

Identification of Urban Farming Practices in Bandung, Indonesia

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1. Introduction

Urban farming is believed to be able to overcome various problems common to cities (land-use ineffectiveness, environmental degradation, food insecurity, unemployment, etc.) by utilizing unplanned land and narrow spaces ²⁾. This study focuses on urban farming in Bandung, the third most populous city (2.4 million people) ¹⁾ in Indonesia. One distinct feature that distinguishes urban farming from conventional urban parks is that it not only provides a green space but also offers economic profit from the farming activities.

After about seven years of its existence, urban farming in Bandung has brought many benefits, but it is also facing many obstacles that threaten its sustainability. Many urban farming communities have not developed or stopped their activities. This paper aims to (1) elaborate a historical framework of urban farming growth in Bandung; (2) explore the urban farming system in Bandung; and (3) examine the potential problems of urban farming in Bandung. The results of each goal will be the basis for formulating the best strategy to overcome the potential problems of urban farming in Bandung.

2. Research Method

The research method used is a case study with a qualitative approach. This research was conducted in five different communities representing three urban farming categories : (1) government-driven, namely the Pajajaran Village community; (2) community-based, namely *Bandung Berkebun* and *Wallagri*; and (3) private initiative, namely *Superindo Berkebun*.

The data was collected through in-depth interviews with key actors in urban farming who were recruited via snowball sampling and two weeks of field observation in August 2018. First, an interview was conducted at the Department of Food Security and Agriculture to gain information about the most successful urban farming community in the *government-driven* group. Interviews with key actors from the community followed. Second, interviews were conducted with *Bandung Berkebun* figures as a representation of the community-based urban farming group. Lastly, an interview concerning a private initiative group, namely *Superindo Berkebun*, was conducted. The compiled data consists of policy documents, documentation of field conditions and results of interviews in the form of historical aspects, historical aspects of urban farming patterns for each community, patterns of urban farming practices, potential and constraints, institutional forms and future plans.

The analysis technique consists of data reduction, data presentation and data verification ³⁾. The final data were validated using the triangulation technique of data resources and collection methods.

3. Results and Discussion

3.1 Historical Chronology of Urban Farming in Bandung

The urban farming movement in Bandung began with the emergence of a gardening community in Bandung in 2011

which was part of the *Indonesia Berkebun* community ⁴⁾. The urban farming movement in other countries is slightly different from urban farming in Bandung that it departs from the urgent issue of food insecurity. In the context of a movement spearheaded by *Bandung Berkebun* specifically and *Indonesia Berkebun* in general, this movement began with concern over vacant land that had been abandoned and was not being optimally utilized ⁵⁾. The program, called *Kampung Berkebun*, has been running successfully in many villages. Its significant development led to a flagship program being enacted by the mayor of Bandung in 2014. Not surprisingly, this movement then mushroomed. About four years since their inception, urban farming communities formed by the local government show an interesting feature. While some of them have kept growing (active, 20%), most of them have declined (inactive, 76%); only 4% (promising) are considered successful (Department of Food Security and Agriculture, 2018). Historical chronology from 2011 to 2018 is illustrated in **Figure 1**.

Spatially, the level of success (active, inactive, or promising) of each urban farming community can be seen in **Figure 2**.

