Species Management Plan for *Cinnamomum capparu-coronde* Blume

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Outline of Presentation

- Introduction
- Status of Forest Genetic Resources in Sri Lanka
- Habit and habitat of *Cinnamomum capparu-coronde*
- Management Strategy and Development of Species Management Plan
- Conclusion & Recommendations


Sri Lanka
Melur
Karaikkudi
Palk Strait
Devakottai
Tirumangalam
Madurai
Jaffna
Srivilliputtur
Aruppukkottai
Rajapalaiyam
Ramanathapuram
Rameswaram
Mullaittivu
Sankarankovil
Kilakarai
Mannar
Tuticorin
Tirunelveli
Trincomalee
WILPATTU N.P.
Anuradhapura
Gulf of Mannar
Bay of Bengal
Puttalam
SRI LANKA
Kattankudi
MADURU OYA N.P.
Kurunegala
Matale
Kandy
Pidurutalagala
Badulla
Sri Jayewardenepura
Moratuwa
Adam's Peak
Ratnapura
YALA N.P.
Galle
Matara

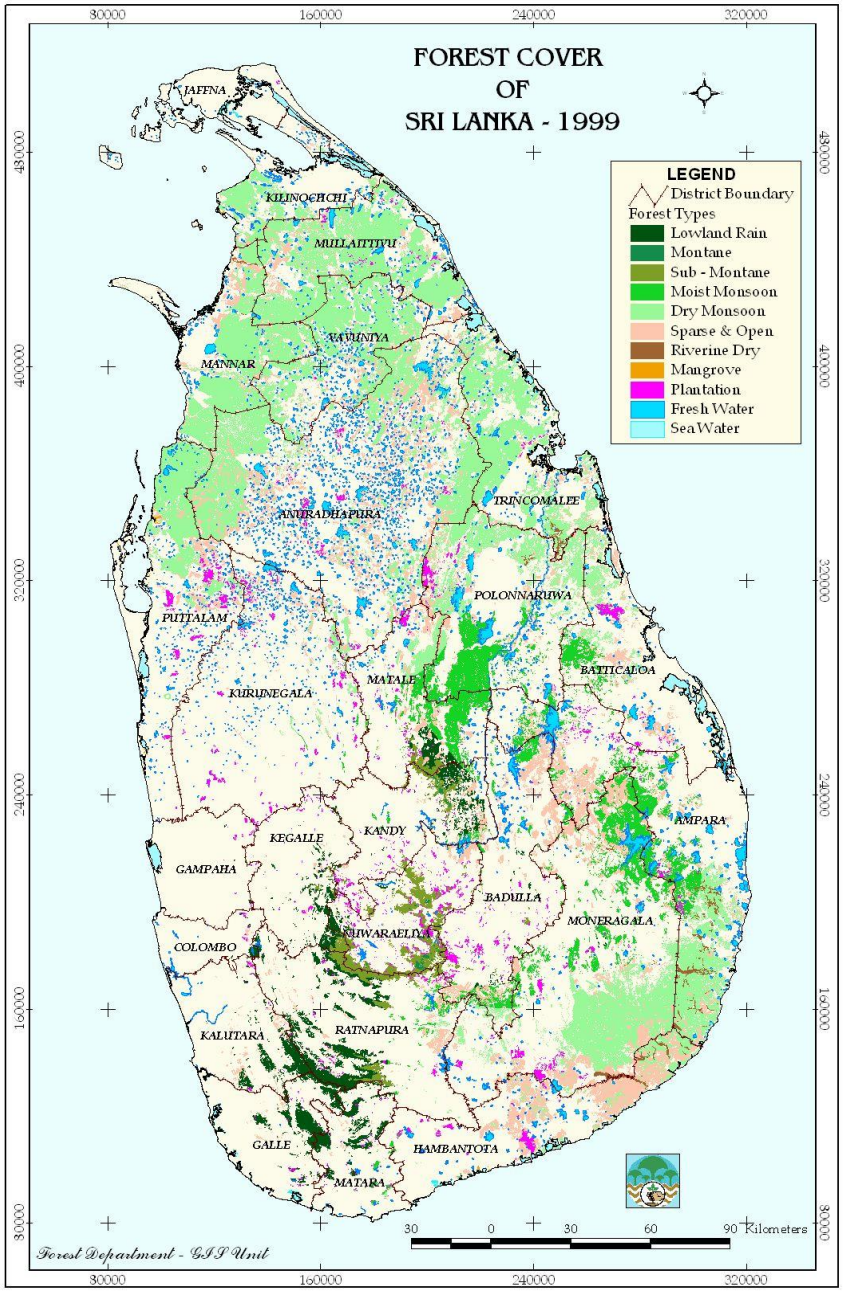
Forest Genetic Resources in Sri Lanka

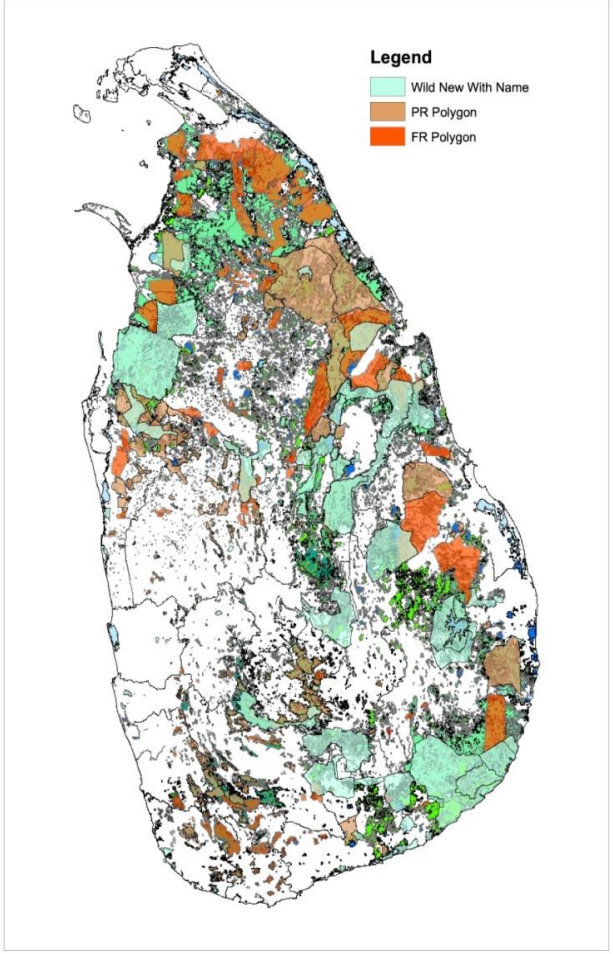
			(% Endemism)
Flowering Plants	-	3771	26%
Pteridophyta (Ferns)	-	348	57%
Mosses	-	566	
Liverworts	-	222	
Algae	-	896	
Fungi	-	1920	
Lichens	-	661	

(Source :The 2007 Red list of threatened Fauna and Flora of Sri Lanka)

Different Habitats of Forest Genetic Resources in Sri Lanka (GIS DATA 1999)

Forest Type	Extent (ha.)	% of Land Area
Montane	3,099	0.05
Sub Montane	65,792	1.00
Lowland Rain	124,340	1.90
Moist Monsoon	221,977	3.38
Dry Monsoon	1,027,544	15.66
Riverine Dry	18,352	0.28
Mangrooves	9,530	0.15
Sparse Forest	471,583	7.19
Forest Plantations	96,250	1.40
TOTAL	2,037,469	31.05


