an effort to increase the ability to absorb and respond to the effects of disasters and reorganize to overcome disruptions in achieving normal conditions after disaster stress or change [39]. Resilience as a system allows the system to adapt to change [40, 41].

Resilience is the capacity of the socio-ecological system and its components in dealing with dangerous pressures. It occurs at the right time and efficiently to respond, adapt and change ways to restore, maintain, and improve the main functions, structures, and identities in preserving the capacity to grow and change in a particular entity. Thus, the notion of the resilient City is a city that can survive and absorb the impacts of hazards, shocks, and stresses through adaptation or transformation to ensure long-term sustainability and essential functions, characteristics, and structures. A resilient city reflects the municipality's capacity through individuals, communities, institutions, companies, and systems to survive, adapt, and develop, no matter how hard or severe the surprises are faced. Resilience has three main aspects: persistence, adaptability, and transformation ability, each of which integrates and collaborates from a local to a global scale. Resilience refers to individuals, households, groups in society, or systems to absorb and recover from the impacts and dangers of climate change and other long-term shocks and pressures. Urban resilience planning carried out to analyze the impact of pressures, possible changes faced by a city.

Therefore, the plan requires evaluating the City’s vulnerability, understanding of processes, procedures, interactions, and capacity building to develop several infra-structural components and their interactions with the primary goal of achieving livable city resilience with spatial resilience support. Based on the description above, it can summarize the City’s Resilience related to the following matters:

1. The town’s ability or capacity (governance and community) in dealing with pressures, shocks, and hazards;
2. Ability to survive and adapt, resilient and able to change;
3. The ability to respond to changes in an era of uncertainty;
4. The ability of urban challenges.

According to Lu et al., [42], Urban Spatial Resilience is an urban spatial system that can resist, adapt, and recover from pressure and change. Lu focuses on the urban spatial, which is based on the physical attributes of the spatial material. Spatial resilience used to understand urban space as a complex social ecosystem. This conception of Spatial Resilience includes literacy about resilience. Theoretically, the research on urban spatial resilience enhances resilience theory and also complements existing literature on urban spatial resilience at various scales.

The theoretical framework of urban space resilience, according to Lu Lu et al., is classified into five dimensions, namely: the scale of urban spatial, urban spatial structure, the urban spatial form, urban spatial function, and urban spatial network (Figure 2). Urban disaster mitigation can anticipate through urban spatial resilience, which must be considered by policymakers and planners by considering

