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KRIHS SPECIAL REPORT Vol. 047

**KRIHS
SPECIAL
REPORT**

Vol. **047**

2019

A Study on the Feasibility Study and Performance Management of Urban Regeneration Projects

Sangyon Lim

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This study intends to establish an evaluation system throughout the phases of pre-, during and post-project to establish a plan that meets the goals of urban regeneration projects and to efficiently promote the projects and generate impact. Furthermore, this study enhances the interoperability between evaluation items to enable continuous evaluation and monitoring from the pre-review in the planning phase to the annual performance evaluation in the implementation phase and the comprehensive performance evaluation in the project completion phase. In addition, this research proposed a short-term improvement plan for the existing screening, evaluation and performance management system as well as a policy plan for mid- and long-term system improvement by monitoring the evaluation application, operation and alternative preparation process.

A Study on the Feasibility Study and Performance Management of Urban Regeneration Projects

Sangyon Lim



Sangyon Lim

Dr. Sangyon Lim is a research fellow at the Urban Research Division of Korea Research Institute for Human Settlements.

She earned her Ph.D. in the department of Urban Engineering at University of Tokyo. Her main research areas are urban regeneration, community participation, and social economy.

Her recent publications are as follows:

- Changing Process of decision making for the Linear-Shinkansen Route selection through text-mining, 2019, Journal of the Korean cadastre information association
- An Analytic Hierarchy Process (AHP) Approach for Sustainable Assessment of Economy-Based and Community-Based Urban Regeneration: The Case of South Korea, 2018, Sustainability
- A Study on Establishment and Operation of Urban Regeneration Intermediaries, 2017, 2018, KRIHS.
- A Study on the white paper the public agency relocation in capital region and the innovation city construction, 2015, MOCT
- A Study on Policy Directions of Locally based Social Economic Organization for Enhancing the Vitality of Local Communities, 2015, KRIHS.

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Summary

This study was motivated by the necessity of improving the evaluation system of the urban regeneration project. The study's primary concern in this regard is to reorganize the evaluation system for all phases of urban regeneration projects, and to strengthen the pre-evaluation function of urban regeneration projects. Particularly, this study intends to establish a rational evaluation method that can verify the project feasibility prior to the project to only promote the projects that are in line with the goals of the urban regeneration new deal policy and are fit for the local situations and project characteristics.

As the study's main outputs, this study intends to provide a check-list based evaluation form by unifying the existing gateway review process divided into two stages and by eliminating duplicate evaluation items. The unified evaluation form will enable systematic management of the conditions and problems of the urban regeneration new deal projects which are being promoted nationwide.

Feasibility study should be linked to the annual implementation performance evaluation in the project implementation phase so that efficient evaluation and management can be achieved. Corrective measures in response to the feasibility study results, implementation performance by sub-project, and the level of achievement of the performance and impact indicators should be regularly assessed to induce achievement of the planned goals. In the comprehensive performance evaluation stage, the evaluation should take place on whether the originally planned performances and impacts of the overall project have been achieved.

The evaluation system should use the evaluation items and methodologies that measure the expected impacts of urban regeneration projects in the project selection and planning phases. We intend to prepare the indicators and calculation methods for the social, economic, cultural and environmental achievements that can be created by sub-projects and the effects that can be created by the overall project and induce the local governments to utilize these in the stage of urban regeneration activation planning.

This study has some limitations although it has contributions in establishing the procedure to evaluate the feasibility of urban regeneration project in each stages. Most of all, the feasibility evaluation of the project in the planning stage could not be analyzed in a statistically robust manner because the comprehensive effect of the project is visualized in long-term period. In light of this, additional analyses are worthwhile to confirm or revise this study's results by analyzing relevant data associated with a more extensive set of cases. Moreover, further research is required to quantify the impacts of urban regeneration as a whole.

CHAPTER I.

Research Background and Purpose

I. Increasing importance of evaluation and performance management of urban regeneration new deal projects

Since the promotion of "Special Act on Promotion of and Support for Urban Regeneration" in 2013, the government has established and operated an evaluation system to provide financial support and manage the performance of urban regeneration projects, but there has been a continuous demand for system improvement. The gateway review process which has been carried out before the government support for urban regeneration projects, had a problem of causing delay to project promotion due to the three-stage screening process. Some also pointed out that the qualitative method hinders the objectivity of the evaluation result. Annual performance evaluation takes place after the government support for urban regeneration projects and comprehensive performance evaluation takes place at the end of the government support. However, these evaluations mainly take place to monitor the execution rate of projects and require improvement to be seen as performance management of regeneration projects linked with the gateway review process.

In the meantime, the urban regeneration new deal projects became to get newly promoted after the launch of Moon administration in 2017. An agreement was reached that specific evaluation criteria and process should be established to improve the problems of the existing system and to respond to new demands in line with the goals and promotion method of the urban regeneration new deal projects. In case of the preliminary evaluation represented by the gateway review process, there is a great need to unify the existing gateway review process that has been divided into two stages in order to streamline the screening of the appropriateness of government funding for urban regeneration new deal projects which will have more than a dozen new places selected each year. In the case of post-evaluation, it is necessary to integrate the existing

three-stage screening into annual performance evaluation and manage the project performance and effectiveness through comprehensive performance evaluation after the project support. In addition, it is important to set up evaluation indexes to meet the goals of the urban regeneration new deal projects such as housing welfare, job creation, and social integration, and also to clarify the roles of the different operation and management bodies.

2. Systematic performance management by improving the evaluation system of urban regeneration projects

Therefore, this study assessed the evaluation process by the promotion phases of urban regeneration projects – the gateway review process in the planning phase, the annual performance evaluation during the implementation phase and the comprehensive performance evaluation in the completion phase – and diagnosed the problems. In addition, this research proposed a short-term improvement plan for the existing screening, evaluation and performance management system as well as a policy plan for mid- and long-term system improvement by monitoring the evaluation application, operation and alternative preparation process.

CHAPTER II.

Analysis of the condition of the evaluation system related to urban regeneration projects

I. Legal system related to the evaluation of urban regeneration projects

The legal system of urban regeneration can be roughly divided into three categories: policies, special acts and enforcement decrees, and guidelines. Based on the legal system of urban regeneration, evaluation is carried out according to the phases of project promotion, such as project selection, planning, implementation, and completion.