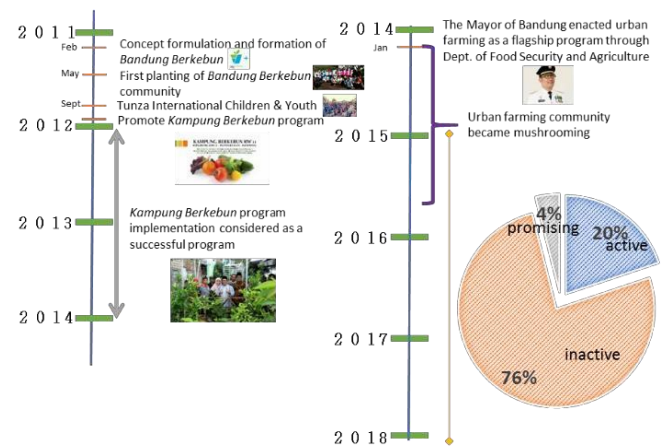


Figure 1. Historical Chronology of Urban Farming in Bandung City

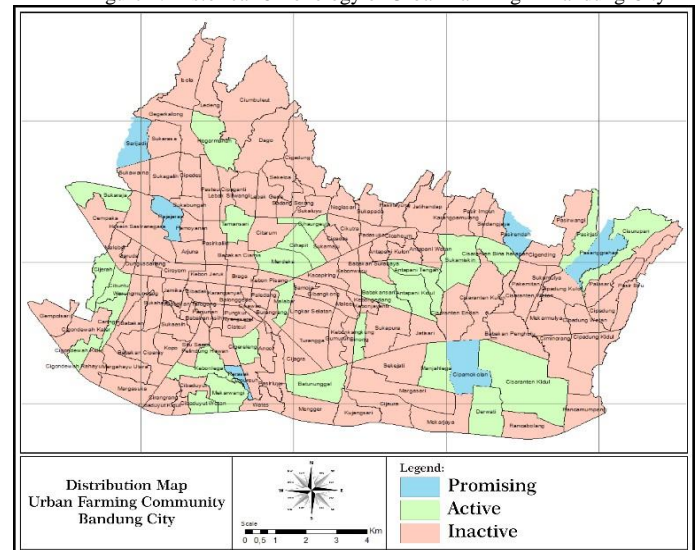


Figure 2. Distribution Map of Urban farming Community in Bandung City

The most notable finding shows that promising urban farming communities are typically located in high-density areas. For instance, the Pajajaran Village, which has received various awards for its urban farming activities, is a very crowded area. Thus, farming in this area has been done by optimizing the top of the river, the wall of the alley and even rooftops of houses.

3.1 Urban Farming Practices System in Bandung

The urban farming movement can be categorized into three groups based on the most dominant initiator: (1) government-driven; (2) private initiative and (3) community-based. This movement is run by an interrelated system between three main groups of actors, namely local government, residents, and land/space owners.

In the first group, the leading sector is the Department of Food Security and Agriculture, which has responsibilities of forming, fostering and funding. This category is supported by strong participation of local residents, particularly those who identify as active residents. This group is also sustained by the existence of residents who receive benefits from urban farming production (supporting residents). They usually utilize public land/spaces provided by local government support. They also apply urban farming in semi-public spaces such as roadsides or hanging pots from fences which extend towards the road.

The second group (community-based) also receives benefits from many fostering programs run by the Department of Food Security and Agriculture, even though these programs are not as intensive as those for the first group. The lands/spaces are facilitated mostly by private residents. This group has a high dependence on local leaders, who also act as initiators. The activists can be the head of Neighborhood Associations, Citizens Associations or Youth Organizations.

The last group is the private initiative, which is fully established, funded and facilitated by the company. They provide space to people who want to participate in implementing urban farming with many interesting coaching programs. Interestingly, they collaborate with the government in providing routine counseling on gardening techniques.

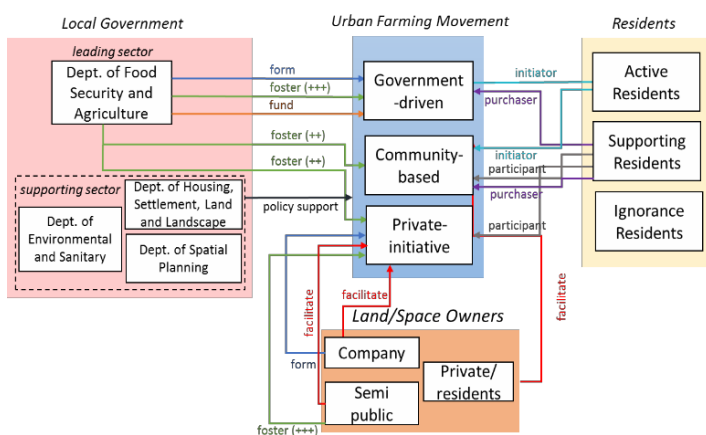


Figure 3. Urban Farming System in Bandung City

Figure 3 illustrates the system between stakeholders (local government, urban farming community, residents, and landowners) that can be considered as a form of collaborative action in order to promote urban farming activities ⁶⁾.

3.2 Future Problems and Challenges

Urban farming practices are not without potential problems and challenges. Based on in-depth interviews, at least three main challenges were identified: (1) technical challenges; (2) water resource problems; (3) leadership issues; and (4) motivational challenges.

Most of the actors implementing urban farming are ordinary people who have no background in agricultural knowledge. However, to obtain optimal production results, certain techniques and methods need to be mastered. Based on the interviews, most of the residents were reluctant to continue farming activity because the production was not as high as expected due to technical problems. It is undeniable that urban farming activities desperately need water as the main resource. In many locations in Bandung, the availability of clean water is still a problem, especially during the dry season. Some successful communities must rely on the leadership of local leaders. These leaders have great influence over initiating and fostering local residents with regard to urban farming activities. In fact, not all regions have leadership figures with adequate capacity and knowledge to maintain urban farming activities. This is the reason why there is a significant developmental difference among communities. Most successful urban farming communities survive because gardening has become a hobby and lifestyle for them. Moreover, if urban farming does not become an activity that is deemed pleasant, it will be vulnerable to abandonment.

4 Conclusion

The emergence of the urban farming movement in Bandung became a phenomenon because it was believed to be a solution to various city problems. However, this research indicates an interesting finding that most of these urban farming communities are stagnant and have not been active since their formation.

The identified system of urban farming in Bandung involves local government, land/space owners and residents who support the sustainability of this movement.

Lastly, urban farming in Bandung cannot be separated from technical and motivational problems and challenges related to water and human resources. Those are the things that require further attention in future studies.

Identification of the best and most appropriate urban farming system for each group will be the first priority for future research.

References

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