Achieving Sustainable Development Goals through Social and Solidarity Economy: Case Study of South Korea

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Abstract

The implementation of the Agenda 2030 for sustainable development requires all states to adopt policies and mobilize resources to advance sustainable development at national as well as local levels. Identifying and strengthening means of implementation that address the social, economic, and environmental dimensions in an integrated manner is crucial.

Over the last several years, social and solidarity economy (SSE) has received increasing attention from policy makers, researchers and practitioners worldwide for its potential in addressing today's major challenges – including poverty, unemployment, social exclusion and climate change. As an integrated, people-centred, and planet sensitive approach, SSE is a sustainable and innovative form of business. SSE aims to generate values for the local communities and people based on the principles of equity, inclusion, cooperation, solidarity and democracy. In fact, its activities are primarily focused on meeting the needs of the community and creating an inclusive and sustainable society where socially vulnerable groups are also empowered.

South Korea has been one of the countries where SSE has been of great interest and importance. The Korean government established various supportive legal frameworks and policies for SSE in the past decade, and as a result, and a large range of SSE organizations and enterprises (SEOEs) has rapidly appeared in the country. The key sectors they engage in range from health-care, housing, education and other forms of social service provision to environmental protection. While there is growing consensus that SEOEs in South Korea are potentially well-positioned to address the SDGs, it is less clear how well it is doing in practice.

This study uses the existing data and analysis to put together an assessment of the economic, social and environmental impacts of SEOEs in South Korea, and relates these impacts to the SDGs. Specifically, this study looks at SEOS in urban agriculture and circular economy sectors to examine their role in building sustainable and innovative business and helping the country adapt to climate change. This study presents a number of evidence that SSE can be a key means of the achievement of SDGs, particularly 1, 2, 3, 8, 11, 12 and 13 by making social and environmental improvements in people's lives while contributing to economic development.

Keywords: social and solidarity economy, sustainable development, circular economy and urban agriculture

I. Introduction

The objective of the paper is to analyse the role of Social and Solidarity Economy (SSE) in addressing the economic, social and environmental objectives in integrated approaches inherent in the concept of sustainable development. Various economic entities fall under the umbrella of SSE whose traditional form across history have been social enterprises, cooperatives, community-based organizations, mutual benefit societies, associations, self-

help groups, and foundations [1]. SSE is characterized by its capacity to open up space for possibility for building society more equitable, sustainable and inclusive being guided by its principles of solidarity, cooperation, equity and democracy. It intends to bring a strong integrational impact for people in situations of exclusion and vulnerability. Given the current economic hardship with imbalance in wealth distribution and rising unemployment affecting the poor and youth, it is critically timely and important to investigate the SSE's potential to lead us toward an alternative path that values sharing and cooperation.

This paper aims to shed light on the role of SSE in relation to achieving the sustainable development goals (SDGs) and the transformative vision of the 2030 Agenda in the local context through an analysis of SSE organizations and enterprises (SEOEs) based in Seoul, South Korea. Due to relatively short history of SSE in Korea, much of its efforts to create social values have focused on job creation. This is largely due to the fact that the Korean government's interest in SSE has mostly focused on its job creation capacity. As such, performance of SSE has been usually assessed in terms of its achievement of employment and economic activity rather than its comprehensive potential in achieving social and environmental goals as well. On this ground, complete data showing the performance of SSE across various dimensions of development is not available, causing constraints on conducting rigorous performance analysis particularly in the field of environment. For this study, I leveraged a wide range of existing secondary research data such as government publications, journal articles, books, newspaper articles, websites, etc.

The remainder of this paper is divided into four sections. Section II provides a brief overview of main characteristics of SEOEs in Korea. Section III presents the potential of SEOEs in achieving SDGs 11, 12 and 13 through the promotion of circular economy. Then, those in the urban agriculture sector are examined in the next section to assess their contribution to the implementation of SDGs 2, 3, 11 and 12. The final section discusses issues related to impact analysis of SSE in Korea, providing policy recommendations.

