# Little Tree Book

**(Record Tree in Grid)**

## Make your trees healthy and safe

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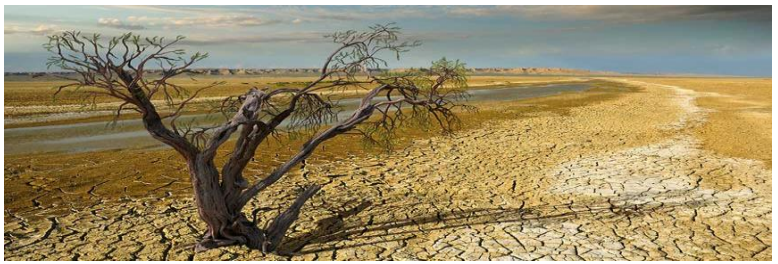

# Climate Change Mitigation and Adaptation (CCMA)


- Technological advances have made it possible to track commodities, vehicles, people etc. The Tree Grid uses this identification and tracking technology to track trees in specific locations. The tracking is not a real time solution but includes Tree identification details with a Tree Hazards Assessment Report, which is used by an expert panel to decide the emergency response or next step of action.

- The experts for trees called **arborists** help cut down, save or maintain trees and thereon save life.

# Climate Change Mitigation and Adaptation (CCMA)


- **<u>Assessment of the Age of a Tree (by observation that is based on details available on the Internet)</u>**
- 1. Count the number of **growth rings** (possible only when the tree is felled or cut). Every year a tree adds a new ring of tissue as its trunk grows outward
- 2. Count the number of **tree whorls** (that is the number of largest branch whorls) and add 1 to the number
- 3. Measure **diameter of circumference of trunk** at an average man's chest height & **multiply this value by the growth rate** of the species

# Climate Change Mitigation and Adaptation (CCMA)


- **<u>Assessment of the Age of a Tree (continued)</u>**
- 4. Use **an increment borer** (to be done only by an arborist) to **remove a cylindrical portion** of the trunk near the base or below an average man's chest height. This portion can be used to count the growth rings.

- Importantly, care must be taken to help the tree heal or grow unaffected after the use of any method to estimate the age of the tree.

# Climate Change Mitigation and Adaptation (CCMA)


- **<u>Assessment of the Age of a Tree (continued)</u>**
- 5. Maintain a Tree Grid that **records the date and time of planting of any sapling or seed** with details that help know more about the plant or tree at any later point in time. This could be used to decide whether the tree should remain at its location or be shifted to a different location or even be put to other use. This may become important in the future when climate change could become more severe leading to alternate cycles of floods and drought, thereby affecting a region's tree cover.

# Climate Change Mitigation and Adaptation (CCMA)


## Tree Identification and Configuration Details

- **Road System name:**
  **Road System Id:** Lookup... (OR)
- **PI/F name:**
  **PI/F Id:** Lookup...
- **Tree-variety or friendly name:**
- **Tree Grid Id:** Generate...

# Climate Change Mitigation and Adaptation (CCMA)


- **Estimated Age (in years by observation+):**
- **Estimated Height (in meters or feet):**
- **Type of Branching:**

- **Summary of condition or history:**

- **Enclosed picture (if any in mobile friendly formats):** Yes/No

# Climate Change Mitigation and Adaptation (CCMA)


- **Soil type: (Choose from:)** Normal hard dry soil/Normal dry soil/Wet soil (due to presence of subsoil water or surface water)/Black cotton soil/Alluvial soil/Red laterite soil/Sandy soil/Fissured rock/Hard rock

- **Soil details:**

# Climate Change Mitigation and Adaptation (CCMA)


- **(CRZ) Critical Root Zone details** (also known as drip line or an imaginary circle around the tree till where the canopy or branches seem to spread) - This is important to estimate the spread of the roots of the tree:

- **Nature of concrete work around tree:**

# Climate Change Mitigation and Adaptation (CCMA)


- **Clearances around tree:**

- **Overhead clearances:**

- The solution also permits the logging of a maintenance schedule for the tree being included in the grid.

# Tree Grid's Acknowledgement

- Finally a simple Thank You note to those citizens or entities who participate in the Tree Grid initiative could definitely help in making this endeavor more far reaching, impactful and socially accountable.

# Little Preparedness can help

- The consultant's note - It is not too late to start off on a much needed CCMA initiative to respond to emerging threats, improve the health of trees in a location and thereon reduce the hazard posed by tree fall or branch collapse.

- Civic bodies will need SMART tools to bridge gaps and mitigate risks in a sustainable manner. Today's citizens could be needing this book, where it might make a difference easily to life, property and the environment.

**DOP: 2017-2018**