Training module on

Community Managed Green Spaces &

Urban Forestry

June -2015

Supported under

Comprehensive Capacity Building

Programme (CCBP)

Ministry of Urban Development

Government of India

Prepared by: Social Development Team

Module Preparation Team:

1. Team Leader

    - T.PandurangaRao

2. Editorial Advise, Guidance and Review

    - Venkateswar Reddy

    - L.VenkateswarRao

    - Narmada

    - DemuduBabu

    - SrinivasaRao

3. Content Contributions:

    - VSN Murthy

    - Prasad

    - Ramadevi

    - Naga Raju

Outline of the Module

COMPONENT	DESCRIPTION
BACKGROUND	Rapid urbanization in India is bringing complex changes to ecology, economy and society. During the last 50 years the population of India has grown two and a half times, but the urban population has grown nearly five times. This causes decrease of greenery in urban areas. So urban forestry has become important now a days Urban forestry is the management of community forests to establish and maintain healthy trees for air and water quality benefits, energy savings, environmental health, as well as to enhance the quality of life for urban residents. The Green spaces also contain wildlife, waterways, built roads and structures, and people.
INTENDED AUDENCE(S)	Town Level Federation (TLF) & Slum Level Federation (SLF) Office Bearers (OBs) and TLF & SLF Resource Persons (RPs)
LEARNING OBJECIVES	On completion of the training, the participants will be able to: • Describe the Importance of Urban Forestry • Explain the Role of Urban Local Body(ULB) in Urban forestry planning • Describe need for Community Participation in Urban Forestry Management • Describe the Environmental conservatory measures
MODULE OVERVIEW	This module covers the importance of the Urban Forestry, Role of the ULB in the urban forestry planning, community participation in urban forestry activities and environmental issues to be taken for urban forestry.

MODULE DELIVERY OUTLINE	**Awareness**: ▪ Importance of green space ▪ Ingredients of Well-managed green spaces ▪ Environmental Initiatives **Knowledge:** ▪ Community participation in urban forestry **Skills:** ▪ Role of ULB in Planning
MODULE ACTIVITIES	**(Methods of teaching)** • Lecture / Input session • Small Group Discussion • Field visits • Power point presentation.
SUPPORTING MATERIALS	• Reading Material in the form of hand outs • Training toolkit • Power point presentation

Contents

1 `Introduction

Rapid urbanization in India is bringing complex changes to ecology, economy and society. During the last 50 years the population of India has grown two and a half times, but the urban population has grown nearly five times. This causes decrease of greenery in urban areas.

The term "urban green spaces" is used in this module as a comprehensive term, comprising all urban parks, forests and related vegetation that add value to the inhabitants in an urban area. The term "urban trees" includes trees growing both within the built environment as well as road-side avenues and public places in urban systems.

2 What is a green space?

Green space means land that is partly or completely covered with grass, trees, shrubs, or other vegetation. These Green spaces can be found in the town/cities in the form of parks, community gardens, School grounds, undeveloped green spaces and cemeteries. Urban forestry is the management of community forests to establish and maintain healthy trees for air and water quality benefits, energy savings, environmental health, as well as to enhance the quality of life for urban residents. The Green spaces also contain wildlife, waterways, built roads and structures, and people.

3 Why it is Important to manage?

Trees provide numerous environmental, social and economic benefits for people, yet urban areas present challenging environments for trees to grow and survive. In the environment and human actions can cause different stresses to urban trees, some of which include: restricted root-growth area, road-salt exposure, soil moisture extremes, compacted soil, reduced soil fertility, pollution, improper pruning, trenching, and damage from lawn-care equipment, snow plows or vandalism. These stressful growing conditions can cause a decline in tree health and may eventually result in death, if not corrected in time. By actively managing our green spaces/forests, we protect these valuable resources and preserve and/or enhance the resulting benefits.

4 Important Ingredients of Well-managed green spaces

Defining municipal responsibility for public and private trees; passing regulations and setting minimum standards for green spaces management.

- Identification of what trees and areas will be managed. Street trees, parks, cemeteries, schools, etc.

- Development of a tree inventory, including; locations, species, condition, and management needs. A survey is necessary in order to develop a management plan.

- Creation of a management plan. Create a vision for the long-term community forest management; develop strategies, budgets and plans to meet that vision.