First, the National Urban Regeneration Policy provides the top-level standard for urban regeneration projects for the overall direction and selection and diagnosis of regeneration areas, such as the criteria for designating urban regeneration areas, criteria for urban decline and diagnosis, and the minimum infrastructure coverage. In addition, this Policy focuses on the phases of project selection and implementation by providing necessary information for site designation and further monitoring when selecting projects. Second, the Special Act on Promotion of and Support for Urban Regeneration (hereinafter referred to as the “Special Act”) and the Enforcement Decree require the proposal of performance management measures as part of the urban regeneration activation plan and present plans that can be realized through the measures. Third, the Guidelines for urban regeneration introduces methods for establishing strategic plan, activation plan, and project implementation by the type of urban regeneration projects, as well as provide evaluation plans and performance management methods and standards for the evaluation of urban regeneration activation plan (see Table I)

Table 1. Summary of the legal system

Legal system		Year of enactment/revision	
		Enactment	Final revision
Policy	National Urban Regeneration Policy	2014	
Special Act and Enforcement Decree	Special Act on Promotion of and Support for Urban Regeneration	2013	2018
	Enforcement Decree of the Special Act on Promotion of and Support for Urban Regeneration	2014	2018
Guideline for establishing strategic plan and activation plan	Guideline for establishing urban regeneration strategic plan	2014	2014
	Guideline for establishing urban regeneration activation plan	2014	2015
	Guideline for establishing “neighborhood regeneration type” urban regeneration activation plan	2014	2016
Guideline for project implementation	Guideline for establishing “urban economy-based type” urban regeneration activation plan and project implementation	2014	2016
	Guideline for project implementation in 2014 urban regeneration leading areas	2014	
	Guideline for “neighborhood regeneration type” urban regeneration project implementation	2014	2017
	Guideline for urban regeneration new deal project activation plan and implementation (“Revitalizing our neighborhood” / “residence support type” / “central urban area type” and “general neighborhood type” / “economy-based type”)	2018	
	Guideline for project monitoring and evaluation plan for 2014 urban regeneration leading areas (proposal)	2014	
	Guideline for urban regeneration leading area designation contest	2014	
Guideline for project application	Guideline for 2016 urban regeneration project application (proposal)	2015	
	Guideline for urban regeneration new deal project application	2018	

2. Operation status of the urban regeneration project evaluation system

The step-to-step change process of urban regeneration project evaluation can be examined by project site: leading area, general area and new deal project area. In the

project selection phase, evaluation for selecting urban regeneration project was carried out three times in 2014, 2016 and 2018 for each project site. In the planning phase, the evaluation system changed to urban regeneration pre-review committee, gateway review process, and urban regeneration feasibility study. The urban regeneration pre-review committee was operated for the leading areas, and afterward, the gateway review process took place for general areas from November 2016 to December 2017. For new deal project areas, urban regeneration feasibility study was carried out in 2018. During the project implementation phase, performance evaluation was carried out from 2016 to 2018 annually regarding the implementation of urban regeneration activation plan, and will be conducted in 2019 as well (see Table 2).

Table 2. Change process of urban regeneration project evaluation

Project site Phase	Urban regeneration leading area	Urban regeneration general area	Urban regeneration new deal project area
Project selection phase	Evaluation for selecting urban regeneration leading areas (April 2014)	Evaluation for selecting urban regeneration general areas (April 2016)	Evaluation for selecting urban regeneration new deal project areas (August 2018)
Project planning phase	Urban regeneration pre-review committee (2014)	Gateway review process (November 2016, December 2017)	Urban regeneration feasibility study (July 2018)
Project implementation phase	2015 performance evaluation of the implementation of urban regeneration activation plan (March 2016)	↓	
	↓		
	2016 performance evaluation of the implementation of urban regeneration activation plan (March 2017)		↓
	↓		
Project completion phase	2017 performance evaluation of the implementation of urban regeneration activation plan (June 2018)		
	↓		
	2018 performance evaluation of the implementation of urban regeneration activation plan (Planned)		
Project completion phase	Comprehensive performance evaluation (TBC)	Comprehensive performance evaluation (TBC)	Comprehensive performance evaluation (TBC)

Note: The years in parentheses indicate when the evaluation was completed and the results were announced.

Source Created by the author by referring to related materials

The urban regeneration project evaluation system is divided into the evaluation for selection, gateway review process, annual implementation performance evaluation, and comprehensive performance evaluation. The evaluation for selection in the project selection phase is carried out when applications are made by the municipalities that meet the requirements for urban regeneration activation area. For efficient support and management of the project promotion, the gateway review process in the planning phase is conducted in two stages: at the stages of governance establishment and activation plan establishment. The gateway review process is a management system that divides the whole process of the project into key stages and requires projects to pass each stage of the process to proceed to the next stage. The performance evaluation of the implementation of urban regeneration activation plan in the project implementation phase is a statutory evaluation to check and provide feedback on the performance and achievement of the urban regeneration activation plan. This statutory evaluation is divided into ① governance establishment and operation and ② project planning and implementation, and regularly assesses all projects included in the activation plan in February every year. In this evaluation, the proportion of the evaluation areas and project indicators are adjusted appropriately according to the project year. The comprehensive performance evaluation in the project completion phase¹⁾ assesses the overall performance of the project such as ① performance according to the project outcome indicators, and ② project management capacity. The comprehensive performance evaluation assesses the budget securing and execution performance and public relations performance as well as the achievements such as job creation through urban regeneration project and establishment of project management plan after the termination of the government fund.

1) The "project completion" in the termination phase refers to the end of the government funding for the urban regeneration project and even after the completion of the comprehensive performance evaluation, the project is continuously promoted in the operation and management phase. the government funding for the urban regeneration project and even after the completion of the comprehensive performance evaluation, the project is continuously promoted in the operation and management phase.

1) Project selection phase: evaluation for selection

The evaluation items for the selection of urban regeneration new deal project areas are composed mainly of the urgency and necessity of the project, feasibility of the project plan, and the new deal effect of urban regeneration.

Table 3. Evaluation items and distribution of points for urban regeneration projects

Evaluation item	Point	Sub-item	Point
Urgency and necessity of the project	20	Project urgency	10
		Project necessity	10
Feasibility of the project plan	50	Establishment of promotion system and governance	10
		Appropriateness of the project plan	10
		Project feasibility	20
		Community involvement and capacity building	10

Source Ministry of Land, Infrastructure and Transport. 2018. Guideline for urban regeneration new deal project application. p.39

Evaluation item	Point	Sub-item	Point
New deal effect of urban regeneration	30	Improvement of housing welfare and quality of life	10
		Job creation and city competitiveness	10
		Social integration and sustainability	5
		Real estate	5
Degree of specialization of the public institution's method of proposal	+10	Capacity of the public institution	+5
		Effectiveness of the public institution's participation	+5
Additional point	+5	※ Strengthening of the collaboration among departments, reflecting of roadmap	+5

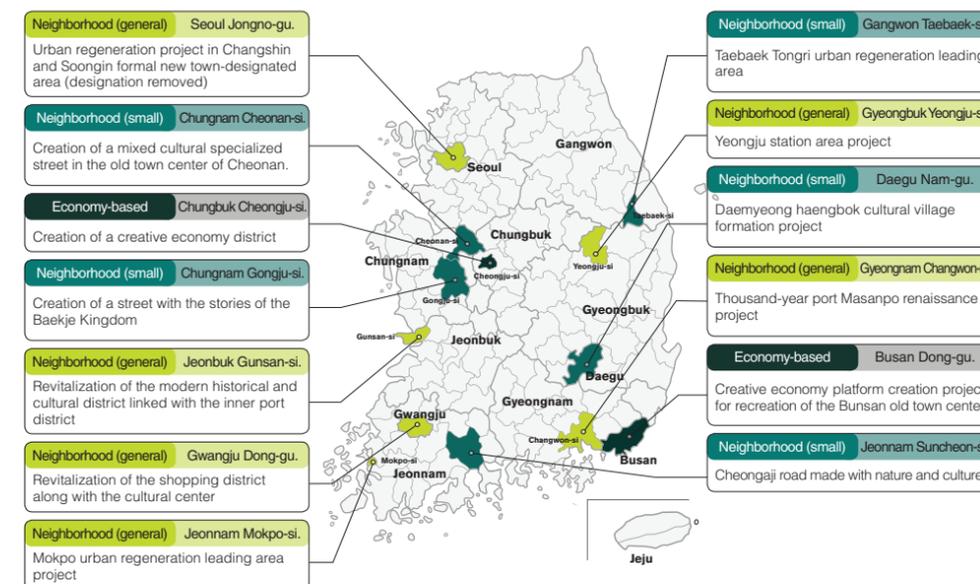
Through the evaluation for selection, 13 cities were selected in 2014, 33 in 2016, 68 in 2017, and 99 in 2018 as the following.