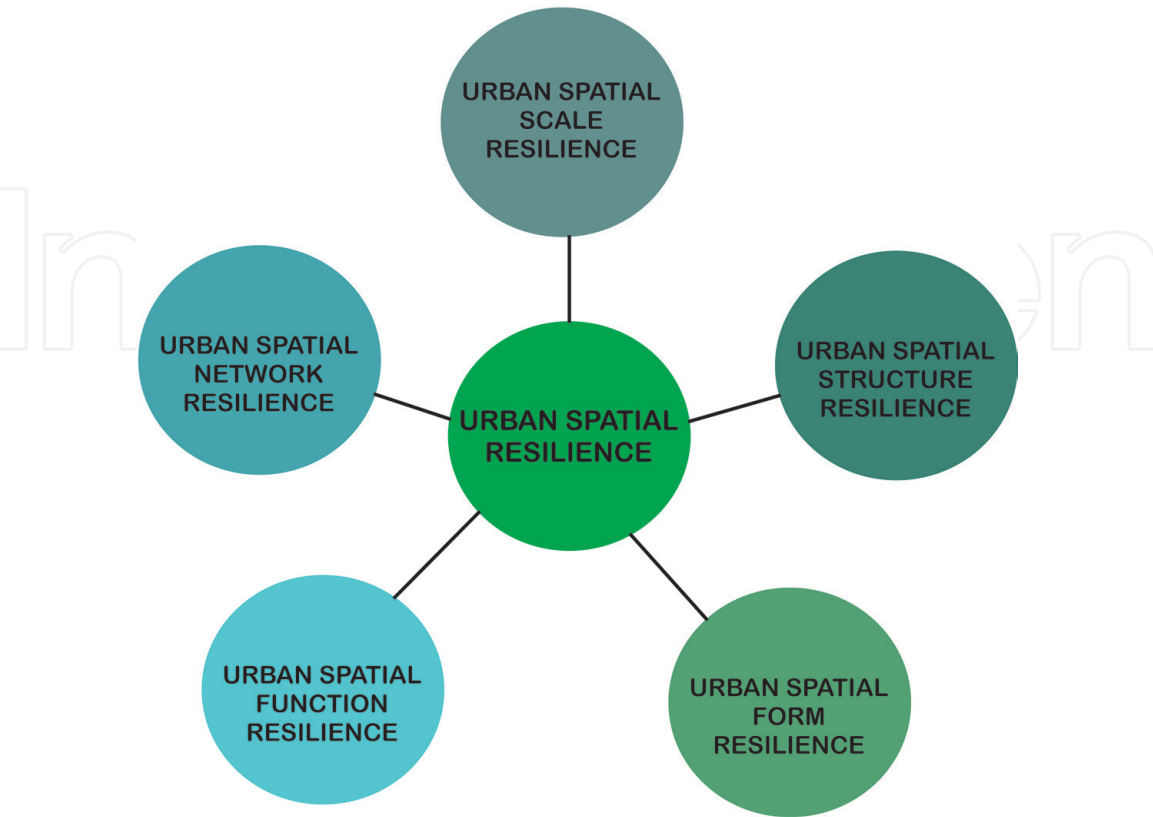


Figure 2.
Components of urban spatial resilience. Adopted from Lu [42].

the promotion of urban spatial resilience to deal with disaster events and uncertain conditions. The complexity of the problem of Urban Resilience requires active participation from stakeholders by creating collaboration between government, experts, and the community in various stages of planning and resilient city planning. So, city planning using a spatial resilience approach aims to reduce urban risk toward the face of climate change.

4. GOS revitalization for livable cities

Liveability is an essential factor in achieving sustainable city development. The concept of sustainability is from environmentalists' concern about the long-term consequences of pressures on deteriorating environmental ecosystems. So, a development approach is needed that aims to support increased economic activity that ensures the sustainability of natural resources and the environment [43, 44] toward the face of climate change. Sustainable development defined as development that meets the present's needs without compromising future generations' ability to meet their own needs [45]. Sustainable urban development essential to improving the quality of life of communities and reducing negative impacts on natural resources in future urban contexts [46]. Three key concepts need attention that is development, needs, and future generations. According to Blowers, sustainable development aims to protect natural resources, developing the built environment, maintain environmental quality, avoid social justice, and increase participation. 11th SDGs explicitly emphasize the concept of sustainable urban development. Development of the concept of sustainable city development requires an integrated approach to achieve harmony in planning, design, implementation, and control. Sustainable urban development through the provision of adequate green space will affect reducing urban heat [47, 48], offsetting greenhouse gas emissions [16, 49–51], and increasing urban groundwater content [52]. The rapid increase in the city center's human activity has contributed significantly to increased carbon gas emissions [16, 49–51]. The GOS quality improvement that not integrated can potentially hurt the quantity and quality of the City's environment; these impacts include:

1. City environment quality decreasing; Due to a decrease in the capacity and carrying capacity of the environment due to pollution, groundwater depleting, and an increase in environmental temperature;
2. The City's declining visual quality decreased natural beauty, reduced flora and fauna varieties, loss of natural artifacts; and.
3. Increased air pollution which drives the greenhouse effect due to increased carbon gas emissions.
4. Declining community welfare; Occurs because of a decline in public health, energy consumption increases.

Thus, urban development policies that have implications for the provision of GOS must be analyzed by predicting pressures, risks, policy transformation, and long-term GOS planning and design. The City's GOS is a potential buffer zone of the City's important ecosystem. It is a part of the area that can use as public health facilities and infrastructure by providing facilities by sports and city parks [53–55]. Urban space functions to support the urban ecosystems to improve microclimate quality [7, 56], increases carbon sequestration [57, 58], and reducing the rainwater

runoff [59, 60], and so on. Currently, there is a very significant change in pressure. Increasing urban development has the potential to reduce the City's GOS. Urban development presently faced with the problem of anticipation of global warming [61]. Thus, urban development efforts must ensure the process of urban environmental sustainability in a broad sense (**Figure 3**). Achieving sustainable urban development will require multidimensional approaches across sectors [3] and urban spatial characteristics [42]. Policy formulation should be comprehensive, adapt to evolving development needs, and incorporate incentives that promote wide-ranging stakeholder coordination and participation [1, 3]. Strategies must draw on inter-linkages among different and sometimes conflicting demands; co-benefit measures that cater to multiple needs through single policy interventions [62] should emphasize using minimal resources [3].