- Use of professional staff or consultants in management of these trees. And involve the community in management

5 Role of ULB in Planning

- ULB need to plan and regulate land uses.
- Responsibility for environmental controls to the local level, yet many town comprehensive plans do not identify
- Forest lands as a valuable, renewable natural resource and many zoning ordinances do not list forest uses or timber
- Harvesting as allowed uses in any zone. While these are more likely oversights than intentional omissions, it
- Illustrates just how much we take the forested landscapes in our midst for granted. Such omissions can complicate
- Generally-accepted forest management practices and create hardship for landowners. Relatively few towns
- actively plan for the future in ways that benefit their forests and some towns unknowingly have plans or processes
- in place that actually jeopardize long-term forest use

6 Community participation

Well-designed and managed green space networks will have an increasingly important role in supporting secure, resilient and healthy communities. Given its growing importance, communities should always be consulted in the development and maintenance of green spaces, and residents should be encouraged to become more engaged in supporting or managing their local green spaces. A sense of ownership over green infrastructure can help to reduce public vandalism and anti-social behaviour.

Develop Networking and creative economy: Networking system should be developed by involving the local community for the community and from the community. Creation of common ground provides opportunities for private and public to meet and exchange information, solve problems and plan together of green environmental friendly infrastructure and services (eco-services).

A group of technical professional will be formed to work across the professional boundaries and support to the community for application and Implementation of Environmentally sound technologies:

Parks and green spaces offer places for children to be able to meet and play with other children. This type of interaction is hugely important for a child supporting good social skills for the future social well-being of communities.

6.1   Benefits – Environment:

1. **Improve air quality** by trapping and holding dust particles that can damage lungs. Tree leaves absorb carbon dioxide and other poisonous gases and, in turn, replenish the atmosphere with oxygen for us to breathe. One acre of trees provides oxygen for 18people and will absorb the amount of carbon dioxide each year equivalent to that produced by a car driven 26,000 miles. Trees act as a carbon sink by removing the carbon from CO2 and storing it as cellulose in the trunk.

2. **Reducing noise pollution** by absorbing unpleasant sounds from the urban environment

3. **Improving water quality** by mitigating the impact of raindrops- resulting in less surface runoff of water from storms and reduced soil erosion. This allows more recharging of the ground water supply, which is significantly reduced by paving. Wooded areas help prevent the transport of sediment and chemicals into streams.

4. **Reduce wind erosion** of soil by providing a shield from heavy winds.

5. Creating wildlife diversity by providing a local ecosystem. Trees provide a suitable habitat for animals and birds that would otherwise be absent from urban areas.

6.2   Economic benefits

1. Creates a favourable first impression of a community to visitors.
2. Enhances community economic stability by attracting businesses and tourists.
3. People spend more because they tend to linger and shop along tree-lined streets.

4. Better employees when businesses lease office space in wooded developments. They find their workers are more productive and absenteeism is reduced.

5. Higher Occupancy rates of apartments and offices in wooded areas and tenants stay longer.

6. Higher property values because well landscaped properties are more desirable and studies have shown that properties can increase by 15%. Larger specimens equal higher values.

6.3 Energy benefits

1. Saving energy through cooling in the hotter months and serving as a windbreak during winter. As a result, you burn less fossil fuels for heating and cooling. Trees properly placed around buildings can reduce air conditioning needs by 30 percent. Trees strategically placed for windbreak protection can save 20 to 50 percent in energy used for heating.

2. Reduce glare on sunny days.

6.4 Health benefits

1. Create feelings of relaxation and well-being when people live and work within urban forests.

2. Provide privacy and sense of solitude and security

3. Shorten post-operative hospital stays when patients are placed in rooms with a view of trees and open spaces

6.5 Social Benefits

1. Green spaces provide a refreshing contrast to the harsh shape, colour, and texture of buildings, and stimulate the senses with their simple colour, sound and smell.

2. Particular types of green space may offer a bigger diversity of land uses and opportunities for a wide range of activities, help to foster active lifestyles, and can be of real benefit to health.

3. Well-managed and maintained green spaces contribute to social interaction by creating opportunities for people of all ages to interact.

4. Urban green spaces emphasize the diversity of urban areas by reflecting the different communities they serve and meeting their varying needs.

