

# ACHIEVING WATER SENSITIVE CITY CONCEPT THROUGH MUSRENBANG MECHANISM IN SURABAYA CITY, INDONESIA

Eddy Setiadi Soedjono<sup>1</sup>, \*Nurina Fitriani<sup>2</sup>, Rifda Rahman<sup>3</sup> and I Made Wahyu Wijaya<sup>4</sup>

<sup>1,3,4</sup>Faculty of Civil Engineering, Environment and Earth Science, Institut Teknologi Sepuluh Nopember, Indonesia  
<sup>2</sup>Faculty of Science and Technology<sup>2</sup>, Universitas Airlangga, Indonesia

\*Corresponding Author, Received: 14 Jan. 2018, Revised: 3 Feb. 2018, Accepted: 5 March 2018

**ABSTRACT:** Water sensitive city is a very important issue for the development of future cities. Water sensitiveness is a kind of way of life for all communities in the cities. Cities with a low level of environmental awareness would be difficult to implement the issue of water sensitive city. The aim of this study is to access how water sensitive city concept could be implemented in Surabaya. Observations and surveys using focus group discussion (FGD) and in-depth interview (IDI) were conducted to get real information on each musrenbang from kelurahan level up to kecamatan and city level. The concept of water sensitive city was likely to be possible to be implemented in Surabaya. It was, however, not easy to be implemented as human basic needs like poverty eradication, education, and sanitation was not discussed during musrenbang as these needs were indicators to further discuss the issue of water sensitive city. Water sensitive should not be thought and discussed as a concept, but it had to be practiced as the daily livelihood of the communities to create of robust cities for water-related issues.

*Keywords:* Communities, E-musrenbang, Water-sensitive city

## 1. INTRODUCTION

The increase of urban water demand forces water stakeholders like government, academia, and communities to change their life, especially towards the water. National governments have targeted universal access to water supply and sanitation [1]. One of the modified systems has been introduced in the concept of water sensitive city which may change a city, give best practice to manage water, improve the environment and its relevant institutions [2]. In the context of water sensitive city, a city must be resilient, liveable, productive, and sustainable. The resilient system consists of (1) number of disturbance that can be absorbed and still remain at the same state, (2) degree of capability to self-organization, (3) degree of capability and capacity to learn and adapt [3]. The resiliency of system to a disturbance in the environment was well understood and based on the approaches, the 'hydro-social contract' was found [4]. The term of the concept is used to describe the pervading values and often implicit agreements between communities, governments, and business on how water should be managed.

According to Brown [5], steps to transform to a water sensitive city were initiated from a city which could manage its own water supply system as a called water supply city. Then it would move forward subsequently to sewerage city, drainage city, then waterways city before becoming to a water sensitive city. The steps were not fixed but

leap frogging was a leap from whichever step to becoming a water sensitive city. There are three main supports to come to a water sensitive city, i.e: the stock of water, proper ecosystem, and community involvement [6].

Water management in Indonesia has already been strongly supported by the government, communities, and academia [7]. Development in Indonesia has conducted both ways using top-down and bottom-up approach. A top-down approach is a kind of national development program from the central government to the lowest level of local government like desa or kelurahan [8]. Water governance is basically using a top-down approach where water policy from the central government must be implemented for the benefit of all citizens and communities via provincial and municipal government, in this case, Jawa Timur Province, and Surabaya City. Even within the city level, it goes down to Kecamatan (sub-district), Kelurahan (village-like), Rukun Warga (RW; community-like), and Rukun Tetangga (RT; neighborhood-like) level [8]. Different level of government boards and institutions which regulates water in this study are Jasa Tirta (central government), Dinas PU Pengairan (provincial government), BAPPEKO, Dinas PUBMP, Dinas LH, DKRTH, and PDAM (municipal government).

