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ISSUE: Promoting Urban and Peri-Urban Agriculture to enhance food security and job promotion

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Introduction

In a world with a growing population and more people to feed, where the global food supply and consumption are unequal, a question arises- How do we tackle food security while also promoting agricultural jobs? Urban and Peri-urban agriculture is a recent initiative where people can have mini farms closely to where they work or live. The plan of action is sustainable which was also commended by the United Nations as residents/citizens can grow a variety of crops. This inexpensive initiative is established to aid people by growing food as well as keeping it affordable so that people can buy from their local vendors which is fresh.

Why shouldn't the human race, accelerate towards a future where people don't have to worry about the food supply and their jobs? How great would it be if everyone had access to food?

The effects of climate change have caused an exponential reduction in crops and has adversely caused the weather patterns to distort which affects the environment where these crops grow. For example, if a crop only grew in warm conditions, today it would not be possible due to the weather disturbances.

Urban agriculture has been defined as ‘...an industry that produces, processes and markets food and fuel, largely in response to the daily demand of consumers within a town, city or metropolis, on land and water dispersed throughout the urban and peri-urban area, applying intensive production methods, using and reusing natural resources and urban wastes to yield a diversity of crops and livestock.’

Therefore, the increase of methods such as urban and peri urban agriculture in parts of the world such as Kenya caused people globally to learn from such methods in order to complement the potential urban food insecurity. Sixty percent of the World's population is going to consist of people living in cities by the year 2050, which will cause an outburst for the demand for resources such as food as well as

jobs. Evaluating urban and peri-urban agricultural helps us ultimately, as using such methods is a fundamental part of a sustainable development path for cities.

Definition of Key Terms

Urban Agriculture

According to the RUAF foundation, “urban agriculture is the growing of plants and the raising of animals within and around cities. The most striking feature of urban agriculture, which distinguishes it from rural agriculture, is that it is integrated into the urban economic and ecological system: urban agriculture is embedded in -and interacting with- the urban ecosystem”

Peri-urban agriculture

The Food and Agriculture Organization of the United Nations defines peri-urban agriculture as “agriculture practices within and around cities which compete for resources (land, water, energy, labour) that could also serve other purposes to satisfy the requirements of the urban population.” For example the same water used for agriculture could be recycled using a traditional filtering system which will remove any impurities such as calcium carbonate to keep the soil at optimum pH so it could be used again.

Sustainable Agriculture

According to the University of California Davis, sustainable agriculture is a “ type of agriculture that focuses on producing crops and livestock for the future while having minimal effects on the environment”. This type of agriculture tries to find a good balance between the need for food production and the preservation of the ecological system

Food Security

Ensuring that all human beings have access to safe food year round and that crops are safe for consuming

Slash and Burn

A form of cultivation which falls under destructive agriculture. This is where pressure from population is caused due to immigration to the rain forests. This then leads to the deforestation in order to grow crops before the soil has recovered.

Soil Erosion

This is where soil is lost from a field's surface due to heavy rainfall or strong winds, where due to human actions are catalyzed. Some types of soil are more vulnerable to soil erosion compared to others for example the soil on slopes.

Subsistence Agriculture

The techniques used in Subsistence agriculture are very easy to use, involve low capital investment and also prioritize the farmer and his family's subsistence needs. Most of the time, the farmer ends up consuming most of the food.

Background Information

On October 12th of 1999, the world's population reached an all-time high of 6 billion people. With only 2.5 billion in 1950, it is estimated that the population will rise to 8.9 billion by the year 2050. As of 2005, over half of the world's inhabitants are living in cities. According to the World Bank, because of the increasing rates of urbanization, many financially troubled people reside in urban areas in numerous countries. Since April 2001, 82 nations were identified as low-income food deficit countries. These states are inhabited by the immense majority of the world's 800 million persistently undernourished humans. Governments and communities as a result, constantly face the trouble of enhancing food security for their citizens, as well constant concern of providing not just food, but jobs for the growing population. Nevertheless, while urban and peri urban agriculture contribute significantly to issues such as food security, income and job promotion, agriculture in urban regions is still seen as an action frowned upon by many governments, and is hardly tolerated. It is considered as an activity unsuitable for the supposed, fitting characteristics of the so-called, urban environment.

Urban agriculture is often seen as a response of the poor inhabitants living in urban areas to inadequate food supplies as a result of food become scarce, or a lack of money to purchase food. Likewise, it is also a response to the deficient number of opportunities of proper employment and jobs, due to national economies being in crisis. Urban agriculture is a form of self-sufficiency and self-reliance. It is what puts struggling families out of the poor conditions, in a sustainable, and peaceful manner.