Increasingly limited public space in urban areas due to increasing urban economic activity is a significant problem in urban planning and design. The provision of City GOS as an urban spatial landscape element has dimensions of social, cultural, economic, and ecological issues of the City [43, 63]. Urban GOS has a very strategic function to create a harmonious and sustainable metropolitan area. The question is, how can we manage GOS, which naturally becomes a natural environment conducive to harmonious [64, 65], integrated [5, 66, 67], and sustainable civic human activities [68]? This effort is in line with SDG's 11th goal of "urban housing and housing that is inclusive, safe, resilient to disasters, and sustainable." In these circumstances, the local governments' role in implementing SDG is very strategic [69–71].

The provision of urban GOS in Indonesia, as outlined in Law 26 of 2007, requires at least 30% of the city area for public green space. The government can get the mandate from this law in the form of responsibility to achieve these minimum standards. Providing and utilizing the City's open space to achieve a 30% balance is a complicated problem for local governments in rapid city development. According to Minister of Home Affairs Regulation No. 1 of 2007 concerning the Preparation of Urban GOS, Urban GOS Planning requires an ideal green space area of at least 30% of the urban regions (Article 9 paragraph 1). The provisions of private open space are the responsibility of the private sector/institutions, individuals, and communities controlled through space permits by the City Government (Article 9 paragraph 4). Efforts to realize the conceptual provision of urban open space have carried out through regulatory requirements related to urban public space provision. However, technical regulations that have made substantially still cannot function as guidelines and directives for the provision and improvement of the quality of open urban areas.



Figure 3.
Alun-Alun (City square) of Malang, 2018; community activities mostly occur in shady areas; click this link: <https://bit.ly/malangcitysquare>.

Presently, the city government has a serious problem related to financing the provision of urban open space by 30%, its responsibility [1]. Through the public forum, the city government can conduct socialization and identification of community involvement in efforts to improve GOS. Referring to Lu (Lu et al., [42]), the role of urban stakeholders, as well as the private sector, can optimize in the provision of urban GOS. Empirically, CSR has contributed almost 81% of all open space revitalization programs in the City of Malang [1]. The success of this program is good practice in revitalizing GOS in creating livable cities.

5. GOS improving quality through Green City development program

Implementation of sustainable development in Indonesia carried out through several city development policies. One of these policies is the Green City Development Program (GCDP). This program was initiated by the Indonesian Ministry of Public Works to adopt the concept of a green city to increase the quantity and quality of urban green space orientation [7]. The GCDP policy implementation intended to provide direction on the provision of urban space in urban planning and design practices. The GCDP policy has to follow up with preparing an urban GOS Master Plan development, which translates into program policies implemented. Following Article 3 of Law 26 of 2007, urban planning in the application must pay attention to harmony between the natural environment and the artificial environment. The development of green cities in their implementation refers to the eight attributes of green cities, as a reference in maintaining the balance of the natural and artificial environment. The eight attribute are; (1) Green Planning and design; (2) Green Open Space; (3) Green Community; (4) Green Building concept policy; (5) Green Waste; (6) Green Energy; (7) Green Water; and (8) Green Transportation (**Table 1**).

According to Lundquist 2007 [71], urban planning and design have to use the principles of sustainable development with community involvement, in ensuring environmentally friendly city development by utilizing water and energy resources effectively and efficiently, waste reducing, implementing integrated transportation systems, ensuring environmental health, and synergize the natural and artificial environment. The success of the GCDP can reflect the collective movement of all elements of the city stakeholders, which requires initiatives based on various techniques and policies in applying the principles of sustainable city development [7]. The GCDP is a city government program that needs broad community participation support. Stakeholder participation through CSR is a form of community participation by providing development funds from the business sector and individual communities (**Figure 4**).

Following the provisions of Law No. 26 of 2007 concerning spatial planning, a city GOS must meet the minimum requirements of 30% of the City's total area. This regulation is then technically regulated in the Minister of Home Affairs Regulation of the Republic of Indonesia No. 1 of 2007 concerning the Preparation of GOS in Urban Areas. In Article 9 paragraph 1 of the Minister's regulation, it stipulated that urban GOS planning requires an ideal GOS area of at least 30% for each metropolitan area (Article 9, Paragraph 1), where the GOS area consists of public and private green spaces (Article 9, Section 2). The provision of green open space is the city government's responsibility that follows the financial capabilities of each region (Article 9, Paragraph 3). Requirements regarding private green space are the responsibility of the private sector or institutions, individuals, and communities controlled through the use of space permits by the city government (Article 9, Paragraph 4).

