

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

02

03

04

05

TEAM PRESERVE



Rupal
Baid



Shilpa
Shashidharan



Vaibhav
Sharma



Veera
Vishodhan
a VI

MENTORS



Mr. Emani Kumar
Executive Director, ICLEI



Dr. Umamaheshwaran
Rajasekar
Chair, Urban Resilience

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

Our Journey: 'Issues'

02

- Air-Water-SWM-Green cover-Energy. Lets start with one that is visibly becoming invisible: **GREEN COVER**

03

- Provision of shade; Increasing heat

04

- Do we have enough greenery?

05

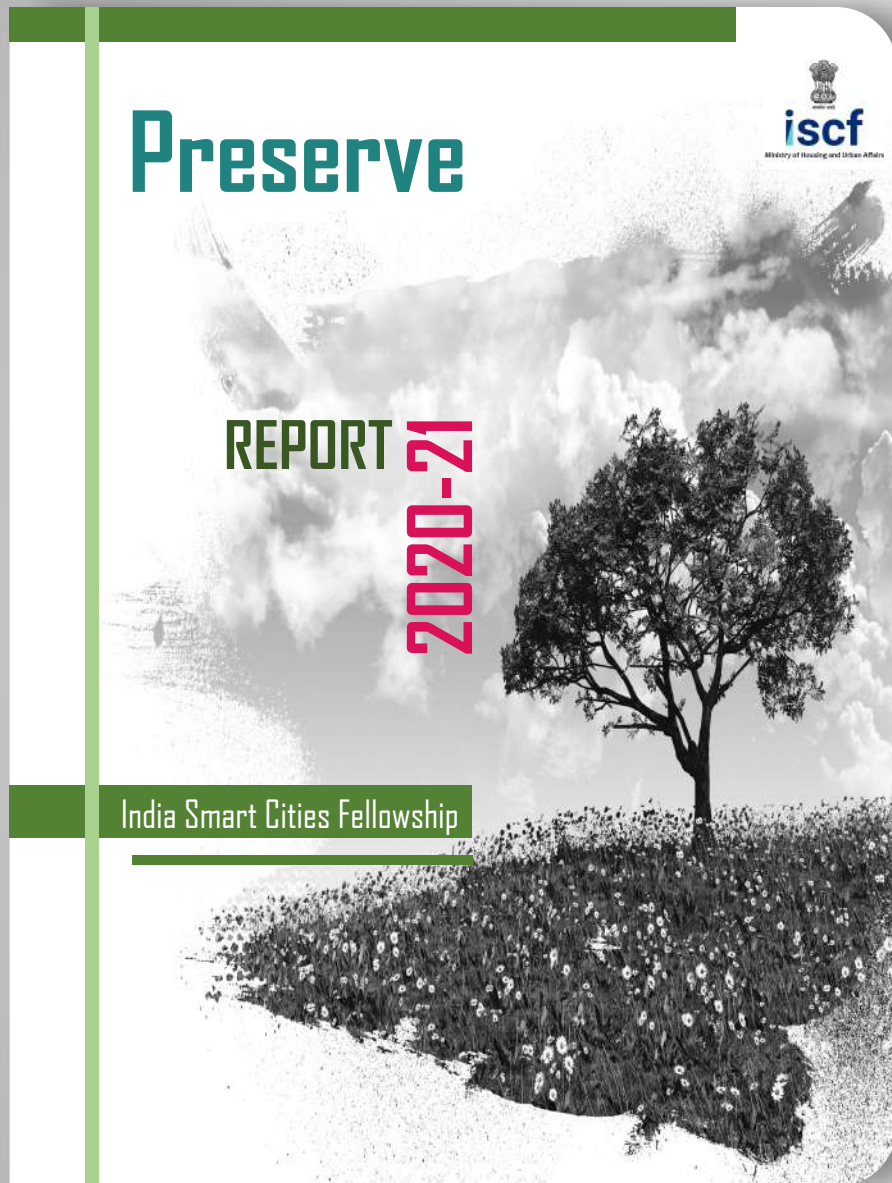
- Maintenance of green cover in cities

- Citizens' help in planning of green cover

- Where and what to plant

- Green cover for NMT pathways

- Climate Change, Pollution of Air, Water and Soil, Solid Waste and the list goes on; How do we recalibrate?



01

Our Journey: 'Ideation'

02

- Something that helps citizens interact with the environment

03

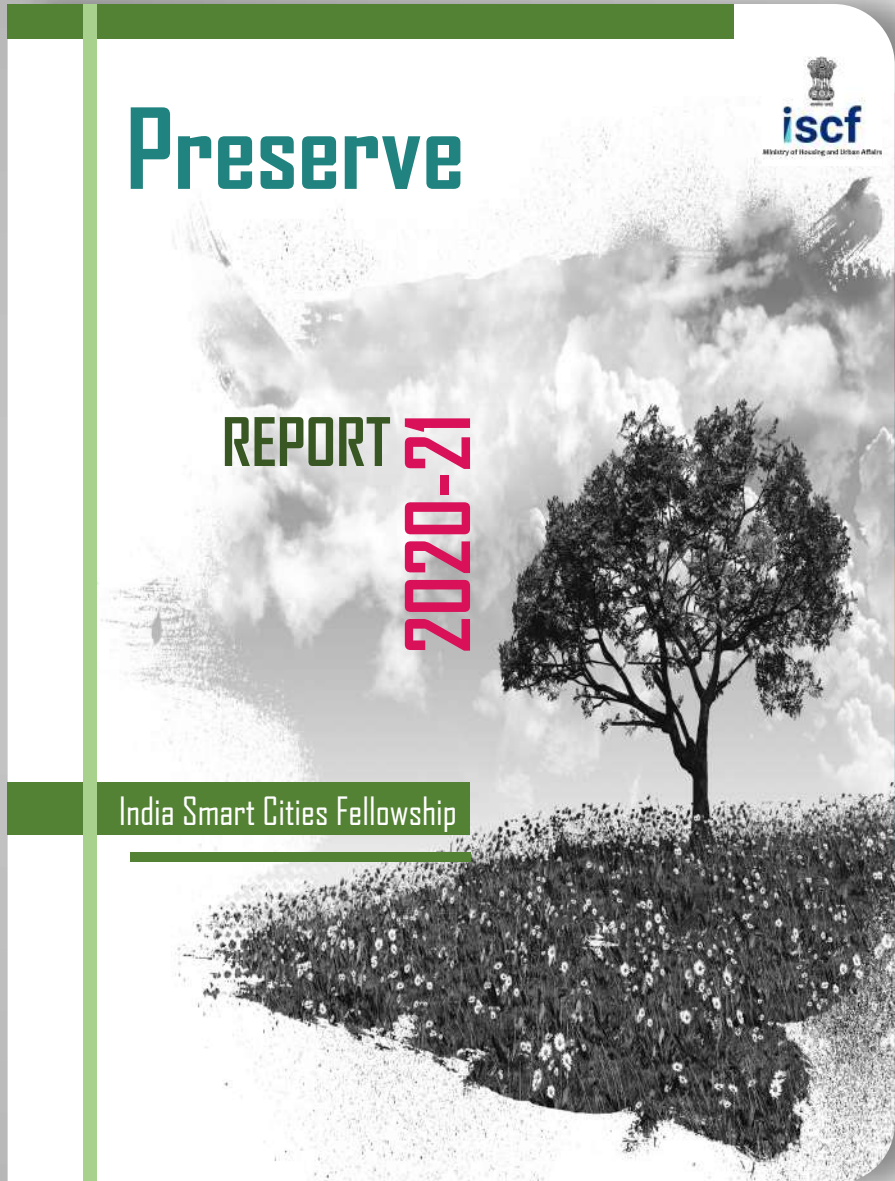
- Data for the urban environment
- Aide for green cover planning

