



## URBAN AGRICULTURE IN AND AROUND GREATER HYDERABAD REGION

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### ABSTRACT

Greater Hyderabad Region has an area of about 750 sq. km. It has increased from 625 sq. km to 750 sq. km recently after merging of gram panchayats. Hence it has become a concern of vegetable growers in this peri urban areas as these areas are getting converted into real estate regions. The rapid urbanization that is taking place goes together with a rapid increase in urban poverty and urban food insecurity as we can see that slowly the vegetable cultivation is shifting to far regions which will have effect on prices of vegetables where in urban poor cannot afford the high prices.

**Keywords :** FAO: Food and Agricultural Organisation, RAUF: Resource Centres for Urban Agriculture and Food Security, FSTT: Food Seed to Table Program, GHMC: Greater Hyderabad Municipal Corporation.

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### INTRODUCTION

Urban Agriculture is defined as an industry that produces, processes and markets food, largely in response to the daily demand of consumers within a town, city or metropolis on land and water disperse 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 (FAO). Greater Hyderabad Region has an area of about 750 sq. km. Recently, the area has increased from 625 sq.km to 750 sq.km after merging of Gram Panchayats. Hence it has become a concern of vegetable growers in this peri urban areas as these areas are getting converted into real estate regions. The rapid urbanization that is taking place goes together with a rapid increase in urban poverty and urban food insecurity as we can see that slowly the vegetable cultivation is shifting to far regions which will have effect on prices of vegetables where in urban poor cannot afford the high prices [1].

Urban agriculture is defined as the growing of plants and raising of animals within and around cities. Major agricultural activities within the city of Hyderabad are fodder, vegetable production, urban forestry and dairy /milk production. Vegetables are grown to a limited extent in the peri urban fringes of the city. Urban agriculture which is mostly concentrated in peri urban regions of GHMC

(Greater Hyderabad Municipal Corporation) region is slowly decreasing/declining because of merging of these regions into GHMC.

Hence urban agriculture promotes a complementary strategy to reduce urban poverty and food insecurity and enhance urban environmental management.

**Objectives:**

1. To analyse land use changes in vegetable production in and around Greater Hyderabad region
2. To assess the problem of vegetable production in and around GHMC region
3. To assess the socio-economic conditions who are involved in vegetable production.

### **MATERIALS AND METHODS**

Peri urban regions and new panchayats which have merged into GHMC are taken as unit for obtaining of data related to vegetable production. Simple random sampling method was adopted for collecting primary data from household through questionnaire cum interview and observation method was also done to collect facts regarding cultivation of vegetables / home gardens in Bodduppall area. Secondary data was collected from the agriculture department.

### **RESULTS AND DISCUSSION**

According to 2011 census it is estimated that the city is covering of area about 750sq.km. It is observed that regions like Uppal, Malkajgiri, Serlingampally, and Qutubullapur mandals which almost become a part of city has low vegetable production and to increase vegetable production in these areas kitchen gardening should be encouraged which not only help the urban people keeping the prices of vegetables low but also gives them fresh vegetables.

Rapid urbanization has resulted in reduction of agricultural land which has hit the low income communities. the hardest and rarely 80% of vegetable supply is brought from neighbouring peri urban areas such as Moinabad, Ibrahimpatnam, Rajendra nagar, Ghatkesar and Keesara regions. It has seen that the vegetable production in these regions has increased.

And the regions like Uppal, Malkajgiri, Serlinghampally, Qutubullapur, Hayatnagar, Saroor nagar, Shamshabad are slowly decreasing in Vegetabale production because the lands of these areas are under new constructions due to high demand for these lands since these are closer to the city and these panchayats are merging into GHMC and will be converted into urban areas in course of time

Earlier the trend of vegetable cultivation in these regions as there was continuous demand in the city markets.



Fig. 1 Greater Hyderabad Muncipal Corporation

Table: 1 Vegetable Production

Mandals	2006 (in Percentage)	2011 in %	2006 Agricultural workers in%	2011 Agricultural workers (%)
Uppal	0.15	0.23	0	1
Malkajgiri	0.30	0.10	1	1
Keesara	1.40	1.90	2	3
Ghatkesar	1.10	1.11	3	7
Saroornagar	2.30	1.50	1	1
Hayatnagar	2.00	0.85	4	9
Moinabad	6.90	7.50	19	19
Rajendarnagar	0.70	0.70	1	2
Serlingampally	0.15	0.08	0	1
Qutbullapur	0.77	0.32	1	2
Shamshabad	4.80	4.12	10	13
Medchal	3.90	6.1	6	12

It is observed by the above data that vegetable cultivation is a part and parcel of life of farmers in the country. The cultivation of vegetable increased by 0.8 percent in Uppal, 0.50% in Keesara, 0.1% in Ghatkesar, 1.60% in Moinabad and 5.20% in Medchal mandal. Due to the persistent and ever increasing demand in the market of cities as vegetable production is an important farm income they get quick returns of the produce and the living conditions of the farmers have improved significantly because of vegetable farming. Earlier they were growing other food crops like paddy, where they used to wait for long time for returns of their production where as now the farmers grow vegetables which are ready for harvest and give good and quick returns which have created higher earning capacity and changing to modern standard life [2].

