

Road Arboriculture and Crisis Reduction

- **Proposal:** Tree Fall / Degradation and Crisis Reduction (Provisioning for road safety and green environment)
- **Tree conservation URL:** <https://venkataoec.wixsite.com/treeconservator>
- **Road Safety URL:** <https://venkataoec.wixsite.com/roadsafety-coe>

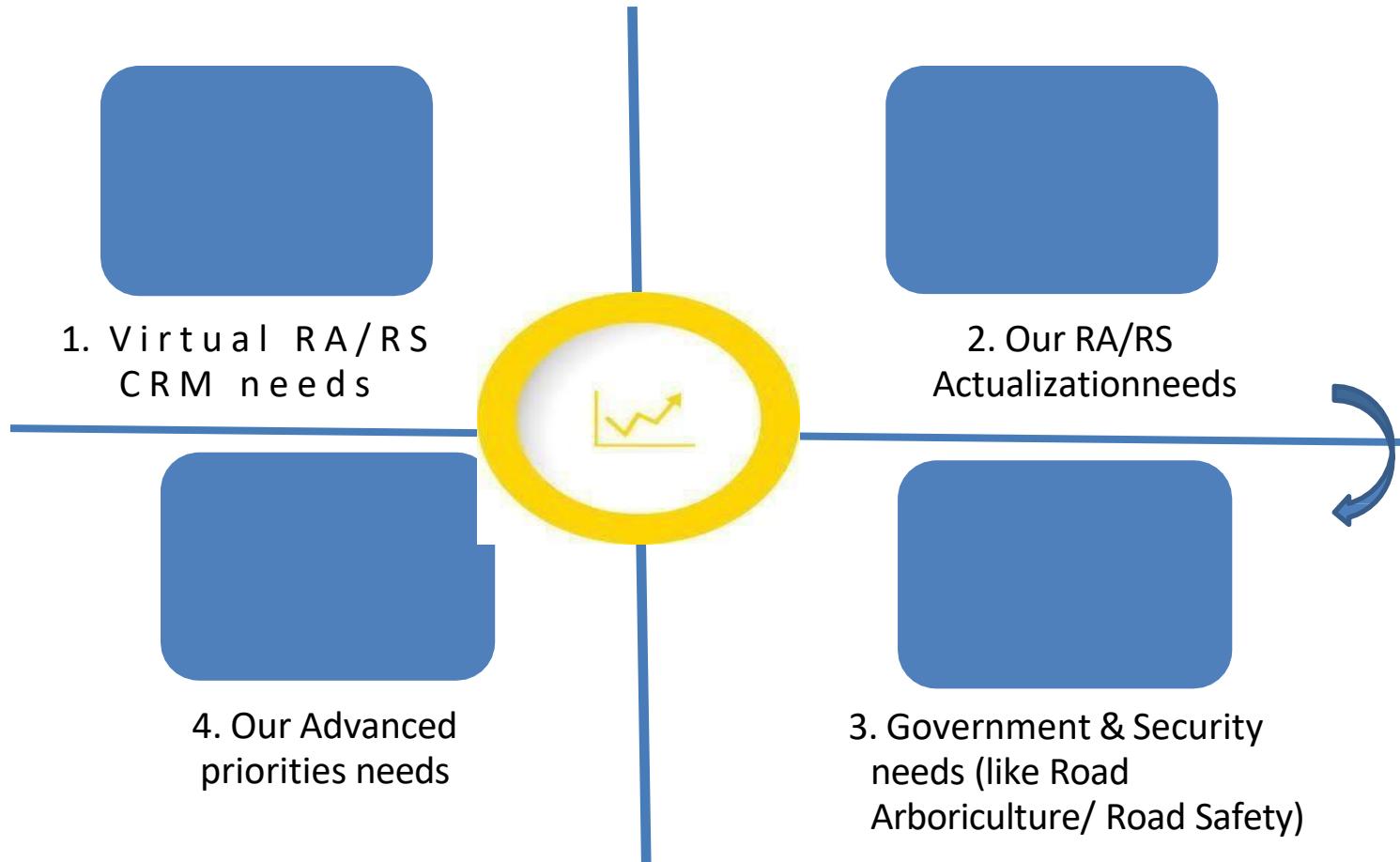


Tree Fall Crisis
Tree Conservation
Uncontrolled cutting of trees,
illegal felling or other road
arboriculture issues that
impact us today

Your
Recommended
Actions

Road Arboriculture and Crisis Reduction

- **Road Arboriculture related trees on being cut down or felled, impact our road safety.** To mitigate this impact, we review the Behavior Model and CRM influencing tree conservation or environment management



Road Arboriculture and Crisis Reduction

- The Government of India has often stated that forests and green environments influence climate change. The other crisis is that of illegal cutting of road arboriculture related (in short mainline) trees grown by the government or indigenously.
- It is important to help this crisis reduction. Thus to bring about foreseeable synergy into the “need to protect mainline trees” versus “the systems that are implemented to support their growth”, it may be important to conceptualize what is called “expert tree conservation and crisis control” for times unforeseen.



Road Arboriculture and Crisis Reduction

- Expert provisioning and virtual CRM can make it simpler to identify the tangible correlation between road arboriculture versus the crisis reduction enabled to improve road safety. This expert provisioning plus virtual CRM can record, evaluate, survey and collect information about concerning road arboriculture trees via an innovative Channel Building, where this new Channel Building will first help a conservator or grower to categorize trees along a road or road system or route based on a RA/RS Tree-management index CRITERIA, where the index can be simply (1), (2), (3), (4) or combinations of them
- **(1) TMI1:** could stand for this tree is a **low priority for virtual RA/RS CRM needs** (with an indication of the Foreseeable need =)
- **(2) TMI2:** could stand for this tree is a **medium priority for RA/RS actualization needs** (with an indication of the Business need =)
- **(3) TMI3:** could stand for this tree is a **high priority for government and security needs or RA/RS needs** (with an indication of the Specific need =)
- **(4) TMI4:** could stand for this tree is an **advanced priority for specific needs** (like air quality, road safety, with an indication of the Priority need =)

Road Arboriculture and Crisis Reduction

- This Channel Building will thereon help the government and tree conservation communities “insure” and “mitigate” the issue of cutting down trees illegally or for urbanization. Saved lifetimes are more helpful than felled lifetimes.
- The introspective solution being that if conservators or growers have a RA/RS Tree-management index that includes **TMI3 or TMI4** (which will most commonly be so), then it will be necessary for the government, tree conservation communities, grower networks and other environment protection networksto incorporate special provisions or schemes that could
- **1. Protect investment via Tree property insurance**
- **2. Help RA/RS related tree conservation via crisis reduction**
- **3. Provide and utilize virtual CRM schemes to help interested parties grow and protect mainline trees that affect priority based or advanced priority based road arboriculture, community and ecosystem development**
- **3. Manage any Illegal, Quickor Priority based cutting of trees by RA/RS Tree management index based** checks, incidence escalation or mitigation. The points 1 to 3 are important to ensure that issues (like resources crunch to grow or support RA/RS specific planted trees, limited power to stop cutting of trees, unregulated cutting down of trees leading to road safety issues and tree resource depletion) are managed.

Tree cutting depletes
drops from a fulfilling
environment

Road Arboriculture and
Crisis
Reduction

The Extra
Mile 

Road Arboriculture and Crisis Reduction

- **k - DEPLETION**
- **What is Tree resource depletion?**



Global warming, climate change, destroying of forests & trees and population growth has depleted and will deplete the natural and man-made resources important for man's existence. For air quality, health, wellness, road safety and green environments, we can say that we will need to incorporate systems to prevent tree **resource depletion (that is as this causes a risk to existence or impacted arboriculture or environment)**, where a RA/RS Tree Management Depletion Quotient (TMQ) will indicate as to whether the tree management level is satisfactory, or low, or extremely low or more of a crisis for road safety.