FOREST COVER
OF
SRI LANKA - 1999
LEGEND
District Boundary
Forest Types
Lowland Rain
Montane
Sub - Montane
Moist Monsoon
Dry Monsoon
Sparse & Open
Riverine Dry
Mangrove
Plantation
Fresh Water
Sea Water
JAFFNA
KILINOCHCHI
MULLAITTIVU
VAVUNIYA
MANNAR
TRINCOMALEE
ANURADHAPURA
POLONNARUWA
PUTTALAM
BATTICALOA
KURUNEGALA
MATALE
AMPARA
KANDY
KEGALLE
GAMPAHA
BADULLA
MONERAGALA
NUWARAELIYA
COLOMBO
RATNAPURA
KALUTARA
GALLE
HAMBANTOTA
MATARA
80000
160000
240000
320000
480000
400000
320000
240000
160000
80000
30 0 30 60 90 Kilometers
Forest Department - GIS Unit



Administration of FGR

Agency	Ext (ha)	% Total Land
Forest Department	1,192,370	17.6
Dept of wildLife Conservation	845,099	12.4

National Forestry Policy Objectives

- To conserve forests for posterity with particular regard to biodiversity, soils, water, and historical, cultural, religious, and aesthetic values
- To increase the tree cover and productivity of the forests to meet the needs of present and future generations for forest products and services
- To enhance the contribution of forestry to the welfare of the rural population, and strengthen the national economy, with special attention paid to equity in economic development

Protection of Sri Lankan FGR - Legislation

- Forest Ordinance
- National Heritage & Wilderness Area Act
- Flora & Fauna Protection Ordinance
- National Environmental Act
- Soil Conservation Act
- Plant Protection Act

Crop Wild Relatives and FGR Conservation

Different Cinnamon Species found in Sri Lanka

Cinnamomum capparu-coronde Blume

Family: Lauraceae

Genus: *Cinnamomum*

Species: *capparu-coronde*

Vernacular Names: Kapuru Kurundu (S)

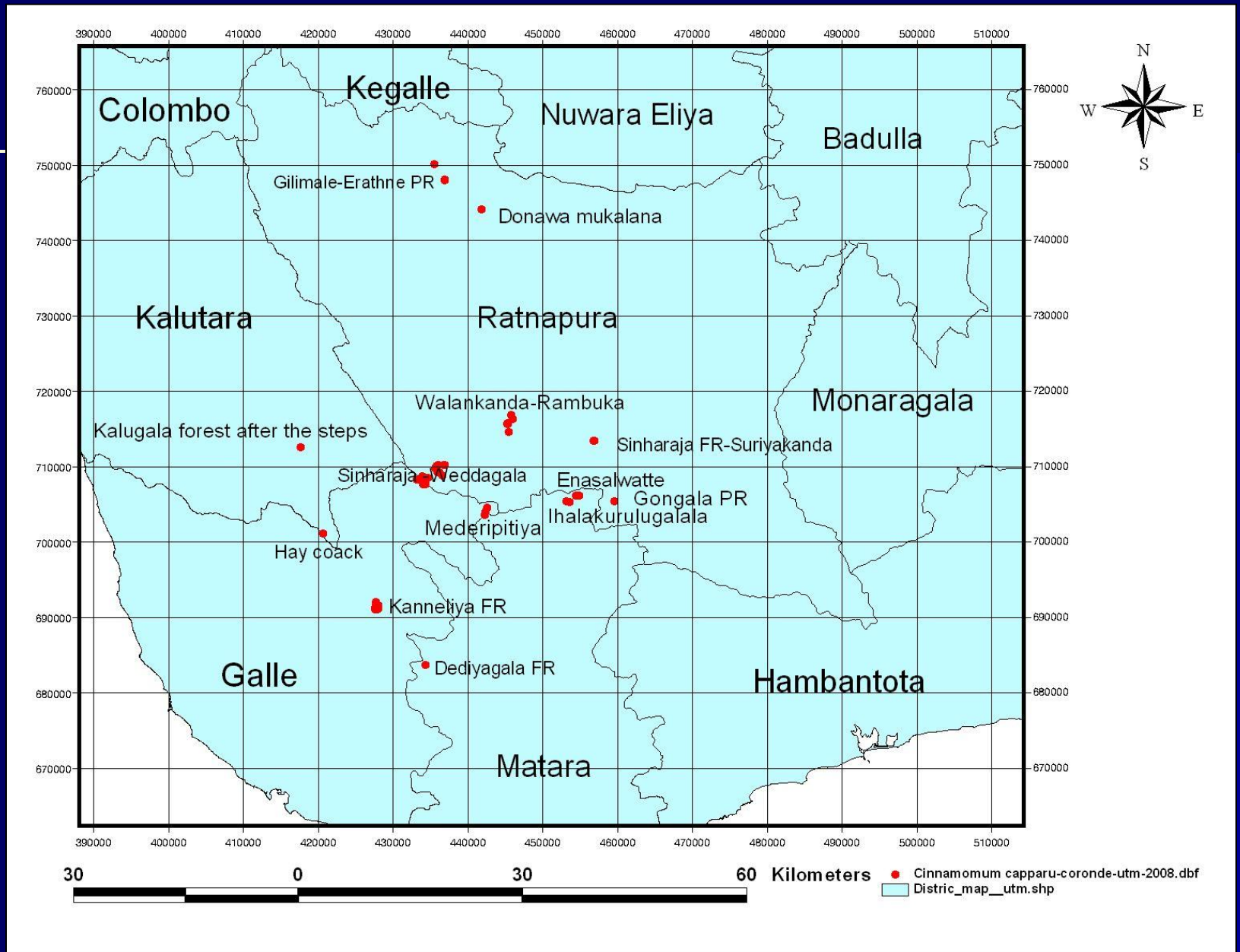
Camphor Cinnamon (E)

