URBAN AGRICULTURAL ACTIVITIES AND CONSTRAINTS TO THE DEVELOPMENT

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Abstract- For recent years, urban agriculture has become an important activity not only for farmers' household nutritional needs, but also to meets the nutritional needs to surrounding community. However, the development of these activities was affected by the various of constrains and obstacles. This paper focuses on the constraints and barriers that affect the development of urban agricultural activities. Discussion on urban agriculture development constraints in this paper are based on a literature review and previous studies. Future more, the study found that there are various constraints and obstacles on the development of urban agriculture in terms of economic, social and environment.

Keywords: Urban Agriculture, Food Security, Constraints.

I. INTRODUCTION

Numerous studies show, one of the food production activities that have potential to increase food security is through urban agriculture activities [1][2]. There are many studies have been conducted shows, an urban agricultural activities has high potential to contribute to food security especially in urban area [3][4][5]. Furthermore, there are reports show that the urban agriculture activities is an important food sources in the food system in developing countries and also is a major livelihood strategy for poor urban households [6][7][8].

II. DEFINITIONS AND CONCEPTS OF URBAN AGRICULTURE

Agricultural activities seen rapidly grown in developing countries such as United Kingdom, United States, China and Japan. Urban agriculture being a very important activity that contributes to the economic, social and environmental development in the country. There are many studies that have been conducted on the meaning of urban agriculture.

2.1. Definition of Urban Agriculture

According to[9], urban agriculture is the development activities, processing and distribution of food, cultivation of food and non food, farming activities that specifically carried out for urban markets either on the edge or in the urban areas. Moreover according to[10], urban agriculture is a crop and livestock production activities that carry out in the urban area or sub urban areas. Urban agriculture and peri-urban agriculture are two different terms. But these two terms are combined and known as Urban and Peri-urban Agriculture-UPA as a same field of study and development. Urban and peri-urban agriculture is also called as (intra and peri) urban agriculture [7]. Intra-urban is urban areas while peri-urban is sub urban areas.

2.2. Main Goal of Urban Agriculture

In most urban areas, the main goal of agricultural activities and peri urban activities area is to produce food, especially for household, farmers and local communities[3][11][12]. However, there are several key factors that encourage urban agriculture activities. A study by[13] shows urban farmers in Nairobi (Kenya) engaged in urban agriculture as a strategy for nutrition and income for their survival. As well as study by [14]in Uganda and study by [15] in Ethiopia shows most people involved with urban agriculture is to meet the nutritional needs and reduce spending on household groceries. Moreover, according to[16] lack of purchasing power among farmers and urban community in Kampala encourage them to develop the agricultural sector in urban areas.

III. CONSTRAINTS AND CHALLENGES OF URBAN AGRICULTURE DEVELOPMENT

Urban agricultural activities are often faced the numerous challenges and constraints that influence the sustainable development of the activities. The challenges and constraints also affect the sustainable livelihoods of farmers who involved in the activities. Because of that, this study discusses the constraints and the challenge of urban agricultural activities from three main aspects, namely economic, social and environment.

3.1. Economic Aspect

In the economic aspect, the contraints and challenges faced by urban farmers are less loan of facilities[17][18], high production costs [19][20][21] and less efficient of marketing channel[22][23][24]. Study on loans and financing for urban agricultural activities have been carried out by *Resources Centre*

on Urban Agriculture and Food Security – RUAF Foundation) in 2009 to 2010 in Lima, Acca and Bangalore. The study shows, lending scheme for a small-scale urban farmers are very limited. The study also considers that urban farmers are often faced with the difficulty of access to credit and appropriate financial to support the investments in improving their production systems. The study also shows, there are only 25% of the respondents have been access to some of financing or money lending services.

Besides that, high cost of production is also one of the main constraints to the development of urban agriculture activities[19]. Study by[21] in six cities in Tanzania, there are about 50% from 1,750 respondents faced financial contraints to initiate and sustain their urban agriculture activities with high producion costs in order to further increase their production levels[21]. From marketing aspect,[23] believes that urban farmers are difficult to achieve a strategiv marketing tools, especially for a small-scale of production. Moreover, study by[25] shows, the main market medium used by the farmers in Dar el Salamm to marketing their production is through the middleman. There are 67% of urban farmers in the area used the middleman, 47% directly to the city market and 33% sell their products in their neighborhood.

3.2. Social Aspect

In a social aspect, some of the major constraints faced by urban farmers include no advisory facility [26][22][27] and lack of agricultural knowledge among urban farmers[23][27]. Moreover, study on facilities and advisory services provided to urban farmers also very low. Study by [28]in Lima Nairobi shows provison for extension and training services program is limited, where there are only 9% and 5% of the study sample received advice from the authorities.

Advises facility is very important for the urban farmers to help better access on appropriate type of crops, production schedules, improve harvesting techniques and reduce a losses during the harvest and ensuring food security through the food chain appropriately addressed[26] (FAO 2010). Study by[1] in Accra, Ghana also shows, more than 50% of respondents never receive an advice from any authorities. In addition, urban farmers are also confronted with the problem of lack of knowledge about agriculture, especially appropriate agricultural practices and support services from involved parties.

3.3. Environmental Aspect

In the environmental aspect, several major constraints faced by urban farmers include the availability of land[29][30][31][32][18] clean water for urban agriculture activities[33][11][29] and climate change that destroying the crops[34]. Some previous studies, have been identified access to land is a major factor in determining the level of expanding urban agricultural activities. This has been recognized by [35] that conducting research on urban agriculture in the Uyo city, Akwa Ibom, Nigeria where the scarcity of land as a major constraints among urban farmers in the area.

Apart from the constraints of land, urban farmers also faced with a shortage of clean water for planting. Study by[36] shows, constraints of water have been resulted in a 46% and 51% of respondents in each city in Windhoek and Oshakati facing water shortage for their cultivation activities. This resulted in their inability to run the production of vegetables and fruits until water resources can be supplied and achieved at a reasonable cost according to the type and scale of their production. Moreover, lack of information on weather in Nairobi also can be a major problem for urban farmers in the area. Most of drought problem is so severe that can reduce the supply of groundwater resources at a critical level. This situation led farmers o faced vulnerability factors for agricultural activities in the urban area and in most cases, the district authority has limited the water consumption rate among urban farmers[36].

IV. RECOMENDATION

To ensure the sustainable development of food production through urban agriculture and preservation of the urban farmers' livelihood security, the cooperation between stakeholders from various sectors is very important and need to be established then the development of urban agriculture activities can be planned in a holistic manner. This approach essentially been implemented and readily adopted by various municipal authorities. Among them is main town in Nairobi and Accra, has established municipal department of agriculture. In Villa Maria del Triunfo, Lima, Peru, the sub-urban agriculture department was established under the Department of Economic Development, within the same urban agricultural activities have been designated as a special area in the Integrated Economic Development Planning (2001-2010). In addition, in 2001, the city of Rosario, Argentina has appointed Secretariat of Social Promotion to take responsibility for coordinating of urban agriculture program and THE staff who involved has BEEN grown from one to many full-time employees in the next five years. While in Cape Town, South Africa, a group of employees between departments was established in 2002 to coordinate the activities of urban agriculture in various departments of municipal and provincial departments to facilitate the development of integrated policies[37].

CONCLUSION

Urban agriculture is seen as an IMPORTANT activity especially in urban area. Pressure on food security was resulted from the declining of food production and increasing population, especially in urban areas.

Therefore, the cooperation of various parties should be carried out to ensure the sustainable development of urban agriculture activities reached.

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