04

- A digital output and a lookout for an ideal solution

05

- Involving the citizens and investing on the existing traditional knowledge on the city's green cover



01

02

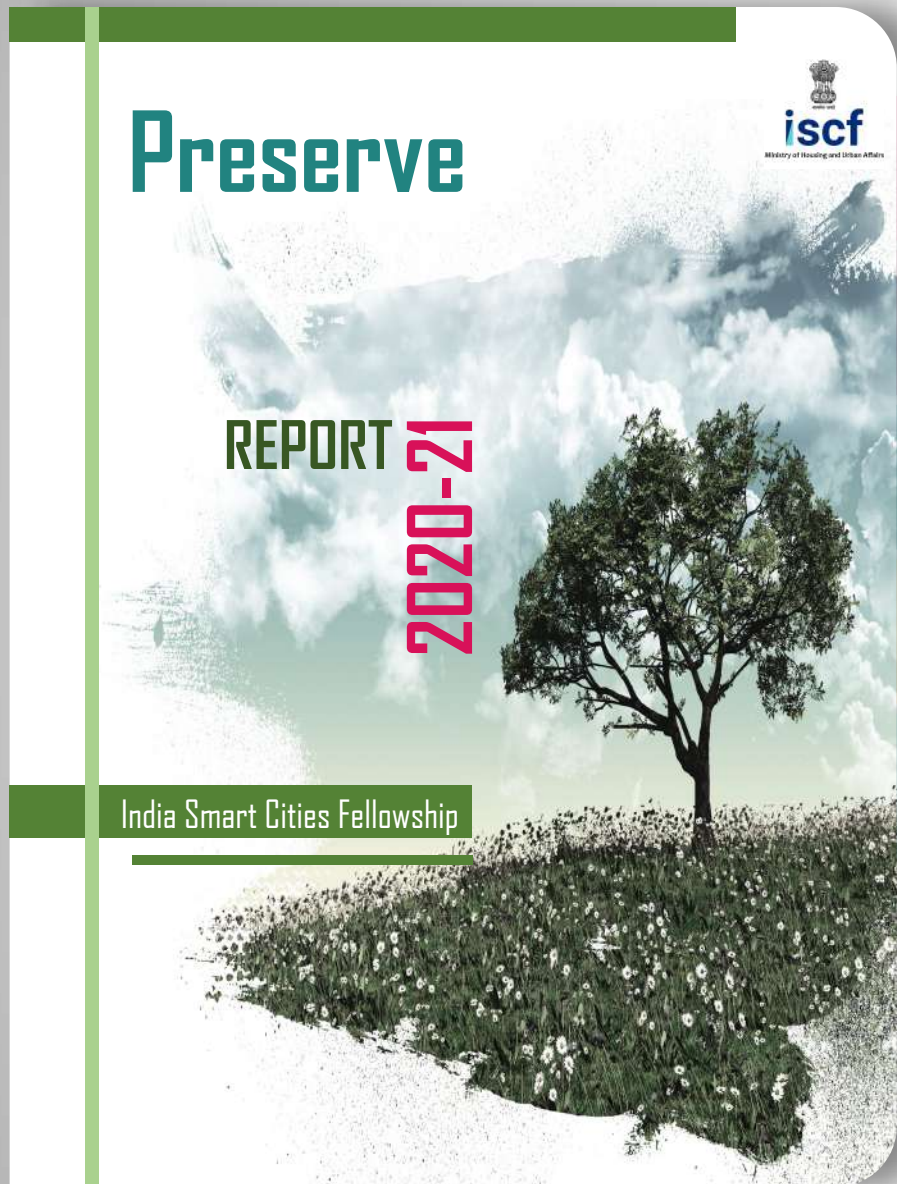
03

04

05

The ENVIRONMENT Project

An interactive digital tool to help create resilient and greener cities by enabling planned green cover improvements and processes to maintain the green spaces in Kochi through citizen and community participation.



