# Empowerment of Communities in Kandangan Region through Natural Resources Management to Realize Developing, Healthy and Clean Villages

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# ABSTRACT

Thematic Field Work Lecture (KKN-T) is an activity that is held every year at Surabaya State University. KKN-T activities are expected to provide learning experiences for students to live in the community directly and together with the community to identify and deal with problems so that they are able to develop village potential. One of Unesa's KKN-T activities is in the Kandangan Village with the title KKN "Utilization of Natural Resources to Create a Developing Village in the Kandang Village, Surabaya City". KKN-T is carried out using the dedication method in the field of physical infrastructure, namely the construction of green houses, hydroponic planting, gazebos, white wall murals, and photo spots for Kampung Maco, as well as in the socio-cultural field, namely Sedekah Bumi activities. The results show a positive response and high community participation in the implementation of the KKN-T program in the Cage area. From the questionnaire conducted, it was obtained a value of 4.22/5 from a minimum score of 4/5 in the field of infrastructure and the presence of 250 residents from 200 invitations distributed in the socio-cultural field. With the implementation of the KKN-T program in Kandangan Village, it is hoped that it can create a developing village and become a new tourist object with an environmentally sound educational concept, able to help the community in improving the community's economy by utilizing natural resources.

# **INTRODUCTION**

Kandangan Village is one of the villages in Benowo District, Surabaya City, East Java. The Kandangan Village has 9 RWs with 52 RTs with a population recorded in the Surabaya City BPS, namely 23,188 people. The majority of the population has professions such as gardening, entrepreneurship, traders, and there are some who work as private employees and civil servants.

The majority of residents of RW 01 Kelurahan Kandangan are native residents of the area who have professions as farmers, traders and entrepreneurs. RW 01 has 9 RTs, each of which has management such as PKK and Karang Taruna. While in RW 06 Kelurahan Kandangan, the majority of the residents are also native residents of the area which are located in the Bukit Tengger Housing Complex and the majority of the population are ladies and gentlemen who are quite old with the profession of private employees, civil servants/PNS. With the active role of the residents of RW 01 and RW 06 Kelurahan Kandangan, the activities that can be carried out at these locations can be divided into two aspects of the field, namely the aspect of the cultural tradition sector and the aspect of the greening sector.

We obtain several aspects of these fields in accordance with the potential of the location. First, there are aspects of the field of cultural traditions that can be carried out in the RW 01 area, because that location already has a cultural tradition every year, namely "Sedekah Bumi". In this activity, all residents of RW 01 Kelurahan Kandangan will participate in enlivening it, this activity is carried out as an expression of gratitude

to God Almighty for providing sustenance in the form of produce, health, and harmony to RW 01 Kelurahan Kandangan.

Second, namely the aspect of greening. Seeing the potential of RW 06, Kandangan Village, to be precise, is located in a fairly shady location, also known as Kampung MACO, which has repeatedly won the title as a clean and shady village, so this is very suitable if we use it as a location for greening. In this activity, planting and repair of existing infrastructure will be carried out to support Kampung MACO so that it has more potential as a Tourism Village. MACO Village itself has human resources who are quite skilled in terms of reforestation so that they can assist in implementing the program that will be undertaken.

### **METHOD**

The method used interviews, observation, and questionnaire responses. This community service activity in the form of KKN is carried out during September - December 2022, taking place in 2 areas, namely the RW 01 area and the RT 02/RW 06 area, Kandangan Village, Benowo District, Surabaya City.

#### **IMPLEMENTATION**

# **Planning**

The initial stage of KKN activities is to determine a program plan for 4 months. This activity begins with a place survey to find out partner problems so that solutions can be found. The survey was carried out by conducting direct visits and interviewing village officials to support the UNESA KKN program. After survey activities and finding a place, then plan a work program to be carried out at that place. Furthermore, the work program plan that has been made will be implemented in stages.