It is seen there is declining of 0.20% of vegetable production in Malkajgiri from 2006-07 to 2011-12 and 0.8% in Saroor Nagar, 1.23 % in Hayath Nagar ,0.7% in Serilingham pally, 0.68% in Qutubullapur and 0.68% in Shamshabad mandal. As these are having much impact of urbanization and they are not very keen in farming so the Agricultural land converted to commercial Buildings.

Urban Agriculture to a large extent complement to rural agriculture and increases the efficiency of the rational food system in that it provides products that are perishable products which require rapid delivery upon harvests which are now seen in GHMC the area under urban agriculture region is decreasing and slowly shifting to far of regions which may slowly effect the prices of vegetables when once they enter the market chain.

In 2005-06 it was noticed that Serilingampally Municipality one of the unit developed household kitchen gardens. In that region it was action planned during that period and estimated about 3.8 kg of vegetable per household per month and saved about Rs.84 and who consumed varieties of vegetable in that unit area and this action plan was encouraged by RAUF (Resource Centre for Urban Agriculture and Food Security) foundation [3].

Hence these kind of action planning can increase the urban agriculture in the GHMC where 13.48% of the population (5, 40,000) lies below poverty line. It can satisfy the urban poor as well as there should be clear policy framework that supports urban agriculture in open spaces for growing perishable vegetables which in turn reduces food, millets and keep prices of vegetables low.

Urban agriculture is increasing and being recognized by International Organization like FAO, (Food and Agriculture Organization) by 2020, 75% of all urban dwellers will be in Asia, Africa and Latin America, and nearly 50% of the poor in these regions will be concentrated in towns and cities. Rapid and unplanned urbanization, climate change and changing demographics have resulted in increasing urban unemployment and poverty, high food inflation and food insecurity, and as its corollary, high nutritional insecurity [4]. While protests over food inflation are vociferous in countries like India, governments express their inability to control prices that are governed by market forces. However, they are making efforts to increase production, focusing on new areas and Innovations. The government in India, for instance, is considering promotion of urban agriculture on a national scale to curb rising vegetable prices in its cities.

This feature discusses urban agriculture, focusing on the from seed to table (FSTT) program by the International Network of Resource Centres on Urban Agriculture and Food Security (RUAF), as a solution to these multiple and interlinked problems. In South Asia, the program is jointly implemented by the International Water Management Institute (IWMI) and the Dhan Foundation in India and Srilanka [5].

Globally, urban agriculture is gaining recognition from governments as well as International Organisations like the United Nations Conference on Environment and Development (UNCED), the United Nations Centre for Human Settlements (UNCHS), the Food and Agricultural Organisation (FAO), and the Consultative Group on International Agricultural Research (CGIAR). According to the estimates made by the United Nations Development Programme (UNDP) in 1996, 800 million people are engaged in urban agriculture and associative sectors world wide. About 200 million of these people are market producers, who in turn employ 150 million people full-time [6].

Urban agriculture- farming that is undertaken with in or around cities- is integrated into the urban eco system, and uses urban resources such as urban labor and urban waste (i.e, compost). In other

words, urban agriculture is not a transplant of rural farming, nor is it only the domain of rural migrants to cities.

Urban agriculture cuts across all income groups, all though a majority of people involved in urban agriculture are the urban poor. Not all of them are recent immigrants from rural areas, instead many are people residing in the locality, which enables them to access land, water and other resources. Often these people may pursue other jobs simultaneously, and it is not uncommon to find government employees or school teachers engaged in urban farming. Typically, most urban farmers are women who find it easier to combine farming, food processing or marketing farm produce with their household tasks and responsibilities. The men, who often travel into towns for other jobs, find it difficult to combine agricultural tasks with their other activities.

Agriculture in urban areas can be done on or off plot- close to urban farmers' homes or away from it. Urban farmers often lease land or use public land such as those along roads, streams and railway lines. They could also avail of semi-public land such as grounds of schools and hospitals. Urban farmers sell their produce in local markets and are largely associated with micro or small farms with low technology levels. Urban agriculture improves food security and also increases livelihood opportunities for the urban poor, as well as some impact on urban waste management.