01

02

03

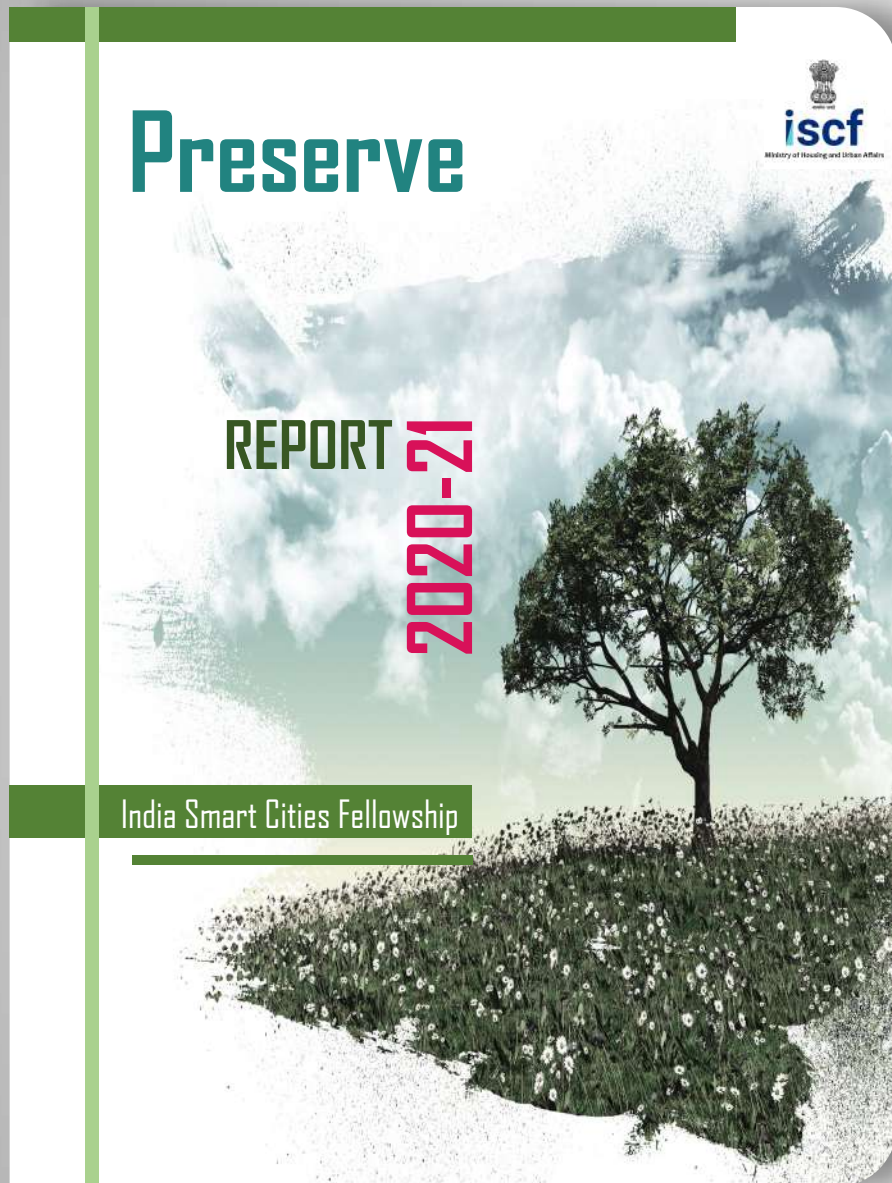
04

05

Kochi – The Green City



Kochi: A perfect mix of Blue & Green



01

02

03

04

05

Kochi – The Green City



Kochi: It's just 98 sq.km. but vibrant

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

02

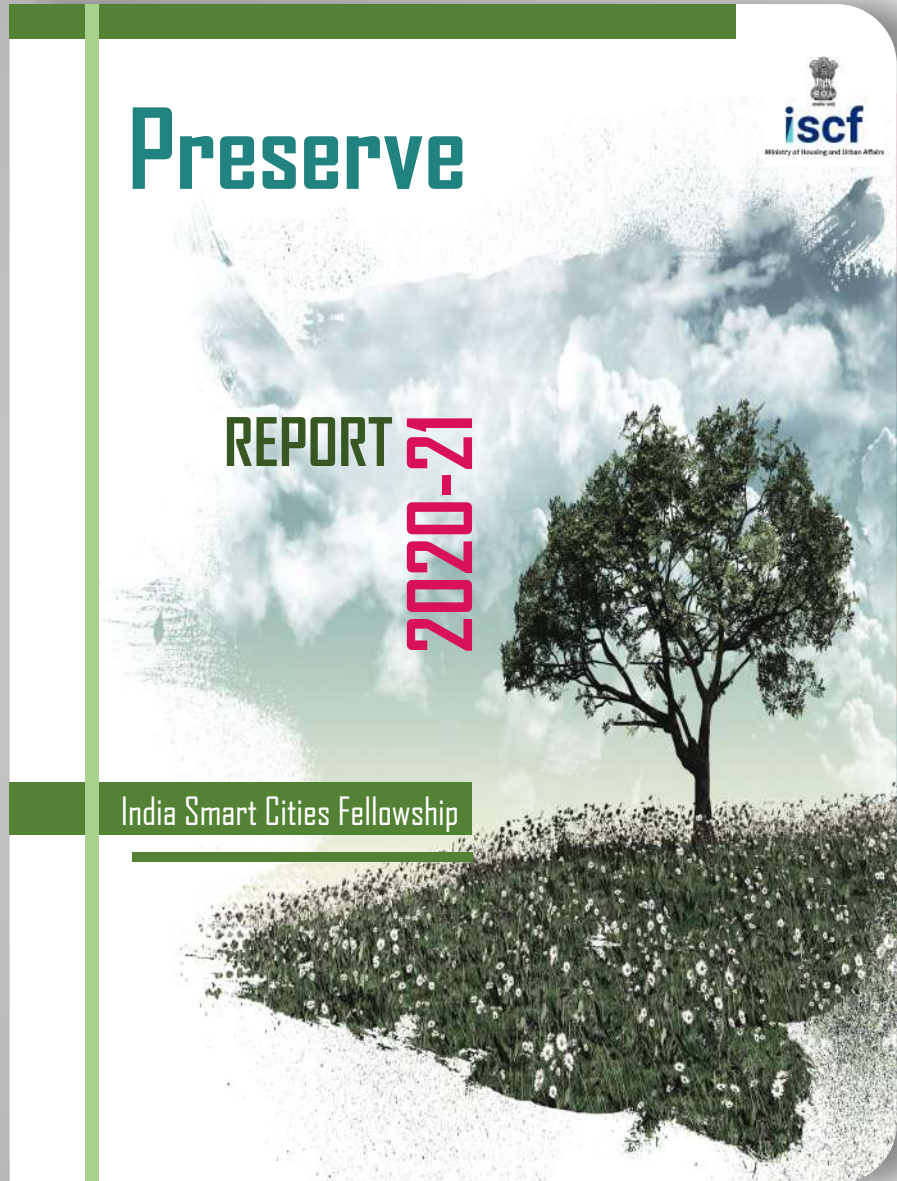
03

04

05

The Project: 'Planning'

- Understanding the city dynamics
- Aligning our ideas with city's requirements
- Tree Mapping – Greenspace Mapping – Citizen Participation [Phase 1 vision]
- Leveraging existing technological base of the IC4
- The tech dilemma and challenges: How to geotag, improve accuracy and where to store?
- Volunteers and NGOs outreach