#### **Implementation**

The implementation stage is the stage of implementing the program that has been planned before. The activity program is in the form of reforestation in Kampung MACO which is located in RT 02 RW 06 including making green houses, making gazebos, and making photo spots.

The next work program is "Sedekah Bumi" which is carried out for 3 days and 3 nights where this activity is an annual routine activity held as an expression of gratitude to God Almighty for providing sustenance in the form of agricultural products, health, and harmony in RW 01 Kelurahan Kandangan.

#### **Evaluation**

The evaluation stage is carried out in the last week of KKN. Evaluation is carried out using a questionnaire which later the partner is asked to assess through the questionnaire, so that from the questionnaire it can be seen the level of partner satisfaction and the success of the work program that has been implemented.

# Work program

Table 1. Work Program

Work Program Name	Forms of activity		
Reforestation and Improvement of	1. Making green houses and		
MACO Village Facilities and	hydroponic planting		
Infrastructure	2. Making white wall murals		
	3. Making love photo spots		
	4. Making gazebos		
Sedekah Bumi	1. Green walk		
	2. Recitation		
	3. Wayang Kulit and Campur sari		
	4. Donations for orphans, Gunungan,		
	Tumpengan and Ludruk		

#### **Success Indicator**

Indicators of success are shown by the positive response from partners and the local community in this KKN work program, such as during the implementation of greening in Kampung MACO RT 02/RW 06 and the implementation of charity activities in RW 01. Other indicators of success are the outputs produced, including:

- 1. Greening work in accordance with the initial plan/design
- 2. Greening work can be completed on time
- 3. Surabaya 13 KKN-T students have carried out the work program well
- 4. Earth charity activities are attended by at least 80% of invited guests.

# **RESULT AND DISCUSSION**

### Implementation of the Work Program in RT 02/RW 06 Kampung MACO

## 1. Making Green Houses and Hydroponic Planting

The implementation of making this green house begins with finding the required amount of bamboo, measuring and cutting the bamboo. Then assemble the bamboo according to the design that has been made. The bamboo that has been assembled is followed by painting the color and transferring the fertilizer and plants to the polybags by placing them in the Green House. Meanwhile, hydroponic planting begins with seeding and providing nutrition (Roidah, 2014). Then move the plants to the planting medium or installation.



**Figure 1.** The final result of making a green house and hydroponic plants

Based on the implementation stages that have been carried out, namely making green houses and hydroponics, the results are in accordance with the initial planning concept. This can be seen in the establishment of green house buildings with the proper maintenance of polybag and hydroponic plants. There have even been two harvests of kale type vegetables. Thus the output of this work program is the construction of food places that residents can use to meet their food needs. The following is a picture of the results of the activity:

# 2. Making a White Wall Mural

The execution of making this mural photo spot begins with plastering and sanding the selected wall (Gazali, 2017). Next, paint the wall with a white base color and draw a sketch and paint it according to the design. Based on the implementation stages that have been carried out, namely making mural photo spots, the results are in accordance with the initial planning concept (Hanik & Subiyantoro, 2010). It can be seen that the white wall has become more beautiful after it has been painted according to the design in the form of a mural and is ready to be used as a photo spot. Thus the output is obtained in the form of helping support Kampung MACO to become a tourist village whose area is very shady and always carries out education. The following is a picture of the results of the activity:



Figure 2. The final result of making a white wall mural

# 3. Making a Love Photo Spot

The implementation of making this love photo spot begins with measuring the walls and concrete iron that will be used as a form of love. Then do the merging of the iron to form love.



**Figure 3.** The final result of making a love photo spot

After love was formed, it was painted white and attached the iron and a nameplate that read "Kampung MACO RT 02 RW 06" on the wall. Based on the implementation stages that have been carried out, the results are in accordance with the initial concept of planning. It can be seen that the brown wall has become more beautiful after installing a series of love shapes. Apart from that, this work program can help support MACO Village to become a very attractive tourist village because it has many photo spots that will make people interested in coming to this village.