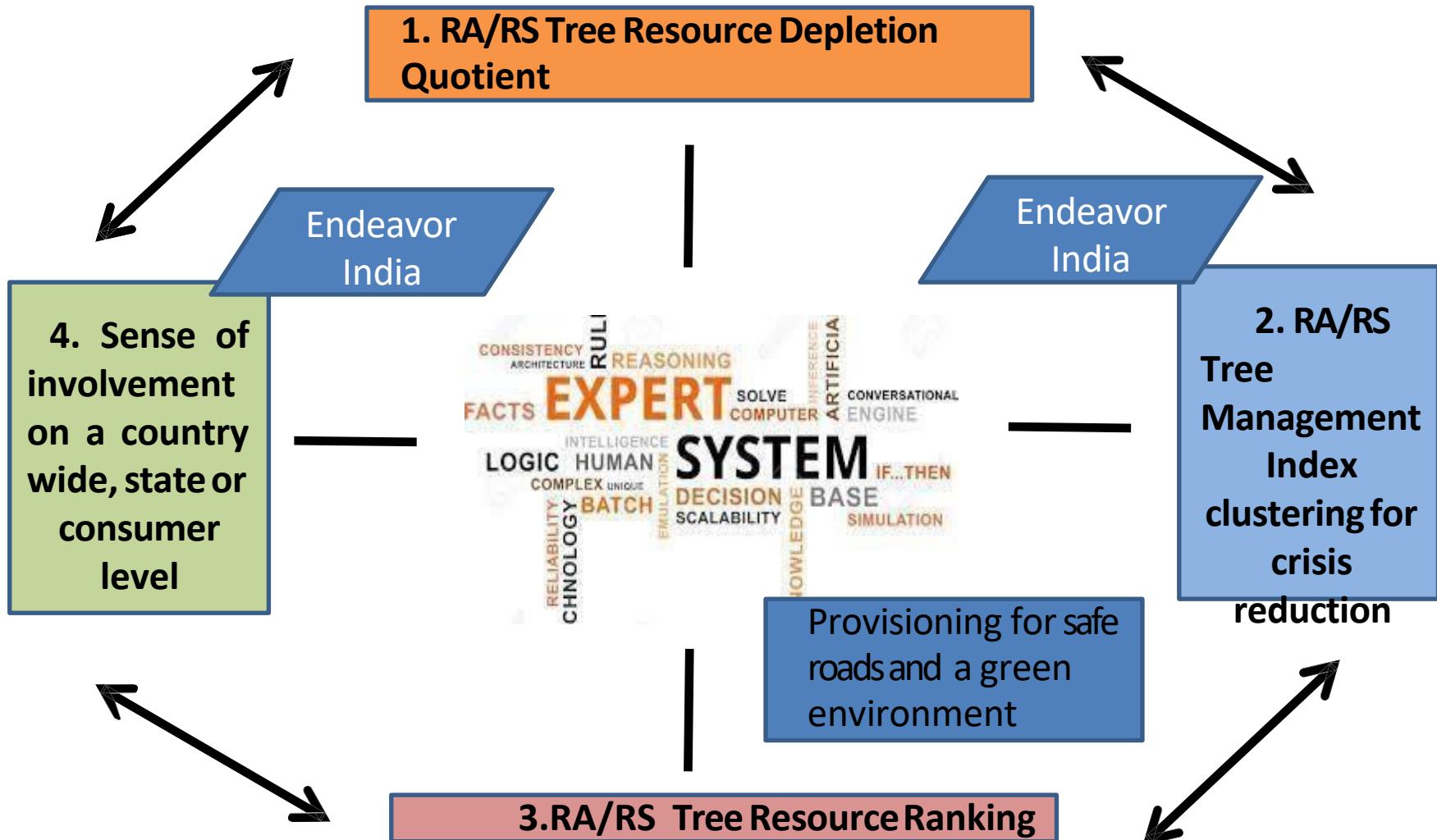
Today we have no “**Expert provisioning and virtual CRM system**” that can importantly survey or provide details on tree resource depletion, where the expert system and virtual CRM **helps develop/conserve/ protect environments with provisioning for what we call as space reclamation, utilization or consumption**. The provisioning may then help act to prevent any oversight at (PAN India to State to Grower levels) as protection, conservation or utilization are dependent on our synergetic sense of involvement (or virtual CRM).

Road Arboriculture and Crisis Reduction



- As a country, we may need to build 'safe roads and **green environments**' that can help tide over adverse climate change related threats on a country wide or state specific basis. Each road safety department, arboriculturist or grower's involvement is important too.
- This need to build 'safe roads and **green environments**' must flow down as a Tree Resource Planning (TRP) requirement to tree conservation communities, arboriculture & grower networks and other systems involved in growing, sales or remedial planning, where this mechanism can help 'tree resource' ranking for safe road and green environments.
- The '**tree resource**' ranking can decide as to what crisis reduction, checks and controls need to fall in place, apart from the '**RA/RS Tree Management Index (TMI)**' and '**RA/RS Tree Management Depletion Quotient (TMQ)**' for lifetimes ahead

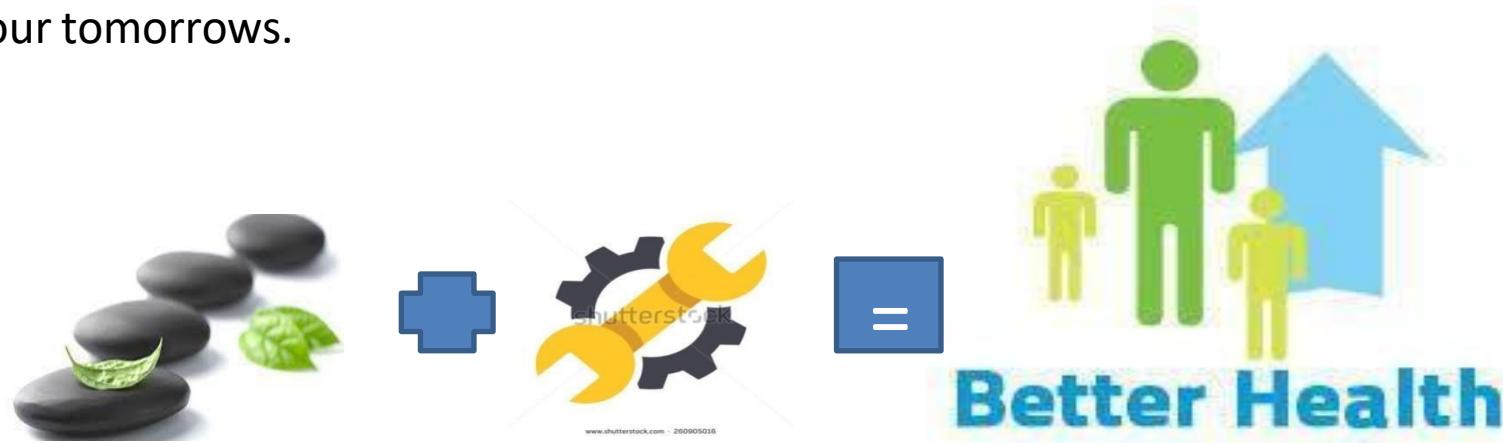
Road Arboriculture and Crisis Reduction



Road Arboriculture and Crisis Reduction

Nature has many roles to play. It is not proactive for us to avoid introspecting how climate change is going to road safety, or could affect demand/supply networks and factories making drugs, medicines and formulations, where production “whether autonomic or not” is not yet remedial. The underlining vision does not fortify the path to a healthier life, in every day interests and/or in unforeseen incidence or disaster afflicted scenarios.

We at AOEC envision that steps and tools for better health are Involvements of conviction that may help our tomorrows.