01

02

03

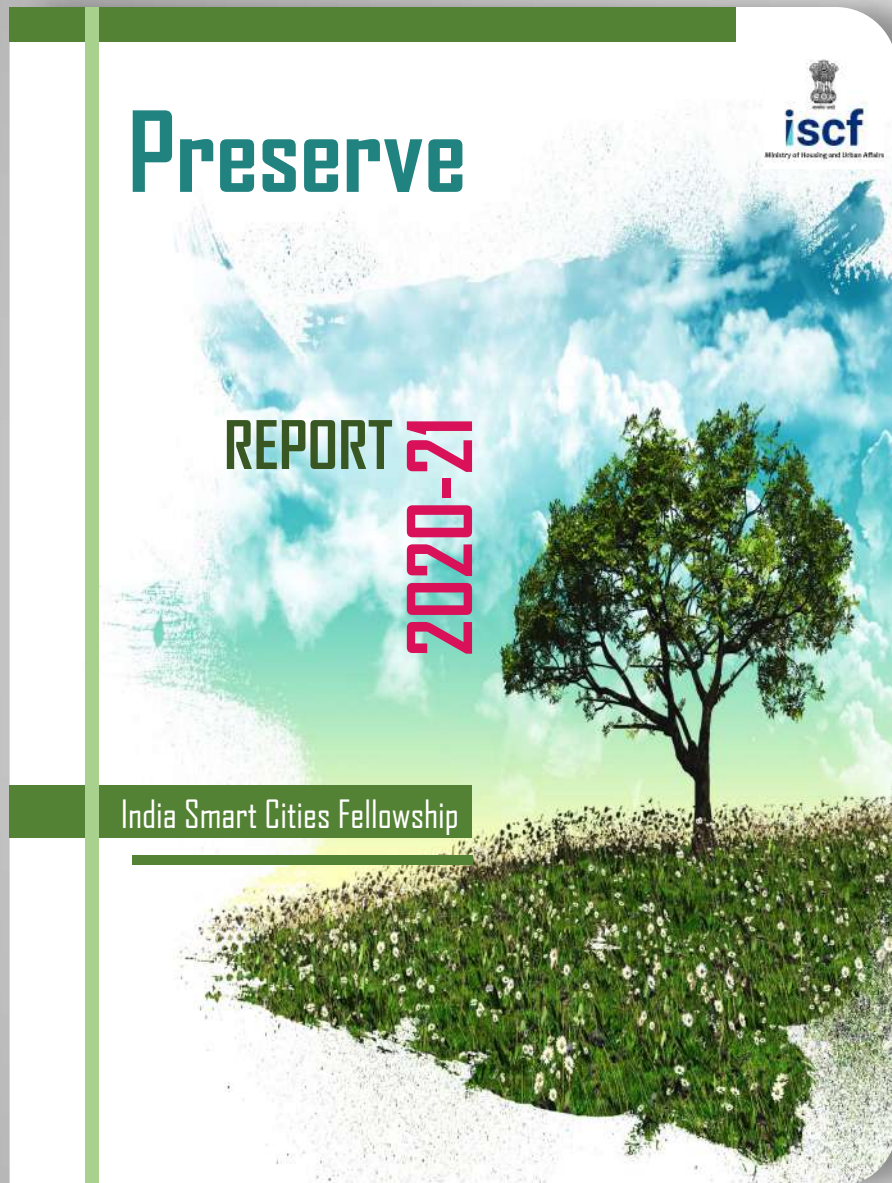
04

05

Pilot Area



Fort Kochi & Mattancherry



01

02

03

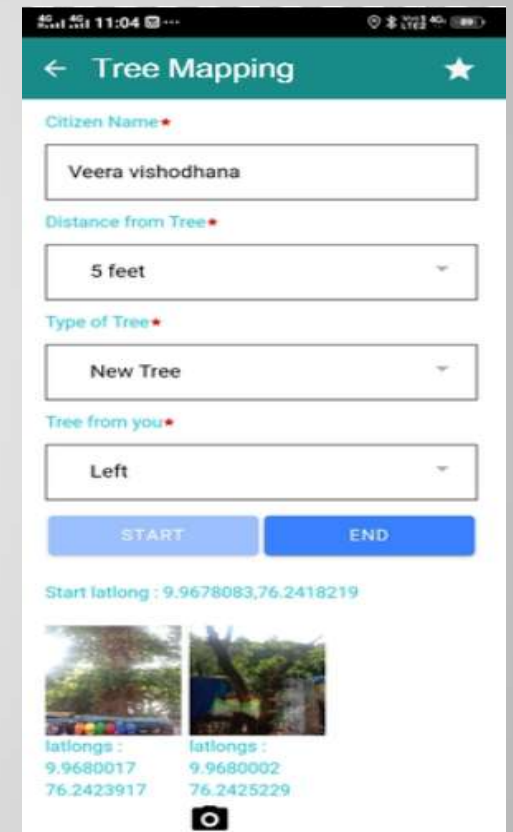
04

05

The Project: 'Tech Development'