# 4. Gazebo making

The implementation of making this gazebo begins with the selection of the amount of wood needed (Dewi, 2017). Next, measure the wood according to the size of the gazebo that will be made and sand it until it becomes smooth. A number of woods were assembled to form a gazebo according to the design and a tiled roof was installed. The gazebo is then painted and decorated with a little mural. Based on the implementation stages that have been carried out, the results are in accordance with the initial concept of planning. It looks like an empty land with some plants has now become a beautiful and comfortable gazebo. Thus the output of this work program, namely the gazebo can be useful for residents and become a photo object that supports becoming a tourist village. The following is a picture of the results of the activity:



**Figure 4.** The final result of making a gazebo

**Table 1.** Indicators of successful implementation of the work program in the MACO Village

No	Indicator Success	Data factual
1	Making green houses and hydroponic planting	From 18 respondent there is mark flat – flat 4,1 / 5
2	Making gazebos	From 18 respondent there is mark flat – flat 4, 43/5
3	Making white wall murals about the environment	From 18 respondent there is mark flat – flat4.19 /5
4	Spot photos of the village of Maco in the form of love	From 18 respondent n exists average value 4 , 19/5
Total	From the fourth gets an average of 4, 22/5 from a minimum value of 4/5	

# Implementation of the "Sedekah Bumi" Work Program in RW 01

"Sedekah Bumi" is an activity that is carried out from generation to generation once a year in order to increase gratitude for the enjoyment that has been given to all residents of RW 01 Kelurahan Kandangan. This event is held for three days and three nights with various series of events that will enliven the "Sedekah Bumi" activities.

# 1. Healthy Walk Activities

The first series of "Sedekah Bumi" activities was a healthy walk. This activity began with morning exercise at the Pandansari building which was attended by residents of RW 01 of various ages, from children to adults. Before the exercise started, residents queued to buy raffle tickets which gave away various kinds of goods, ranging from consolation prizes such as cups, soap and splashes as well as the main prize, namely a washing machine. Start the healthy walk starting from the Pandansari building then walking around the RW 1 area and ending at the Pandansari building. After the healthy walk, residents can also buy food from the stands available around the Pandansari building, then take a break while waiting for the door prize draw. The door prize draw starts with consolation prizes and the last is the main prize draw. This activity lasts until 11 pm ending with many residents who are happy because they have won a door prize.



**Figure 5.** Healthy walking activities in RW 01

#### 2. Recitation

The recitation is the second in a series of "Sedekah Bumi" activities which are carried out at night by inviting all residents of RW 01 in the courtyard of the Pandansari Building. This activity took place starting with the opening, namely greetings and reading prayers so that it would run smoothly. After the opening, it was continued with a recitation program which was delivered directly by Mrs. Nyai Hj. Nurul Abidah according to the theme that has been determined. In addition to delivering the study, it was also accompanied by the Prophet's sholawat which was read together. After the recitation ended, the next activity was the appearance of gamelan music until 23.00 WIB. This activity was also accompanied by several bazaar booths from local residents, which were located on the side of the Pandansar Building. All residents looked very enthusiastic in this activity, even until late at night more and more residents attended.



Figure 6. Recitation of Sedekah Bumi activities

#### 3. Wayang Kulit & Campur Sari

The third series of "Sedekah Bumi" activities is an art performance which is held at night in the courtyard of the Pandansari Building. This activity was attended by all residents of RW 01 and the general public. Art performances are displayed in the form of wayang kulit performances along with tasters. The first program was the performance of a campur sari and punjul laras karawitan. At the campursari performance, several people can submit the songs they want, so

# Empowerment of Communities in Kandangan Region through Natural Resources Management to Realize Developing, Healthy and Clean Villages

that the atmosphere becomes lively and the audience feels entertained. While the next agenda is the performance of wayang kulit brought by Dalang Ki Punjul Kasranto. The wayang kulit performance is carried out late into the night, this does not reduce the number of spectators, meaning that at night the more spectators who attend. In this activity, many residents enthusiastically participated, even the general public also participated. In addition, this art performance activity is accompanied by several bazaar booths that have been arranged in the side yard of the Pandansari Building.