Road Arboriculture and Crisis Reduction

Our guided methodologies

The following tabulation will remain common for the crisis reduction but the details or guidance will differ for each road arboriculture plant/tree/product

Steps	Guided methodologies
Crisis reduction for the Seed to productization lifecycle	AOEC solutions
Sensor controlled network	AOEC solutions
Crisis reduction for Demand/supply systems	AOEC solutions
Contingency Plan	AOEC solutions
Risk Mitigation Plan	AOEC solutions
Fencing System and Remote Management	AOEC solutions

Road Arboriculture and Crisis Reduction

Tree cutting or felling depletes a fulfilling environmental balance

Road Arboriculture and Tree Crisis Reduction



- Ask for our NEXT Steps to know more about the crisis reduction proposal.
- **You can refer to our documentation on Incidence Escalation or Mitigation to help reduce the issue of cutting down, felling or theft of trees.**
- **You can refer to our documentation on RA/RS enabling Census and Self-corrective Analysis for safe roads and green environments.**
- You can call us on +91 9342867666 or email us on venkataoec@gmail.com



Road Arboriculture and Crisis Reduction

MINDSET



Booklet VFH 1.00.2020



Build Road Arboriculture as Assets, AOEC

Complementing Road Safety programmes



Natural Remedies and Health

As a CMMA / healthcare goal, we all need to increase our awareness about health and wellness. This information from different sources can help you find the path to a healthier life.

Some ailments can be cured or treated via relevant Home Remedies. India is known to use herbs, berries, fruits, plants and flowers for health and wellness. This guide looks at this ability, specifically when we need to plan for disaster management and restoration of life-normalcy.



Natural Remedies and Health

Real-life craftsmanship is mankind's abilities to convert nature to home remedies for health and wellness. Manufactured drugs, medicines, formulations need not always be the way ahead to recovering from ailments.

The country is advancing both technologically (healthcare) wise and infrastructure wise as the years are passing by, but the changes to nature are not being managed to help “Natural Remedy” asset development via road arboriculture. We know of allopathy, ayurveda, homeopathy, wellness therapy.

Business interests dominate much of these domains of healthcare. This review looks at “why” plants, herbs, flowers etc cannot be planted-grown along roads or on-relevance maintained/collected/reused for road safety and healing or wellness. Waste management has become the need of the hour given that natural remedies will grow in their need , but today

Natural Remedies and Health

there is no Natural Systems Interface (NSI) associated with many nature's resources to help man develop a sense of participation to revive, enable and ensure we have a Home Remedy Cluster, that conceptualizes (Least factory based) home remedies, where a cluster of experts ensure availability and effectiveness for restorative or mass requirements. Disasters are prone to affect man but restoration post disaster needs methodologies. **Added to this...Roads are** known to be costly to develop or maintain, where issues like dynamics of pollution/mankind's decisions for quality can impact autonomic planning for safe road systems / for natural remedy asset production.

For all futuristic interest, autonomic production is known to be capable of remedial "self-configuration, self-management, self-prioritization, self-reparative methodologies to manage demand/supply with sustainable clustered insights".

Natural Remedies and Health

Nature has many roles to play. It is not proactive for us to avoid introspecting how climate change is going to road safety, or could affect demand/supply networks and factories making drugs, medicines and formulations, where production “whether autonomic or not” is not yet remedial. The underlining vision does not fortify the path to a healthier life, in every day interests and/or in unforeseen incidence or disaster afflicted scenarios.

The first part looks at (A) names of flowers, herbs, berries, spices and medicinal benefits with a review of (B) Asset development for People Welfare Systems. The Mission Health Grid (MHG) bridge between the two (A)  (B) is highlighted in the sections that follow.



Natural Remedies and Health

A step today to develop a Road Arboriculture Remedy Cluster may make it possible to decide upon a sense of preservation that can help use or reuse flowers at first and then more generally plants, herbs, leaves so there is a supply of clustered green resources for the experts who can use them when fresh, dried, residual or in stages of being discarded, as growing crops for agricultural, horticulture, floriculture or herbal products is involving by itself. As a start...



There are many businesses or consumers who use herbs in large quantities or in regular repetitions. Connecting them to a Road Arboriculture Remedies Cluster can help change what is expected or convenient today. We could help these businesses or consumers to register with a Road Safety Cente/Portal, that helps advise how guided methodology can followed for road arboriculture and for any cluster of Natural Remedy producers to help a sense of preservation.

A bridge for Road Safety and Health

Names of RA plants/trees/products and their medicinal benefits

Plant/Tree/Product	Medicinal benefit
Bilva patra	Helps treat Asthma, Constipation, Depression, Diabetes, Diarrhoea and Memory improvement
Bael patra (Wood apple)	Bael fruits are of dietary use and the fruit pulp is used to prepare wellness foods. Bael fruits are also used in the treatment of chronic diarrhoea , dysentery, and peptic ulcers, as a laxative and to recuperate from respiratory infections
Sitaphal (Custard apple)	Contain anti-oxidants like Vitamin C, which helps to fight free radicals in the body. High in potassium and magnesium that protects heart from cardiac disease. Controls blood pressure. Contains Vitamin A, which keeps skin and hair healthy
Sibehannu (Guava)	Lowers Blood Sugar Levels. Boosts Heart Health . Helps Relieve Painful Symptoms of Menstruation. Benefits Digestive System. Aids Weight Loss. Has an Anticancer Effect. Helps Boost Immunity. Good for Skin.

A bridge for Road Safety and Health

Names of RA plants/trees/products and their medicinal benefits

RA plant/tree/ product	Medicinal benefit
Jamun Mara	Helps manage Diabetes. Regulates bloodsugar level. Boosts Stomach Health. Helps Regulate Blood Pressure. May Boost Immunity and Aids Weight Loss. Jamun seeds manage stomach-related issues effectively.
Mahogany Mara	Used for hypertension, amoebiasis, chest pains, parasitism, cancer. In India, bark extracts used as astringent for wounds. Used for malaria, anaemia, diarrhoea, fever and dysentery

Flowers & RA/Natural Remedies



Names of herbs/flowers and their medicinal benefits

Herb/Flower element	Medicinal benefit	Conscious Decision making
Bach flower	Helps improve moods and emotions	
Dandelion	Helps flush out excess fluids	
Echinacea	Improves immunity and reduces incidences of cold and flu	
Grapefruit	Cleanses the air	
Hibiscus	Reduces high blood pressure	
Brahma Kamal	Treatment of fever, bone ache, intestinal ailments, cough, and cold	
Lemongrass	Can refresh, cleanse, stimulate digestion and ease nervous feelings in the stomach. Can remove toxins and also has an antibacterial and antiseptic effect	
Mandarin	Boosts self-worth	
Marigold	Treating minor wounds, callouses, insect bites and stings, eczema, itches, burns and haemorrhoids	
Primrose	Helps balance hormones, reduces stress and improves moods	

Flowers and RA/Natural Remedies



Names of herbs/flowers and their medicinal benefits

Conscious Decision making

Herb/Flower element	Medicinal benefit
Rose	Boosts self worth
Rosemary	Helps balance moods
Ylang Ylang	Boosts self worth

Herbs & RA/Natural Remedies



Names of herbs and their medicinal benefits

Herbelement	Medicinal benefit
Aloe vera	Anti-inflammatory and healing properties
Basil	64 basil species, some of which are used as food wraps, elements of culture and ornamental ingredients
Bay	Cooking and ornamental purposes
Brahmi	Improve brain function and memory, ornamental purposes
Chilli	Culinary spice, ornamental and landscape purposes
Coriander	Cultivated for its culinaryfoliage, roots and seeds, herbal medicines
Curry plant	Cooking, floral arrangements and edging herb gardens
Eucalyptus	Medicinal applications and fragrance
Fennel	Culinary purposes like salads, salad dressings, pickles, baked foods and for its ornamental qualities
Flax	Printing inks, paints, varnishes, linoleum, bakeryand cereal products