Smart Kochi App



The Geotagging tool

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

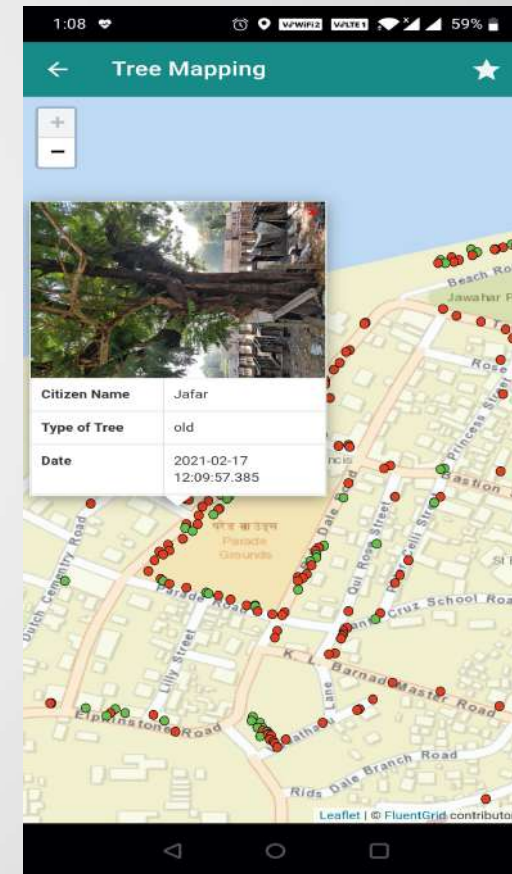
02

03

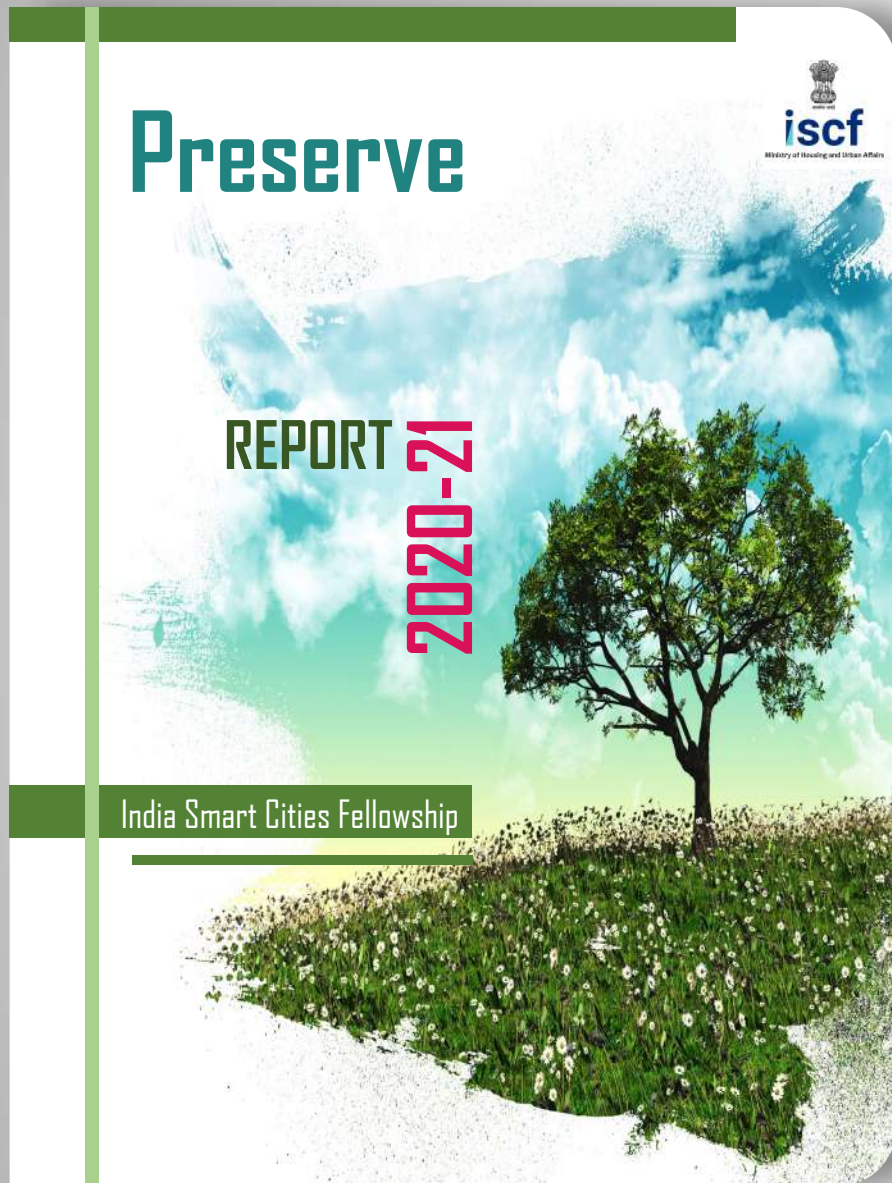
04

05

The Project: 'Tech Development'



The real-time GIS output



01

02

03

04

05

The Project: 'Tech Development'

- How to capture location? [Photo]
- How to improve GIS accuracy? [Left-right indexing + Direction + Pedometer**]
- How to save user's mobile memory? [AWS storage]
- Pilot with restricted users to avoid duplications