I. Overview of SSE in South Korea

Because of SSE's distinctive functions to generate values for local people and communities, many countries have provided support for SSE through one or more forms: laws, new institutions or certification processes. The Korean government established supportive legal framework and supporting agencies in 2007 with an aim to create a conducive environment for SSE to emerge and thrive, and as such, a large range of SEOEs has rapidly appeared in the country since then. The number of SEOEs has increased from 55 in 2007 to 1825 in 2017 [2]

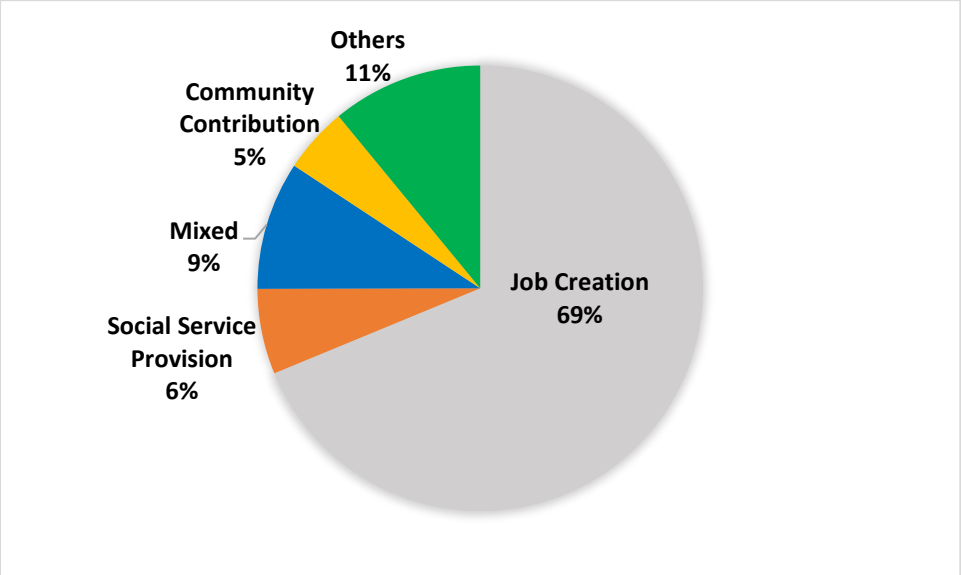
In order to receive government funds to cover expenses, SEOEs in South Korea must pass a certification process. Once certification is granted, they are registered as one of the five SE types: job-creation, social service provision, local community contribution, mixed, and other types. As of 2017, 68.8 percent of SEOEs identify themselves as a job-creation type [3]. Given that social service provision enterprises and mixed-type enterprises also have job creation as one of their purposes to be certified, approximately 78.1 percent of the total SEOEs is estimated to contribute to job creation (see figure 1).

[1] Bergeron et al., *Social and Solidarity Economy*.

[2] Korea Labor Institute and Korea Social Enterprise Promotion Agency, "2017 Social Economy Performance Analysis (in Korean)."

[3] Korea Labor Institute and Korea Social Enterprise Promotion Agency.

