



ROLES OF COMMUNITY ALONG CODE RIVER SETTLEMENT- YOGYAKARTA IN VEGETATION PLANTING

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Abstract

This study describes the roles of community along Code River settlement in implementing the vegetation planting program of Yogyakarta City Government launched in June, 2005. The lack of technical guidelines especially in relation to the appropriate design of urban vegetation make the priority in vegetation planting program become ignored. It seems that low economic background, lack of environment, land limitation and housing ownership system are problems that have to be faced by this dense settlements in applying the vegetation planting design. As a result the function aspect seems to be less important than aesthetic aspect. In order to sustain the vegetation planting program, the community needs not only technical guidelines in detail but also accessible consultation chances to an expert.

Key words : *community roles, urban vegetation*



Introduction

On 6th June 2005 the City Government of Yogyakarta have been awarded an honourable prize called 'Adipura' as one of the cleanest cities in Indonesia. This prestigious achievement could not have been done without Government's persistent initiative in terms of cleanliness in the city.

'Towards An Environmentally Friendly Yoga City' is a yearly development theme determined by the City Government of Yogyakarta during the year 2005. Many activities have been done in order to realize a city that is not only clean but also green such as cleanliness competitions and vegetation planting in several areas of the city. *"Let Jogja be clean and green"* seems to be a slogan that can be easily found in every corner of the city through many media like posters, billboards, and any other communication medias.

Besides those activities, the City Government tried to involve the whole community's role in Yogya inner city by giving an incentive (stimulan grant) as much as 2 million rupiahs for vegetation planting program for each neighbourhood (called *Rukun Warga* or *RW*¹). By giving this incentive, the government hopes that the community will involve in the whole process of vegetation planting program, from planning, designing, implementing to decision making. The community should accommodate the vegetation planting program between the need priority and the character of each areas based on the discussion among the member of the community.

Code River Settlement is one of the areas that received the grant. This study will focus on the settlement area in the Suryatmajan Sub-District (*Kelurahan Suryatmajan*). As an area located in the city centre with limitation in many aspects, the City Government have carried out many program to increase the condition of the area either physically or socio-economic. By implementing the

¹ *'RW' is the administrative unit at the next-to-lowest level in city*



vegetation planting program in this area, it is hoped that the program will increase the quality of its environment.

Vegetation Planting Programs

The allocation of the stimulan grant for The Vegetation Planting Program had been regulated in *Peraturan Daerah Kota Yogyakarta Nomor 1 Tahun 2005* (Yogya City Regulation) regarding the Budget Estimation for Yogya City and *Surat Edaran Sekretaris Daerah Kota Yogyakarta Nomor 900/45/SE/2005* (a circular letter from the Secretary of Yogya City Government)

The City Government required a procedure for getting the grants. According to the Technical Guidelines, every neighbourhood has to propose a proposal in which it has to include activities description, total budget estimation (including self supporting budget from the community as many as 10% minimum), site/location map, photos showing 0% progress and time schedule (including planning and implementation). The grants can be claimed if the proposal is feasible technically and economically, and has been approved by a coordination team at the city level.

Mechanism of the proposal submission and assessment, project implementation and report can be seen in the figure below:

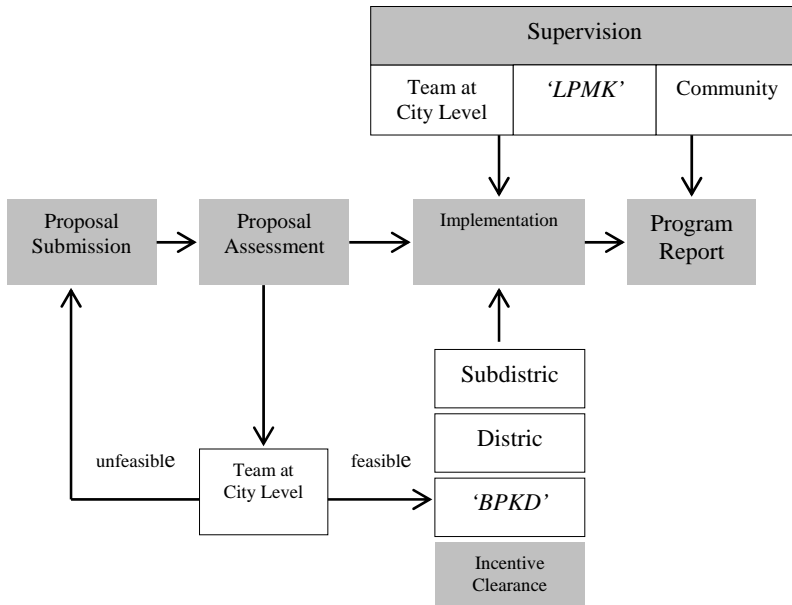


Figure 1. Mechanism of vegetation planting program

The approved proposal is made into five copies and has to be submitted to the Mayor via '*Ka.Bag.Tata Pemerintahan Setda Kota Yogyakarta*' (Division of City Government Administration), District, Subdistrict, and for neighbourhood's archive. If the proposal is approved by the team, it will be submitted to the '*BPKD*'² (Committee of Regional Finance) as the stimulan grant organizer. From the '*BPKD*', the incentive will be cleared to every neighbourhood through the District (managed by Distric Cashier), and Subdistrict (managed by Subdistric Cashier)

Implementation of this program have to be reported as a kind of supervision to a coordination team at city level, '*LPMK*'³ (Urban Community Empowering Groups) and the

² BPKD stands for Badan Pengelola Keuangan Daerah

³ LPMK stands for Lembaga Pemberdayaan Masyarakat Kota



community itself. The report has also to be conveyed to the Mayor via 'Ka.Bag.Tata Pemerintahan Setda Kota Yogyakarta' (Division of City Government Administration), District, and Sub District. Monitoring will be done by the team and 'LPMK'.

Based on the technical guidelines, the vegetation planting program can be prior to:

1. Planting activities, such as
 - a. Tress for shelter like mahogany (*swietenia macrophylla*), tamarind, almond tree, 'angsana', 'tanjung' (*mimusops elengi*), etc.
 - b. Vegetation for herbs like betel vine, 'mahkota dewa', ginger plant/the galangale, laurellike leaf, etc.
 - c. Ornamental plants like bougenville, hibiscus, palm, casia, stivera, alamanda, oleander jasmine, etc.
2. Garden Renovating
3. Developing new facilities

Implementation of Vegetation Planting Program

Having seen the process of the vegetation planting program started from proposal submission to implementation, it seems that the Government aims are to involve the community's role as many as possible. According to **Arnstein (Panudju, 1999)** this is called a delegated power in which the Government delegate the power to the community to decide a kind of activities which is needed by themselves. Participation are conducted from forming a team at the neighbourhood level, collecting self supporting budget, providing the land for planting, designing the garden, implementing the planting program, up to reporting the result of the activities when it is finished.

Based on field observation and discussion with the 'kampung' board, there are several constraints faced by the community in implementing the program i.e.:

- a. Financial restriction



The Government's incentive seems relatively too small compare to the width of the settlement area that has to be utilized. Meanwhile it is almost impossible to trade on the community's financial ability since most of the inhabitants are low income family. As a result it is only a small number of areas that are planted with vegetation. On the other side, the financial restriction have created initiative from the community to find another ways in order to get an optimum result with limited budget. This is done by making the flowerpots instead of buying, using the old bucket or cans, garden renovating and constructing by community self-help/mutual cooperation, etc.



Figure 2.

Example of garden at Ledok Macanan Kampung. The flowerpots are made by the communities themselves

b. Land limitation

Most of houses in this area are about 50-100 sqm width on average and are inhabited by more than one family. It is very rare to find houses with a yard or garden. Only houses near the main street usually have their own garden. Generally houses are built on most of their site without open spaces. Having lack of spaces, the inhabitants use flowerpots to overcome the land limitation instead of planting



directly on the ground. These flowerpots are put on the ground or hung under the eaves of houses. In addition, some try to use passageway corner as a planted area.



Figure 3. Hanging flowerpots to solve limited land



Figure 4. Passageway corner for planted area

The vegetation planting is a little bit difficult to be implemented on a rented house unless the landlords/owners have given permission which sometimes difficult to be done as they live in the other area.

c. Implementation constraints

This is due to the lack of community's knowledge in terms of vegetation types and their suitability for a certain condition. As a result, sometimes the vegetation uses are inappropriate. Ornamental plant is the most often chosen by the community as they can be used for attractiveness. There is even a neighbourhood allocated the grant to buy orchid plants which are expensive and difficult to take care of. During the implementation of the program, the community has problems in finding information or discussing with an expert (e.g. landscape expert) about technical aspects in vegetation planting and its



maintenance. They design the garden based on their individual experiences.

