



The Development of Effective Urban Farming Sales Method with Hydroponics Plantation System to Complete Instant Vegetable Supply in Urban Area

Wirawan Pamuji^{1*}, Lili Dahliani², Jamaludin³, Ricki Rianto Gorat⁴

¹University of Yos Soedarso Surabaya, ²Sekolah Vokasi IPB Bogor, ^{3,4}Universitas Papua

Corresponding Author: Wirawan Pamuji Shangwira.muji@ gmail.com

ARTICLE INFO

Keywords: Hydroponics, Method of Research, Beneficence of the System

Received : 09, July

Revised : 20, August

Accepted: 27, September

©2024 Pamuji, Dahliani, Jamaludin, Gorat: This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

Urban Area Regency with limited land makes it difficult to plant with soil media; in this case the hydroponic media employees are intensifying the planting of water media. The Research applies Research and Development Methods for planting with Hydroponics to complete vegetable demands in Urban Area that the planting media is not only done using soil but also with water media because in this case the employees can also provide a contribution to the Urban district government in carrying out Effective distribution of vegetable crops in an effective and high quality manner for subsequent marketing to meet adequate vegetable needs.

INTRODUCTION

The narrow and inadequate land in some areas of Urban district means that the land that will be planted with plant stands in reduced number of scale, because the land looks narrow and cannot be planted with plants with less extensive land conditions. This is inevitable from the regional conditions in residential areas in the urban area. Which by the end of 2023 the area will be filled with areas that are E P D or Effective Plant Design so the the opinion to build nutrition sites in villages in the Nutrition area so that the contribution of major vegetables can be completed.

The opportunity needed in this case is a planting medium that is applied as a substitute for soil, namely hydroponic media, namely a planting medium with a hydroponic system, namely a planting medium that uses water as a planting base. Referred to Masduki (2017; 186) the definition of hydroponics is growing without water as a medium because hydroponic comes from Latin, namely from the words hydro which means water and phonic which means work or literally hydroponics means the way water works as a planting root.

In relation to land-saving administrative activities related to the study of public administration, the role of hydroponic employees is needed so that the planting can be useful in terms of quality and free distribution effectively and easily Referred William H Newman in his book Administrative Action states that Administration has been defined as the guidance, and leadership and control of the efforts of a group of individuals towards some common goals. In this explanation, it can be interpreted that administration is a collection of guidance and leadership as a group or individual effort to achieve a goal.

Urban Regency, with limited land, makes it difficult to plant with soil media, in this case the hydroponic media employees are intensifying the planting of water media so that the planting media is not only done using soil but also with water media because in this case the employees can also provide a contribution to the some urban districts government in carrying out free distribution of vegetable crops in an effective and high quality manner for subsequent marketing to meet adequate food needs.

One of the benefits of Free Distribution is that apart from being able to meet the market share of fruit and vegetable needs with good quantity and quality and cleanliness, it can also provide information to Nutrition Site Employees about saving land so that not all of it is used for planting using soil media but can also be used as media. in the form of water which can speed up the harvest.

This media can also increase the quality of products Referred plants that are accurate from previous plants, reduce costs, manual labor, and make the work practically easier because everything is done using planting media using water so that the design of the nutrition site in this case can provide a very important contribution in distribution. Vegetables and fruit for underprivileged Nutrition Site Employees with proof of an indigent card from the government, so that underprivileged Nutrition Site Employees can get an allotment of vegetables and fruit to fulfill their nutritional needs on an ongoing basis.

Evaluation of the planting cycle and planting qualifications will be carried out periodically together with the Nutrition Site employees who have the same interest in the use of hydroponic media in the district area in relation to the planting of these plants, if there are no errors that result in failure then planting will be carried out in the same form as E M or Effective Marketing as a basis for Free Distribution that is appropriate for its use for sales purpose in every house in urban Are to simplify it.

Vegetables and Fruit that can fix the defects of plants with hydroponic qualifications in the area of Urban district officials will be crowned as Responsive Vegetables and Fruit and after repairing damaged plants, if there are no plants that are indicated to be damaged then the media used can be called appropriate media. In accordance with the principles of public administration, namely, apart from improving the quality of food, we also maintain plants in good condition and maintain maximum quality on a regular or daily basis.