In Indonesia, however, water governance may also introduce using a bottom-up approach where the water-related program could be proposed from

the communities to the municipal, provincial, and central government as called MUSRENBANG (Musyawarah Perencanaan Pembangunan). Musrenbang would result in an annual work plan of city and province (RKPD) as the mandate from RPJMD or Village Medium Development Plan at village level [8], [9], [10], [11]. Musrenbang is divided into 3 stages: pre-musrenbang, musrenbang, and post-musrenbang. Musrenbang must prioritize discussion on basic human rights like health, education, sanitation, job opportunities, and feeling secure. Musrenbang is supposed to be an educational forum for any citizen to actively involved in development governance. It is supposed to be a participatory and dialogical forum. Some output for musrenbangdes would be a list of village development priorities and use of ADD (village budget allocation or Anggaran Dana Desa) [8].

Study on Musrenbang in Jawa Timur Province like in Probolinggo District showed that water and sanitation were not strongly discussed during Musrenbang [12]. Musrenbang at the level of village/kelurahan, kecamatan, district, province, and even at the level of national level mainly discuss infrastructures like road, rain drainage, and other public facilities. Some municipalities in Jawa Timur Province like Bojonegoro District, however, has discussed water and sanitation in its musrenbang. Musrenbangdes at Bojonegoro District was attended by local government, local public figures, religious figure, and the representative of farmer community, fisherman community, woman community, children protection community, environment community and poor people community [8]. With all background has been mentioned before, the aim of this research is to access how water sensitive city concept can be introduced in the musrenbang (using bottom-up approach) at a different level in Surabaya City: kelurahan, kecamatan, and municipal level.

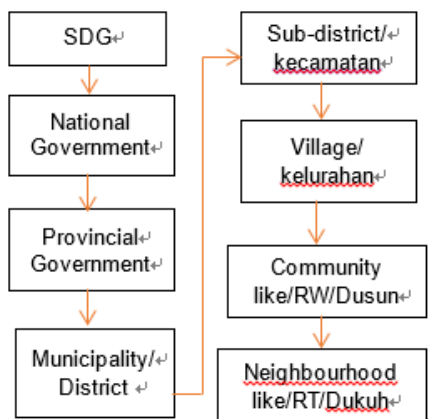


Fig. 1 Top-down approach of sanitation governance

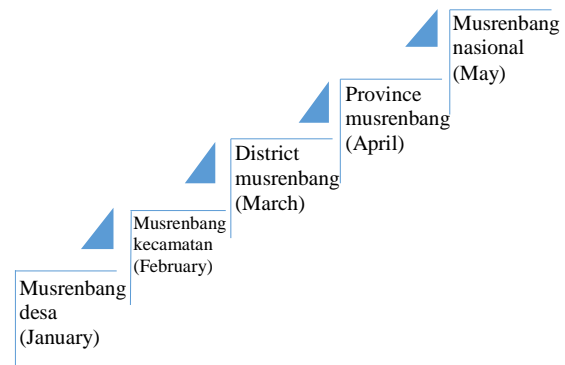


Fig. 2 Bottom-up approach of Musrenbang

## 2. METHODS

Primary data were collected through the in-depth interview (IDI) and focus group discussion (FGD). The respondents were common people and representatives from local government officers which conducted the Musrenbang in the kelurahan, kecamatan, and municipal level. Secondary data collections were mainly information regarding relevant regulations from the central government level like Indonesia Law or UURI down to kelurahan regulations. Then results of secondary data were compared with the primary data. The comparisons were used to improve the current regulations, especially improvements towards water resource management to achieve water sensitive city conditions. As Musrenbang Kelurahan was conducted simultaneously for all kelurahan in Surabaya, then Kelurahan Kenjeran was selected to join the MUSRENBANG in January 2017. Within kecamatan level, then Kecamatan Bulak and Kecamatan Semampir were selected for the Musrenbang and eventually it was the Musrenbang at the city level.

