

## HOMEGARDEN: IN THE URBAN PARTS OF TRIPURA

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**T**he homegarden is a small-scale production system supplying plant and animal consumption and serviceable items which is either not affordable, obtainable, or readily available in the retail markets. A household garden tends to be located close to the abode for security, expediency, and special care. In home gardens, ecologically adapted and complementary species are featured, which are marked by low capital input and simple technology. Home gardens can be described as a mixed cropping system that encompasses vegetables, fruits, plantation crops, spices, herbs, ornamental and medicinal plants as well as livestock that can serve as a supplementary source of food and income. Homegardens are found in both rural as well as urban areas in primarily small-scale subsistence agricultural systems. The subsistence agricultural production systems which began in small garden plots around the household a long ago have persistently endured playing an important role in providing food and income for the family.

Tripura is a small piece of land in the North-Eastern part of India where homegardening has been a long standing practice among the rural and urban households for centuries. There has a considerable difference between homegarden practices in rural and urban areas of Tripura, particularly with the plant diversity and species richness. Agartala and its peripheral localities are semi-urban to urban in nature where peoples also show certain degrees of interest in homegardening. However, the practice of homegarden is diminishing day by day in the urban parts of the state.

### Characteristics of Homegardens

There have few characteristics of homegardens:

- 1) Are located near the residence;

- 2) contain a high diversity of plants with multiple strata;
- 3) Production is supplemental rather than a main source of family consumption and income;
- 4) Occupy a small area; and
- 5) Are a production system that the poor can easily enter at some level.

### **Experiences of Home Gardens from Developing Countries**

Homegardens have been an integral part of the local source of food in developing countries around the world. Several shreds of evidence and analysis of homegardens in developing countries in Asia, Africa, and Latin America show their numerous benefits to communities and families. Even though homegardens are mainly intended to produce food items only for family consumption, but they can be diversified to produce outputs that have multiple uses, including indigenous medicine and home remedies for certain diseases, kindling and alternative source of fuel, manure, building material, and animal feed. Sometimes homegardens are referred as a 'place for innovation' because of its potential to improve the livelihood of semi-urban and rural communities. In addition to the above-mentioned benefits of homegardening, it can broadly be categorized into three components: (1) social; (2) economic; and (3) environmental benefits.

#### **Social Benefits**

##### ***Enhancing food and nutritional security***

The most fundamental social benefit of homegardens stems from their direct contributions to household food security by increasing availability, accessibility, and utilization of food products. Homegardens are maintained for easy access to fresh plant and animal food sources in both rural and urban locales. For poor and marginalized families unable to afford expensive animal products to fulfill their nutritional needs, homegardens offer a cheap source of nutritive foods. Furthermore, the integration of livestock and poultry activities into homegardening reinforces food and nutritional security for the families as milk, eggs, and meat from home-raised animals provided the main and, in many instances, the only source of animal protein (de la Cerda and Mukul, 2008).

### ***Improving health***

Plants are an important source of medicine for humans and livestock and are used as biological pesticides to protect crops from diseases and pest infestations. Herbs and medicinal plants are grown in homegardens all over the world, and in developing countries, nearly 80% of the people use them to treat various illnesses, diseases and also to improve their health conditions (Rao and Rao, 2006). A generous portion of the plants found in homegardens have some medicinal value and can be used to treat many common health problems cost-effectively.

### ***Uplifting the status of women***

Women's participation and responsibilities in homegardening vary across cultures, including land preparation, planting, weeding, harvesting, and marketing. Maximum homegardens are chiefly managed by the women members of the family, which is a positive sign in terms of 'women empowerment. Regardless particularly for women and disadvantaged groups, homegardening is an opportunity for social and economic enrichment. For some women, sales of garden products are often the only source of income or livelihood.

### ***Preserving indigenous knowledge and building integrated societies***

The rich communal knowledge and indigenous culture is expressed through homegardening, by the selection of plants and animal components as well as the farming practices used by the local communities. Homegardeners usually exchange or gift planting materials, vegetables, fruits, leaves, herbals and medicinal plants for social, cultural, and religious purposes. Such kind of interaction is very much essential for social integration and constructing social capital.

### **Economic Benefits**

Homegardens contribute to income generation, improving livelihoods, and household economic welfare as well as promoting entrepreneurship and rural development. Income generated from the sale of fruits, vegetables, and livestock products allows households to procure additional food items as well as for savings, education, and other services. In many cases, the sale of produce from homegardens improves the financial status of the family, providing additional income while contributing social and cultural amelioration.

## **Environmental Benefits**

Homegardens provide various environmental and ecological benefits. While conserving biodiversity and natural resources, they serve as the primary unit that initiates and utilizes ecologically friendly approaches for food production. Homegardens also contains some of the rare or threatened species thus they become ideal sites for in situ conservation of biodiversity. Homegardens also provide a number of ecosystem services such as habitats for animals and other beneficial organisms, nutrient recycling, reduced soil erosion, and enhanced pollination. In homegardens organic fertilizers and organic wastes are being used, which is a positive step towards organic farming.

## **Home Garden in Context to Tripura**

Homegardens of Tripura are playing a significant role in food, nutritional security and livelihood of the peoples of rural as well as urban areas. Tripura is a small state with a diverse demographic composition. People of various communities show a keen interest in homestead-based agroforestry. In maximum families, the members spend an ample amount of time in homegardening activity. Regardless of communities, maximum homegardens are chiefly managed by the female members of the house in this state. Homegardens of Tripura is a rich repository of vital plant species that include medicinal plants, vegetable crops, fruit crops, spices and timber-yielding tree species. People also get a significant portion of fodder from the trees of their homegardens. Recent studies have revealed a significant species richness and plant diversity in the homegardens of Tripura (Das *et al.*, 2020). Homegarden is also playing a vital role in maintaining the economic condition of rural people by providing some economic outputs and also by providing them some of the necessities.

## **The Declining Trend of Homegardening in the Urban Parts of Tripura**

Even though homegardens provide multiple benefits both directly and indirectly to the peoples without any major investment, still in urban localities these practices are getting less importance. A recent study revealed declined tendency towards the practice of homegardening in urban parts of Tripura (Das *et al.*, 2020). Homegardens of these areas of Tripura are much smaller in size and possess a lesser plant species richness and diversity. The possible reasons may be low land availability, the divergence of people's tendency from

agricultural activities, availability of other comfortable livelihoods, less availability of skilled agriculture workers and busy life schedule of urban people.

This tendency of the people of the urban part of Tripura is making those areas less green. One fact is often forgotten that a tree outside the forest also provides similar ecological functions. So, plant species, especially the trees of homegardens, act as a carbon sink and provides all other benefits. So, utilizing the available spaces in the home yards to practice homegardening in the urban areas can be a positive step against pollution and global climate change.

However, homegardens of both rural and urban areas of the state are providing some income and employment opportunities, as 'unemployment is a burning issue in Tripura nowadays.

### Conclusion

In the wake of a global food crisis and high food prices, increased emphasis has been made on enhancing and building local food systems. In this perspective, there is improved attention to the inclusion and promotion of homegardens as an eco-friendly sustainable agricultural practice to improve food security and enhance economic growth. Also, encouraging urban people to practice homegardening incorporating avenue and timber yielding trees will surely be a constructive step towards biodiversity improvement, carbon sequestration, and climate change mitigation.

### References

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