The purpose of the policy on the provision and utilization of urban space is to maintain the sustainability and balance of the urban ecosystem, including elements of the social and cultural environment. GOS has a significant ecological function, namely to improve the quality of the microclimate, decrease urban heat, reduce

| No | Green City attribute | Policies related to green city attributes | Implementation of GCDP policies |
|----|---------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------|
| 1 | Green planning and design | Spatial Planning Substance | Spatial City Planning Vision |
| | | | Spatial Planning Mission related to green city agenda |
| | | | Regional development priorities related to the green city agenda |
| | | | Determination of zoning and land use related to the green agenda to realize 30% of GOS. |
| | | | Determination of protected areas to realize 30% of Cites GOS |
| | | | Determination of green open space in Malang City in each unit of the development area |
| | | | Technical policies related to the green agenda to escort 30% of the City GOS |
| | | Spatial Detail Plan | Spatial Detail Plan Vision |
| | | | Spatial Detail Plan mission related to the green city agenda |
| | | | Regional development priorities related to the green city agenda |
| | | | Determination of zoning related to the green agenda to realize 30% GOS |
| | | | Determination of protected areas to realize 30% GOS |
| | | | Determination of green open space in Malang City in each unit of the development area |
| | | | Technical policies related to the green agenda to escort 30% of the Cities GOS |
| 2 | Green open space | The Products GOS Master Plan | The vision of GOS Master Plan |
| | | | The mission of the GOS Master Plan related to the green agenda |
| | | | Regional green space development priorities related to the green agenda |
| | | | Determination of zoning related to the green agenda to realize 30% GOS |
| | | | Determination of protected areas to realize 30% GOS |
| | | | Determination of green open space in Malang City in each unit of the development area |
| | | | Technical policies related to the green agenda to escort 30% of the City GOS |

| No | Green City attribute | Policies related to green city attributes | Implementation of GCDP policies |
|----|----------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 3 | Green community | The legality of urban communities is related to urban environmental issues | Involvement of the green city community in spatial development activities |
| | | | Community involvement in spatial planning and green agendas formulation |
| | | | Green city community involvement in die green City and environmentally sustainable implementation |
| 4 | Green building | City government policy in supporting the concept of green building | The rules for green building policies |
| | | | Provisions standard for the application of green building rules |
| | | | Energy-saving building policy institutions in building design |
| | | | Standard requirements for energy-efficient building design |
| 5 | Green waste | Sustainable integrated waste management policy | The city government program for integrated waste management |
| | | | Integrated and sustainable waste bank management |
| | | | Integrated and sustainable waste management |
| | | | Waste management by the community through integrated separation and recycling. |
| 6 | Green energy | Alternative energy policies | Determination of policies on the use of environmentally friendly alternative energy |
| | | | Implementation of the use of alternative energy (solar energy) |
| | | | Structured efforts lead to the use of environmentally friendly alternative energy. |
| 7 | Green water | City government policy on water use | Policy to limit the use of deep-sea resources |
| | | | Efficiency policy in water use |
| | | | Requirements for water management of buildings in building permits |
| | | | Determination of water management requirements for large buildings and particular areas for water use |
| | | | Low law enforcement |
| 8 | Green transportation | Environmentally friendly transportation systems | Determination of green transportation policies in urban spatial planning |
| | | | The city government effort in the environmentally friendly public transportation system |

Table 1.
Implementation of GCDP policy and its attributes.



Figure 4.
Stakeholders involvement participation in an urban forum.

carbon emissions, absorb groundwater, and create a balanced urban environment. Increasing the quantity and quality of GOS is very important in controlling and maintaining the city environment's carrying capacity. Urban planning must function as an effort to control proportional and balanced urban development between the function of cultivation and the City's ecological role. Several studies discussing the use of GOS as inclusive public space are also critical and the environmental service of some open urban areas with historical values that need to preserve.