Herbs & RA/Natural Remedies



Names of herbs and their medicinal benefits

Herbelement	Medicinal benefit
*Garlic and onions	Garlic used in medicinal preparations for its antimicrobial effects, anti cancer effects, improving blood circulation, Onions used for medicinal benefits and Culinary qualities
Ginger	Medicinal uses, to control arthritis, rheumatism, to protect the heart and blood vessels, to improve digestion and even to treat motion sickness, nausea
Jasmine	In essential oils, for perfumery and aromatherapy
Lavender	Medicinal uses in antiseptic, anti inflammatory preparations, treating anxiety, sleeplessness, essential oil in home-made air-fresheners and cleaning products
Lime	Medicinal uses to treat anxiety, tension, circulatory disorders, arthrosclerosis, respiratory infections, for ornamental and shade qualities
Mint	Uses fragrance, flavor, taste, in medicinal preparations to treat digestive disorders, for pain relief, as a nasal decongestant
Nettle	Medicinal uses to remove toxins, to treat arthritis, skin disorders and for its diuretic effect

Herbs & RA/Natural Home Remedies



Names of herbs and their medicinal benefits

Herbelement	Medicinal benefit
Parsley	Medicinal uses to remove toxins, to treat arthritis, skin disorders and for its diuretic effect
*Plantain	Cooking to add flavor, for garnishing and medicinal uses to treat arthritis, digestive disorders, urinary-tract disorders and for its diuretic effects.
Poppy	Medicinal uses for anti-inflammatory and healing qualities, to prevent constipation and treat hemorrhoids
Sage	Medicinal uses like pain relief, treating insomnia, anxiety, to aid relaxation but should not be used for addictive qualities like heroin
Tea	Culinary qualities like flavor, aroma and for medicinal uses as an anti-oxidant, to control cardiovascular diseases, cancers and to improve mental alertness and concentration Green tea though very beneficial must be consumed with precaution and in controlled measures
Tea tree	Medicinal uses to treat cuts, skin infections due to antimicrobial and antiseptic qualities
Thyme	Ornamental qualities like profuse flowering, culinary qualities like aroma, flavor and for medicinal uses like anti-microbial qualities to treat and cure gastrointestinal infections, digestive disorders & respiratory disorders
Turmeric	Ornamental foliage and medicinal properties like anti-inflammatory effects, anti-oxidant effects, anti-cancer effects and anti-thickening properties to improve the health of arteries

Berries & RA/Natural Remedies



Names of berries and their medicinal benefits

Berries element	Medicinal benefit
Blackberry	Used for astringent properties and to treat diarrhea
Cranberry	Used for anti-oxidant effects and to treat and improve urinary disorders
Juniper	Used to treat arthritis, rheumatism and in treating diseases like gout due to its anti-inflammatory qualities
*Schisandra	Super berry that is used to treat asthma, cough and for its anti-inflammatory and anti-oxidant properties
Wild strawberry	Used to treat digestive disorders

Berries & RA/Natural Remedies



Names of spices and their medicinal benefits

Spices/element	Medicinal benefit
Asafoetida	Culinary qualities and medicinal purposes such as to treat digestive disorders, respiratory problems
Black Pepper	Culinary qualities and medicinal purposes like anti-microbial effects to treat digestive disorders
Cinnamon	Culinary qualities and medicinal purposes like for its possible anti-carcinogenic properties, its anti-bacterial, anti-fungal and anti-viral properties, to qualify to reduce cholesterol levels
Clove	Culinary qualities and medicinal purposes like its anti-septic, anti-inflammatory and analgesic properties
Cumin	Culinary qualities and medicinal applications to improve digestion, to control and treat colitis, bowel spasms
Fenugreek	Culinary qualities and medicinal uses to manage blood sugar levels in order to treat diabetes and to lower cholesterol levels
Saffron	Medicinal uses like its anti-cancer properties, its qualities to treat respiratory problems and in cooking for its flavor, fragrance and appearance
*Nigella	Widely used for its culinary qualities and in medicinal applications that treat digestive disorders, and for anti-parasitic, anti-inflammatory and anti-cancer qualities
Tamarind	Culinary qualities and for medicinal purposes to treat nausea, constipation, rheumatism

Road Arboriculture and Crisis Reduction (MTCR)

- **Proposal:** Incidence Mitigation and Adaptation(Provisioning for safe roads and a green future)
- **Tree conservation URL:** <https://venkataoec.wixsite.com/treeconservator>
- **Road Safety URL:** <https://venkataoec.wixsite.com/roadsafety-coe>

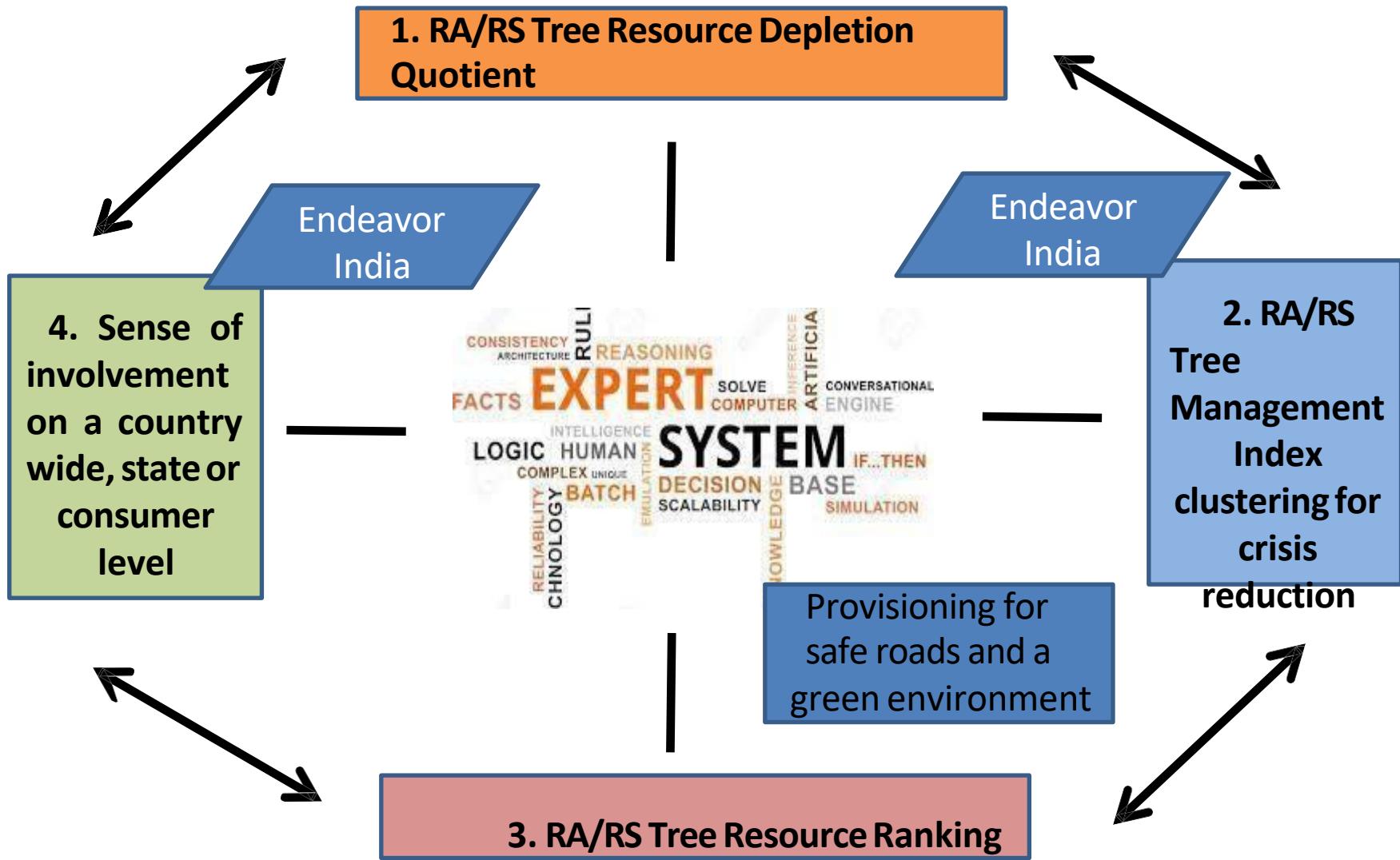


Uncontrolled cutting of trees,
illegal felling or theft are
issues that impact road
arboriculture