(1) Evaluation for selecting urban regeneration leading area (2014)²⁾

As a result of the evaluation for selecting "urban economy-based type" urban regeneration leading areas, Busan and Cheongju were designated for economic revitalization and job creation in the declining cities. As for the "neighborhood regeneration type" urban regeneration leading areas, six areas including Seoul Jongno-gu, Gwangju Dong-gu, and Yeongju-si were designated as general-scale areas, and five areas including Daegu Nam-gu, Taebeak-si, and Cheonan-si were designated as small-scale areas.

2) Ministry of Land, Infrastructure and Transport. 2014. "13 urban regeneration leading areas designated" Press release (2014.4.28)

Figure 1. Urban regeneration leading areas selected in 2014.



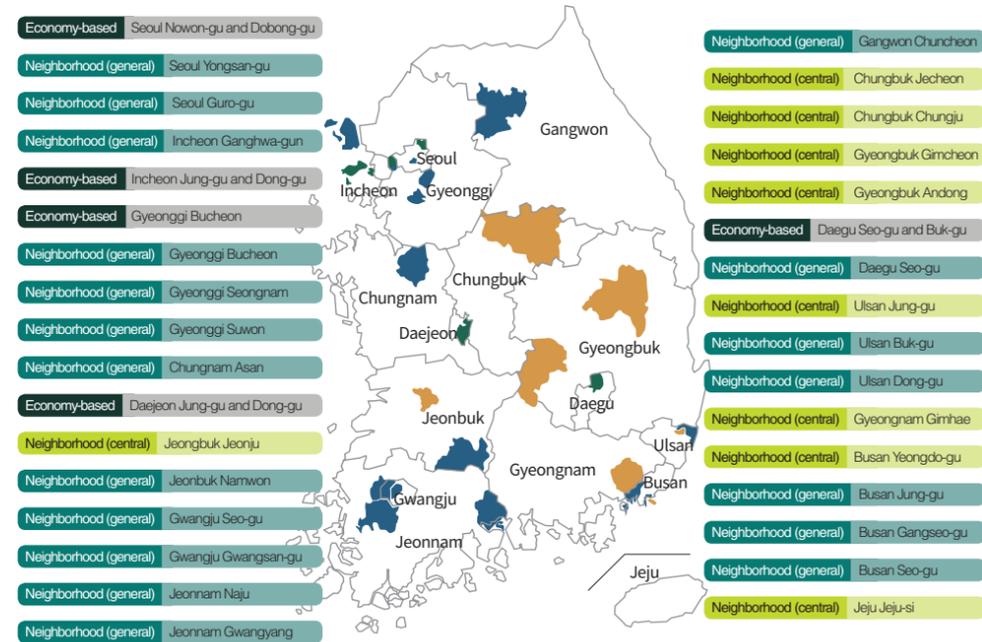
Source Comprehensive information system for urban regeneration. 2014. Designation status of leading areas. [http://www.city.go.kr/portal/business/businessInfo/1/link.do#] (Accessed on August 30, 2018)

(2) Evaluation for selecting urban regeneration general area (2016)

Following the selection and designation of 13 urban regeneration leading areas with high urgency and impact in May 2014, an additional evaluation took place in April 2016 for selecting the new urban regeneration general areas. As for the project site for 2016 government funded urban regeneration general areas, a total of 33 sites were selected, including 5 “economy-based” sites, 9 “neighborhood regeneration (central area)” sites, and 19 “neighborhood regeneration (general)” sites.

Figure 2. Urban regeneration general areas in selected 2016

Source Comprehensive information system for urban regeneration. 2016. Designation status of general areas. [http://www.city.go.kr/portal/business/businessInfo/1/link.do#] (Accessed on August 30, 2018)

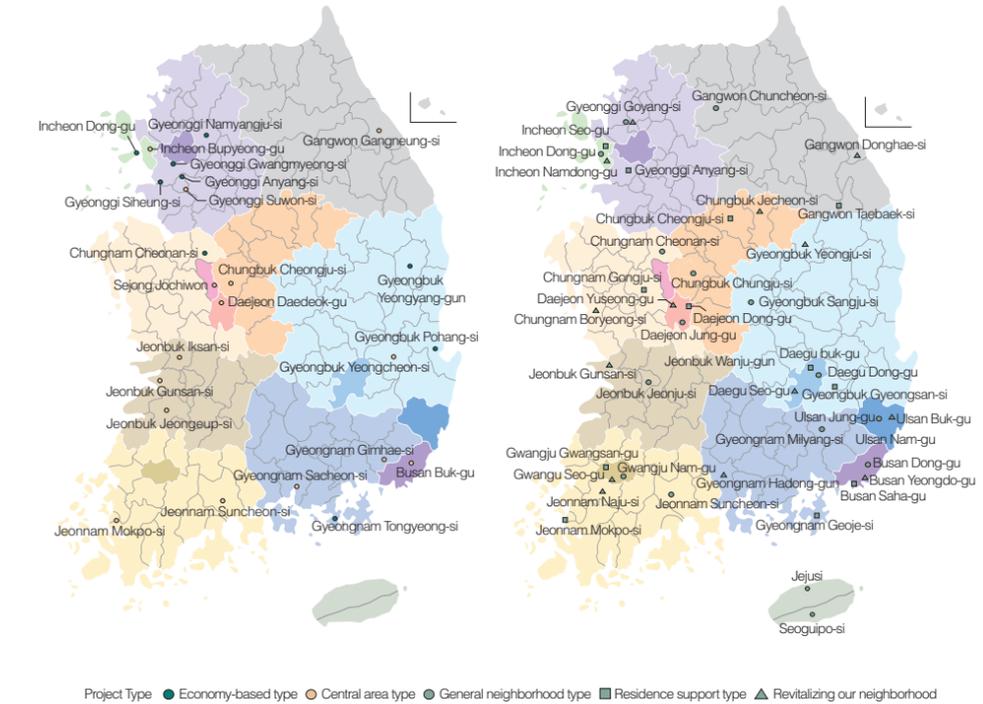


(3) Evaluation for selecting urban regeneration new deal pilot project areas (2017)

The evaluation for selecting urban regeneration new deal pilot project areas began the application on October 23, 2017 and finished the selection on December 14, 2017. According to the new deal pilot project selection plan decided by the 8th Urban Regeneration Special Committee, 68 sites were selected as 2017 urban regeneration new deal project sites on September 25, 2017 after evaluation. 44 sites (about 60% of all sites) fell under the categories of “revitalizing our neighborhood”, “residence support type” and “general neighborhood type”, and there was an attempt to strengthen the authority and responsibility of the region by allowing the metropolitan government to select the

areas. The central government selected 24 sites (about 40% of all sites) by performing evaluation on “central area type”, “economy-based type” and projects proposed by public institutions. Urban regeneration new deal projects were selected with a focus on restoring city competitiveness and creating quality jobs based on the region by revitalizing urban functions rather than simply improving the residential environment.

