Urban Renewal Strategies for Application of the Agreement Co-Construction Approach

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Abstract. Currently, Taiwan leads urban renewal via public participation style with the government playing the role of critical decision-maker. The problem of urban aging is a common phenomenon faced by the global cities. According to the Ministry of the Interior statistics in 2018, old houses more than 30 years in Taiwan are more than 4.27 million; 0.77 million old houses in New Taipei City, accounting for 18%; and 0.69 million old houses in Taipei, accounting for 16.2%. However, the current progress of urban renewal is slowly stagnating. From 2006 to 2018, the approved urban renewal case was only 449 cases, approximately 35 cases per year, only nearly 2,000 households. Although the government strongly promotes the urban renewal policy, it is limited by the policy implied that it cannot be implemented and promoted. In addition, excessive emphasis on the sound of living justice, the lengthy review process, and the inability to implement various supporting measures have made urban renewal more difficult. In particular, the adoption of the "Agreement Co-Construction Approaches" method for urban renewal is even more difficult. Base on this, this study uses empirical case studies and content analysis methods to analyze the challenges of urban renewal through the "Agreement Co-Construction Approaches", and further proposes specific countermeasures and recommendations, to enable Taiwan to accelerate the urban renewal process, and provide developing and developed countries specific reference for urban renewal planning and promotion strategy in the future.

1. Introduction
Successful urban renewal requires a variety of strategies and approaches to develop local and regional regulations through the integration of partnerships among multiple sectors and institutions [1]. Urban renewal originated in developing countries as a response to the changing expectations for renovating and reusing abandoned and obsolete urban buildings, rather than demolishing them [2]. Urban recession has been a long-standing issue in many developed cities [3]. In Taiwan, Taipei City Government advocates that the joint construction under urban renewal agreements should be exempt land value-added tax according to the right transformation. Nevertheless, in the end, it still maintained the current 40% reduction of land value-added tax. The government considered that all the other local governments except for six cities cannot afford the complete reduction of land value-added tax, so it insisted on the bottom line of 40% reduction of land value-added tax under the situation of reduced tax revenue. In order to encourage urban renewal by Agreement Co-Construction, Taiwan government launched the "Urban Renewal Act", which proposed to give 40% reduction of the land value-added tax, while the
current exemption of land value-added tax had maintain in case of right transformation. Many local governments actively strive for the non-levy of the land value-added tax in both cases in order to avoid the change of the way from Agreement Co-Construction to right transformation due to the factor of land value-added tax, which may jeopardize the rights and interests of land and property owners.

Land value-added tax is one of the important taxes of local governments. If as suggested by Taipei City Government, the tax rate for Agreement Co-Construction is changed to tax free, local governments will have no tax to collect, and there would be concerns about the fairness of local tax systems arising from Taiwan's policy of promoting urban renewal. Taipei City Government is the city with the richest experience in urban renewal in Taiwan, which is supported by central unified allocation of funds and high local tax revenues and thus has the condition to propose tax exemption to promote urban renewal. However, other governments have little tax revenue and no fund to carry out this preferential measure. The central government believes that it is necessary to maintain the implementation of the 40% reduction of land value-added tax on the Agreement Co-Construction and the exemption of land value-added tax on the right transformation.

In view of the above, it is expected that the research results will provide building developers and the public sector with the reference for development direction and implementation strategy assessment of future urban renewal and to further promote Taiwan to achieve the goal of sustainable architecture.

2. Literature review and data analysis
Urban renewal is a very complex and highly professional field, because it not only requires professionalism in land development and construction planning, but also the ability of urban renewal integration and planning promotion. With "Agreement Co-Construction Approaches", allocation is made according to the contract signed between the landlord and the builder upon mutual agreement considering the landlord's preferences. Therefore, the government will not involve in the "Agreement Co-Construction Approaches". There is a high degree of freedom in the "Agreement Co-Construction Approaches", so conditional negotiations are often conducted privately by the builders with the process not made public. Landlords with poor professional knowledge and negotiation skills are often unable to specify their own requirements, or they may not reach consensus with the builders due to asymmetric information.

The source of law for implementing urban renewal with "Agreement Co-Construction Approaches" is based on Articles 25 of Taiwan Urban Renewal Act, which stipulates that "Land in the reconstruction section within the scope of the Urban Renewal Business Plan shall be implemented by means of right transformation. However, in case of handling by the competent authority or other authority, expropriation, zone expropriation or urban land readjustment can be adopted for implementation. Upon the consent of all owners of the land and buildings, the urban renewal can be carried out by Agreement Co-Construction Approaches or other means". The implementation way of "Agreement Co-Construction Approaches" and that of right transformation are different due to different conditions in respective bases. Therefore, the way to apply urban renewal is not the same. The following table on differences between "Agreement Co-Construction Approaches" and "Rights Transformation" can be used as a reference for selection (shown in Table 1).