Habit

A twig and bark

A Leaf and a flower

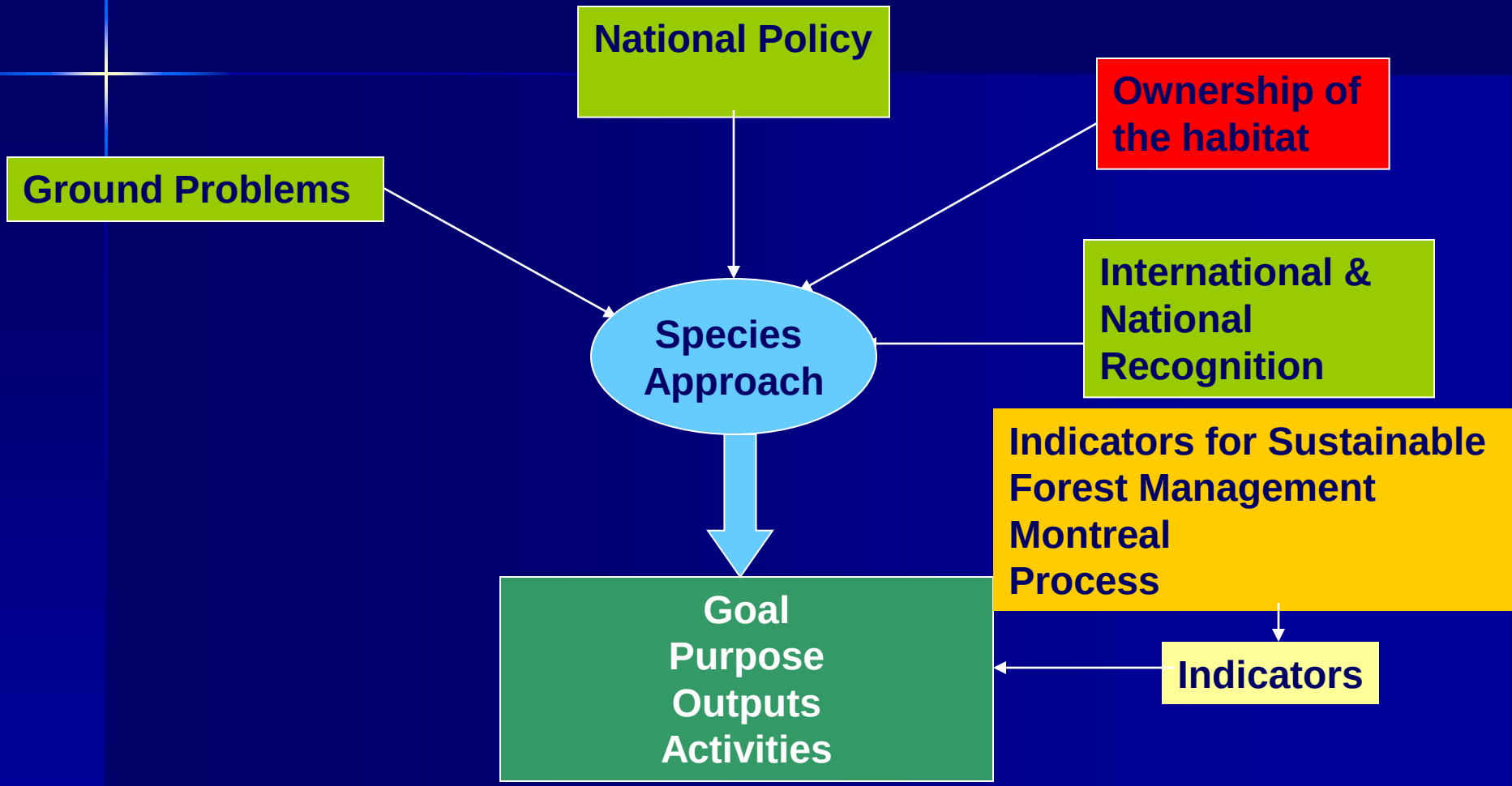
Habitat Distribution



Habitat Distribution

Sinharaja World Heritage*
Kanneliya Biosphere Reserve*
Walankanda FR*
Gilimale-Erathne FR
Haycock
Donawa Mukalana
Ihalakurulugala
Enasalwatte
Silverkanda
Gongala
Kalugala
Dediyagala

Formulation of Management Strategy



Species based Approach :
(target species/candidate species/priority species)

to protect, manage and monitor the selected populations in their natural habitats so that the natural evolutionary process can be maintained, thus allowing new variation to be generated in the gene pool that will allow the species to adopt to gradual changes in environmental conditions such as global warming, changed rainfall patterns or acid rain

Species based Approach : (target species/candidate species/priority species)

Largely concerned for two categories of species:

1. Nationally rare or endangered native species- irrespective of their actual or potential use

2. Economically important species
   - Crop wild relatives
   - forestry tree species
   - medicinal and aromatic plants

Specific aims of Species based Approach :
(target species/candidate species/priority species)

- Ensuring continuous access to the populations for research and availability of germplasm

  e.g. native species of important plantation species

Specific aims of Species based Approach :
(target species/candidate species/priority species)

- Ensuring continuous access to or availability of materials that are exploited by local people

  e.g. rubber and medicinal plants

Specific aims of Species based Approach :