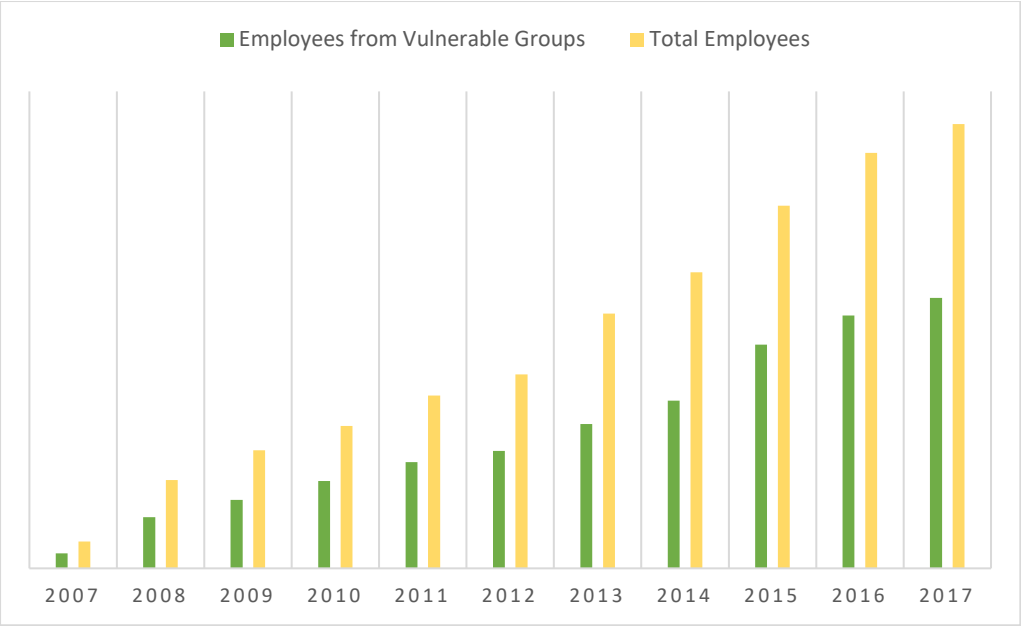
Figure 1: Types of SEOEs in South Korea in 2017



Source: Korea Labor Institute and Korea Social Enterprise Promotion Agency 2018

Since 2007 about 60 percent of those jobs created went to people the government classified as belonging to vulnerable groups (e.g. low income, elderly, disabled, migrants or refugees) (see figure 2). This economic empowerment of vulnerable people helps to achieve SDGs 1, 8 and 10.

Figure 2: Annual Employment Status of Social Enterprises



Source: [4]

[4] Korea Social Enterprise Promotion Agency, *How to Use Social Enterprise*; Korea Labor Institute and Korea Social Enterprise Promotion Agency, "2017 Social Economy Performance Analysis (in Korean)."

This study will mainly focus SEOEs in the environmental sector. As of December 2018, approximately 480 SEOEs are in the environmental sector, which is broadly categorized into four areas: resource circulation, green production and distribution, ecology resource utilization and environmental education. However due to the lack of detail in data collection, no further information for each area is available [5].

II. Creating a circular economy for environmental preservation: SDGs 11, 12 and 13

Several studies pointed out that waste is one of the most daunting problems facing the world. Total waste generated by the world is enormous. The UNEP(2009) reported that every year the world population dump a massive 2.12 billion tons of waste partly because 99% of items people buy is trashed within six months. At the current rate of waste generation, the global waste will more than triple by 2100, from 0.68 to 2.2 billion tonnes per year [6].

Throwing away means huge environmental impact. In the process of disposal of waste, harmful chemicals and greenhouse gases are released from waste in landfill sites, facilitating climate change. Furthermore, new raw materials and huge amounts of energy are required for the production of new goods. At the current rate of resource depletion, the world will eventually run out of natural resources, compromising the needs of future generation [7].

Recycling helps to reduce environmental damages done in the production process such as mining raw materials and conserves the energy went into making new products. The University of Michigan(2014) reported that the amount of one person recycling newspapers, magazines, plastic, glass, and metal for one year is enough to prevent 471 pounds of CO_2 emissions from entering into the atmosphere. Furthermore, 30% of global demands for resources in 2030 could be met through currently available resources, and this will bring economic benefit as high as $3.7 trillion each year [8]. All these measures indicate that reuse and recycling is the path to achieving the ambitious goals for sustainable economic ecosystem which Agenda 2030 requires.

The Ministry of Environment in Korea reports annual data on waste disposal nationwide. As of 2015, the daily wastes produced by households and businesses in Seoul are 9,438.7 tons [9]. The amount discharged through recycling is 3,309.3 tons. While the percentages of recycling is as high as 35%, most of them are sent to developing countries. In addition, only 2% of Seoul residents have a habit of donating used items to recycling SSEs or second-hands shops rather than putting them in a recycling bin [10]. In fact, the lack of consumer awareness of reuse, repair, and recycling is the key obstacle to realizing the conservation vision and thriving the reuse, repair, and recycling sector.