Tree Mapping

Citizen Name •
Veera vishodhana

Distance from Tree •
5 feet

Type of Tree •
New Tree

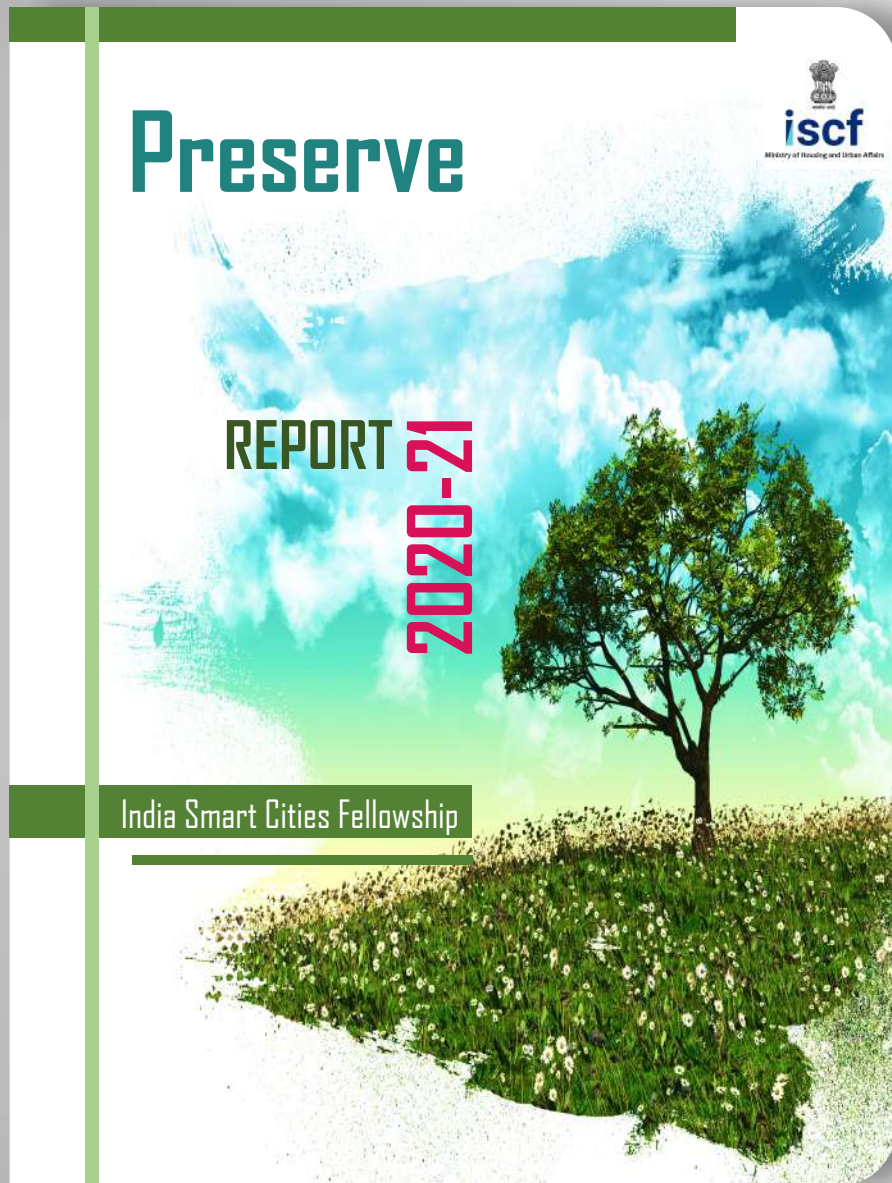
Tree from you •
Left

START END

Start latlong : 9.9678083,76.2418219

latlongs :
9.9680017
76.2423917

latlongs :
9.9680002
76.2425229



01

02

03

04

05

Phase 1 Implementation



Testing and trial run of the prototype by the team at Fort Kochi



01

02

03

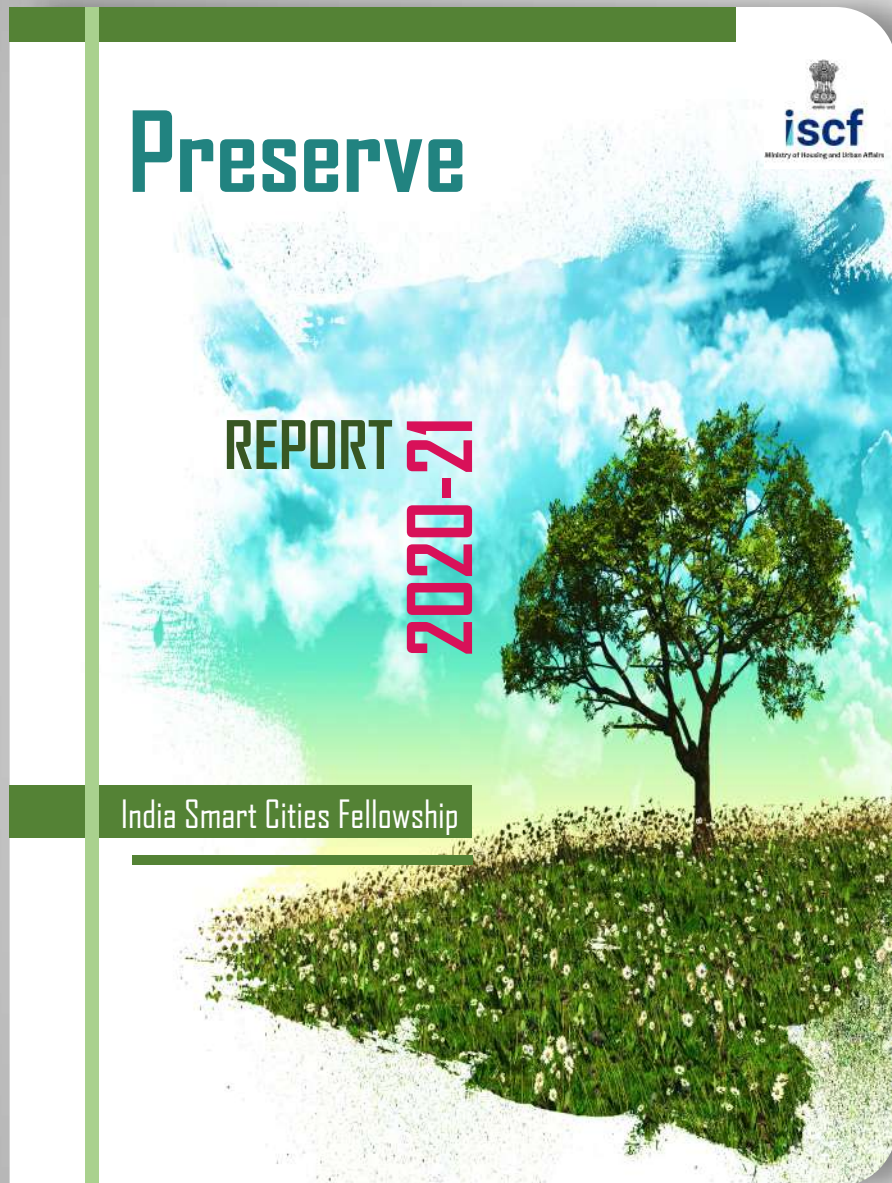
04

05

Phase 1 Implementation



Webinar for citizen engagement and training before the pilot run



01

02

03

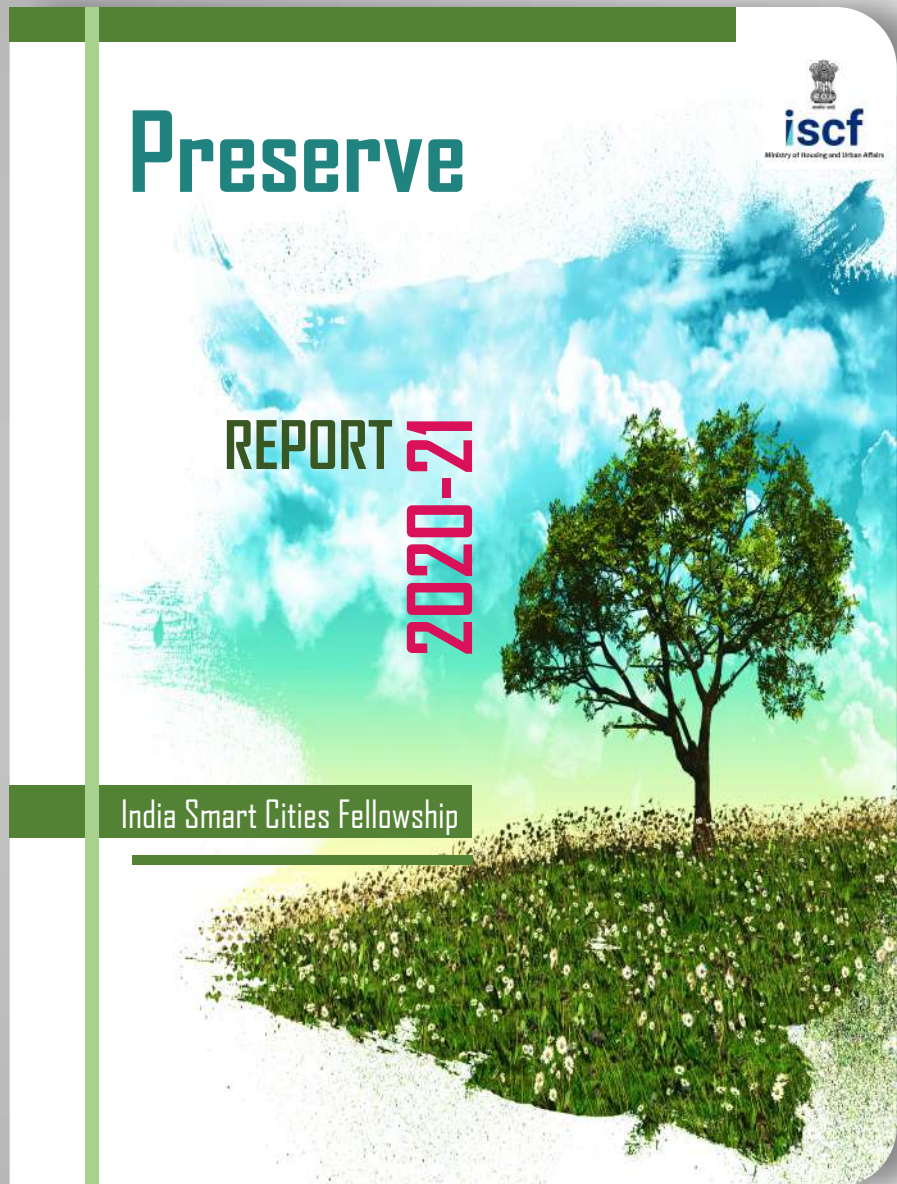
04

05

Phase 1 Implementation



Initiating the pilot mapping with the Deputy Mayor and Councillor of Fort Kochi & Mattancherry