There are many reasons for the adoption of "Agreement Co-Construction Approaches", among which, the main reason is because the builders take the initiative to participate in it. Most landlords have lived there for 10 years, but they have no economic ability to reconstruction by themselves. Instead, the builders would handle urban renewal through "Agreement Co-Construction Approaches". This is also the popular way adopted for urban renewal, but its advantages and disadvantages vary according to different viewpoints, as shown in Table 2:

3. Research content and methodologies
Through the literature survey of urban renewal and the qualitative data obtained from empirical case studies, this study further applies the "Content Analysis Method" to analyze and compare the research contents. Through the analysis of empirical cases and qualitative analysis methods, it makes an objective
and systematic comparison and analysis of the research data content. Content Analysis Method was proposed by Bowers in 1970 as a research method to make quantitative statistical analysis of the objectivity, systematicness and measurement methods of literature content, with the purpose of clarifying the essential facts and trends in the literature, and then reveal the information content implied in the literature data, so as to infer the development of events and objects, and further predict the changing trend [4, 5]. This research method has been widely used in various social science and behavioral science researches.

Table 1. Analysis of the difference for "Agreement Co-Construction Approaches" and "Rights Transformation Approaches".

| Implementation modalities | Agreement Co-Construction Approaches | Rights Transformation Approaches |
|---------------------------|-------------------------------------|----------------------------------|
| Significance              | Landowner and legal building owner in the urban renewal area, providing land, buildings or funds to participate in or implement the urban renewal business. After the completion, assigning urban renewal buildings and land ownership or royalties. | The owner of the private land and private buildings in the urban renewal unit, all agree to the urban renewal business plan proposed by the builders, after the approval and implementation of the plan, the relevant rights shall be handled according to the agreement of both parties. |
| Agree to the threshold    | Most owners agree | Owners of private land and private legal buildings, involving public ownership adoption the "Rights Transformation Approaches". |
| Land integration          | The law protects landlords and builders. Including fair, just, open, and consistent condition. | Private parties are only protected by civil law. Insufficient legal protection, easy to trade on the dark, integration difficulties. |
| Construction license application | Construction application. Do not need to attach supporting documents. | All landowners agree and show proof of land rights. |
| Distribution of property rights | Adopting three valuation companies for valuation, the property rights distribution is more reasonable. | According to market experience, it is distributed by negotiation. Discuss the proportion, the number of building pings, the area of the building, conversion ratio, value division, etc. |
| Dispute resolution        | Mediation, petition, administrative litigation. During the period, the urban renewal business will not be affected. | Court civil action, time consuming |
| Tax breaks                | Have. Reduce the land value-added tax of 40% on the first transfer after urban renewal | No |
| Applicable area           | For areas with large areas and complex land rights relationships, it is not easy to use the urban renewal of the "Agreement Co-Construction Approaches". | Property uncomplicated areas. |
| Security deposit          | No | Calculate the margin for a fixed ratio of land value. Apply instalment payment or trust management. |

Therefore, through the qualitative data obtained through literature survey and case study, this study further explores and analyzes the problems encountered in empirical cases through content analysis. During the research and analysis process, this study analyzes the challenges faced by cases of urban renewal through "Agreement Co-Construction Approaches", and further puts forward specific countermeasures and suggestions in order to provide a strategic reference for accelerating the promotion of urban renewal policy in Taiwan in the future. A detailed content analysis of case study on urban renewal is shown in Table 3:
4. Research results analysis and discussion
The development of urban renewal need to tackle many "human" factors, such as land consolidation, property rights and agreement threshold, there must be an additional building bulk awarded through the deliberation mechanism. Besides, the development time is lengthy, which brings higher risks to the developer. Therefore, during the promotion of urban renewal in the past, developers must grasp the timing of the case and therefore were reluctant to touch on this topic. In recent years, with the high exploitation of urban areas, land acquisition is more difficult and expensive to acquire. Developers must invest in the development of land in good locations through agreements and integration. In order to obtain more additional building bulk incentives to reduce costs and increase profit space, and to solve some tough problems of property rights through legal constraints, more and more developers are willing to develop land through urban renewal mechanism.