In order to drive changes in consumer behaviours, many SE enterprises and organizations organize events such as flea market campaigns to exemplify quality goods at affordable prices and highlight the benefits of recycling [11], and these events are spreading the culture of sharing, donation, and environmentally-friendly actions, which is crucial in establishing a sustainable

[5] Hong, "Social Economy Status and Prospects in the Environmental Sector."
[6] Hoornweg and Bhada-Tata, *What a Waste 2012: A Global Review of Solid Waste Management*.
[7] National Institutes of Health, "Benefits of Recycling."
[8] Dobbs et al., "Resource Revolution: Meeting the World's Energy, Materials, Food, and Water Needs."
[9] Ministry of Environment and Korea Environment Corporation, "2015 National Status of Waste Production and Disposal."
[10] Cho, "Departure from the Profit Seeking, Short Commodity Cycle (in Korean)."
[11] Beautiful Store, "Beautiful Store Sustainability Report."

economic ecosystem. In other words, SE organizations are leading the circular economy industry. By definition, a circular economy "encompasses all of the changes which allow different economic actors to continue creating value whilst preserving the natural capital and using increasingly fewer limited resources" [12]. The idea is to make sure the economic activity consumes less natural resources than it can regenerate. It is about paying more attention to how much trash is thrown away and what can be done with what is already out there. Such philosophy is carried out by recycling SEOEs. They collect a wide range of damaged items by direct donations from people [13], and create something new and better from old items, which is known as "upcycling". There are currently five SEOEs in the upcycling business in Seoul, and they altogether have around 50 stores in Seoul. These stores receive approximately 10,443,831 items per year through donation and this circular economy system contribute to reducing up to 77,706,334 pounds of CO_2 emissions per year [14]. Once donation culture is well established in Korea, the amount of wastes ending up in landfills will be further reduced.

The upcycling SEOEs also attempt to respond local needs and promote a wider community involvement. The end-result of upcycling is typically a handmade and one-of-a kind product. For instance, an old pair of jeans can turn into a child's summer bag. Since upcycling especially the one associated with fashion requires a considerable amount of creativity and a wide range of craft skills, many in the sector establish partnership with local designers and makers, promoting grassroots projects [15]. Due to the emergence of fast fashion retailers, traditional craft skills such as sewing and pattern designing are in danger of being lost as demand for them falls, so some crafts are now in the hands of an aging population. Building partnership with declining sectors such as traditional sewing and pattern designing helps older people to remain active or get back into work. In a nutshell, reuse and recycling are not only good for the environment but lead bottom-up solutions for sustainable local growth.

III. Making Cities Resilient to Food Security and Climate Change: SDGs 2, 3, 11 and 12

Urban agriculture is an adaptation strategy for a city to address climate change at the local level and prepare its population to deal with the adverse impacts it brings. Since 2008 when the world urban population outnumbered its rural counterpart for the first time in history [16], the world has continued to urbanize, and by 2050, the number of people living in cities is expected to increase by 1.5-2.0 times, adding 2.5 billion more urban dwellers to this planet (United Nations 2014). Unfortunately, a very large number of urban population worldwide already live in slums and face malnutrition. In Africa, more than 60% of the urban dwellers live in slums without sufficient amount of nutritious foods, and the same goes for 30% in Asia, and 24% in Latin America [17]. While many cities are showing difficulties to cope with urban development and its ensuring problems, rapid urbanization and population growth can only put more pressure on the global food system contributing to more hunger and poverty. In addition, as much of the national economic activities are concentrated in urban areas, urbanization have direct consequences on greenhouse gas emissions and climate change.