01

02

03

04

05

Phase 1 Implementation



30+ Citizens · 5 wards · 400+ trees



01

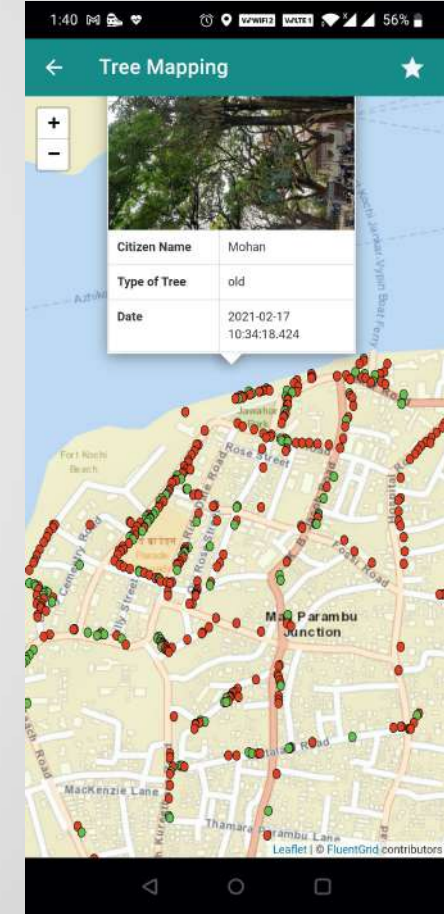
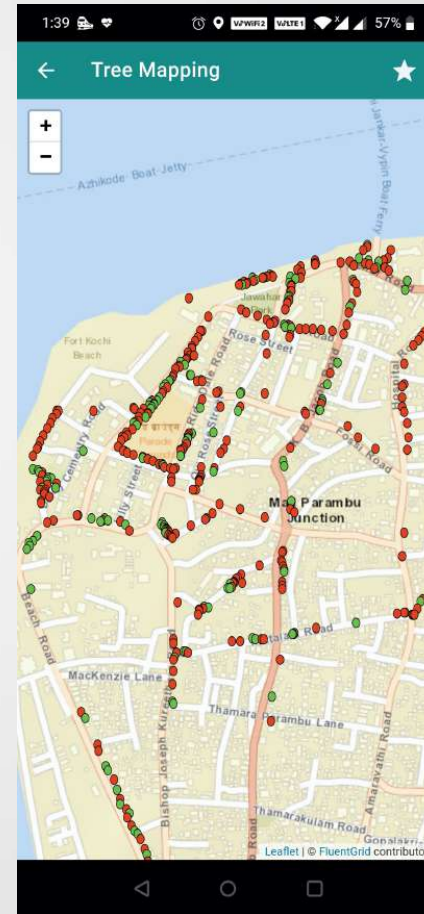
02