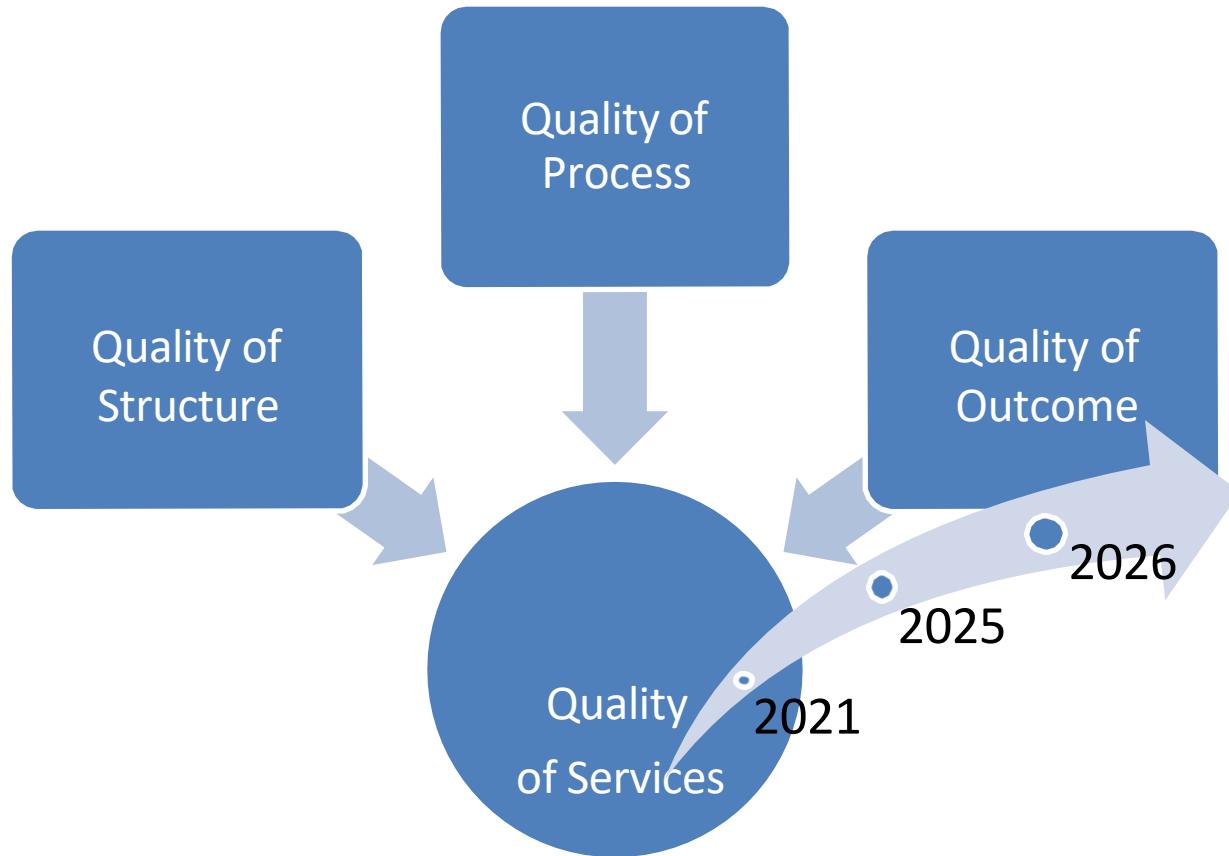
...
Your
Recommended
Actions

Incidence Mitigation and Adaptation



TMI: Tree Management Index, TMQ: Tree Management Depletion Quotient and TRR: ²⁸ Time Resource Ranking with Road Arboriculture and Road Safety in mind

Incidence Mitigation and Adaptation



Gap Analysis for Incidence Mitigation and Adaptation

1. Is the MTCR model agile to serve sudden incidence response for disasters, climate change related risks, threats, air quality related health hazards, illegal cutting down, felling, smuggling or theft incidences, complaints etc? Yes / No
2. Are all cases put through complete case analysis & incidence management practices to ensure Road Arboriculture and Crisis Reduction (MTCR)? Is any assessment reported at the earliest? Yes / No
3. Are all events or incidences or complaints assessed to understand root causes and TMI, TMQ and TRR indicators? Yes / No
4. Are efforts put in to reduce further incidence or complaint occurrences? Yes / No
5. Are MTCR diagnostics and consultations assessed periodically for problems in effectiveness? Yes / No
6. Are MTCR diagnostics and consultations assessed periodically for deviations from norms or root cause practices? Yes / No

Gap Analysis for Incidence Mitigation and Adaptation

7. Are census control & self-corrective solutions periodically put through preventive or mitigative assessments and quality checks? Is proactive critical path management in place to ensure their availability? Yes / No
8. Is gap analysis done periodically, to assess practices adherence and quality levels for areas important to ensure best results for green ecosystems, MTCR sufficiency and sustainability for the bio-cluster? Yes / No
9. Is a post-mortem (of TMI, TMQ & TRR indicators and lifecycle theory) done for important cases to understand what could have been done better? Yes / No
10. Are contacts, availability and preferences of MTCR consultants, experts, personnel in MTCR hub deployments confirmed or updated on a periodic basis? Yes / No
11. Are there alternate strategies to help MTCR solutions when there are unforeseen impactful changes or uncontrollable situations? Yes / No

Road Arboriculture and Crisis Reduction (MTCR)

- **Proposal:** Census and Self-corrective Analysis(Provisioning for safe roads and a green future)
- **Tree conservation URL:** <https://venkataoec.wixsite.com/treeconservator>
- **Road Safety URL:** <https://venkataoec.wixsite.com/roadsafety-coe>