Figure 3. Urban regeneration new deal areas selected in 2017



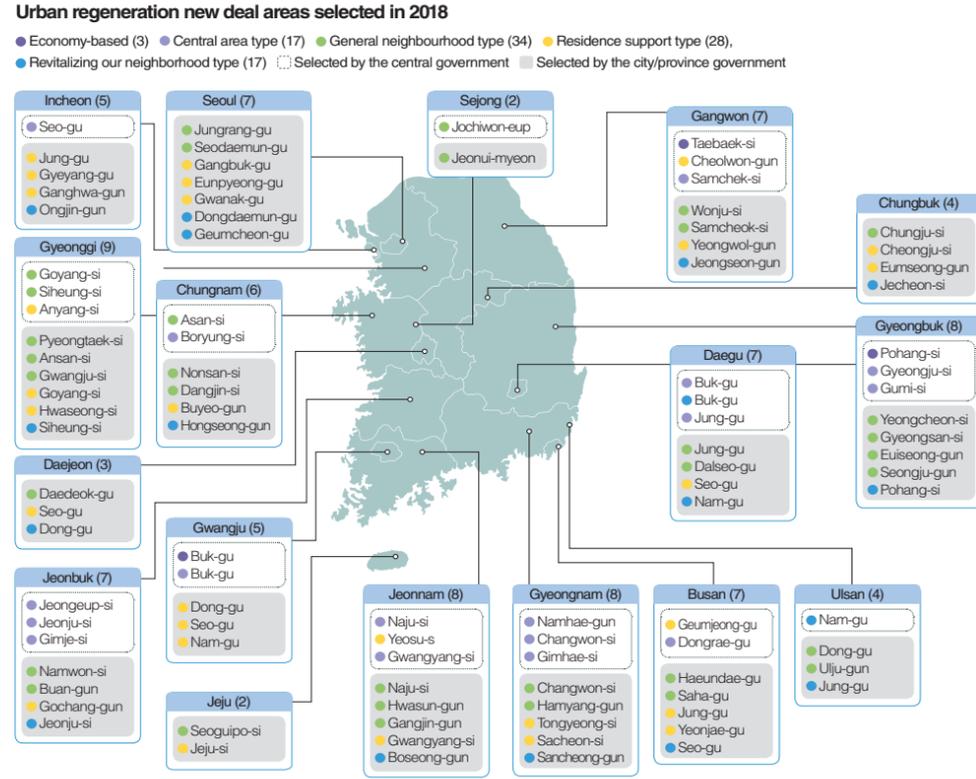
Source Comprehensive information system for urban regeneration. 2017. Designation status of urban regeneration new deal areas. [https://www.city.go.kr/portal/business/newDeal/statusInfo/link.do] (Accessed on August 30, 2018)

(4) Evaluation for selecting urban regeneration new deal project areas (2018)

The evaluation for selecting urban regeneration new deal project areas began the application on July 4, 2018 and finished the selection on August 31, 2018. According to the new deal project selection plan decided by the 11th Urban Regeneration Special Committee, 99 sites were selected as 2018 urban regeneration new deal project sites on April 24, 2018 after evaluation. The selection was expanded compared to the 68 sites selected for pilot projects in 2017 in order to cope with the crisis of urban destruction caused by the nationwide increase of population decline and acceleration of aging. 69 sites were selected by the city and province governments (about 70% of all projects) and 30 sites were selected by the central government (about 30% of all projects). Collaboration among the related ministries was strengthened given that urban regeneration serves as a platform for gathering diverse disciplines. 80 out of 99 sites include 382 projects linked to the related ministries.

Figure 6. Urban regeneration new deal areas selected in 2018

Source Mael Economy TV. 2018. Urban regeneration new deal areas selected in 2018[http://mbnmoney.mbn.co.kr/news/view?news_no=MM1003318572] (Accessed on August 31, 2018)



Source: Ministry of Land, Infrastructure and Transport

2) Planning phase: The review board and gateway review process

As the sites receiving public funding were expanded after the selection of urban regeneration general areas in 2016, the government strengthened the existing review board system for efficient support and management of project promotion. The gateway review process provided local governments with the opportunity to revise, supplement and perform a final review on their project plans and enabled the central government to adjust the budget difference and the timing of public funding support. This refers to an opportunity for the local governments to supplement the weak points of the project plan and to perform a final review on the project promotion scenarios in order to flexibly cope with the possible variables in the process of project promotion. The urban regeneration project promotion process can be divided into three phases: governance base establishment, activation plan and project implementation. The gateway process was first carried out before the infrastructure construction and activation plan stages, and was carried out again in between the activation plan stage and project implementation stage.

The gateway review process has different evaluation items for the base establishment stage and project implementation stage. The evaluation items also differ for “urban economy-based type” and “neighborhood regeneration type”. The gateway review process uses a qualitative evaluation method where the judges prepare the review opinion and make the decisions of pass, pass with conditions and re-examination.

Table 4. Evaluation items of the gateway review process

Type	Evaluation item
Stage 1: base establishment	Establishment of the administrative support capacity base
	Establishment of the local field support base
	Establishment of the community cooperation base
	Establishment of the activation planning base
Stage 2: project implementation	[Urban economy-based type]
	Analysis of urban regeneration status and setting of the goals of the plan
	Establishment of the detailed project implementation plan
	Project monitoring plan
	[Neighborhood regeneration type]
	Diagnosis of decline and potential
By year	Setting of the goals of the plan and core content
	Identification of unit projects and implementation plan
	Monitoring plan and future promotion plan
	Appropriateness and feasibility of the promotion of unit projects
	Possibility of developing an urban regeneration business model
Capacity of preparing for the operation and management phase	
Impact of the project	

Note: Additional point if there is a link with the national agenda

Source Ministry of Land, Infrastructure and Transport, 2014, National Urban Regeneration Policy, pp.42-43

(1) Review board (2014)³⁾

The review board was implemented in 2014, and whether or not the review board’s opinion was reflected in the activation planning stage of the urban regeneration leading areas was utilized as a performance evaluation item of the projects.

(2) Gateway review process (November 2016 and December 2017)⁴⁾

The gateway review process for 33 urban regeneration general projects was completed as of December 2017. It took 8 months of review on average when calculating the total screening period from the date of notification of the initial result of the 1st stage review to the date of notification of the final result of the 2nd stage review. 10 local governments had a review period of less than 6 month, 13 had a period of 6 to 12 months, and

3) Seo, Sujeong and Yoon, Juseon. 2015. A study on the institutional improvement for the effective promotion of urban regeneration. p.83

4) Ministry of Land, Infrastructure and Transport. 2017. Internal data of the results of the urban regeneration gateway review process (December 2017)

10 had a period of 12 months and more. By project type, it took an average of 8 months for the “urban economy-based type” and the “central area type”, and 9 months for the general type.