(target species/candidate species/priority species)

- Selection for yield potential

  e.g. forest trees, fruit or nut producing trees

Specific aims of Species based Approach :
(target species/candidate species/priority species)

- Species which can not be established or regenerated outside their natural habitats

e.g. species dependent on specific pollinators etc.

Specific aims of Species based Approach :
(target species/candidate species/priority species)

- Some degree of conservation of associated species

Species Management Plan has to address.....

- Biological issues
- Present and Future threats for existence
- Socio-economical importance of species
- Research and education
- Institutional Strengthening

Species Management Plan for *Cinnamomum capparu-coronde*

Main Activities:

- Study on Floral Biology and Population Dynamics
- Study on Potential Uses
- Germplasm collection and Ex-situ Conservation
- Domestication and Cultivation
- Research on Tree Improvement

Participation of Local Communities in Conservation of *Cinnamomum Capparu-coronde*

Establishing, maintaining & managing tree resources on none forest lands – Ex-situ Conservation

Protecting & managing buffer zones of protected areas in order to conserve the wild populations – In-situ Conservation

Community Participation in Implementation of Species Management Plan

- Ex-situ Conservation (Direct Participation)
  - Cultivation in Homegardens
  - Planting in non-forest areas
- In-situ Conservation (Indirect Participation)
  - Ecosystem Approach – Habitat management
  - Species based Approach – Threatened species

Thank you