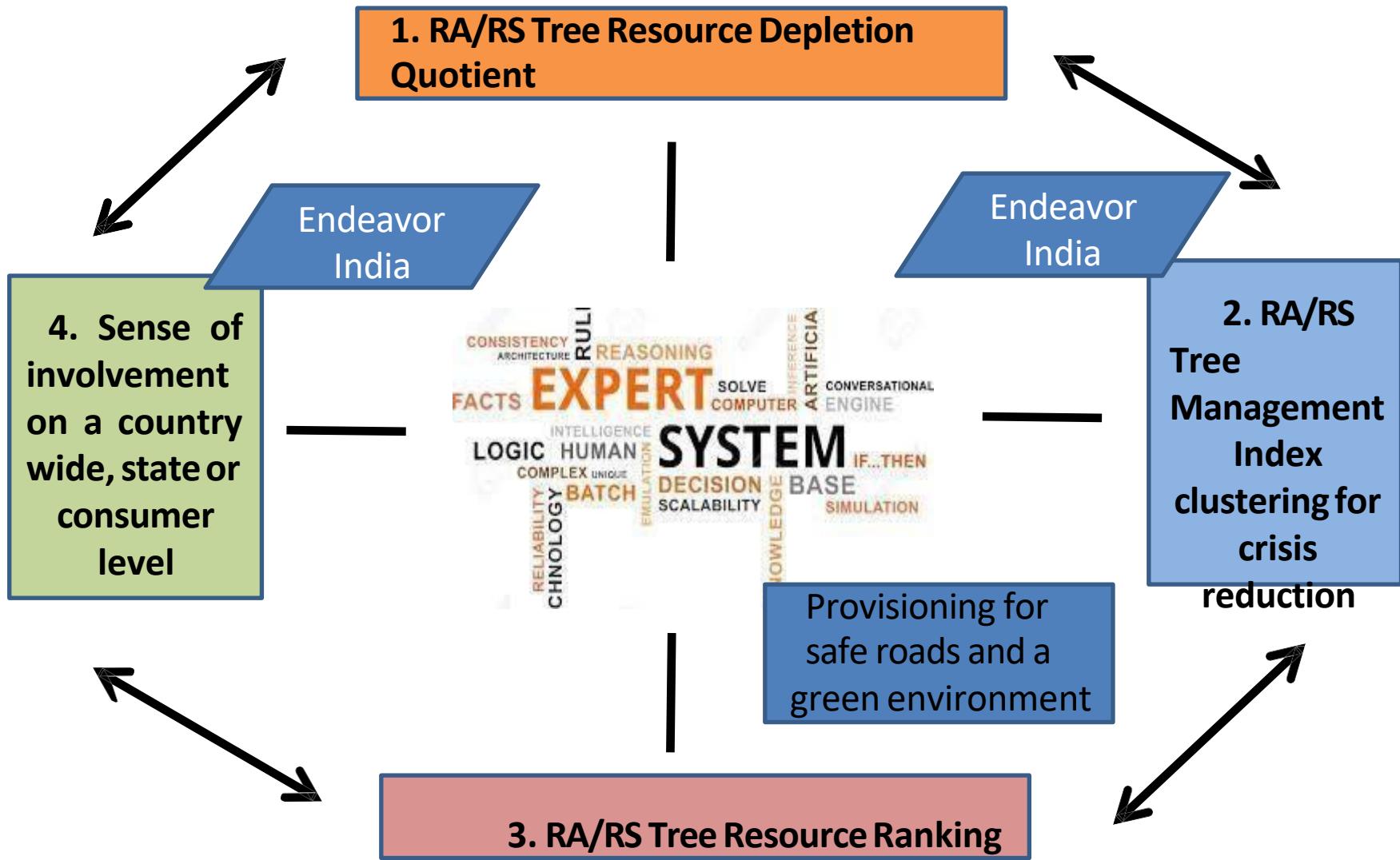


Uncontrolled cutting of trees, illegal felling or theft are issues that impact road arboriculture



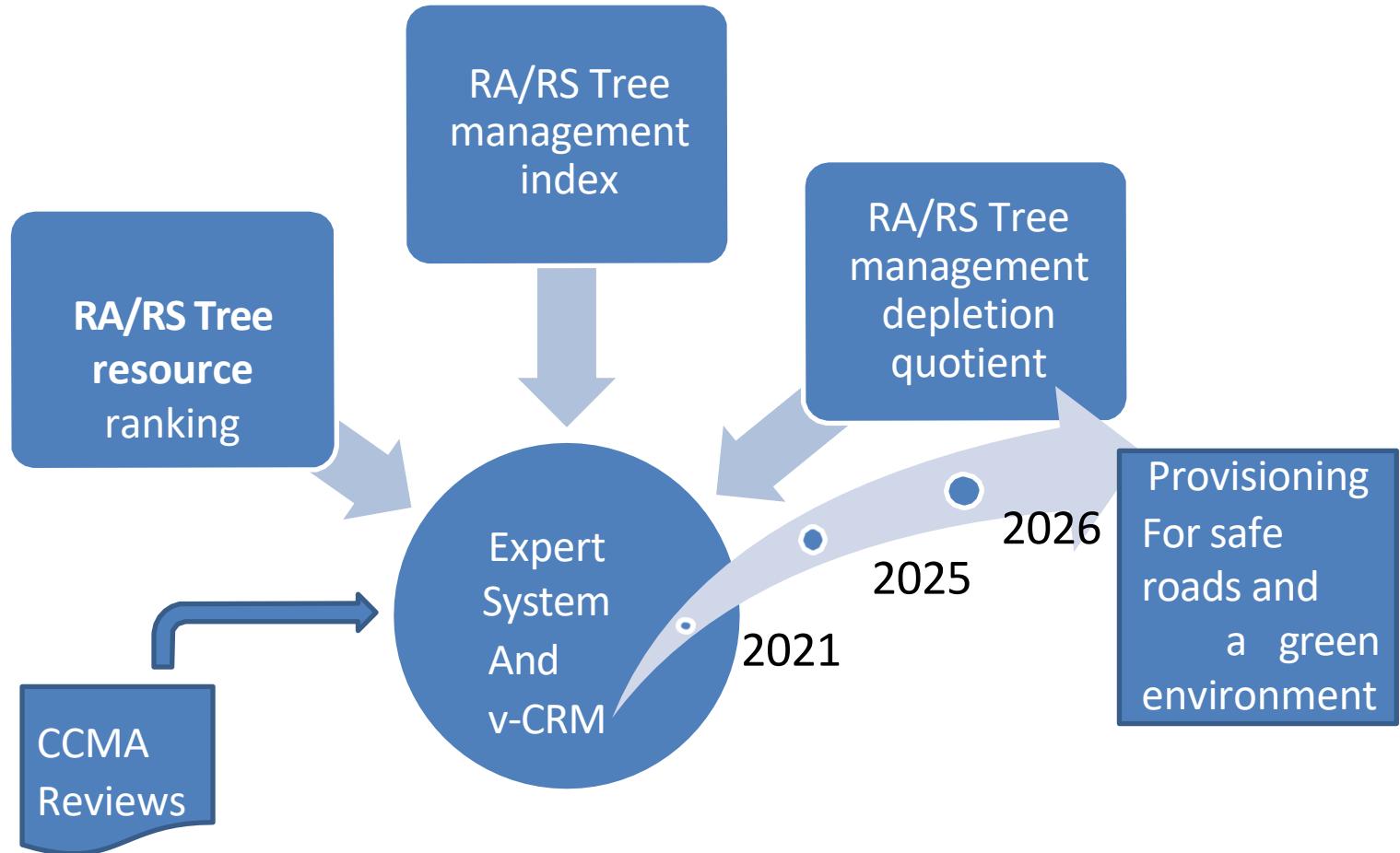
...
Your
Recommended
Actions

Census and Self-Corrective Analysis



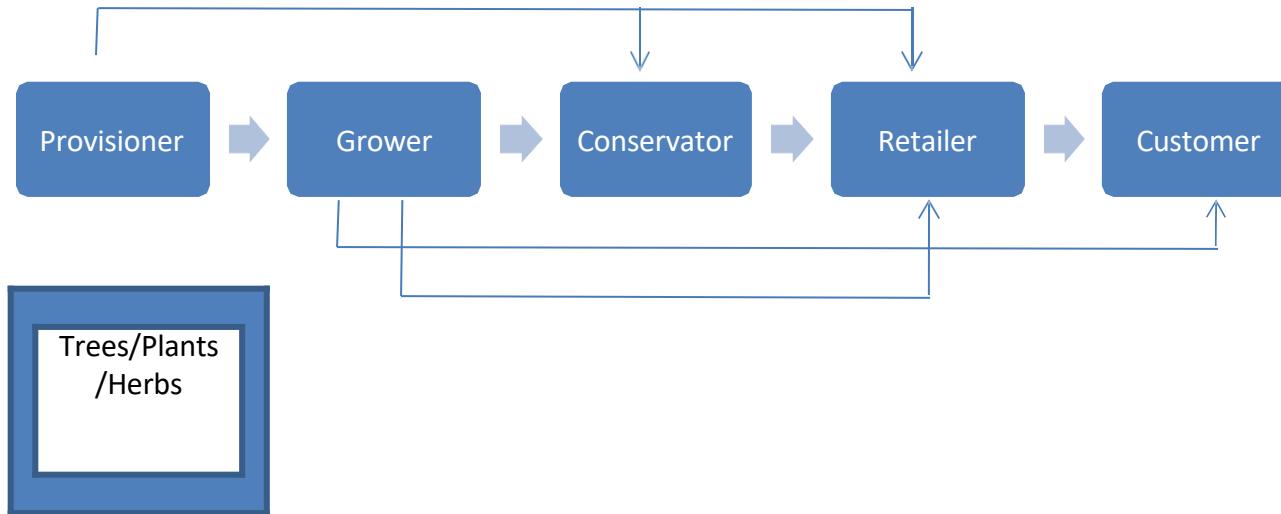
TMI: Tree Management Index, TMQ: Tree Management Depletion Quotient and TRR: ³³ Time Resource Ranking with RA/RS in mind