Provision of urban open space in Malang, in fact, conceptually, the public metropolitan area's rule has been made through regulatory requirements related to urban public space. However, it has not supported yet by technical regulations and compliance with the implementation of existing rules. Based on Malang City's Green Open Space Plan, GOS needs can divide into two categories, namely: (1) Increasing the quantity of city GOS; and (2) Improving the quality of the City's Green GOS through the City Green open space revitalization program. According to the Malang GOS Master Plan, the current area of Malang public GOS is 18.14%, based on existing regulations there is still a shortage of 11.86% to reach a minimum area of 30% city area. City Spatial Planning, City Spatial Planning Details, and City Green Open Space Master Plan should function as a control device to ensure that 30% of urban green open space is needed. In the process of controlling the Green City, Management Information System required to answer the problem of providing, utilizing, and managing urban GOS.

According to Respati Wikantiyoso et al. [7], GOS quality improvement can reduce the extent of open space, even though the area's quality has improved. The revitalization process's spatial change pattern depends on efforts to increase the spatial facilities to be added. Changes in passive GOS to active space will undoubtedly have implications for reducing space because there is additional space for new activities. Level of change (reduction) due to design decisions and functions of the public space to be provided. It is essential to carry out a public consultation process to design a new open space.

Improving the quality of GOS as an effort to realize the spatial resilience of urban space refers to the analytical framework presented by Lu. Refer to Lu, GOS revitalization must pay attention to the dimensions of scale, structure, shape, function, and urban spatial networks. The revitalization scope must consider the aspects of the urban GOS scale to developed, spatial structures forme, spatial manifestations, spatial functions, and how the spatial linkages of the aspects mobility,

circulation of activities between existing services. To ensure the quality of urban open space and achieve urban spatial resilience conditions, strategic efforts are needed. These efforts include;

1. Determination of green open space development plan.
2. Persistence of high surveillance conservation areas
3. Application of the concept of green architecture in building design and development of the urban environment.
4. Adding GOS to districts that do not yet have proportional public space.
5. Revitalizing urban areas to improve the vitality of space from the aspect of function and social space.
6. Control the provision of GOS in the development of new settlements to ensure the availability of adequate GOS.
7. Development of green corridors along streams, high roads, median roads, and other potential areas.
8. Improving the quality of GOS is done through public involvement.

6. CSR potential in GOS quality improvement

The European Community Commission (2001) defines CSR as a concept, integrating social and environmental care in business operations to voluntarily interact with stakeholders. This interaction based on the interests of public and private entities [3, 72], some researchers believe the implementation of CSR policies can improve corporate financial performance [72] and can increase acceptance, and public trust in the company. Cooperation between the government and the private company sector in providing urban infrastructure is needed to improve urban development's financial capacity [73]. Based on the governance theory, it stated that providing public support must increasingly rely on substantial public participation. As such, the government's role no longer consists of directing and monitoring, but coordinating the network and identifying instruments that can help motivate the system to fulfill the provision of city infrastructure and GOS [74].

The company is interested in providing CSR funds as a form of responsibility to the community and its environment [75]. The company, through its business excellence, has roles and responsibilities in developing the surrounding environment. The provision of CSR in city development must provide benefits to local governments; not only financial factors but also the city environment (see **Figure 5**). Companies' CSR provision based on standards, guidelines, or norms follows applicable regulations [76]. Applying these standards recommends that organizations consider the diversity of society, environment, law, culture, politics, and organization and differences in economic conditions, by maintaining consistency in international norms.

The company will set aside the benefits for the surrounding community's benefit, as a form of compensation that package informs CSR. The initial idea of social responsibility watches oriented to philanthropic activities such as charitable giving. At present, the form of CSR implementation is increasingly shifting and varying according to



Figure 5.
CSR contributions for GOS quality improvement in Malang city; functionally, socially and healthy for the community. Other CSR project from the air: <https://bit.ly/2BMMfSc>

the needs of community development. According to Julia Taufik et al., 2010 [77], CSR is the theoretical basis of companies' need to build harmonious relationships with the surrounding community. Corporate social responsibility can define as the company's moral responsibility toward its stakeholders' strategies, especially for the community around the work area. One of the moral principles in running a company is to do business by promoting honest and ethical principles that will provide the most significant benefit to society and the company [1].

The expansion of the scope of CSR is encouraged by adequate regulatory procedures. Changes in the CSR paradigm are increasingly opening opportunities for local governments to utilize alternative funds through CSR. Implementation of the CSR concept involves the responsibility of partnerships between the government, community resource institutions, and the community, which is a socially shared responsibility between stakeholders. The complexity of social problems in the last decade and the implementation of decentralization have placed CSR as a concept that expected to provide breakthroughs in empowering urban communities. CSR activities in developing countries are described as sustainable and extensive, although they tend to be less formalized, more submerged, and more philanthropic and natural [78].