Identification the Potential Use of Vegetation for Code Settlement

The unique character of the Code settlements in Suryatmajan Subdistric make the Vegetation Planting Program have to consider factors such as:

- a. Financial constraint due to middle-low income level
It is very important to make priority of vegetation planting needs. The priority have to consider vegetation with economical value and can be used to increase the community's health and nutrient such as herbal plants (e.g. '*mahkota dewa*', ginger plant, etc) or fruit trees (e.g. mangos, guava, sapodilla, bread fruit tree or rose-apple trees)
- b. Land availability
Hanging flowerpots have been used by the community in order to solve the limited space problems but it is very important to share the newest information about planting methods in a narrowed space such as stacked planting, roofgarden, etc.
- c. Physical Environment
In general, the settlements environment along Code River are characterized by:
 - Having been in the flood-risk area
 - Potential to get air pollution and noise as the area closed to the main streets and commercial area (*Malioboro*)
 - Narrowed and contoured passageways (it cannot be passed by cars, but motorbikes still can be pushed by hand)

Based on the environmental condition along the Code River, vegetation can be used to:

- Protect from flood. Vegetation with high evapotranspiration and tough roots such as mahogany, jackfruit, leucaena glauca, etc., are suitable to be placed along the river embankment/dike. When the river overflowed, it



helps the evaporation rapidly and protects the area from the stream.



Figure 5.

The river embankment area. In wet season or when the river floods, high water debit can flow over the embankment.

- Minimize the air pollution caused by motorvehicles. These benefits are gained from mahogany (*swietenia macrophylla*), nutmeg (*mirystica fragrans*), ‘asam landi’ (*pithecelobiumdulce*), and ‘johar’ (*cassiasiamea*) by absorbing the smokes caused by the motorvehicles. In order to get optimum results, the vegetation should be placed at the border of the area next to the main street (like Mataram Street, Suryotomo street, Jambu Street and Abubakar Street).
- Reduce noise. Vegetation with dense leaves and thick crown are able to reduce noise. Therefore it should also be placed at the border area.
- As shelter. A shade tree with dense and wide leaves such as mahogany (*swietenia macrophylla*) and ‘ketapang’ can be planted along the ‘*kampung*’ alley or open spaces (such as football



or badminton field). It also can use fruit trees such as mango, guava, sapodilla, or rose-apple trees.

- Increase attractiveness. Ornamental plants with attractive forms, textures and colours can be used to increase the beauty of the environment. Its composition can be arranged to increase aesthetics and visual image of the surrounding area (such as obscure visual views from garbage disposal or laundry)

Conclusion

The City Government's persistent initiatives by subsidizing and giving chances to the community in terms of vegetation planting program are deserved to be appreciated. The communities are free to plan and design the garden but it should be balanced by sufficient knowledge of garden design or vegetation planting. As a result, it is the Government's responsibility to provide a technical guidelines in detail not only in relation to the vegetation's types but also to the wide use of vegetation including its suitability with a certain environment.

It is very important that the City Government inform the community many kinds of vegetation planting methods and maintenance so that inappropriateness between vegetation types and planting area can be avoided. As a result vegetation will grow for a long time and the program will be sustainable.

The City Government has to provide accessible consultation chances for the community to an expert. By means of expert's consultation and assistant, the community is able to solve the technical problems at the implementation level.

Bibliography

Panudju, Bambang., 1999, *Pengadaan Perumahan Kota dengan Peran Serta Masyarakat Berpenghasilan Rendah*, Penerbit Alumni, Bandung.

Moughtin, Cliff., 1999, *Urban Design, Street and Square*, 2nd ed., Architectural Press, Oxford



Informal Settlements and Affordable Housing

Meeting and Conference, Surabaya 17-18 November 2005

Department of Architecture ITS and the International Council for

Research and Innovation in Building and Construction (ICB)

- Simonds, John Ormsbee., 1997, *Landscape Architecture, A Manual of Site Planning and Design*, 3rd ed., McGraw-Hill, USA.
- , 2005, *Petunjuk Pelaksanaan Dana Stimulan Rukun Warga (RW) untuk Taman dan Penghijauan*, Kota Yogyakarta.
- , 2005, “*Dalam Menuju Yogya Ramah Lingkungan Kecamatan Gondomanan Pelopornya*”, Ayodya, Majalah Pemerintah Kota Yogyakarta, edisi Juni 2005.
<http://www.jogja.go.id/ayodya/laput.asp>
- Departemen Kehutanan Republik Indonesia, *Hutan Kota untuk Pengelolaan dan Peningkatan Kualitas Lingkungan Hidup*.
<http://www.dephut.go.id/INFORMASI/HUTKOT/Dafisi.htm>