As the population increases drastically each year, so does the rate of unemployment as well as the number of hungry people left begging on the streets. Urban agriculture, food security and job promotion come hand in hand as they affect each other greatly. Urban agriculture is often recognised for the vital role it plays as an approach to endure living in the urban regions on a country. Urban agriculture revolves around the production of food and the nurturing of

livestock within or directly in line with urban settlements. It acts as a key role in enhancing the food budget as it likewise serves as a source of revenue.

Food Security

Food insecurity has long been an issue that the world has faced since the drastic rise in population. As the population grows and reaches all-time highs, the demand for food upsurges, leading to a substantial number of families not having a stable source of food. Food production in urban places is generally an answer to the insufficient and irregular access to food. Thus, this practice provides a more adequate income to the farmers themselves, thereby eradicating their food insecurity. Urban agriculture can be used to grow a range of produce which are in demand of diverse urban populations. It increases the efficiency of the country's food system since it provides products that rural agriculture cannot offer easily, and can substitute for food imports. Urban agriculture plays a vital role in alleviating poverty and deal with the malnutrition of the population.

Urban agriculture perhaps improves both the availability and quality of food. Research proved that children in households which practice farming were found to be notably with better nutrition than those in non-farming households. Urban and peri urban agriculture therefore, provide a peaceful solution to the problems with regards to food security.

Job Promotion and Economic Impact

Around 15% of the world's food is now grown in urban areas, according to the U.N. Food and Agriculture Organization. Surveys and research suggest that up to two-thirds of urban and peri-urban households in developing countries practice agriculture, where a large percentage of the food produced is used for one's personal consumption. This allows people to save household expenses on food; people in developing countries often spend most of their income on food. Growing the relatively expensive crop thus saves money.

Added to the production of their consumption needs, farmers produce large amounts of food for urban consumers and the rest of the population. These urban farmers produce a large quantity which they sell, allowing the produce to act as a form on income for the farmers, and secure an adequate job for the famers. Likewise, numerous jobs stem from urban agriculture; making yoghurt from milk as one example. This therefore, decreases unemployment as jobs are created and provided for people due to urban and peri urban agriculture, thus improving the economic situation of the country, which is enhanced by exporting some of the produce.

Major Countries and Organizations Involved

The Food and Agriculture Organization of the United Nations (FAO)

The Food and Agriculture Organization of the United Nations plays an imperative role in this topic. With many nations who are unable to meet a supply of food towards their respective nations, the FAO acts in collaboration to use Peri Urban and Urban agriculture in order to help many nations. They work with organizations and other nations in order to determine food security especially this type of security within households. Thus helping nations to have high resilience and measures such that they have an adequate amount of resources during times of shortage. In Colombia, for example, the FAO has implemented multiple different projects, which has helped in technological assistance as well as the establishment of urban agriculture in specific areas.. For example, the FAO has worked with 500 families in Altos de la Florida Region to establish orchards for home consumption. This is just one example showing how Colombia has now implemented urban gardening and helped increase the food supply. They also run projects in the Democratic Republic of the Congo, Burundi, and other countries. Their main goal at this point, is to transform UPA(Urban and peri-urban agriculture) into legitimate “urban land use activity”.

The United Nations Development Programme (UNDP)

The United Nations Development Programme also acts as another organization that strives towards sustainable agriculture and works to set up urban agriculture in places they see fit. They at times work with the FAO on this problem, but generally they allow the FAO to address this issue.

China

For developing countries, urban and peri urban agriculture is a prominent activity that has helped the economy in many ways. Developing countries of India, China, Vietnam, Uganda, and Kenya all have used it to augment their economy. However, China is one major country that could act as an example for the greater international community. In nations, such as China where there was quick industrialization the use of urban agriculture provides for a good example on how it can help the economy. Cities, such as Beijing, have led the effort with new technology and has improved the quality of life in such industrial cities. Over time, it has become quite popular throughout the country incorporating the former farm life into these industrial heartlands. Delegates can look to some of the institutions that have been put into place in order to find ways of addressing this issue

Uganda

Another nation that is leading the effort in urban agriculture for developing nations is Uganda. The city of Kampala has seen an explosion of what they have called “vertical blooming”. Through this process, many houses have been able to grow food through a process of rooftop farming, and this

occurs throughout the city. After having experienced a 5.6 % increase in urban population from 2002-2010 the city has become one of the most urbanized areas in the nation. However, as mentioned in the section pertaining to China, this rapid development has created problems in the city and this form of rooftop agriculture has helped. Similarly, the ability to advertise this as a solution has helped invigorate young people to aid in this effort as well. The success of this “vertical blooming” can be, in large part, credited to the city’s ability in appealing to young people. As a result, they have shown the importance in advertising to fix such a problem.