Table 2. Advantages and disadvantages for "Agreement Co-Construction Approaches" and "Self-Organized Urban Renewal Approaches".

| Advantage                                                                 | Agreement Co-Construction Approaches | Self-Organized Urban Renewal Approaches |
|---------------------------------------------------------------------------|--------------------------------------|----------------------------------------|
| • Builders leading the integration and coordination.                      |                                      | • Residents get a larger area after redistribution. |
| • Builders is responsible for supervising the design drawings and ensuring the construction quality. |                                      | • Can apply for urban renewal various subsidies. |
| • Builders must prepay the project.                                       |                                      | • Landowners can plan and select building materials according to their needs. |
| • Household property by bank trust.                                       |                                      |                                        |
| • Market risk is borne by the builder.                                    |                                      |                                        |
| • Rent subsidy provided by the builder during construction.               |                                      |                                        |

| Disadvantage                                                                 | Agreement Co-Construction Approaches | Self-Organized Urban Renewal Approaches |
|-----------------------------------------------------------------------------|--------------------------------------|----------------------------------------|
| • After re-allocation, the area obtained is small and cannot meet the needs of residents. |                                      | • Residents need to raise all funds themselves. |
| • Under the overall planning, households cannot choose building materials according to individual needs. |                                      | • Residents should bear the market risk on their own. |
| • Cannot apply for various subsidies.                                       |                                      | • Non-professional and no one is responsible for coordination and integration. |
|                                                                             |                                      | • No special person checks the design drawings and ensure the construction quality. |
|                                                                             |                                      | • Residents have no rent subsidy during construction. |

Table 3. Analysis of the urban renewal empirical case.

| Base location                  | Neihu District, Taipei City (shown in Fig. 1 and Fig. 2) |
|--------------------------------|----------------------------------------------------------|
| Base area                      | 4,920 m², Building bulk ratio: 225%                      |
| Floor Area Ratio after the urban renewal approved | 323.74 %                                                |
| Urban renewal planning and design scale | 14 floors above ground and 4 floors below ground. |
| Use situation of each floor     | 13 households before the urban renewal and 161 households after the urban renewal. |
|                                | The underground floor is an air defense shelter, car and motorcycle parking, 1F~3F are general retail trade, activity centers, collective residence, and management committee uses space. |
|                                | Standard floor is a collective residence, part of the floor space provides the residents' activity center, citizens' hall (historic site), and fire station, etc. |
At present, the implementation methods of urban renewal, as mentioned above, include "Rights Transformation", "Expropriation", "Zone Expropriation", "Urban Land Readjustment", "Agreement Co-Construction Approaches", etc. The construction development projects of non-governmental developers currently mostly adopt the "Agreement Co-Construction Approaches". According to the research data analysis of empirical cases, there are nine items key problems caused by the implementation of urban renewal in Taiwan through "Agreement Co-Construction Approaches", which are illustrated below in detail: The key questions are as follows:

- **Allocation skill and proportion.** The key to the success of urban renewal through "Agreement Co-Construction Approaches" is the allocation skill and proportion. Therefore, builders must give them more subsidies in area and amount. Otherwise, they will not be able to achieve the goal of urban renewal.
- **Unrecognizable expenses.** In order to meet the individual needs of landlords, builders will have conditions that cannot be stated publicly, which is also one of the elements for the establishment of almost every co-construction case. However, the condition of non-publicity is that they cannot recognize the cost, and builders often have to absorb the cost, which will become profits and taxes.
- **The difference between co-burdened and actual expenditures.** The co-burdened expenditure is the cost of urban renewal implemented by the builder, which is shared by the builder and the landlord. The higher the amount of co-burdened expenditure, the higher the cost of urban renewal invested by the construction company, the more houses can be obtained after urban renewal.
- **Public land disposal method.** When dealing with urban renewal, the builders would propose to make the public land disposal by price purchase, and then carry out "Rights Transformation" through "Agreement Co-Construction Approaches", which is more advantageous to the builder.
- **Solve nail householders and occupiers.** Nail householders and occupiers are the biggest obstacles to urban renewal. Although the government can demolish the building by force according to law, the builders are often reluctant to go in this direction, but most will still try to settle through communication and give preferential co-construction conditions.
- **Time control of urban renewal.** The urban renewal review may last for 3 to 5 years in fast cases but decades in slow cases, which is very disadvantageous to builders. Therefore, it is very important to simplify the review process of urban renewal. The Regulations on Accelerated Reconstruction of Urban Dangerous and Old Buildings announced in 2017 can solve this problem.
- **Property Trust Guarantee.** Although this case adopts household-by-household trust, as long as one household is a nail householder and the urban renewal process cannot be completed, trust will be meaningless and a waste of money. It is suggested that the builder should make property trust only after the approval of the business plan.
- **Identification and maintenance of historic sites.** Within the base in this case, there are historic sites such as citizens' gatherings during the Japanese occupation period and old wooden houses of the Forestry Bureau. After numerous deliberations and amendments, the builder even went further to Japan
to find relevant building materials in construction, causing greater construction problems and waste of time (shown in Fig. 3 and Fig. 4).