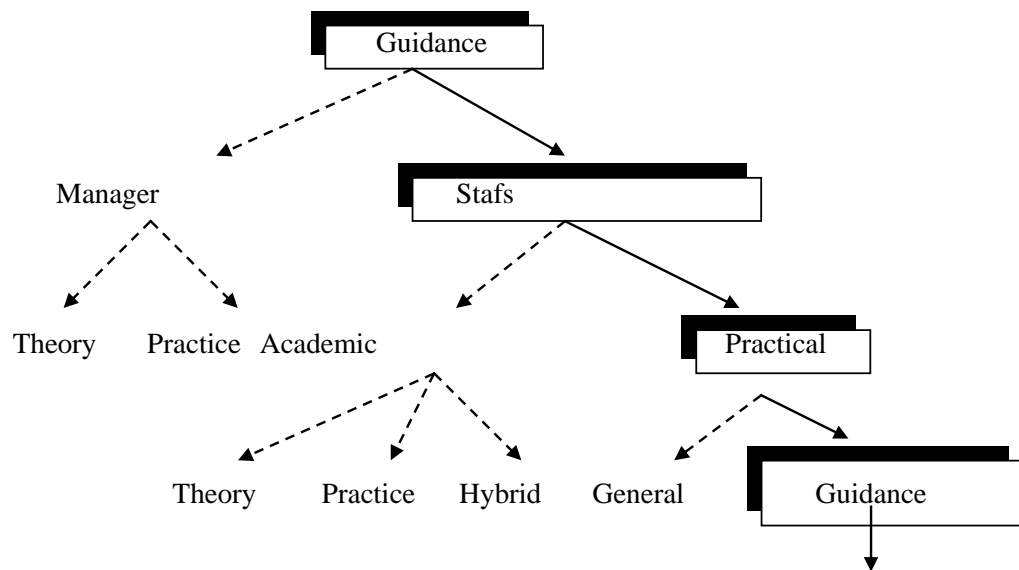
From the observations made by researchers, plant owners can choose to open a nursery even if the plants are inaccurate to the planting media employees who use water by self-teaching to learn how to grow plants or can collaborate with other employees in order to improve the plants.

This system is implemented and planned by the planting media employees utilizing water in The Urban districts. The planting media employees use regional water by paying attention to the conditions of the surrounding area. To get the correct crop results, vegetables and fruit must be sensitive in monitoring the plants in a standardized form. In terms of planting using water media, the planting media employees use water hydroponically.

The function of the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and Vegetables in this case is within the scope of correct and concise Plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system, other planting media that do not pay attention to fertility factors and the practical level in planting is very different from planting if carried out using water media.

LITERATURE REVIEW

This Research is designed based on literature and reference from books, it allows researchers to define characters how hypothesis is concluded by applying the concept of research with certain steps and procedures as their way of the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and Vegetables in this case for sales purpose is within the scope of correct and concise Plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system.



Note : Hydroponics to Complete Demand of Vegetable Supply in Urban Area

————— Observed
 - - - - - Not Observed

Graphic 1. The Concept of Research

METHODOLOGY

In this chapter, the discussion depends on the reliable and cohesion from the explaining. Therefore, there is one basic question reflected from the previous paragraph. How the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and vegetables in this case is within the scope of correct and concise plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation sales.

The objective of this research is to know about how is Natural Way strategy applied for standardized. The research analyzes how the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and vegetables in this case is within the scope of correct and concise plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system for sales purpose.

The research is achieved to present and to support Affective Domain strategy for maintaining about how scarecrow be applied for standardized. The research applies Development Design Methods in developing how the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and vegetables in this case is within the scope of correct and concise plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system for sales purpose.

Meanwhile, The Design is measured at the end of domain as the students are able to characterize an action and Indication to create How the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and Vegetables in this case is within the scope of correct and

concise Plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system for sales purpose.

In a common way for any Indication to create affection for students all levels for nurturing nature by customizing the function of How the role of Public Administration and Human Resource Management of the Demand and Supply of the fruits and Vegetables in this case is within the scope of correct and concise Plant patterns for planting plants with productive results with abundant results of Hydroponics Plantation system with literal study for sales purpose.