3) Phases of project implementation

The performance evaluation of the implementation of urban regeneration activation plan is mainly for checking and providing feedback on the performance and achievement of the urban regeneration activation plan every year. This evaluation is based on Article 24 of the “Special Act on Promotion of and Support for Urban Regeneration” and Article 31 of the Enforcement Decree of the Special Act. This evaluation aims to identify and share excellent achievements as well as areas that need improvement every year to be reflected in the project implementation in the following year.

Table 5. Performance evaluation items of the implementation of urban regeneration activation plan in leading and general areas in 2017

Classification	Evaluation item
Governance establishment and operation	① Administrative governance
	② Project governance
	③ Resident governance
Performance of project planning and promotion	Performance of project planning and promotion
	④ Performance of project planning and promotion of key projects
	⑤ Ensuring of the sustainability of construction and development projects
	Performance of budget securing and execution
Impact of the project	⑥ Securing of the matching local funding, execution of the grants (central and local government funding), appropriateness of the budget execution
	⑦ Promotion of public relations and press release, etc.
Impact of the project	⑧ Job creation and the improvement of city competitiveness
	⑨ Improvement of the quality of life and social integration

(1) 2015 Performance evaluation of the implementation of urban regeneration activation plan in (2016)

The government carried out a performance evaluation of the implementation of urban regeneration activation plan for 13 sites including the “economy-base type” (2), “general-scale” (6), and “small-scale” sites (5) and announced four “excellent (S-grade)”, five “good (A-grade)” and four “average (B-grade)” sites. In the 2015 evaluation, most of the regions were evaluated to have established the foundation as projects in their second year, such as the identification of core content and establishment of governance.

(2) 2016 Performance evaluation of the implementation of urban regeneration activation plan in (2017)

The evaluation was conducted on 13 sites selected as urban regeneration leading areas in 2014. The evaluation was conducted by the Urban Regeneration Special Committee for 3 months from February to April 2017, composed of the Ministry of Land, Infrastructure and Transport, Land and Housing Corporation and urban regeneration experts. In the case of the “economy-based type” projects, the implementation performance and budget execution were satisfactory and the systematic promotion of the government funded project is expected to lead to the creation of a successful model and impact in the surrounding areas. The “neighborhood regeneration type” projects were evaluated that overall achievement and budget securing and execution were satisfactory in 2016 when the project implementation was picked up focusing on the field governance.

(3) 2017 Performance evaluation of the implementation of urban regeneration activation plan in (2018)

The 2017 performance evaluation of implementation took place for 46 sites, including 13 urban regeneration leading areas and 33 general areas selected in the second stage. The evaluation plan was announced in January 2018, the evaluation was performed by the metropolitan governments in March 2018, and the comprehensive evaluation was carried out by the Ministry of Land, Infrastructure and Transport (MOLIT) in April, 2018. The comprehensive evaluation by the MOLIT took place in April 2018 for 3~4 weeks involving a day of pre-workshop, a week of document review, and a day of overall evaluation for each urban regeneration project type. The result of the 2017 performance evaluation of implementation was announced on June 8, 2018. As for the leading areas, four sites were evaluated as “good”, seven “average” and two “poor.” As for the general areas, four sites were evaluated as “good”, twenty-three “average” and six “poor.”

(4) Comprehensive performance evaluation

The comprehensive performance evaluation aims to provide an overall evaluation and feedback on the performance of urban regeneration projects after the termination of government support. A process is being planned to have the Ministry of Land, Infrastructure and Transport carry out the “performance evaluation of the implementation of urban regeneration activation plan” every year during the project implementation and extract the final “comprehensive performance evaluation index.” The comprehensive performance evaluation takes place after the termination of the government funding, separately from the “performance evaluation of the implementation of urban regeneration activation plan.”

Originally, comprehensive performance evaluations were to be carried out after 2017 with the termination of the government funding for the leading projects selected in 2014, however, they have not yet been pursued to date.

3. Implications

Need to improve the legal system across the evaluation and management of urban regeneration projects

The legal system provides the necessary standards and guidelines for urban regeneration projects by phase from the site selection until implementation, however, the details regarding the evaluation are not specified sometimes. The Basic Policy, the Special Act and the guidelines present specific evaluation criteria and methods regarding the site selection, project monitoring and performance evaluation. However, the details of the pre-review conducted prior to the government funding such as the review board and the gateway review process are not specified in the Act and the guidelines. Similarly, the comprehensive performance evaluation has not been adequately defined in the legal system and it has never been properly implemented. There is a need for clear standards as the works of the central government, local governments and project entities are faced with confusion as the evaluation process and items are repeatedly changing due to the repeated revisions of the legal system.

Need to improve the database management system for the evaluation and management of urban regeneration projects

The analysis of the evaluation and project management result suggests that a consistent management standard and system is needed as the database of the evaluation plan, performance and result after 2014 is not established properly. The departments responsible for each project at the MOLIT and multiple urban regeneration support organizations performed evaluation and evaluation support however it is not easy to manage the output. For example, in the case of the review board, there is almost no activity record and related records, making it difficult to understand the current situation and improve the evaluation system.

Need to establish effective evaluation items, performance indicators and evaluation methods

The existing evaluation system is structured to assess the degree of preparation and implementation of the governance, the activation plan and the whole project, and neglected the evaluation of each of the sub-projects. The review board and the gateway review process have an advantage that the readiness of governance and activation plan is assessed in the activation planning stage and allows the plan to be complemented through consulting, however, there are limits to the evaluation items and methods as a means of verifying the feasibility and readiness of the sub-projects. Similarly, the annual implementation performance evaluation can identify the implementation plan and performance of the overall project according to the goals but because it is prepared and submitted for the overall project, it is difficult to identify the goals, plans and performances of each sub-project. An urban regeneration project is a package-type project composed of multiple sub-projects, therefore, the evaluation of each sub-project should also be considered important rather than just the evaluation of the overall plan.

Although there are some differences in the point distribution of evaluation items by project stage, it is necessary to manage the evaluation items, performance and indicators throughout the entire project process. As the number of leading, general and new deal project areas of urban regeneration continues to increase, the work of the project management entity will also increase. Therefore, the establishment and management of standardized and consistent evaluation items, performance and impact indicators will reduce the burden of the project management work and enable efficient management of the project database and performance.

Plan to reorganize the evaluation system of urban regeneration projects

I. Basic direction of the evaluation system reorganization

Comprehensive reorganization of the evaluation system for all phases of urban regeneration projects

This study intends to establish an evaluation system throughout the phases of pre-, during and post-project to establish a plan that meets the goals of urban regeneration projects and to efficiently promote the projects and generate impact. We plan to enhance the interoperability between evaluation items to enable continuous evaluation and monitoring from the pre-review in the planning phase to the annual performance evaluation in the implementation phase and the comprehensive performance evaluation in the project completion phase.