Fig.3. Neihu District "Citizens' Hall".  
Fig.4. Neihu District "Forestry Bureau wooden truss".

Change design. In this case, the urban renewal started in 1996 and was only completed two decades later. Throughout this period, the time and space background is varying, and the economic environment is constantly changing. If it can be completed and sold in the best time, it will be more effective. On the contrary, the benefit will be reduced.

5. Urban renewal of strategy proposals in the future
To achieve the successful urban renewal, the general public shall have basic awareness of "replacing the old with the new", but there should also be the reasonable system and suitable investment conditions that builders can follow. The most important thing is that the government must actively intervene and take the lead. Finally, this study brings forward eight items of the urban renewal strategies as specific reference for future government to promote urban renewal (shown in Table 4).

| 1. Strengthen the deep tillage plan. | 2. State-run and private-operation. |
| 3. Broaden the preferential policy on floor area ratio. | 4. Simplify urban renewal procedures. |
| 5. Fair tax system and preferences. | 6. Social housing policy. |
| 7. Solutions to nail households. | 8. Supporting measures for the overflow of historic sites. |

Table 4. Eight items of the urban renewal strategies in the future.

6. Conclusions
The original intention of urban renewal is to activate urban functions, promote residential safety and provide a comfortable residential environment. Urban renewal is based on a good intention, but the results are far less satisfactory than expected according to statistics. There are many obstacles to urban renewal, such as: public urban renewal is only an embellishment of the publicity of government policies [6, 7]. However, the most difficult way of promotion of urban renewal is to adopt private "Agreement Co-Construction Approaches". The aforementioned city encountered many problems with the adoption of "Agreement Co-Construction Approaches" in urban renewal, mainly because that it’s more difficult and the government has not carried out effective and active urban renewal policy [8, 9]. This study explores the empirical case analysis of "Agreement Co-Construction Approaches" and summarizes the problems encountered in the process. The study shows that the obstacle factors will make builders feel urban renew is a road of no return that never ends. In addition, the proposals brought forward by Taiwan government in recent years, such as "Regulations on Accelerated Reconstruction of Urban Dangerous and Old Buildings announced", "168 Programs", "Simple Urban Renewal", "Disaster Preventive Urban Renewal", seem to be inputting new hopes and expectations into urban renewal, but their essence is contrary to the goal of urban renewal. They abandoned the systems under the framework of "Urban Renewal Act", had no overall scale, did not improve the urban appearance or solve the "nail household" problem. Nor did they solve the bias consciousness of "residential justice". Therefore, in the future urban renewal, "Agreement Co-Construction Approaches" will be the way that builders are unwilling to adopt and will avoid.

Finally, this study provides effective references and suggestions for the implementation of "Agreement Co-Construction Approaches" to promote Taiwan’s urban renewal strategy in the future. With the yearly increasing trend of the proportion of old and obsolete buildings and cities around the world, the research results are expected to provide developing and developed countries with important references for specific urban renewal planning and promotion strategies.
References

[1] Zheng, H. W., Shen, G. Q., Wang, H. (2014) A review of recent studies on sustainable urban renewal, Habitat International, 41: 272–9.

[2] Halla, F. (2007) A SWOT analysis of strategic urban development planning: The case of Dar es Salaam city in Tanzania, Habitat International, 31: 130–42.

[3] Deakin, M. (2009) A Community-Based Approach to Sustainable Urban Regeneration, Journal of Urban Technology, 16(1): 91-112.

[4] Chen, M. Y., Liu, S. Y., Perng, Y. H. (2014) Probe into the Development and Strategies of Implementation for Intelligent Buildings in Taiwan, Applied Mechanics and Materials, 584-586: 1829-34.

[5] Bowers, J. W. (1970) Content Analysis, in Methods of Research in Communication, edited by Emment, P. and Brooks, W., Boston: Houghton Mifflin Press.

[6] Yi, Z. et al. (2017) Strategic Approaches to Sustainable Urban Renewal in Developing Countries: A Case Study of Shenzhen, China, Sustainability, 9(8): 1460.

[7] Tan, Y., Xu, H., Jiao, L., Ochoa, J. J., Shen, L. (2017) A study of best practices in promoting sustainable urbanization in China, Journal of Environmental Management, 193: 8–18.

[8] Liu, S.Y., Ho, Y.F. (2016) Wind energy applications for Taiwan buildings: What are the challenges and strategies for small wind energy systems exploitation?, Renewable and Sustainable Energy Reviews, 59: 39–55.

[9] Zhou, T., Zhou, Y., Liu, G. (2017) Key variables for decision-making on urban renewal in China: A case study of Chongqing, Sustainability, 9(3): 370.