## 3. RESULTS AND DISCUSSION

As regulated by Regulation of Ministry of Home Affairs no. 54/2010 regarding Musrenbang [11] then musrenbang is started from Kelurahan level, then it is continued to musrenbang in sub-district, city musrenbang, province musrenbang, and even at national level. Musrenbangdes is a way to get feedback right from the grassroots for the Central Government. The following musrenbangs are to describe Musrenbang at Kelurahan Kenjeran, Musrenbang at Kecamatan Bulak and Semampir, Musrenbang at Surabaya City, and even Musrenbang at Jawa Timur Province.

### 3.1 MUSRENBANG at Kelurahan Kenjeran

Musrenbang in Surabaya started at RW level which all proposals could be inputted online through a website of [bapeko.surabaya.go.id/musrenbang](http://bapeko.surabaya.go.id/musrenbang) 2017 [13]. Each RW in Surabaya was given user id and password to log into the website. Surabaya government called this system as e-Musrenbang. RW was not only entitled to input any next year program into the website but was also entitled to give any comments and critics to the city government [14]. Such system would ease the interaction between communities and the city government. Input from RW definitely would accommodate input from its RT. With this system then any input from RT, RW, Kelurahan, and finally from kecamatan could be easily known by the city government. In the system, however, RW was only allowed to select proposal which was already given in the website; not any proposal could be accommodated in the website. Each RW was only allowed to propose 2 proposal with 1 reserved proposal to accommodate future adjustment due to program priority of the city.

Kelurahan Government was entitled to edit all input from RWs during the Kelurahan Musrenbang. That was why the RW speakers should be properly selected to clarify any priority within its RW. Website of RW and Kelurahan was definitely different as Kelurahan regulated all its RWs. Besides, Kelurahan had a fixed budget from the city government for local development using a top-down approach. Results of bottom-up approach of Musrenbang were called development priorities of kelurahan for next year program. This top-down must meet the bottom-up approach during Musrenbang. Development priorities within Kelurahan were then submitted to Kecamatan through the website as well.

### 3.2 Musrenbang at Kecamatan Bulak and Semampir

As Kelurahan Kenjeran is located at Kecamatan Bulak, then Kecamatan Musrenbang was at Bulak as well as Semampir. The condition of Bulak Musrenbang was basically typical at any other Kecamatan Musrenbang in Surabaya. Kelurahan representatives had to attend the musrenbang at kecamatan level. Each kecamatan in Surabaya had its own website as well to submit its musrenbang development priorities to the city of Surabaya online. All priorities and reserved proposal from each kelurahan were evaluated together during Musrenbang kecamatan. Some priorities were definitely agreed while some others were rejected. Some reserved proposal could be accommodated as this reserved became priorities at several other kelurahans. All the agreed proposals would later survey by relevant cities agencies (SKPD) to be executed next year.

Probably the biggest challenge within Kecamatan Musrenbang was the little number of participants. Even the quality of participants in term of discussing and debating to goal priority development in each kelurahan was not strong. Hence the Musrenbang seemed a kind of forum to conclude decision without strong arguments. Example of musrenbang participations is shown in Table 1 at Kecamatan Semampir in the last two years [15].

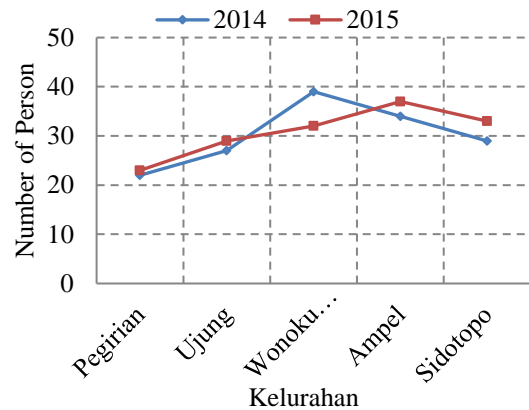


Fig. 3 Musrenbang participants at Kecamatan Semampir

Lack of public participation also occurred in the other Kecamatans in Indonesia, for instance, Kecamatan Larantuka, Kabupaten Flores Timur of Nusa Tenggara Timur Province. Musrenbang's participants were [16]. A number of participation are shown in Figure 4.

