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Development Vegetables Organic in Agriculture Urban

Nana Kariada Tri Martuti¹, Lutfia Nur Hadiyanti¹, Amnan Haris¹, Erry Affand², Andri Simbolon², Moch. Samsul Arifin³

¹Universitas Negeri Semarang, Indonesia

²Saka Energi Muria Limited, Indonesia

³Akar Banir Foundation, Indonesia

Abstract

Agriculture agriculture urban with method agriculture organic is A form solution just done _ For face many intervention ingredients synthetic in the world of agriculture. Cultivation vegetables organic on land yard is a worthy alternative considered Because can sufficient need healthy and hygienic food for family, save expenditure consumption food at a time guard sustainability environment. As for goals from activity devotion to public This namely, to : increase KT Tambakrejo knowledge in cultivation friendly organic vegetables environment, and improve KT Tambakrejo knowledge in making organic fertilizers and pesticides with good and right. Activity devotion to community carried out by KT Tambakrejo, Village Tambakrejo Semarang, at l a kuk a n with a number of method approach which is conducted based group, comprehensive and based local potential. Enhancement knowledge partner done through observation field work, interviews, training, mentoring and evaluation activity. From activities dedication that has been done, obtained results increase knowledge partner in technology raised bed as method repairer suitable soil implemented in the region urban with condition land in general arid, increasing knowledge partner in cultivation vegetables organically and friendly environment. Service partners have also get good and correct knowledge in making organic fertilizers and pesticides, with utilise potency source power existing in the environment surroundings.

Keywords: organic vegetables, agriculture urban, KT Tambakrejo

INTRODUCTION

Agriculture agriculture urban with method agriculture organic is A form solution just done _ For face many intervention ingredients synthetic in the world of agriculture [1]. Cultivation vegetables organic on land yard is a worthy alternative considered Because can sufficient need healthy and hygienic food for family, save expenditure consumption food at a time guard sustainability environment. Beside That For consumption domestic, cultivation vegetables organic with capacity certain own mark high economy that can be add income family. Development Organic farming is encouraged by: (1) strengthening awareness care environment and style life Healthy public; (2) support policy government; (3) support industry processing food; (4) high price level consumer; (5) the presence of a generic label; and (6) incessant campaign national organic farming [2].

Semarang City since 2019 has launched the Agricultural Movement Urban in support Ward Food Independence. For realizing government programs related with sovereignty food is required activity resilience food throughout component public done through movement civilisation agriculture urban. Activity This strengthened with exists Regulation Mayor Semarang Number 24 of 2021 concerning the Civilization Movement Agriculture Urbanism in the City of Semarang. Furthermore be delivered in Perwal, that agriculture urban areas which is also called Urban Farming is is activity growth, processing and distribution food as well as product other through cultivation intensive crops and livestock in cities and regions surroundings, and use return source Power nature and waste urban For obtain diversity results crops and animals cattle. As for goals movement civilisation Agriculture Urban areas in Semarang City are:

- a. For empowerment public in frame strengthen resilience food and nutrition;
- b. utilise land and/ or room;

- c. create healthy environment; _ and/ or
- d. increase greening as well as utilization waste House ladder .

Ward Tambakrejo, District Gayamsari, Semarang City, is one of the areas on the coast of Semarang City area 74.75 Ha, consisting of from 9 RWs and 54 RTs. Village Area Tambakrejo, beside is on the bank of the East Flood Canal River, also crossed by the Tenggang River which divides it village in the Tambakrejo area. Part of the Tenggang River border Still leaving land with area not enough more than 127 m² which is used by the community local For match plant various type vegetables. It is just Because Not yet exists good abilities _ in do cultivation, mainly cultivation vegetables organic. Beside That method plant only in accordance existing conditions _ without exists good arrangement, so _ Can have mark attractive aesthetics. _

In do cultivation vegetables carried out by the Tambakrejo Farmers Group (KT), which is partner devotion, still need accompaniment in do friendly organic farming environment. Agriculture organic need perseverance and tenacity for cultivator vegetables. On cultivation production process required from activity seeding seeds, as well planting vegetables in polybag or spread on existing soil media prepared previously .