Timeline of Events

Date	Description of event
Early 19th Century	Basic forms of urban city farms appear in Germany
2004	The International Treaty on Plant Genetic Resources for Food and Agriculture
2015	SDG Goals are Published
April 2018	Sustainable Urban Agriculture Initiatives Feed Your City

Relevant UN Treaties and Events

Below are a list of relevant UN treaties, resolutions, and events that have been enacted or taken place in attempts to solve the issue.

- Goal 01: End poverty in all its forms everywhere
- Goal 02: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- RUAF Foundation, 2007

Previous Attempts to Solve The Issue

Attempts to tackle the issue of promoting methods of agriculture to promote food security and job promotion have been limited in the past. Many solutions that have been passed or implemented have not generated much change, however, are built with a solid core but need to be built upon to meet the changing demands of the current world.

The United Nations sustainable development goal number 2 (SDG2) to end hunger, achieve food security and improved nutrition and promote sustainable agriculture has been a pivotal instrument in achieving progress in the issue. The development goal acknowledges the connection between striving for sustainable agriculture and empowering farmers. This is especially prevalent in rural areas where farming is a popular occupation amongst the population. Fertile land, soil, water, and plant resources are imperative to the growth of food production, however, their growing scarcity threatens the food security and jobs in nations around the world. The development goal strives to bridge the gap between food security and job promotion because farmers play such an integral role in global economies. To do this different approaches to crop productions have been proposed such as urban and peri-urban agriculture. These methods promote farming in various areas and allow for farmers to prosper while not compromising the quality of crops.

Similarly, another attempt to remedy the issue has been the Zero Hunger Challenge. At the Conference on Sustainable Development in 2012, it has been globally agreed upon that everyone has the right to safe food. From there, the Zero Hunger Challenge was born. Since its launch the challenge has gathered the support of hundreds of nations. According to the United Nations, the challenge entails reaching statistics of zero stunted children under the age of 2, access to safe food year round, establishment of sustainable food systems, increase in small-holder productivity and income and zero loss of food.

This sets a precedent amongst the international community that this issue is not to be taken lightly. The solution has already seen results as farmers in Bangladesh have seen a rise in jobs because of the development of different agricultural methods. Going forward, more solutions need to be made so that every person in the world has access to safe food and the farmers that pave the way for economies can thrive.

Possible Solutions

Quality solutions pave the way for effective resolutions and the quality of debate as well. Most importantly, this helps to solve the task of promoting urban and peri-urban agricultural methods while also addressing food security and job promotion. Here are some solutions that can be used when crafting resolutions as a whole.

Firstly, the education of farmers around the world must be a priority. It is difficult for farmers to thrive in their field when they do not have the proper education that is relevant to their occupation. It is also not feasible that every farmer use the same agricultural methods as every nation has a different environment. This is why education is imperative. Deploying educated United Nations officers in areas that require attention to offer education to farmers would help promote job promotion. Education of these farmers would promote sustainable agricultural methods and teach farmers ways in which to keep crops healthy and to grow healthy crops. Moreover, with proper education the farmers could generate more revenue and their jobs would be promoted.

Many farmers are currently located in areas where their jobs may have health or environmental impacts. This is especially prevalent in many LEDCs where agricultural land is being converted into buildings. These farmers must be relocated into different areas to continue their jobs and promote the methods of urban and peri-urban agriculture. Farmers should be compensated with by providing them with alternative land and basic infrastructure of necessities such as water and security. In nations such as Indonesia, cattle farmers cause environmental problems and waste issues. Such cases need to be addressed so that farmers around the world ensure food security while also promoting the sustainable agriculture methods.

Also, in many rural areas, land is destroyed because of deforestation and it negates the ability for land to be used for economic benefits. One method in which food security can be improved is to restore degraded land in these areas. Many areas of land suffer the consequences of the destruction of environment. By restoring this land through sustainable development methods would allow for crops to be grown in different areas. This would mean that less forests would be destroyed and improve the production. A larger number of farmers would be able to prosper along with education and therefore, the promotion of urban and peri-urban agricultural methods has the ability to drastically improve the conditions of sustainable agriculture, food security, and job promotion across the world.

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