Based on Figure 4, it shows that the total citizens are 125 persons. The citizens who participate are 50 people (40%) and not participating are 75 people (60%). It shows that the total participants in Musrenbang of Kecamatan Larantuka are less than ideal. Kifanyi [17] said the failure of system particularly in developing countries has been partly the lack of public participation.

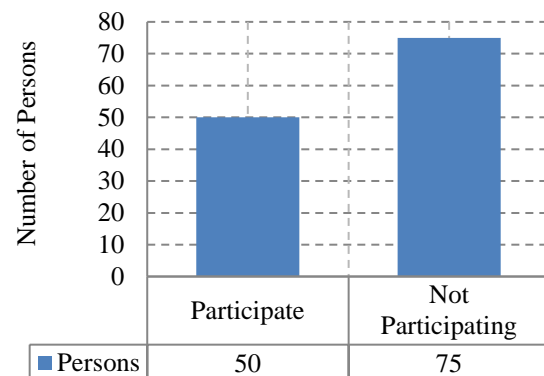


Fig. 4 Musrenbang participants at Kecamatan Larantuka, Flores Timur, NTT Province

According to PTPM [18], RW representatives would be 3 persons (one would be a woman) or 5 persons (2 would be women). Based on Figure 3, it showed that the total participants in each Kelurahan were less than ideal. This was not to discuss the capacity of the representatives and gender representative.

### 3.3 Musrenbang at Surabaya City

Within the city level then BAPPEKO (Badan Perencanaan Pembangunan Kota) was the one in charge to collect all online input from each kecamatan at Surabaya City. City Musrenbang (musyawarah perencanaan Pembangunan) was usually opened by the mayor which invited all the kecamatan representatives and other relevant invitations like NGO, academia, industries, etc. BAPPEKO and any agencies within the city would have their own meeting to determine which priorities were selected and surveyed. Each agency basically had its own program priorities and budget (top-down approach) which should be in line with musrenbang bottom-up approach. When decisions were taken, then the rejected proposals had to be informed back to the kecamatan and kelurahan via the website as well. This kind of e-musrenbang was claimed by the city government to give better public service and transparency.

As there were different musrenbang levels like kelurahan, kecamatan, municipalities, provinces, and national level, the kelurahan musrenbang was the most important moment to discuss the issue of water sensitive city. As musrenbang kelurahan was opened by a representative from kecamatan as also a moment to inform any top-down program from the central government, issuing water sensitive sensitive city would be a huge challenge. With the assumption that water sensitive city (WSC) is already the national program, water sensitive city could not only be implemented through opening ceremony during kelurahan musrencang, but would be more like a way of living. Issuing this during musrenbang opening, however, was also important for the next or future development program. There should be another program from the city government to introduce water sensitive program via other institutes to inform basic human needs especially any related issues of water to bring this discussion at kelurahan musrenbang. Water sensitive issues had to be discussed during pre-musrenbang at Rukun Warga (RW) level in Surabaya. Musrenbang had to be attended by women representatives in order to bring important issues regarding basic human needs like health, environment, water, and sanitation.

Summary of musrenbang in each government level like kelurahan, kecamatan, and city level is shown in Table 1.

Table 1. Summary of Musrenbang (**musyawarah perencanaan pembangunan**)

| Musrenbang | Results                                                                                                                                                                                                                                                                                        |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kelurahan  | <ul style="list-style-type: none"> <li>• Input from RT and RW to the online system.</li> <li>• Top-down meets the bottom-up approach during Musrenbang.</li> <li>• The kelurahan musrenbang is the most important moment to discuss the issue of water sensitive city.</li> </ul>              |
| Kecamatan  | <ul style="list-style-type: none"> <li>• Each sub-district in Surabaya had its own website to submit its musrenbang development priorities to the city of Surabaya online.</li> <li>• RW representatives would be 3 persons (one would be a woman) or 5 persons (2 would be women).</li> </ul> |
| City       | <ul style="list-style-type: none"> <li>• City Musrenbang is usually opened by the mayor which invites all the kecamatan representatives.</li> <li>• BAPPEKO and any agencies within the city have their own meeting to determine which priorities to be selected and surveyed.</li> </ul>      |