5. They enhance cultural life by providing venues for local festivals, civic celebrations

and theatrical performances.

7 Urban Forestry

The objective of Urban Forestry is bringing open spaces under greenery by raising different types of plantation models like block plantation, avenue plantation, tree parks, colony parks and gardens in order to improve the overall environment of Towns/Cities for better quality life.

The prime objectives of the Urban Greening Programme are:

- Greening the urban area to reduce air, noise and water pollution.

- Conversion of Unproductive lands into greenery to provide gainful employment.

- Increase the availability of fire wood and fodder to local villagers

- Income generation for the women groups through Nursery raising activity.

7.1 Social Strategies in Urban Forestry

- Participatory appraisal techniques give good response in understanding the needs, skills and ability of marginal segments of urban and peri-urban population in creation and maintenance of tree and forage resources. It helps in developing a satisfying arrangement for the protection of plantation by community in return for the right to enjoy products.

- Though charge-free sapling planting may be done in residential colonies with the residential welfare associations coordination.

- Public hearings may be held with Resident Welfare Associations and Voluntary organisations

- Mass awareness generation programmes like one-day-one-lakh / two lakh planting

- Involving the Public representatives, Institutions, Self Help Groups and other Govt. departments etc.

7.2 Women empowerment & Gender equity

HMDA (erstwhile HUDA) every year conducted training programmes in basic elements of nursery rising and maintenance to the women in its nursery centres under GHEP Project. After training, poorest of the poor women (below poverty line) were selected from the women groups identified for taking up homestead nurseries.

So far 6800 women were trained and involved them in nursery raising activity. About 110 lakh seedlings were raised by these women as part-time activity, which were used in the mammoth afforestation programme of making Hyderabad more greener. An amount of Rs. 261.77 lakhs has been disbursed to the women through cheques on buy back concept.

7.3   Greenery Development In Industrial Areas

As a part of Urban Greening Programme Industrial areas may be promoted for plantations. Greenbelts in the open areas of industrial establishments to be developed as block plantations to provide thick green canopy to contain the industrial pollution and to improve the green environment around the notified industries. The multiple row and single row avenue plantations have to be raised in industrial development area roads to support the green belts to upgrade the green environment in the industrial layouts.

7.4   Nurseries

For the environment up gradation ULBs have to develop and supply various types of nursery seedlings for multiple urban uses like ornamental plants, shade bearing plants, fruit bearing plants, fodder and fuel needs of the urban and semi urban population.

7.4.1   Types of Nurseries

- **Tall Plant Nursery**

  Ornamental shade bearing and multiple use tall plants of 2-3 Meter and 18 months old to the needs of the urban planting.

- **6"x12" bag culture Nursery:**

  Shade bearing, fruit bearing and ornamental seedlings have to be raised for planting in open areas, wastelands, parks etc. These plants will attain height of about 1 Meter at the time of planting.

- **Ornamental Nursery:**

  To meet the demands of various parks, gardens and landscape needs ornamental shrubs, hedges, climbers etc., are to be raised in Nurseries in 5"x5" size bag plants and about 6-8 months old.

- **Horticulture Nursery:**

  Different verities of mango, amla, pomegranate, sapota, seethaphal, Jamun, acid lime and tamarind to be raised nurseries as per the demand.

7.5   Parks Development

ULB has to develop different parks as per the need. They are theme parks, play parks, colony parks, lake parks and walkway gardens. ULB has to protect and improve the urban environment to provide better living facilities in the urban Area. Small open areas are developed into landscape residential parks. Medium size areas are developed into play parks to facilitate youth and children to play. Larger areas are developed into theme parks

7.6   Environmental Initiatives

In or order to mitigate the harmful effects by global warming and climate change, ULBs have to take some initiatives for "Reduce-Recycle-Reuse" of natural resources.

1. Say NO to Plastic

2. Cleaning and better management of local Lakes

Summary of the Module

Community Managed Green Spaces & Urban Forestry plays a pivotal role in protection of urban environment for healthy living. Participation of the community in managing the urban forestry is the need of the hour. This module greatly stress upon the need for community managed green forestry. This module describes various steps involved in urban forestry and need for community participation. This will be of much use to the participants involved in urban forestry.