From several definitions of CSR, it can conclude that CSR is a commitment of a company or business to contribute resources in sustainable development as a form of corporate social responsibility by emphasizing the continuing attention on economic, social, and environmental aspects. Through CSR, the Green Open Space development program is an effort to improve the function of urban open space as an ecological function and socio-cultural purposes for public activities funded by CSR providers. The GOS revitalization project shows that the reduction or change of soft area to a variety of hard space percentages. The percentage change is more due to design decisions and the function of public space to be revitalized. The design carried out through a consultation mechanism between the CSR providers, designated planners, the Housing And Settlement Technical Team (DKP), and resource persons from various parties appointed by the DKP. **Table 2** shows that the

| No | Location | Area of green space (m2) | Decreasing green space (m2) | Decreasing green space (%) |
|-----|-----------------------------------------|--------------------------|-----------------------------|----------------------------|
| 1 | Ken Dedes Park | 5002 | 250.10 | 5 |
| 2 | Trunojoyo Park | 9145 | 1271.75 | 15 |
| 3 | Merbabu Family Park | 4181 | 1045.25 | 25 |
| 4 | Suhat Park | 254 | 26.67 | 10.5 |
| 5 | Design implementation of Alun Alun Park | 23,970 | 8749.05 | 36.5 |
| 6 | Malabar Urban forest | 16,812 | 2101.50 | 12.5 |
| 7 | Kunang-kunang Park | 14,777 | 2881.52 | 19.5 |
| 8 | Slamet Park | 4919 | 1475.70 | 30 |
| 9 | Sawojajar Green Space Corridor | 672 | 151.20 | 22.5 |
| 10 | Taman Dieng Pedestrian | 3498 | 1749.00 | 45 |
| 11 | Unmer Park | 1954 | 450.19 | 23.5 |
| 12 | Sawojajar Green Corridor | 500 | 62.5 | 12.5 |
| 13 | Dempo Park | 2475 | 606.38 | 24.5 |
| SUM | | 88,159 | 20,821.26 | 23.62 |

Source: Wikantiyoso [1].

Table 2.
The calculation of the reduction of green open space on the revitalization program.

reduction in green open space ranges from 5–45% of the revitalized space area, with a reduced 23.62% [1]. According to Erik, former chairman of DKP, the green space reduction due to the revitalization program is 20%. The tolerance limit must have consequences for the need to provide replacement land. However, this provision is still not in the regional regulation on Malang Green Open Space Master Plan. Thus, new rules on the substitution of GOS have to design because of the improvement and change in the function of some green public space for public spaces.

Community participation through CSR programs and grants, if appropriately managed, will increase public confidence in urban development management. Accountability and transparency of CSR funds and endowments are the keys to successfully driving CRS and providing funding as an alternative to the city development funding, especially green open space. Stakeholder involvement in urban development is a long and sustainable process that requires accountability, transparency, and commitment by the city government [79] to ensure that the GOS revitalization program is in urban communities’ interests. The GOS development program’s openness to every part of the City will provide an excellent opportunity for the district to participate in implementing the city plan [80]. Through the Office of Housing and Settlements, the city government must prepare all rules and regulations regarding the terms and conditions for implementing CSR in the GOS revitalization policy.

7. Role model of corporate social responsibility

Corporate social responsibility in sustainable development focuses on the company’s role in assuming organizational responsibility to society and the environment and business interests. Through its business excellence, companies have roles