Korea is a large net importer of agricultural goods with corns, meats, soybeans, maize and wheat comprising a large proportion of the imports (rice is excluded given the importance of

[12] Institut Montaigne, "The Circular Economy: Reconciling Economic Growth with the Environment."
[13] Kim and Kim, "A Case Study Comparing Textile Recycling Systems of Korea and the UK to Promote Sustainability."
[14] Beautiful Store, "Beautiful Store Sustainability Report."
[15] Kim and Kim, "A Case Study Comparing Textile Recycling Systems of Korea and the UK to Promote Sustainability."
[16] Population Fund, *Unleashing the Potential of Urban Growth*.
[17] UN-Habitat, *Prosperity of Cities*.

it in Korea's culture) [18]. In 2017, Korea imported about $25 billion in agricultural goods making it the eighth-largest agricultural importer in the world. This import-based food supply system can be vulnerable to food security because there are always risks, for example, associated with extreme weather events causing global food shocks. Given that 90 percent of Korean populations live in cities [19], it is very likely that Korea will face great challenges in the near future with regard to food security. With such uncertainly about the future outcomes of global food supply due to the increasing odds for agricultural practices to be disrupted by climate change, the government and people of Seoul and other big cities must start addressing self-insufficiency and create alternative food supply sources.

One of the key solutions to address food security is urban agriculture, which is defined as a practice of growing plants and raising animals for food, and processing and distributing them within the urban area [20]. Urban agriculture can take place in any empty slots ranging from rooftop of office buildings, restaurants, and housing, parks, schools to community gardens. Degraded open spaces such as informal waste dumpsites also have been used by turning them into green zones. Among numerous benefits of urban agriculture, one is to increase accessibility and quality of meals by growing own fresh food close to home. By producing own foods, urban poor can consume fresh and nutritious foods without spending a large portion of their income. Some people can sell or trade their harvest as well. Either way, it decreases hunger. Direct experiences of consuming locally grown foods can develop healthy consumption habits, and such habits lead to sustainable consumption and production in line with SDG 12.

The impact of urban agriculture on climate change has been studied by several researchers. Cities are well-known hotspots. The concrete, asphalt, stone, brick absorb and retain higher levels of sunlight throughout the day. According to a recent NASA study [21], due to the urban heat island effect or overheating, on average, temperature can be between 1 to 3°C higher than surrounding vegetation or less developed regions, exacerbating global temperatures rises. While 1-3°C may seem like a small difference, a research by the EPA(2014) shows that, at the human level, even a rise of 0.6°C in air temperature can raise energy demands for air-conditioning. Both studies highlight that tree and other vegetation can help reduce the urban heat island effect through a process called evapotranspiration, and thus bring a cooling effect on homes and buildings. Dubbeling and Massonneau (2014) stated that green roofs in particular are very beneficial in energy saving and mitigation of urban heat through its functions of shading and thermal insulation. It can reduce the daily energy demand for cooling by 95% compared to a conventional roof.

Since the establishment of urban agriculture legislation in October, 2011 [22], more than 60 local authorities across the country have set up their own ordinances to support urban agriculture development. In Seoul, the area of agricultural land has increased more than five times over the last seven years from 29ha in 2011 to 177ha in 2018 [23]. In line with this, the number SEOEs engaging in farming-related activities has also increased by three times from 55 in 2013 to 148 in 2015 (Lee 2017). While the size of this sector's SEOEs is smaller than that of major Western cities incomparably with a long history of SSE, given a starting point of nearly zero at the turn of the millennium, its rapid growth is impressive.

Although separate statistics about SSE in this particular sector are not available, the SSE sector as a whole in Seoul created 8.8 new jobs on average in 2016, while the average for

[18] USDA, "U.S. Agricultural Export Opportunities in South Korea."
[19] Ministry of Land, Transport and Maritime, "2016 Urban Planning Status Statistics."
[20] Veenhuizen et al., *Profitability and Sustainability of Urban and Peri-Urban Agriculture*.
[21] Bounoua et al., "Impact of Urbanization on US Surface Climate."
[22] National Archive of Korea, "Proposal for the Promotion and Support of Urban Agriculture."
[23] Yang, "Let's make a garden garden in Seoul - Up to 30 million won support for urban agricultural business."

all newly established enterprises including SEOEs was 9.8 new jobs [24]. Given that more than half of their employment go to the vulnerable groups, its contribution to poverty reduction and social inclusion is significantly greater than that of conventional for-profit enterprises.