Based on exposure condition existing partner mentioned above, then the Devotion program To the Community (PKM) Development Vegetables Organic In "Agriculture Urban" In the Village Tambakrejo, Semarang City has objective For: increase KT Tambakrejo knowledge in cultivating friendly organic vegetables environment through training and mentoring cultivation good and true organic vegetables. Beside That increase find out KT inside making organic fertilizers and pesticides through training and mentoring making organic fertilizers and pesticides. Management cultivation friendly organic vegetables environment in a wise and sustainable way the s e go anyway with vision and an m contents UNNES as University Conservation, which has concern to national culture and environmental conservation. With the concern of UNNES for the public all around, it is hoped that pk a n can realize UNNES as a tower a ir not a n ivory tower for the public. Activity devotion This is also supported by existence cooperation with the Community Development Program (PPM) from Saka Energi Muriah Limited (SEML).

METHOD

Activity devotion to public This carried out at Pancasila Park, Village Tambakrejo, District Gayamsari, Semarang City. Activity implemented from April to August 2023.

From the beginning of the day which It is in the field, based on the agreement between partners and the service team determined a number of problems which will be handled together in this way are:

1) Training and Mentoring Cultivation Vegetables Organic

Service partner Already have knowledge base related in cultivation plants, only just partner Not yet have good and correct knowledge _ related cultivation vegetables in a way friendly organic _ environment. Therefore _ That partners really need it exists training about cultivation good and true organic vegetables. Training agriculture organic This covers method setup land and technology *raised bed*, fertilization with use organic fertilizer, use pesticide organic as well as maintenance good and correct plants. _

2). Training and mentoring making fertilizers and pesticides organic

Tambakrejo Farmers Group, which has 20 members, has not yet have knowledge making good and friendly organic fertilizers and pesticides environment. Therefore _ That given knowledge about meaning, use and benefits use organic fertilizers and pesticides vegetable. On activities devotion This skills are also given method making organic fertilizers and pesticides vegetable to group farmer. There are activities This KT Tambakrejo is expected can do cultivation good and friendly vegetables _ environment .

Activity devotion to community carried out by KT Tambakrejo, Village Tambakrejo Semarang, at l a kuk a n with a number of method approaches which is conducted together, namely based group, comprehensive and based local potential

- a. Group based, whole don't know what and type of activity. Which will be done to all over members of KT Tambakrejo with use group. By coming on, pok used training program which includes: Training and accompaniment, planning, implementation, and monitoring activity.

- b. Comprehensive, For increase knowledge and skills all over member KT Tambakrejo, who provided impact to skills in cultivation vegetables organic. Activity This done For developing existing natural resources and human resources, as well as give facilitation sarpras cultivation organic vegetables and

bukkamber .

c. Based on local potential, enhancing knowledge and skills in cultivating organic vegetables are carried out with still notice potential and culture of the public around, and still utilize resources and community resources in Ward Tambakrejo, Semarang.

RESULTS AND DISCUSSION

As objective devotion to existing society _ stated above, it has done and obtained results devotion as following :

a) **Training and mentoring cultivation good and correct organic vegetables ,**

Activity training cultivation organic vegetables, starting with processing land to be used in cultivation vegetables. The land will be used is land used material waste so needed processing available land _ used For cultivation organic vegetables that will carried out by KT Tambakrejo. Land area of 127 m² that, then given the name "Pancasila Park". Processing land absolute carried out by farmers in cultivation vegetables. Processing land besides will make it easier the planting process can also be done increase quality land Good in a way physique nor biology For support growth plant. As for goals activity This is (1) Giving counseling about importance preparation and processing land in cultivation vegetables, as well introduce *raised bed* as method repairer land. (2) Improve knowledge and skills method preparation and processing land with method *raised bed* to member group farming, and (3) Giving accompaniment preparation and processing land to group farmer .