Strengthening of the pre-evaluation function of urban regeneration projects

This study intends to establish a rational evaluation method that can verify the project feasibility prior to the project to only promote the projects that are in line with the goals of the urban regeneration new deal policy and are fit for the local and project characteristics. The gateway review process that take place before the government funding can

be reorganized into a project feasibility evaluation process that can quantitatively and objectively evaluate the feasibility and efficiency of the projects. The results of the feasibility evaluation can be utilized as the data for checking the change of local government consulting and government funding budget and the promotion performance.

This study intends to provide a check-list based evaluation form by unifying the existing gateway review process divided into two stages and by eliminating duplicate evaluation items. The unified evaluation form will enable systematic management of the conditions and problems of the urban regeneration new deal projects which are being promoted nationwide.

Improvement of the efficiency of project management in the project implementation phase

Feasibility study should be linked to the annual implementation performance evaluation in the project implementation phase so that efficient evaluation and management can be achieved. Corrective measures in response to the feasibility study results, implementation performance by sub-project, and the level of achievement of the performance and impact indicators should be regularly assessed to induce achievement of the planned goals. In the comprehensive performance evaluation stage, the evaluation should take place on whether the originally planned performances and impacts of the overall project have been achieved.

Preparation of evaluation items and methodology for measuring the effectiveness of urban regeneration projects

The evaluation system should use the evaluation items and methodologies that measure the expected impacts of urban regeneration projects in the project selection and planning phases. We intend to prepare the indicators and calculation methods for the social, economic, cultural and environmental achievements that can be created by sub-projects and the effects that can be created by the overall project and induce the local governments to utilize these in the stage of urban regeneration activation planning.

2. Criteria for improving evaluation items and improvement plan (proposal)

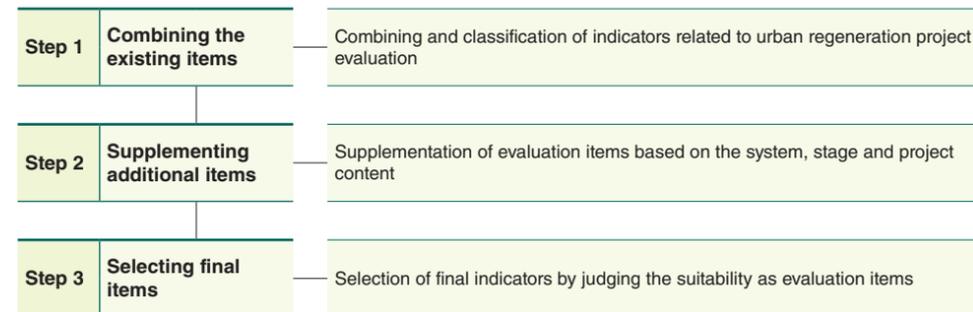
Criteria for selecting evaluation items

As there is no universal method objectively accepted to select evaluation items, this research has derived objective and valid indicators to achieve the purpose of evaluation in consideration of the evaluation subject, purpose of item setting and suitability for the situation at the time. While considering the existing criteria to select items objectively, this study made selection based on the ease of securing data, objectivity, reliability, ease of understanding, and representativeness.

Evaluation item selection process

This study comprehensively surveyed and analyzed the indicators presented in domestic and international evaluation cases in order to select the evaluation items for urban regeneration projects. In addition, we examined the indicators suggested from expert consultations, urban regeneration TB, the gateway review process regarding the leading and general areas, annual performance review of implementation, and the monitoring process. Through the above process, we identified available evaluation items, considered selection criteria, and selected items suitable for evaluation stage, target, system, and project content.

Figure 7. Selection process of evaluation items for urban regeneration projects



1) Feasibility study of urban regeneration projects

This study has simplified the pre-evaluation system and improved the feasibility evaluation items of sub-projects and the overall project by combining the 1st and 2nd gateway review process and reorganizing it into an urban regeneration project feasibility study.

Table 6. Comparison of the gateway review process and the urban regeneration project feasibility study system

Source created by the author

Classification	(Existing) Gateway review process	(Reorganized) Feasibility study
Evaluation process	<p>(1st round gateway review: project plan supplementation stage)</p> <ul style="list-style-type: none"> Local governments request a gateway review by the Ministry of Land, Infrastructure and Transport → Judges visit the sites and provide gateway review opinions → The local governments establish plans to respond to the gateway review results <p>(2nd round gateway review: Review to approve the activation plan)</p> <ul style="list-style-type: none"> For the local governments that passed the 1st round → Consulting process → Request for the 2nd round gateway review → Presentation of the results → The local governments respond to the results 	<p>(Feasibility study)</p> <ul style="list-style-type: none"> Combine 1st and 2nd round gateway reviews into one Metropolitan governments commission a specialized agency to perform a feasibility study on the plan and the government funded project → The metropolitan governments perform internal evaluation and report to the central government → The local governments establish plans to respond to the evaluation results
	<p>(3rd round gateway review: Review for each project implementation stage)</p> <ul style="list-style-type: none"> Re-examine until passing through the consulting process of gateway review for each stage 	<p>(Combining with the annual implementation performance evaluation)</p> <ul style="list-style-type: none"> Combine the 3rd round gateway review in the project implementation stage with the annual implementation performance evaluation
Key content	<p>(Operation)</p> <ul style="list-style-type: none"> Operate along with the consulting function, operate a virtuous cycle system to be complemented by consulting through the gateway review process Divide the process into two activation planning stages and one project implementation stage and proceed to next step after passing the gateway review 	<p>(Operation)</p> <ul style="list-style-type: none"> Operate the verification system to carry out the comprehensive review promptly and enable the efficient project planning and implementation Carry out the consulting function regardless of the evaluation result so that the weak parts can be supplemented
	<p>(Key review content)</p> <ul style="list-style-type: none"> Provide consulting for the local governments that do not meet the project promotion goals or are showing weak performance according to the gateway review 	<p>(Key review content)</p> <ul style="list-style-type: none"> Provide consulting for the local governments that do not meet the project promotion goals or are showing weak performance according to the gateway review Select nonconforming projects and provide a differential budget support by analyzing the pre-feasibility of the sub-projects such as the appropriateness as an urban regeneration project and the possibility of project promotion
	<p>(Suggestion of gateway review opinion)</p> <ul style="list-style-type: none"> Review the main contents and promotion process of each urban regeneration participating entities, draw out limitations and problems, and present the opinions of the review committee 	<p>(Review of the key items of the feasibility study)</p> <ul style="list-style-type: none"> For the key evaluation items that require the meeting of conditions, provide continuous project management by carrying out both consulting and monitoring in the process of project promotion

Compared to the existing gateway review, the feasibility study strengthened the quantitative evaluation method by introducing the point-based method, reorganized the system so that evaluation can take place for each sub-project, and newly established the evaluation of the overall project effectiveness. It has been pointed out that the existing gateway review focused on establishing the base and plans, and did not enable sufficient evaluation of the feasibility and project impact for each individual unit project. Accordingly, the reorganized feasibility study improved the evaluation system so that each sub-project can be evaluated and the effect of the overall project can be analyzed.