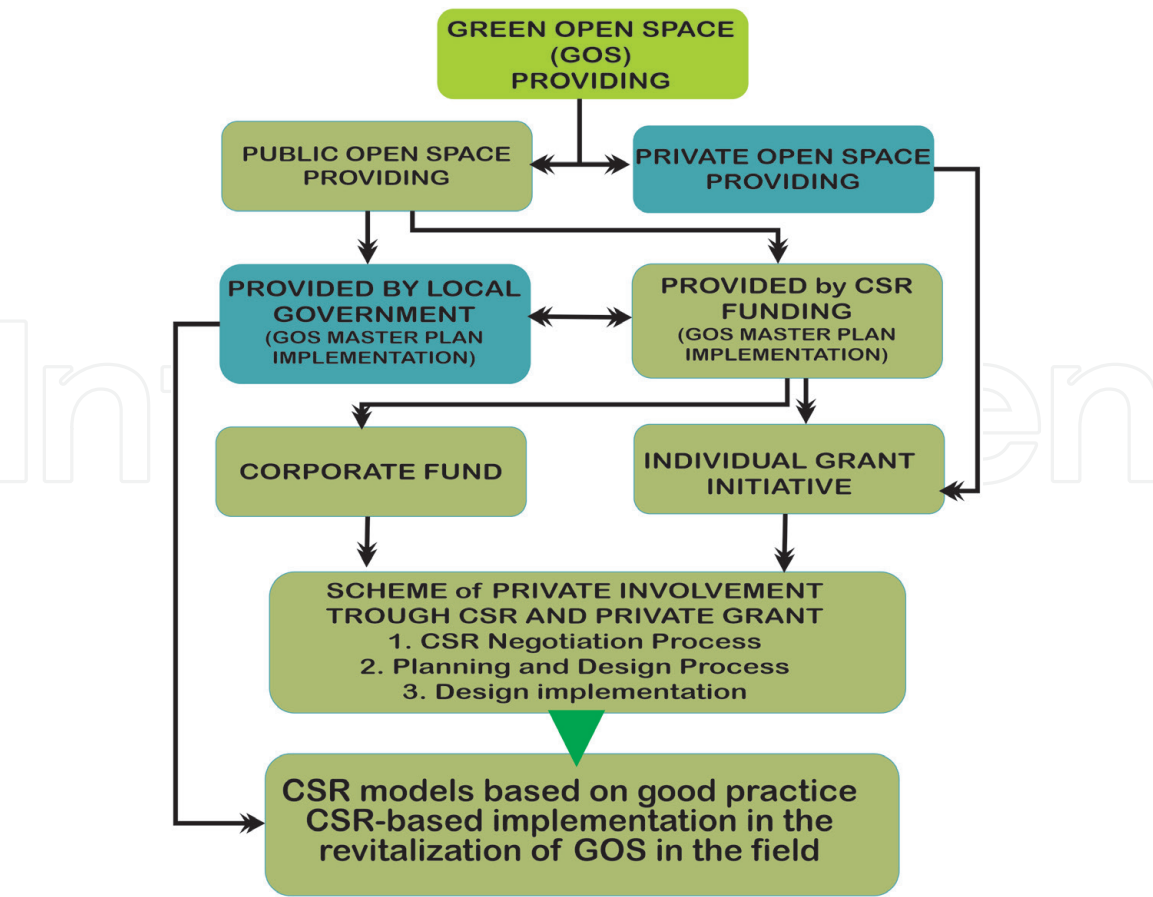


Figure 6.
Framework of GOS provision model trough CSR.

and responsibilities in developing the ecosystem. In the context of the program to provide urban open space, specifically the public space revitalization program, the CSR program has greatly assisted the city government in providing city development funds. In this regard, the government is responsible for ensuring that CSR funds are targeted and useful as the community's interests. The city government has a concrete role in managing CSR funding opportunities from stakeholders (Figure 6).

According to Steele, 2010 [77], companies' granting of CSR must base on their actions on standards, guidelines, or regulations that follow applicable principles or norms. Guidelines or rules for the use of CSR for the development of GOS must pay attention to social, legal, political aspects, and aspects of program benefits. In applying operational standards, the use of CSR must consider the diversity of the community, the environment, the law, culture, politics and organization, and differences in economic conditions, as well as the consistency of international norms. Referring to the ISO 26000 standard on CSR implementation, seven principles must consider [77], namely;

1. Accountability; companies must take responsibility for their impacts on society, the economy, and the environment.
2. Transparency; the implementation of CSR programs must be transparent and can be accountable to the public,
3. Maintain business ethics; CSR's application must be aligned with ethical norms of humanity, committed to environmental sustainability, and commitment to society's interests in the broadest sense.

- 4. Having responsibility and respecting stakeholders and the attention of the community,
- 5. Respect to the laws and regulations,
- 6. Respect the norms of international behavior and business provisions globally,
- 7. Connection to the principles of human rights implementation,

The seven principles above are a universal norm that must also obey in implementing the Green Open Space Development Program. CSR, as explained earlier, that the GOS Development Program is an effort to improve urban open space as an ecological function and socio-cultural purposes for public activities funded by CSR providers. Thus, the implementation of the GOS Revitalization program through CSR must meet CSR principles that have high spiritual and normative values.