Census and Self-Corrective Analysis



CCMA Reviews and Self-Corrective Analysis

- **Illustration 1: Self-corrective analysis for future green environments is made up of stages that involve CCMA Reviews, TRR, TMI and TMQ provisioning**



- Today there is no Road Arboriculture and Crisis Reduction that can report CCMA indexes/control and/or self-corrective analysis for issues impacting our road safety and environments. There are solutions to carry out a review or census but the data is not used for provisioning or self-correction for a safe roads and a green tomorrow.

CCMA Reviews and Self-Corrective Analysis

- **CCMA Reviews and Self-Corrective Analysis**
- Most tree conservator communities, road arboriculture & grower networks, or environment management communities have solutions to carry out a census of trees, plants, herbs, gardens/forest environments along roads/road systems.
- **Push/Pull Processes for self-correction**
- Other than this, we need 2 processes for mainline CCMA resource provisioning i.e. Push processes, and Pull processes. Push processes operate in an environment where CCMA controls are not inclusive of any self-corrective analysis. Pull processes are reactive processes, they are used in environments where CCMA controls are inclusive of self-correction analysis and help us implement CCMA solutions for safe roads and a green environment.
- A self-assessment framework can help mainline CCMA resource provisioning and intelligent control of community involvement on a country wide, state wide or grower wide basis for Climate Change, Mitigation and Adaptation (CCMA).

CCMA Reviews and Self-Corrective Analysis

- There are different Key Performance Indicators for safe roads and **future green environments** (some examples follow):
 - 1. CCMA level based road arboriculture
 - 2. Adept CCMA control and reduction of illegal felling, degradation or theft
 - 3. Improved demand/supply formulation for safe roads and green environments
 - 4. Right and ethical RA/RS tree resource provisioning functions
 - 5. RA/RS benefits due to smarter decisions for self-corrective processes
 - 6. Reduction in delayed escalation or decision-making
 - 7. Success factor in meeting the requirements for Environmental, Social and National health goals, where tree resource management does acknowledge and control involvement to mitigate climate change and combat new or existing threats to road safety and our continual dependency on roads.
- **.Classifications that help tree resource provisioning for road arboriculture and future green environments**
- They can be classified into the following 3 macro-processes:
 - a. CCMA level based Provisioning, Conservation and Self-Correction (PCSC)
 - b. Road Arboriculture Management for TM1, TMQ and TRR indicators (RAM)
 - c. Customer Relationship Management for TMI, TMQ and TRR indicators (CRM)

CCMA Reviews and Self-Corrective Analysis

Road Arboriculture Management **Activities (RAMA)** for TM1, TMQ and TRR indicators, **typically involve**

- 1. CCMA level based Assessment
- 2. CCMA level based Self-correction
- 3. Sourcing or Space to Grow investment
- 4. Seed to Shelf/Utilization Lifecycle Collaboration
- 5. Supply Collaboration

Provisioning, Conservation and Self-Correction Activities(PCSC) for TM1, TMQ and TRR indicators, **typically involves**

- 1. CCMA control specific Strategic Planning
- 2. CCMA related Arboriculture Demand Planning
- 3. CCMA related Arboriculture Supply Planning
- 4. CCMA related Arboriculture Fulfillment
- 5. CCMA related Arboriculture Perspective Imagery/Field Visits

CCMA Reviews and Self-Corrective Analysis

Virtual Customer Relationship Management Activities for TM1, TMQ and TRR indicators typically involve

- 1. CCMA Review / Evaluation Pricing
- 2. Controlled and Self-corrective Maintenance
- 3. CCMA Advisory Centre or RA/RS Surveillance Centre assistance
- 4. Guidance for Road Arboriculture Lifecycle Management
- 5. Incidence Mitigation and/or Management

- Self-corrective analysis (called lifecycle sequencing) is a methodology for enabling small and continuous improvement in PCSC, RAM and v-CRM Activities. Self-corrective analysis will help provision mainline tree resources via an Expert system and virtual CRM that understands different TMR, TMI and TMQ indicators for mainline crisis reduction.

CCMA Review and Self-Corrective Analysis

AOEC's Sustainable Tree Resource Lifecycle Review helps design a RA/RS knowledge base that integrates Gap analysis for the RADIUS of 5 factors

- This RA/RS knowledge base packages different Gap analysis sections to form a baseline database that can implement a maturity forecaster to help control the PCSC, RAM and virtual CRM activities for Road Arboriculture and Crisis Reduction (MTCR).
- The Gap analysis integration can be continually improved via a set of P-D-C-A efforts to help
- a. Plan - What should be forecasted, when should it be forecasted, who should be forecasting this, how should it be forecasted and by using what?
- b. Do - Enable PCSC, RAM and virtual CRM activities via this plan?
- c. Check - Check if PCSC, RAM and virtual CRM activities can support the MTCR maturity needed, or carry out "what if" analysis for better results
- d. Act – Determine whether the integration improves alignment? Can it work to revise or restructure the PCSC, RAM and virtual CRM processes?

RA/RS Stakeholders will need to invest in a Case study to understand more details. The next section includes a template that can be used to respond via CCMA Reviews and Self- corrective analysis for any nature of incidence faced with mainline tree resources.

CCMA Reviews and Self-Corrective Analysis

- **Type of incidence or event being reported(Tick as applicable):** TMI Event/ TMQ Event/TRR Event/Other Complaints or Incidences
- **Explanation:**
 - (a) TMI Event: Incidence or event affect the RA/RS Tree Management Index (TMI)
 - (b) TMQ Event: Incidence or event affect the RA/RS Tree Management Depletion Quotient (TMQ)
 - (c) TRR Event: Incidence or event affect the RA/RS Tree Resource Ranking (TRR)
 - (d) Other Complaints or Incidences: Anyother complaint or incidence
- **Incident or complaintor event:**
- **Brief description:**

CCMA Reviews and Self-Corrective Analysis

- **Place of impactful occurrence:**
- **Date of occurrence:** **Time of occurrence:**
- **Analysis for CCMA Review and Self-Corrective Analysis:**
- 1. Have all events or incidences or complaints (related to this mainline tree resource) been assessed to understand root causes? Yes / No
- 2. Have MTCR diagnostics and consultations (related to this mainline tree resource) been assessed periodically for problems in effectiveness? Yes / No
- 3. Have MTCR diagnostics and consultations (related to this mainline tree resource) been assessed periodically for deviations from norms or root cause practices? Yes / No