### 3.4 Musrenbang at Jawa Timur Province

Provincial musrenbang is basically to continue the musrenbang results from municipalities in Jawa Timur. The musrenbang is also online. This musrenbang level is so important when there are development priorities which are cross-border among municipalities. As the water-related issue is always cross-border in inland areas like Surabaya City and its neighbor regencies, then the issue of water sensitive cities become crucial, especially in the condition where Surabaya water is coming from its neighbours regencies. Water security is becoming a crucial issue for a city like Surabaya with about 3 million population at the area of 330 km<sup>2</sup> with rain intensity of 2200 mm/year. Although the issue of water supply, wastewater, and drainage is the issue of city centered, the raw water supply of Surabaya is coming from its neighbours regencies. This is obvious that the issue of water sensitive city is so important for Surabaya. This issue must be raised to the provincial musrenbang

of Jawa Timur; even though the issue of water in Surabaya was already mentioned in the regional planning of the Province.

### **3.5 Water Sensitive City Concept Through Musrenbang**

Musrenbang is a forum to discuss development priorities in a bottom-up approach in Indonesia development system. As it is a bottom-up approach, then the priorities are started from the lowest of government level up to the highest. Within Surabaya City, then it started from the Kelurahan Government, which then to be continued to Sub-district, city, and eventually to provincial level of Jawa Timur Province.

Within this water sensitive city concept, then the top-down approach was not discussed as it was assumed that the government from the national to local level was already understood the concept of water sensitive city as it could be assumed that water sensitive city was already become the policy of the government, at least at Surabaya City Government. The crucial thing was then how water sensitive city became the topic of discussion at musrenbang kelurahan in Surabaya.

Musrenbang results would the development plan for next year. Next year development priorities should be obtained from the current year of Musrenbang. Hence the representatives of Musrenbang Kelurahan were very crucial. According to Soedjono [8] and PTPM [18], musrenbang had to be attended by women representatives in order to discuss at least human rights needs like education, health, and water sanitation. Men representative would create men dominated forum which discussed man's local development world like the development of roads, irrigation facilities, and other infrastructures rather than to discuss human right needs. This is to say that to discuss water sensitive city in Musrenbang Kelurahan is likely possible as long as the representatives raise the issue. Again, this is to say that water sensitive city concept must relate to daily activities of communities. The concept of water sensitive city is not merely knowledge; it must be attitude and way of life of communities. Then the main issue would be how to bring the issue of water sensitive city to be widely well known by the public.

### **4. CONCLUSION**

Musrenbang kelurahan was a coordination forum basically between the Government as represented by the Kelurahan Government and the communities. On one hand, the Government was mainly using a top-down approach to implement its development targets. The communities, on the

other hand, proposed development priorities they need in a bottom-up approach. As it was assumed that the concept of water sensitive city was already understood by the government from the central down to the kelurahan level, then the community representatives who attended the musrenbang kelurahan were very crucial to come to a water sensitive city discussion. These representatives had to understand well about the water sensitive city. This would be far beyond ideal as the representatives, in the beginning, were not women representation. It was a male-dominated forum while the basic human right was not discussed. Then the concept water sensitive city would not be discussed in the musrenbang forum. The concept of water sensitive city to be discussed in the musrenbang forum, however, was possible as long as the proposal from the communities must propose anything related to water sensitive city. This to say that the communities must fully understand the concept of water sensitive city. Water sensitive is not enough to be only taught as a concept, it must be the attitude of communities on their daily life to bring the city robust for water-related issues.

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