In states like Maharastra and kerala, which are mostly urban and peri-urban, promotion of urban agriculture is already included in state policies. In other states, advocacy is needed to make it part of policy as more and more areas within the states transform from rural to peri-urban areas.

Worldwide, 200 million people are directly associated with urban agriculture as market producers. India currently lacks good estimates in this area, though the RUAF team is planning an assessment at the national scale. More and more dweller-cum-farmers are giving up agricultural land in urban areas for other uses with higher market value.

In a case of Hyderabad More than 4000 households in the outskirts of the city currently are self reliant for the vegetable needs of the family .The Horticultural Department is giving subsidy directly to the citizens instead of farmers who want to grow of complete nutrients set of vegetables though the horticulture department is giving a Kit which involves four silatin round beds, red earth, farmyard manures 14 bags and other essential things to grow garden at home and are encouraging Urban farming.

It is noticed that Mostly people in Uppal, Dilshuknagar, L.B. Nagar and Vanastalipuram who have own houses have shown good interest in urban farming and department of horticulture already distributed more than 4000 subsidy kits and may increase more shortly to encourage urban farming in and around Greater Hyderabad region.

### **Home Gardens/ kitchen Gardening in Boduppal**

Kitchen gardening /Home gardening is the growing of vegetable crops in the residential homes to meet the requirements of the family all the year round. It aims at an efficient and effective use of land for growing essential vegetables for daily use of a family. It plays an important part in vegetable production.The kitchen should aim at a giving a continuous supply of vegetables to the family throughout the year according to the season.

Boduppal village of Ghatkesar Mandal is a peri-urban area having an area of 2378 acres. This village is at the border of a city which is in process of converting from rural to urban area. Its total population is about 43692 out of which male population is 22,255 and female population is 21437. A study was conducted to see the changes in farming in this village as it is in verge of converting into complete urban area due to merging into Greater Hyderabad region.

Boduppal village consist of 98 colonies, An inspection was conducted around 400 households of 8 different colonies which are Srisai colony, Annapoorna colony, Rajivnagar colony, Kakathiya nagar colony, Indira nagar, Jyoti nagar, Raghavendra nagar, RNS colony in Boduppal. Out of which of the 400 households surveyed 130 had an existing home garden of which has mixed vegetables and flower cultivation. Out of the existing gardens 67% were managed by female members and remaining 33 % by retired male members. 61% of households saved approximately 70-80 rupees per month and 39% saves 90-100 rupees per month of vegetable consumption. Vegetables grown in these areas are of available land was put into vegetable production. Tomato, leafy vegetables, okra etc.. Horticulture Department and Some organizations like Sangha Mithra etc. are encouraging for vegetable production on the open plots of the colony and organic manure preparation and it is also noticed that vegetables are grown in flower pots, on terraces, garden spaces, and available open plots with the prior permission of the plot holders.

There are different constraints for home gardening in these colonies as the water availability is limited and there is no knowledge and training in vegetable cultivation space is limited. It is observed that out of total households 35% of them sell their production to nearby markets and local markets. These vegetables farmers claimed that Home grown vegetables are of good quality and this cut down the vegetable purchase cost, and remaining consumed by the family itself. Moreover they are nutritious, safe and produced in an environmentally sustainable manner, and is accepted to the people as it is being produced by them. However, kitchen gardening and roof-top gardening and backyard gardening which are systems of Urban Agriculture need be encouraged especially in densely populated cities and Greater Hyderabad Region is one of the important city where it growing its boundaries and have included many villages where market oriented crops are dominant.

A policy paper (number 67) and peri-urban agriculture, brought out recently by the National Academy of Agricultural Sciences, has strongly recommended that peri urban farming should become an integral part of Urban land- use planning as well as national food production and distribution system [7].

## CONCLUSION

Though there is potential for home gardening people show lack of interest because lack of land and water and the four areas like Uppal, L.B. Nagar, Dilshuknagar and Vanasthalipuram are so crowded. There is limited space and water scarcity for gardening and the outskirts of the city, areas like Hayatnagar, Ghatkesar and other mandals which have merged into Greater Hyderabad region have purchased few kits for kitchen gardening but result is not found satisfactory. As it is seen that though the subsidy kits distributed the farmer /citizen has to spend additional money for transporting.

Active cooperation from the government is important for the growth and the contribution of urban agriculture to 'sustainable development'. Irregularities in land-use planning, lack of space for agriculture in urban area, rapid urbanization and insufficient knowledge about safe and scientific technologies leads to unsustainability. Hence, there is need for conducive government policies to encourage urban agriculture in cities.

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