The consultation mechanism carried out between the CSR providers, the designated planners, the technical team of the Housing and Settlements Department as a representative of the city government, and resource persons representing community groups (**Figure 7**). In a study by the author, the reduction in green open space ranged from 5% to 45%, with 23.62% (see **Table 2**). According to Erik, chairman of DKP, the tolerance limit of green space reduction is up to 20%, while still paying attention to new public spaces that require hard space. If there is an excess of the average number, the open space's material must be porous (there is rainwater absorption). The mechanism carried out through the design consultation process and public testing to ensure that the revitalization process results in favor of the community's ecological and social interests. If the tolerance limit is excessive and the parties can tolerate, the city government and the CSR government must find a solution to the effort to provide replacement land.

The GOS improvement project's mechanism must be established and agreed upon in the implementation of CSR in the provision of GOS through the project process of urban GOS quality improvement. In a review of the Malang Green Open Space Master Plan, this provision does not exist in the regional regulation concerning. Seeing the technical implementation experience as illustrated above, a breakthrough is needed; making improvements to the law on the substitution of green open spaces must be drafted because of the development and change of functions of some green public spaces.

The city government must make a policy mechanism for control of urban GOS provision by 30%. Implementation of this provision applied to the design or Detail Engineering Design (DED) process or the consultation process of implementing



Figure 7.
The GOS improvement mechanism due to create SCR governance.

an open space revitalization program through CSR or applying for a permit to build a new area in urban areas. In the design negotiation process (related to the company's amount of CSR), the Design Consultation Team's role from the Housing and Settlement Office became very strategic in negotiating solutions to reducing open urban areas. Community participation through CSR programs and grants, if appropriately managed, increases public confidence in urban development management. Accountability and transparency of CSR funds and endowments are the keys to success in driving CRS [81], and providing funds as alternative funding for urban development, especially green open space. Stakeholder involvement in urban development is a long and sustainable process that requires accountability, transparency, and commitment by the city government [79] to ensure that the GOS revitalization program is in urban communities' interests. The GOS development program's openness for every part of the City will provide an excellent opportunity for districts to participate in implementing city plans [80]. Through the Housing and Settlement Office, the city government must prepare all regulations and provisions regarding the terms and guidelines for implementing CSR in the GOS revitalization policy.

8. Conclusion

Following the objectives of this chapter's discussion, several notes result from discussion and conclusion. Improving the quality of urban GOS associated with social, ecological, and esthetic functions significantly contributes to the realization of urban resilience. Success in improving the quality of urban space will contribute to the provision of social space with the scopes for social interaction, space for relaxation, and sports that are important for improving the physical and spiritual health of the community and maintaining the ecological function of the City.

The GCDP is a city government program that needs broad community participation support to GOS quality improvement. The involvement of the private sector in the provision of City GOS has enormous potential. Private sector involvement is a form of participation of urban communities through the planning and design process, implementation of designs, and even financing through the provision of CSR funds. Stakeholder participation through CSR is a form of community participation by providing development funds from the business sector and individual communities.

The GOS quality improvement program has to integrate with efforts to provide urban public space and create a livable city with city starch resistance. The CSR program is the potential to be developed as a policy of private sector involvement in improving the quality of GOS and increasing community participation in creating urban spatial resilience. The GOS improvement project's mechanism must be established and agreed upon in the implementation of CSR in the provision of GOS through the project process of urban GOS quality improvement. According to the technical implementation experience as illustrated above, a breakthrough is needed; making improvements to the law on the substitution of green open spaces must be drafted because of the development and change of functions of some green public spaces.

Improving the quality of GOS through CSR as a city policy mechanism must formulate through an approach model that ensures control functions following sustainable development schemes. Improving the quality of green open spaces through CSR programs can be a community involvement model in sustainable urban development. This model consists of negotiation, planning, implementation, and maintenance of green open space, especially in the process of implementing CSR.

Acknowledgements

Some of the material used in the text of this chapter is the result of a study entitled Web-Based Green City Management Information System (MIS) as a Model for Implementing Sustainable Urban GOS Control. This research funded (2018-2020) by the Directorate of Research and Community Service, Ministry of Research, Technology/National Research, and Innovation Agency (BRIN). It is grateful to all staff of Housing and Settlements Services of Malang, Malang City Government. They have provided data on Malang City's urban open space planning policy during this research.

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