Figure 1. Processing land For cultivation organic vegetables

Furthermore agriculture was also conveyed with technology *raised bed* as method repairer suitable soil _ implemented in the region urban with condition land in general arid. In the raised bed method the steps are carried out includes : 1) cleaning land from trash and weeds bully ; 2) creation *raised bed* ; 3) addition layer of organic material to in *raised bed* (plant branches on the layer bottom, litter or organic waste in the layer above it, and planting media form mixture soil, husks burn, fertilize organic, and lime dolomite at the very top ; 4) addition microorganisms ; 5) rest land before planted [3].

On limited land _ these, the farmers has plant a number of type vegetables like eggplant, bitter melon, pokcay, tomato, cucumber and chili. On land the farmer given training How plant good and correct vegetables, as well Can sustainable. Planting vegetables done with organic systems, with use fertilizer nor pesticide experience with utilise the potential that exists around location planting .



Figure 2. Utilization Tenggang River border For cultivation vegetables and Tabulambot

As be delivered [4], exists have advantages, namely : can reduce cost shopping with activity produce material food For consumed own, healthy, improve beauty and aesthetics, as well give optimal results through innovation technology and facilitation cultivation vegetables friendly organic _ environment .

b) **Training Making Fertilizers and Pesticides vegetable (Pesnab)**

For support agriculture organic carried out by KT. Tambakrejo, in cultivation Vegetables are also used ingredients friendly organic farming environment. This matter based exists use fertilizer excessive chemistry _ can turn off microorganisms fertilizer land, so condition land become Sick. Condition sick land _ generally own level acidity as high as it can be cause decline absorption nutrients by plants. Deficient plants _ other nutrients _ its growth disturbed, also vulnerable to attack pests and diseases. For overcome problem the can done with enhancement material organic land through addition fertilizer organic and control pest with pesticide vegetable. However _ price fertilizer organic and pesticides vegetable Enough tall on the market, meanwhile group farmer Not yet can make fertilizer organic and pesticides vegetable Alone .

See the above conditions, then need done training making fertilizer organic and pesticides vegetable for group farmer. Through training This expected group farmer sufficient knowledge and capacity _ in make fertilizer organic and pesticides vegetable in a way independent .

In the making fertilizer compost, materials organic form rubbish brown (litter), rubbish green (waste vegetables or leaves), bran, and fertilizer pen entered to in composter in a way layered. On a composter that has been filled containing further organic materials added containing solution _ microorganisms, washing water sprinkled rice and molasses _ in a way evenly throughout _ surface organic materials. Next, the composter Stored in a sheltered place so that it doesn't caught exposure rain and light sun in a way direct [5].

On manufacture fertilizer organic liquid (POC), material congested form foliage green (Nitrogen nutrient), banana tuber (Posphor nutrient), and fruit rot (potassium nutrient) is ground and added to in the bucket that has been filled with washing water rice. On the bucket is also added microorganisms and molasses. Next the bucket is closed paper and tied use rope, then stored in a shady place. POC so after appear smell such as tape or fermented bauk. POC applications can done with moreover formerly done dilution with ratio of 1 POC : 5 water [6] .

On manufacture pesticide vegetable, ingredients like leaf soursop (pounded), onions white (crushed), and tobacco entered to in bottles that have been filled with water. The bottle furthermore Closed and left in place for at least 12 hours bow. Application pesticide vegetable can done with moreover formerly done dilution with ratio of 1 pesticide vegetable : 5 water [7-9].

c) **Monitoring and Evaluation Activity Devotion**

For get results good and sustainable dedication to the service program to the Community in KT. Tambakrejo, monitoring and evaluation is carried out from results activity. Activity monitoring and evaluation done every the month For know development cultivation vegetables that have been carried out by KT Tambakrejo. Monev is carried out by the team UNNES service as well as by SMEL which is also involved activity devotion .



Figure 4. Monitoring activities dedication by SMEL and the team UNNES service

CONCLUSION

From activities devotion to existing communities done, can taken conclusion as following : Increase KT Tambakrejo knowledge in cultivation good and true organic vegetables as well as friendly environment. KT Tambakrejo knowledge and skills in making organic fertilizers and pesticides have increase with Good. This matter can seen from cultivation organic vegetables that have been carried out by KT Tambakrejo has grow with good and sustainable .

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