Table 7. Comparison of the methods and items of gateway review and feasibility study

Gateway review process			Feasibility study		
Evaluation method			Evaluation method		
Qualitative evaluation			Qualitative + quantitative evaluation		
Phase	Checklist		Classification	Checklist	
Base establishment	Governance establishment	Administrative support capacity	Governance (50 points)	<ul style="list-style-type: none"> Establishment of the base for administrative support capacity Establishment of the base for local on-site support Establishment of the base for community cooperation 	
		Community participation and maturity		<ul style="list-style-type: none"> Diagnosis of decline and survey of local asset Gather resident opinion and identify local issues Develop customized content to respond to local issues Develop project ideas to achieve the customized content 	
	Establishment of the on-site support center	Activation plan (50 points)			
	Preparation for activation planning				
Planning	Confirmation of core content and the appropriateness of establishing unit project implementation plan		Sub-project (100 points)	[Potential to achieve goals] <ul style="list-style-type: none"> Conformity of the purpose Feasibility of the project effect Connectivity with other projects 	
	Establishment of project promotion system	Administrative support capacity		[Potential of project promotion] <ul style="list-style-type: none"> Securement of the main agent and project fund Potential to collaborate with stakeholder Appropriateness of project management 	
		Community participation and maturity			
	Establishment of the on-site support center				
Project implementation	Conflict management among stakeholder		Project impact (100 points)	[Targets of the mandatory indicators] How effective the presented mandatory indicators are in line with the goals of urban regeneration projects	
	Appropriateness and feasibility of the promotion of unit projects			[Feasibility against project cost] How feasible the presented goals are compared to the project cost	
	Possibility of developing an urban regeneration business model				
	Capacity to prepare for the operation and management phase				
	impact of the project				

The feasibility study consists of four major items: ① governance, ② activation plan, ③ sub-project, and ④ overall project. First, the governance item evaluates how well the governance base is established for project promotion. Second, the activation plan item comprehensively evaluates how detailed the plan is prepared in identifying the local issues and reflecting resident opinion through diagnosis of local decline and survey of local asset. Third, the sub-project item evaluates whether the individual projects conform to the goals as an urban regeneration project and have appropriate performance target and whether the requirements have been prepared to carry out the sub-projects as planned. Fourth, the overall project item evaluates whether the overall project can provide impact in terms of goals and job creation as an urban regeneration project.

Figure 8. Feasibility evaluation system for urban regeneration new deal projects



2) Annual implementation performance evaluation

The annual implementation performance evaluation reorganized to induce the efficient budget execution and goal achievement regularly evaluates the progress of each sub-project according to the activation plan. The evaluation items were adjusted so as to be linked with the feasibility study items, and the method of filling the evaluation form was simplified by using checklist and description styles in parallel. In particular, the indicators that need to be checked regularly during the project promotion process for efficient management such as project means, method, management plan, and impact indicators were reorganized into a checklist style.

Table 8. Comparison of the existing performance management system and the reorganized annual implementation performance evaluation system

Classification	(Existing) 3 rd round gateway review + implementation performance evaluation	(Reorganized) Annual implementation performance evaluation
Evaluation process	<p>(3rd round gateway review: Review for each project implementation stage)</p> <ul style="list-style-type: none"> Re-examine until passing through the consulting process of gateway review for each stage <p>(Implementation performance evaluation)</p> <ul style="list-style-type: none"> The metropolitan governments conduct the implementation performance evaluation first and the Ministry of Land, Infrastructure and Transport conduct the comprehensive performance evaluation 	<p>(Combination of the 3rd gateway review and the implementation performance evaluation)</p> <ul style="list-style-type: none"> Combine the 3rd round gateway review with the annual implementation performance evaluation The metropolitan government conducts the implementation performance evaluation on local governments → The metropolitan government evaluates and submits the report to the central government → The central government conducts the comprehensive evaluation based on the evaluation report submitted by the metropolitan government The support organization provides overall support as the evaluation support team
Key content	<p>(Operation)</p> <ul style="list-style-type: none"> While the project proceeds to the next stage after passing the gateway review, promote the consulting function in parallel Differentiate the key evaluation content according to project type <p>(Key review content)</p> <ul style="list-style-type: none"> Evaluation focused on the project promotion and budget execution status by urban regeneration project goals for checking the implementation performance of the urban regeneration activation plan and the project progress 	<p>(Operation)</p> <ul style="list-style-type: none"> Conduct the evaluation items and process of the annual implementation performance evaluation linked with the feasibility study carried out prior to the project implementation Conduct the implementation performance evaluation using both quantitative and qualitative methods and maintain the existing project consulting function Differentiate the evaluation items and key content according to the key project by project type <p>(Key review content)</p> <ul style="list-style-type: none"> Improve the evaluation items focusing on the project performance for the year compared to the annual plan validated by the feasibility study <ul style="list-style-type: none"> Examination of the overall project through a comprehensive budget and index table Transition to the budget and performance management system by sub-project and subdivision of the evaluation items for governance and sub-project Enhance the nature of project monitoring by making checklists for indicators such as project means, methods, and management plans that needs to be reviewed continuously during the project implementation process

Note: The 3rd gateway review is a review by project implementation stage and is not carried out in the actual project.

Table 9. Comparison of the existing and reorganized annual implementation performance evaluation system

[Existing]		[Reorganized]	
Classification	Evaluation item	Classification	Evaluation item
Governance establishment and operation	① Establishment and operation of the administrative support and cooperation system	Governance establishment and operation	① Performance of dedicated organization operation
	② Establishment and operation of the expert utilization and public-private partnership system		② Performance of local on-site support
Project plan and implementation performance	Supplementing of the activation plan and project implementation performance		③ Performance of community cooperation
		① Expansion of new employment	① Project outline and potential to achieve goals
		② Activation of shopping districts, main roads and tourism	② Status of project means
		③ Preparation of the project management plan	
	④ Improvement of the neighborhood SOC	③ Status of project implementation and management	
	⑤ Evaluation and monitoring performance		
	⑥ Budget securement and execution performance		④ Implementation status and key content
⑦ Public relations performance			

Note: The sub-project implementation status is evaluated by each sub-project, divided into key project and general project, and suggest different evaluation items for each project