RESULT AND DISCUSSION

Public Administration Principles for Human Research in Hydroponic sales and supply must refer to the principles below, namely:

A. Administrative Objectives of Planting that objectives must be based on action objectives related to carrying out administrative processes towards certain references according to the current context, and also administrative actions are required to look at the context of existing media needs in meeting needs in agencies or regions that require planting media nurseries water.

B. Planting Transactional Experience

Five general principles of transactional experience and their explanations, namely:

1. Plant Employees must do something that makes it possible to achieve the goal of successful planting.
2. The planting cycle must be able to satisfy the usability of consumers of vegetable and fruit plants in the form of quality vegetables and fruit.
3. Administrative and cultivation transactional experience must be in accordance with the level of purchasing power and water plant employees in the Urban district in the case of plant media employees utilizing the water.
4. Transactional objectives need to be presented with valid evidence of planting results.
5. One planting experience in one period is different from another period

Human Resource of Hydroponic Site Administrative Observations

In these observations, it was observed that when carrying out hydroponic seedlings, there were indications of complaints from the community regarding the lack of fulfillment of fruit and vegetable needs as follows, namely:

1. Hydroponic cultivators must do something that makes it possible to achieve administrative goals, namely saving land so that empty land can be used for other purposes and seedlings only require a small area of land.
2. Manual hydroponic cultivators are still unable to provide satisfaction with the fulfillment of vegetables and fruit in terms of quality and purchasing power for the community due to the lack of satisfaction

with this fulfillment, which is observed in the form of questions and answers to several consumers in several markets in the Urban District, long queues and poor distribution. Time consuming triggers other factors which create other factors which indicate buyers are choosing shortcuts by choosing vegetables and fruit at makeshift distributors with moderate or ordinary nutritional value rather than using hydroponic growing media.

3. The manual transactional experience used by cultivators finally decided to set up a hydroponic growing media cultivation room as well as a grocery store to distribute vegetables and fruit that had been grown by the cultivating community to more easily market these hydroponic products optimally.
4. The purpose of transactional administration is to facilitate purchasing transactions that are carried out effectively in housing or villages which are also cultivation places and shops where fresh and healthy hydroponic products are produced.
5. One transactional experience that the community complained about was manually turned into an innovation in developing community fulfillment distribution to meet community needs regarding vegetables and fruit.
6. Excellent Distribution implemented by hydroponic media cultivators to meet consumer needs following complaints about fruit and vegetables lacking minerals and the increasing need for these.
7. Relationship or linkage Cultivation administratively has a connection between fulfilling plants and vegetables with each other and the needs of the community who want vegetables and fruit that are more nutritious than the plants found in general.
8. Criteria for determining organizational effectiveness. Distribution of hydroponic media needs include elements of integration: continuity, sequence and integration. Continuity refers to one element that is repeated continuously for the same need, for example the same distribution is repeated over and over again, for example the need for chilies for spicy food or tomatoes for sauce, while sequence refers to systematic needs hierarchically or procedurally when distribution is carried out, including urgency. towards non-urgency or vice versa, such as distribution of vegetables and fruit sequentially according to needs, namely fulfilling soybeans for soy sauce first and then fulfilling chilies for chili sauce for restaurants that need it, while integration refers to the connection of things with other distribution things or supporting contexts such as the influence of mineral water in speeding up To grow plants and fruit hydroponically, mineral water is also needed.
9. In this order, distribution orders must be able to develop according to the flow of needs, and also in accordance with user needs in a sustainable, sequential and integrated manner in Urban district so that the need for nutritious vegetables and fruit can be met

10. In the Author's opinion, there are three types of organizing distribution orders to meet the needs of vegetables and fruit hydroponically, namely Separate-Subject-Sales, correlated-sales, and Integrated-sales which can only be applied Separate-Subject-Sales
11. Separate-Subject-Sales are orders that are arranged based on separate needs and cannot be linked to each other, for example, distribution of just one type of plant or fruit for personal needs, for example just apples or spinach without a package system distribution cannot be implemented one door or separately.
12. Meanwhile, Correlated-Sales are orders that are arranged in other orders so that they can be related so that they become one unit. For example, Distribution with a vegetable package system for vegetable soup or tamarind vegetables so that the distribution consists of several vegetables such as cabbage, cabbage or carrots and so on. one package.
13. And Integrated-Sales are orders that are arranged in orders where each other influences each other. For example, when buying tomatoes you must also buy chilies for chili sauce, when purchasing soybeans you must also buy cashews so that the soy sauce becomes more delicious.