As regards environmental impacts, shifting food production to location with high demands reduces greenhouse gas emissions caused by transporting food over long distances. A study (Lee, Lee, and Lee 2015) found that the available area for urban agriculture in Seoul is 51.17km^2. After calculating the food transportation distance decrease per unit area of urban agriculture, they found that if all those available lands are used for urban farming, this could possibly eliminate 11668.53ton/year of CO_2 emitted in the transportation process. This quantity is equivalent to amount of emission absorbed by 20km^2 of pine forests and 10.2km2 of oak tree forests on the annual basis (Lee, Lee, and Lee 2015). Although the current size of urban agriculture (11.05km2) in Seoul is no way near the ideal size, the growing trend towards urban agriculture is such a positive sign for climate change mitigation.
Another key asset of urban agriculture is the social dimension. SSE actors see urban agriculture as an opportunity to address social injustices. For example, most urban agriculture projects involve disadvantaged people such as unemployed, disabled, elderly, and retired people and work to integrate them into the urban society by providing jobs and training. One project initially started in 2013 to provide recreational opportunities for disabled people to get together with non-disabled people, now teach more than 400 disabled people annually about how to farm foods in more than 20 gardens [25]. Due to the psychological relaxation and healing the nature provides, rather than to food production per se, a growing number of parents with a disabled child seek information or willing to join the project each year. In the past five years, some of participants in the project have been offered a job to work in the gardens to produce eco-friendly products (e.g. skincare, soap, etc.) and foods for consumption and for sale. Foods and flowers are often donated to disadvantaged people such as elderly people living alone for whom flowers are such luxuries. Given food prices in Korea are among the highest in the world [26], bringing more people particularly socially vulnerable people into urban agriculture and assisting them to grow their own foods will not only improve their access to foods and nutrition intake, but translate into significant savings by reducing expenditure on foods as well.

Connecting the economic dimension with the social and environmental ones, urban agriculture truly advocates an integrated and balanced approach to sustainable development and realizes the ambition of making cities “affordable, inclusive, and sustainable”. Yet, in Korea, urban farming is generally seen as recreational and used for educational and health purposes, its contribution to economy is insignificant.

Conclusion

The paper shows that SSE plays an important role in addressing social, economic, environmental challenges by fostering inclusive growth, reducing wastes and greenhouse gas emissions, producing affordable foods, and supporting civic engagement and participation. Although only partial segments within the SSE industries – the circular economy and urban agriculture sectors, have been looked at, the paper shows that SSE may have great potential for addressing today’s major challenges - poverty, unemployment, inequality, lack of social provisions, climate change and so on.

[24] Seoul Social Economy Center, “2016 Report on the Performance of Seoul Social Economy Centre (in Korean).”
[25] Shin, “Gardening Gives Work and Friends to People with Developmental Disabilities (in Korean).”
[26] Yonhap, “Seoul’s Food Prices among Highest in the World.”

In the context of South Korea, the most outstanding achievement of SSE is found in job creation and poverty alleviation especially for vulnerable groups. A majority of SEOEs has job creation and work integration as their main missions and a large share of their employment indeed goes to vulnerable groups including elderly, disabled people and women, contributing to the reduction of inequality and gender equality. A problem with this is that among many capabilities of the SSE, the government and relevant agencies have highlighted mostly its job creation capability, which influenced direction of research on SSE in general. Most of the existing studies on SSE in South Korea have focused on the SSE's role in job creation and poverty reduction.

Achievement in such limited areas has overlooked the possibilities that SSE offers in relation to the other economic, social, and environmental dimensions of sustainable development. Policy makers need to shift their attention from the SSE's role in job creation to the full scope of what SSE could do by monitoring and evaluating all potential areas of its activity. SSE monitoring and evaluation are particularly limited in the environmental sector, and this should be a priority area for further attention. Without knowing SSE's full capacity as well as its limitations and challenges, the government cannot design effective and supportive SSE policy schemes to further improve the sector.

This study can be a reference to demonstrate that SSE may have greater potential in bringing environmental and social values by promoting environment-friendly behaviors. Policy makers interested in achieving the SDGs should design and implement policies that support all areas of SSE activities and thus SSE can be developed as an integrated and balanced approach to achieve all three dimensions of sustainable development.

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