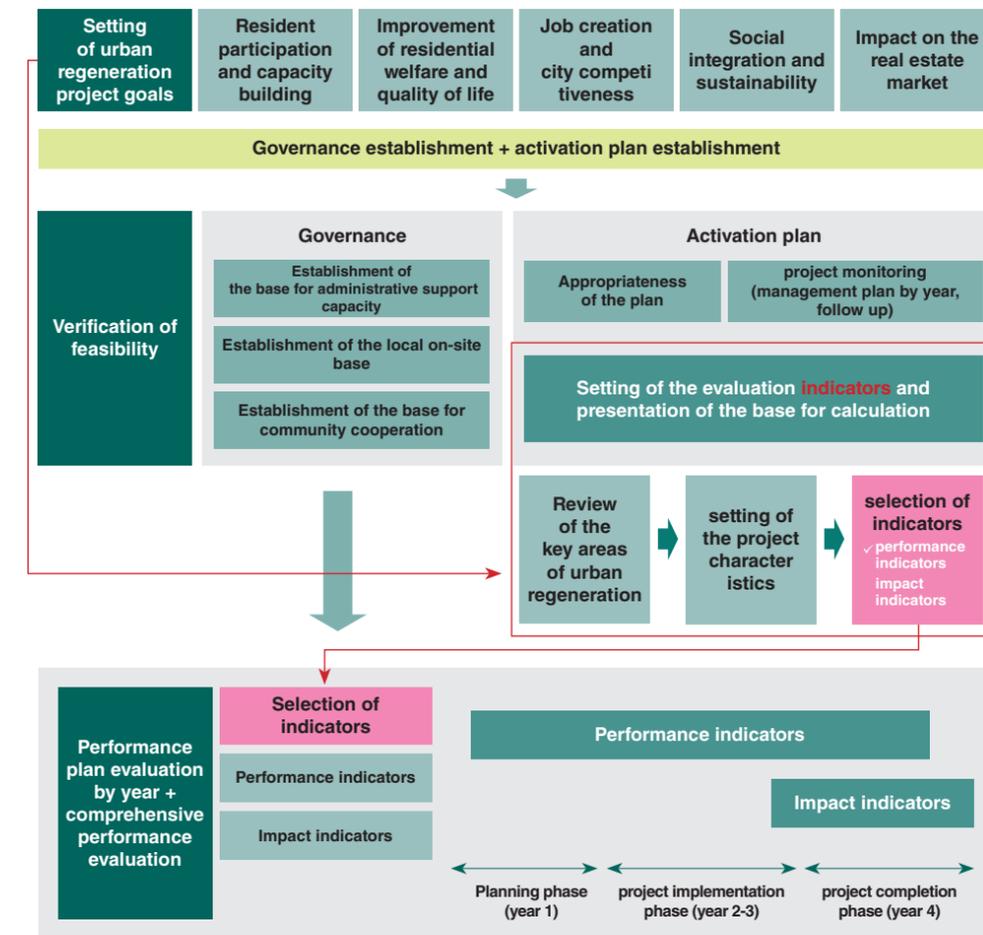
Source Ministry of Land, Infrastructure and Transport. 2017. Results of the urban regeneration activation plan implementation performance (2016). p.2

Suggestion of methods to improve the evaluation system

I. Presentation of specific project goals and encouragement for achievement using the performance indicators

This research suggests distributing the performance and impact indicators in advance to induce the establishment of performance goals in detail from the urban regeneration planning stage and manage the performance goals by year through project management. This can include the performance and impact indicators by project type and characteristics that meet the goals of the new deal project such as resident participation, job creation and social integration. Performance can be induced in various fields by reviewing the indicators of various fields such as the housing welfare evaluation index and the SDGs index as well as by selecting and providing indicators that can be utilized in urban regeneration projects. The performance indicators can include whether specific project goals were presented by sub-project and year in the feasibility study and the implementation performance evaluation.

Figure 9. Process of setting performance indicators for urban regeneration projects and the evaluation system (proposal)



2. Promotion of systematic urban regeneration project management by establishing roles of entities

The central government needs to transfer the authority of evaluation and project management to the local governments to induce local-led project promotion and management that reflect the specificity and reality of the region. The central government is responsible for the selection, evaluation and management of the regeneration projects in the early stage as a leading evaluation body until the establishment of the base for

project selection and feasibility study. In the mid- and long-term, the central government should reduce the administrative burden and increase the efficiency of project promotion by sharing the roles with the metropolitan governments with regard to project selection and feasibility study.

The metropolitan and local governments should play a leading role from the overall urban regeneration project selection which includes project evaluation for selection, annual implementation performance evaluation and comprehensive performance evaluation to the monitoring of implementation status and project management. For this, it is essential to strengthen the capacity of metropolitan and local governments and establish an administrative base, and local governments should share the role of evaluation and project management by utilizing the competence of experts such as the urban regeneration support center.

3. Evaluation verification system and introduction of a specialist institution for systematic evaluation management

As the nature of urban regeneration projects requires long-term project promotion and management, it is important to respond to the changing circumstances appropriately and to introduce a consistent evaluation and verification system along with a specialist institution. Consideration should be given to the evaluation verification or meta-evaluation process regarding the metropolitan evaluations to reduce the trial and error in the process of transferring the management authority of urban regeneration projects from the central government to local governments and to secure the appropriateness of the central government's total budget allocation method. In the future, with the increasing number of areas with urban regeneration projects, the need for the evaluation of the overall process of urban regeneration projects (evaluation for selection – feasibility study – annual implementation performance evaluation – comprehensive performance evaluation) is expected to increase. Therefore, it is important to introduce a specialized institution to systematically manage and verify these evaluations. In addition to the evaluation verification, the specialist institution should be in charge of the establishment of the overall evaluation system, database management and consulting including the training and dispatching of evaluation-related human resource and information system as well as the establishment of the work sharing and collaboration system with the urban regeneration support district and the urban regeneration support center.

4. Improvement of the project management system in connection with the advancement of the urban regeneration information system

There is a need to establish a performance management plan linked to the mid- to long-term upgrade plan for the online project management and evaluation and the monitoring service by improving the project management system which was utilized in a limited extent for project management. It is important to expand the online system functions such as project management, monitoring and consulting by improving the system that was used only to a limited extent such as application for project selection, uploading of the implementation guideline and project plan files, sharing of the research reports, and checking of the budget execution performances. In particular, an organic project collaboration system is needed that develops and operates a data-driven policy management system for each region for the efficient project promotion and the improvement of the system that supports policy cooperation among the central, metropolitan, local governments and the project sites.

In addition, it is necessary to expand the functions of establishing the database and diagnosing the neighborhood SOC status and monitoring the improvement effect by enhancing the database establishment, development and analysis functions related to the urban regeneration projects and evaluation. The parcel-unit database and monitoring and evaluation system enable the clear understanding of local conditions and the setting of predictable performance targets, and this should lead to effective project planning and implementation. It is necessary to establish and manage the related indicators and database for measuring the mid- and long-term urban regeneration effects.

In addition, an improvement in the evaluation and project management system is needed in order to develop related projects by department, establish a linkage system and perform an integrated operation of the budget execution and management. While urban regeneration projects can be operated in accordance with the laws, systems and guidelines related to the sub-projects, the evaluation and project management system needs to be improved in order to integrate the timing and method of subsidy provision for the government-funded projects linked with various ministries to improve the efficiency of the financial support.

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**KRIHS
SPECIAL
REPORT**

2019

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Sangyon Lim

Edited by the Global Development Partnership Center (GDPC)

Editor Se Hoon Park

Editorial Team Seryeon Jeon, Chanyong You

Publication Registration 25100-1994-2

Printed on June 30, 2019

ISBN 979-11-5898-432-8

Published by Korea Research Institute for Human Settlements (KRIHS)

5 Gukchaegyewon-ro, Sejong-si, 30149, Korea

Tel. +82-44-960-0655 / Fax. +82-211-4772

<http://www.krihs.re.kr/>

<http://gdpc.kr/>

Designed and Produced by SeilFocus Co., Ltd.

<http://www.seilfocus.com>

Tel. +82-2-2275-6894-6

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Printed and Bound in the Republic of Korea First Published in 2018

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