Hydroponic cultivation or planting media that utilizes water is an administrative action carried out by the community so that cultivators can not only utilize media that utilize water but also carry out distribution and purchase to meet food needs in the form of vegetables and fruit that have more nutritional value in accordance with the existing administration system. required by the people of Urban district in general.

CONCLUSION AND SUGGESTION

Criteria for determining organizational effectiveness of Distribution of hydroponic media needs include elements of integration: continuity, sequence and integration. Continuity refers to one element that is repeated continuously for the same need, for example the same distribution is repeated over and over again, for example the need for chilies for spicy food or tomatoes for sauce, while sequence refers to systematic needs hierarchically or procedurally when distribution is carried out, including urgency. towards non-urgency or vice versa, such as distribution of vegetables and fruit sequentially according to needs, namely fulfilling soybeans for soy sauce first and then fulfilling chilies for chili sauce for restaurants that need it, while integration refers to the connection of things with other distribution things or supporting contexts such as the influence of mineral water in speeding up To grow plants and fruit hydroponically, mineral water is also needed.

ADVANCED RESEARCH

This research is not impeccable during or after it applies as a result as the Hydroponic cultivation or planting media that utilizes water is an administrative action carried out by the community so that cultivators can not only utilize media that utilize water but also carry out distribution and

purchase to meet food needs in the form of vegetables and fruit that have more nutritional value but it is required to observe how Hydroponic cultivation could not always precede Vegetables and Fruits to complete their demand but how every house in urban are able to cultivate themselves instead of selling it.

ACKNOWLEDGEMENT

This presents gratitude for all parties as supporting data and findings as the research is finally conducted for summation as follow:

1. Mr Ir.Bachtiar Prabowo MM as Rector of University of Yos Soedarso Surabaya.
2. Mr Ruslin, S.H.,M.H as Dean of Faculty of Law University of Yos Soedarso Surabaya
3. Miss Lili Dahliani from Sekolah IPB Bogor, Jamaludin and Ricki Rianto Gorat as students from University of Papua, Papua who supported Fund for the research and plan collectors for this research in assisting with the matters for the main author.
4. And all Partners supporting the research

REFERENCES

- Arikunto, Suharsimi. 2006. *Prosedur Pendekatan Edisi Revisi VI*. Jakarta: RinekaCipta
- Bolgar, R.R. 1998. *Teaching Methods*. England: Encyclopedia Compact Disk
- Degeng, I.N.S. 2008a *Pedoman Penyusunan Metode ajar. Teknologi Pembelajaran P.P.S Universitas PGRI Adi Buana Surabaya.*
- Degeng, I.N.S. 2008b *Pengembangan Modul Pembelajaran. Teknologi Pembelajaran P.P.S Universitas PGRI Adi Buana Surabaya*
- Freeman Diane Larsen. 1985. *Techniques and Principles in Language Teaching*. Oxford : Oxford Unifersity Press.
- Grellet, Francoise. 1992. *Developing Reading Skills A Practical Guide to Reading Comprehension*.Combridge: Combridge University Prees.
- Grellet, F. 1992. *Developing Reading Skills A Practical Guide to Reading Comprehension*. Combridge: Combridge University Prees.
- Grondund, N.E. 1985. *Measurement and Evaluation in Teaching*. New York: Macmillan Publishing Company.
- Hewitt, L.A.H. and Luc, d. *The Power of Focus for College Students*. Deerfield Beach, FL: Health Communications, 2005.
- Hillerich, L.R. 1987. *The Principal's Guide to Improving Reading Instruction*. USA: Bowling Green State University.
- Hornby, AS. 1995. *Oxford Advanced Learners Dictionary*.International New Students Edition. Oxford : Oxford Unifersity Press.
- Masduki,Anang,2017, *Hidroponik Sebagai Sarana Pemanfaatan Lahan Sempit di Dusun Randubelang, Bangunharjo, Sewon, Bantul, Yogyakarta: Universitas Ahmad Dahlan Yogyakarta*
- Taksonomi dan Tujuan Instruksional, Tim Pelatihan dan Pengembangan Pendidikan (P3) LLDIKTI VII Jawa Timur.