CCMA Review and Self-Corrective Analysis

- 3. Have contacts, availability and preferences of MTCR consultants, experts, personnel in MTCR hub deployments (related to this plant/tree/product)
• been confirmed or updated on a periodic basis? Yes / No
- To demonstrate best practices, the interested stakeholder will need to report a response of Yes to the questions 1 to 3
- 5. Are efforts necessary to reduce further incidence or complaint occurrences?
• Yes / No. If Yes, include details in the Subsequent actions to be taken.
- **Subsequent actions to be taken:**

CCMA Review and Self-Corrective Analysis

- **Any Corrective Action:**
- **Any Preventive Action:**
- **Any Grievance Redressal:**
- **Any Post-mortem understanding:**
- **Any other details:**
- **Date being reported:** **Time being reported:**
- **Signature:**
- **Name:**



Zen for the environment



By
K.S.Venkatram
AOEC, 2018-2025

SAVE THE EARTH
GO GREEN



Provisioning for
safe roads and a
green environment

Zen for the environment

- Since 1970, Bengaluru's land growth or concretization has increased by 925%
- The ratio of the number of trees per person has severely dropped leading to an increase in air pollution and climate change trends
- According to a study, every person needs at least 8 trees in a lifetime, whereas there is approximately 1 tree for approximately seven persons
- There is a need to come up with action plans to address this loss of green cover
- AOEC proposes a programme called “Zen for the environment” to address this problem and its need for risk mitigation in addition to the CCMA control reviewed for road arboriculture.

Zen for the environment

- The consultant finds that the proposed programme will be more successful if assisted by the BBMP, Nursery Men Society, Lalbagh, Bengaluru
- The programme will include the following steps
 - 1. **Zen for sites:** Launch a remedial initiative that mandates when builders & construction companies clear land for their construction projects, they should be provided 8 saplings (per flat, office or home constructed at the site in question). It will be a responsibility for a builder or associated owners to plant and care for these saplings in an exercise to make up for any deforestation done.
 - **Decision making:** Selecting saplings that are suitable and designing a “handbook” that helps an average person care for and know the health of a tree
 - **Deliverable:** Ready-to-plant saplings and Zen for the environment booklets

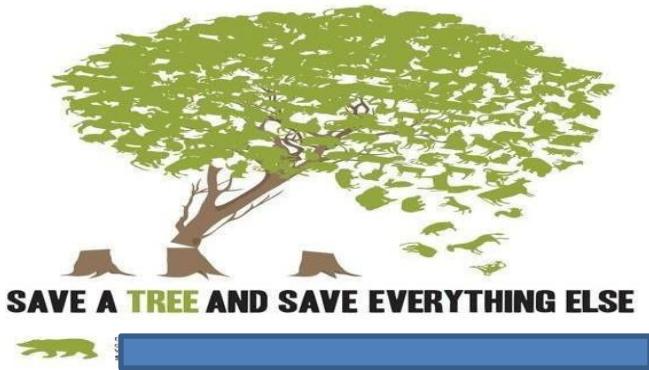


Zen for the environment



- **2. Zen for families:** Launch a **lifetime initiative** that mandates when a child is born, a family or new parents should be provided 8 saplings to plant and care for these saplings in an exercise to help the child fight climate change and concretization.
- **Decision making:** Selecting saplings that are suitable and designing a “handbook” that helps an average family care for and know the health of a tree
- **Deliverable:** Ready-to-plant saplings and Zen for the environment booklets

Zen for the environment



- **3. Zen for municipal bodies:** Launch a sustainable environment initiative that mandates whenever the municipal body cuts down a tree or reduces its lifetime, it should plant 8 saplings and care for them in an exercise to make our environment sustainable and green.
- **Decision making:** Selecting saplings that are suitable and designing a “handbook” that helps the municipal implement a “Tree Grid” to inventory, track, care for and know the health of trees in select locations
- **Deliverable:** Ready-to-plant saplings, “Build a Tree Grid” and “Zen for the environment” booklets

Zen for the environment

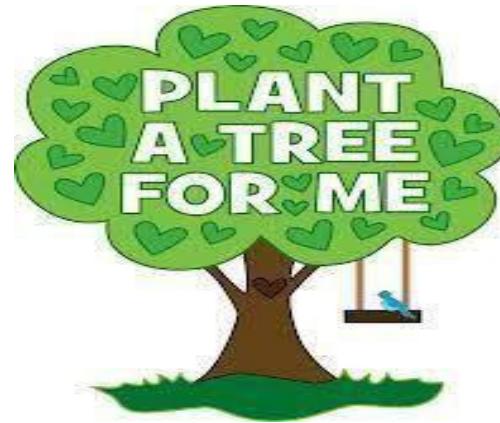


PROJECT TREE



- **4. Zen for parks and gardens (lung spaces):** Launch a rejuvenate the environment initiative that mandates whenever a municipal body plans for or maintains a park or garden, it should implement the “Tree Grid” in an exercise to conserve and rejuvenate the environment.
- **Decision making:** Recommending saplings of plants, trees, herbs that are suitable for a location and implementing of the “Tree Grid” to inventory, track, care for and know the health of trees in the park or garden
- **Deliverable:** Ready-to-plant saplings, “Build a Tree Grid” and “Zen for the environment” booklets

Zen for the environment



- **4. Zen for lakes and ponds (care for our water bodies):** Launch a nurture me initiative that mandates whenever a municipal body resurrects or maintains a lake or pond, it should arrange to plant trees on the perimeters of the lake or pond, landscape it and implement the “Tree Grid” in an exercise to protect this resource.
- **Decision making:** Recommending saplings of plants and trees that are suitable for a location and implementing of the “Tree Grid” to inventory, track, care for and know the health of trees in the park or garden
- **Deliverable:** Ready-to-plant saplings, “Build a Tree Grid” and “Zen for the environment” booklets

Zen for the environment



- **5. Zen for your kitchen (health and well-being):** Launch a health for all initiative that recommends that families should plan to grow a kitchen garden of select herbs if they are interested in growing plants and trees.
- **Decision making:** Recommending saplings of plants and herbs that are suitable for a family & its location and implementing of the “Herb garden accelerator ” to families achieve wellness and even productize if necessary
- **Deliverable:** Ready-to-plant saplings, “Grow your Zen or Herb garden” booklets

Zen for the environment



- **6. Zen in your workplace (caring for your workforce or staff):** Launch a care for your workforce initiative that recommends that organizations or institutions should plan to grow a Zen garden of select plants, herbs and trees with specific landscaping to bring Zen (inner peace and harmony) into the lives of people at work there.
- **Decision making:** Recommending saplings of plants, herbs and trees that are suitable for a workplace & its location and implementing of the “Zen garden healer” to help workplaces add soulful and healing influences to their environments
- **Deliverable:** Ready-to-plant saplings, “Grow your Zen garden” booklets

Zen for the environment



- **7. Zen in nature conservation (caring for flowers):** Launch a care for flowers initiative that develops methodologies to use dried or discarded flowers that need conscious decision-making for conservation, where the methodologies include a framework that includes a flower species, hybrid or variety into the nature conservation initiative, defines the artwork to use the dried or discarded flower in meritorious & sustainable environment solution finding prizes/awards/medals/certificates/winner cups/etc awarded to students, sustains the species by creating a postage stamp, designs a flashlight view to its evolution and conservation.
- **Decision making:** Recommending flowers of plants, herbs and trees that are helpful to “man, habitats, workplaces, gardens, and associated environments”
- **Deliverable:** Artwork, postage stamp, flashlight view of species/hybrid/variety

Zen for the environment

**Building our
Sustainable
Futures ***



- The way ahead
- Increasing population will necessitate more land use or concretization, thus helping people plant and care for plants and trees will become a vital endeavor.
- (1) Building Tree Grids, (2) Designing Zen and Herb gardens and (3) Mitigating risks of tree fall associated with trees in our road systems, neighborhoods or locations are all steps towards a Sustainable Future (or Future ready Millennium)