Figure 7. Wayang kulit show and campur sari

# 4. Donations for Orphans, Gunungan, Tumpengan and Ludruk

The peak of the "Sedekah Bumi" activity is on the last day on Sunday morning and continues into the evening. The activity took place in the yard and inside the Pandansari Building considering the increasing number of residents who would attend. This activity was attended by high-ranking officials such as village heads, sub-district heads, RW heads, RT heads, and other officials. The first arrangement of events is compensation for orphans which is held in the morning. This activity began with data collection as a form of attendance, the number of orphans present was quite a lot. Then proceed with praying together and giving gifts to orphans. After a pause of several hours, the second program was a mountain of fruit and vegetables which was the culmination of the "Sedekah Bumi" activity. This activity is a procession of residents by bringing mountains that have been prepared by each RT. When the piles of fruit and vegetables were placed on the Pandansari building, each RT representative presented an art performance on the stage in turn. After all the RT representatives have presented art performances, the next event is the struggle for fruits and vegetables that have been arranged neatly in the mountains. This is the highlight of the event that all residents have been waiting for, it didn't take long for the gunungan in the Pandansari building yard to be gone, this was because of the enthusiasm of the residents who took part in enlivening the struggle for the gunungan. After the struggle for the gunungan, it is followed by tumpengan, where the tumpeng that has been under each RT will be enjoyed by the RT residents together. In the evening the activities continued with a ludruk performance which was accompanied by a campur sari performance. In this activity it was seen that many residents were enthusiastic so that the general public also participated in seeing the performances of ludruk and campur sari (Koswara, 2005). Apart from that, there were also several bazaar booths which coincided on the side of the Pandansari Building which also enlivened this event.



Figure 8. Donations for orphans, gunungan, tumpengan and ludruk

Table 2. Indicators of successful implementation of the "Sedekah Bumi" work program

No	Indicator Success	Data factual
1	It is said to be successful when	There are 200 invitations, on
	attended 80% visitorinvitation.	moment implementation
		"Sedekah Bumi" inhabitant
		Which come reach
		250.

#### **CONCLUSION**

The KKN-T activities carried out by the Surabaya 13 KKN-T Group were carried out from 1 September 2022 to 5 December 2022. Several work programs that have been carried out by the Surabaya 13 KKN-T Group were divided into two places, namely RW 01 and RT 02 RW 06. The first program carried out was reforestation and improvement of facilities and infrastructure in Kampung MACO which is in RT 02. Reforestation is a planting activity such as lettuce, chili, spinach, and kale on hydroponic growing media that has been provided by RT 02. Meanwhile, improvement of facilities and infrastructure in Kampung MACO consists of 4 work programs namely making photo spots in the form of love, making educational white wall designs, making gazebos, and making greenhouses. The work program in RW 01 is healthy walking and "Sedekah Bumi". Healthy walking activities are activities that aim to welcome the annual event and give gratitude by giving a healthy soul and strong body. Earth charity activities are activities that are carried out from generation to generation once a year to increase gratitude for the enjoyment that has been given to all residents, this activity lasts for 3 days. The KKN-T Surabaya 13 group was welcomed by the village administration and residents of the Kandangan village. The work program that has been implemented has been running properly and smoothly. In carrying out our activities, we still adhere to health protocols and get good output for the Surabaya 13 KKN-T group and the residents of the Kandangan village.

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# Empowerment of Communities in Kandangan Region through Natural Resources Management to Realize Developing, Healthy and Clean Villages

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