03

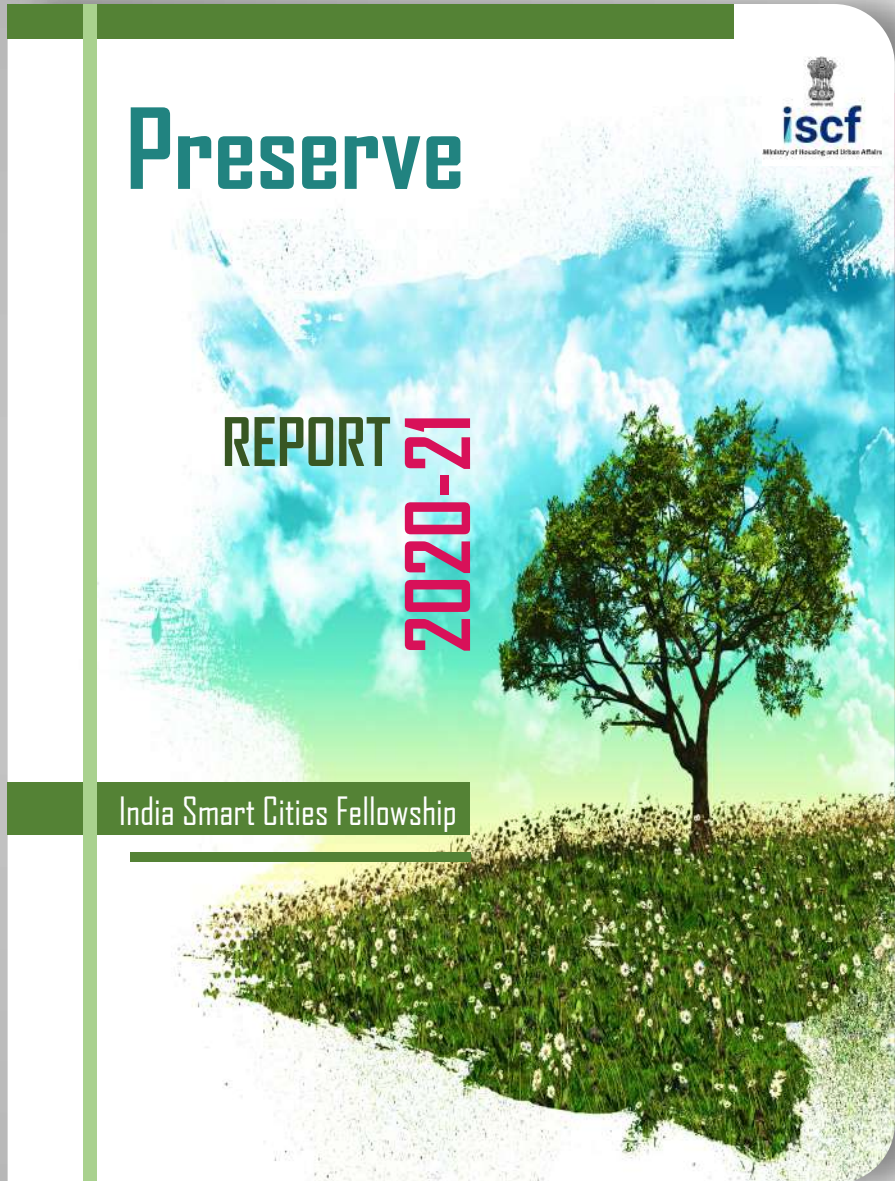
04

05

Phase 1 Implementation



Live GIS output: Data capture of the mapped trees



01

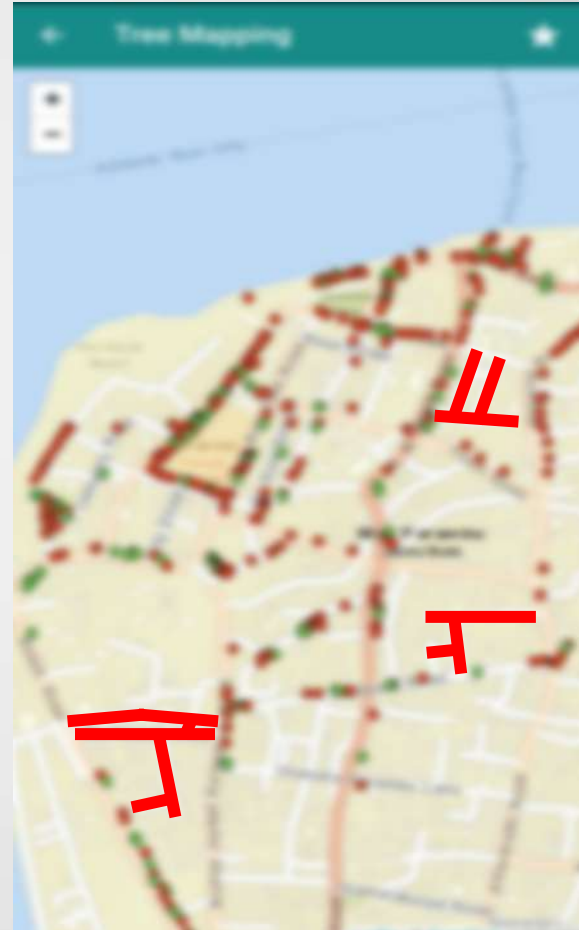
02

03

04

05

Phase 1 Implementation



Lanes identified for planned afforestation

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

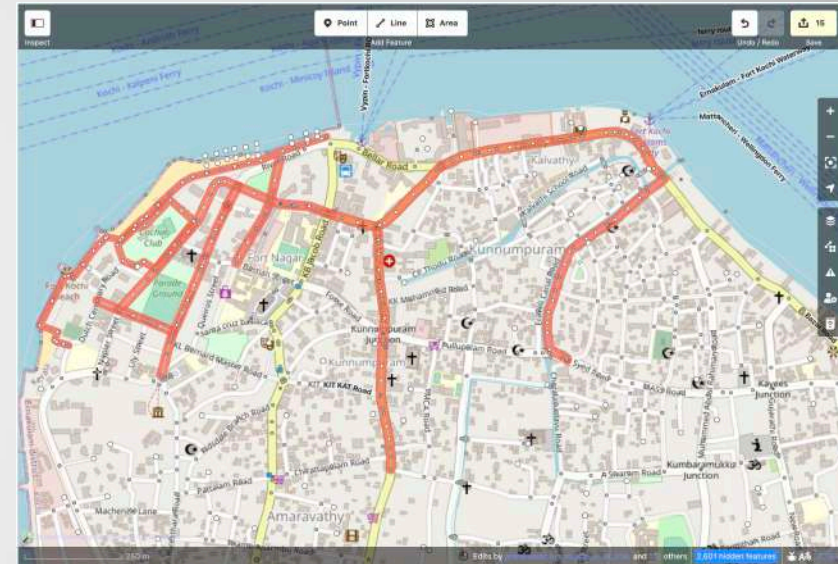
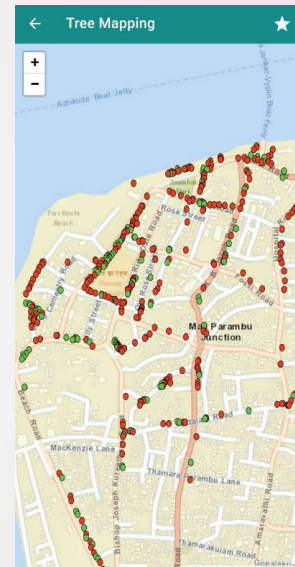
02

03

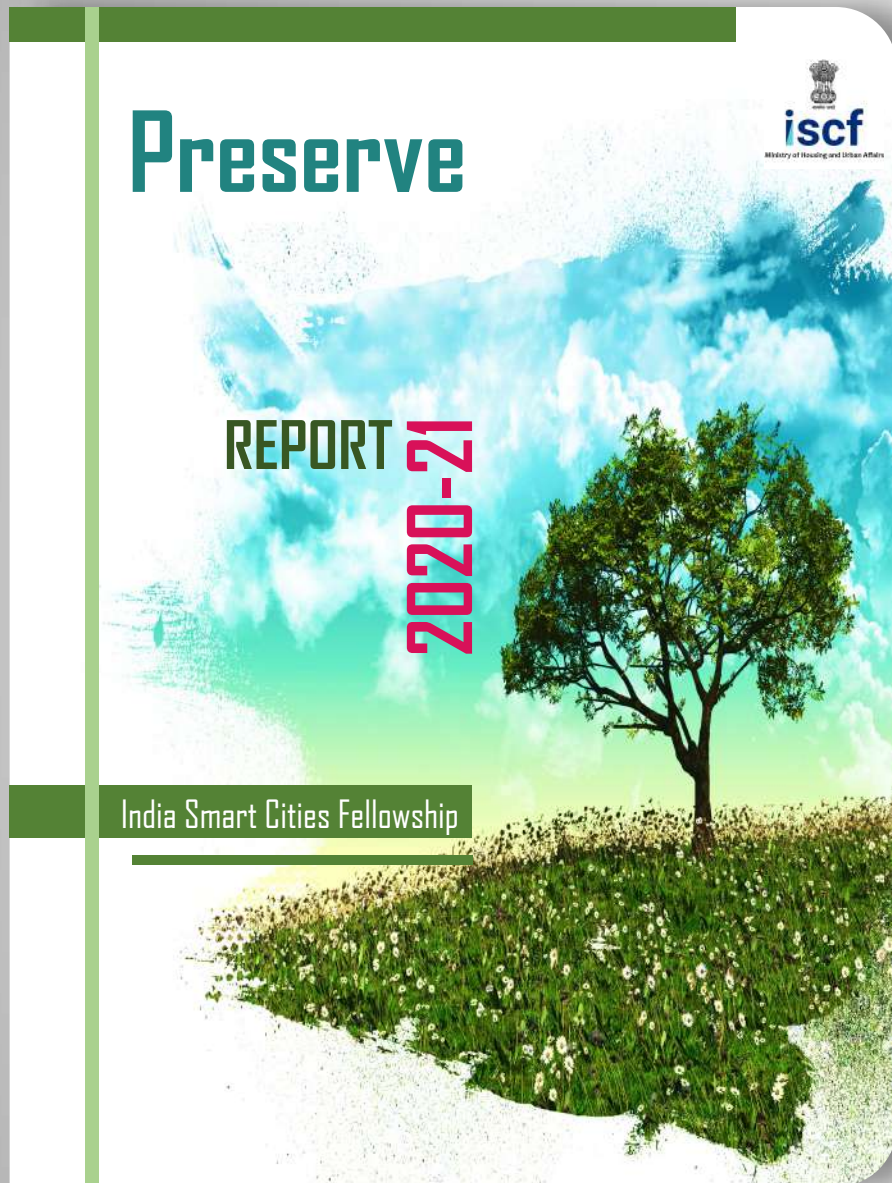
04

05

Phase 1 Implementation



The Green Infrastructure aided NMT route



01

02

03

04

05

Media coverage

THE NEW INDIAN EXPRESS

NATION WORLD STATES CITIES BUSINESS SPORT GOOD NEWS MOVIES GALLERIES

STOCK MARKET BSE 50846.08 -598.57(-1.16%) NSE 15080.75

Home > Cities > Kochi

'Serve to Preserve' campaign launched

The 'Serve to Preserve' campaign aimed at creating a greener Kochi was officially launched on Friday by launching tree-mapping in wards 1-5 of Kochi Corporation.

Published: 13th February 2021 04:54 AM | Last Updated: 13th February 2021 04:54 AM

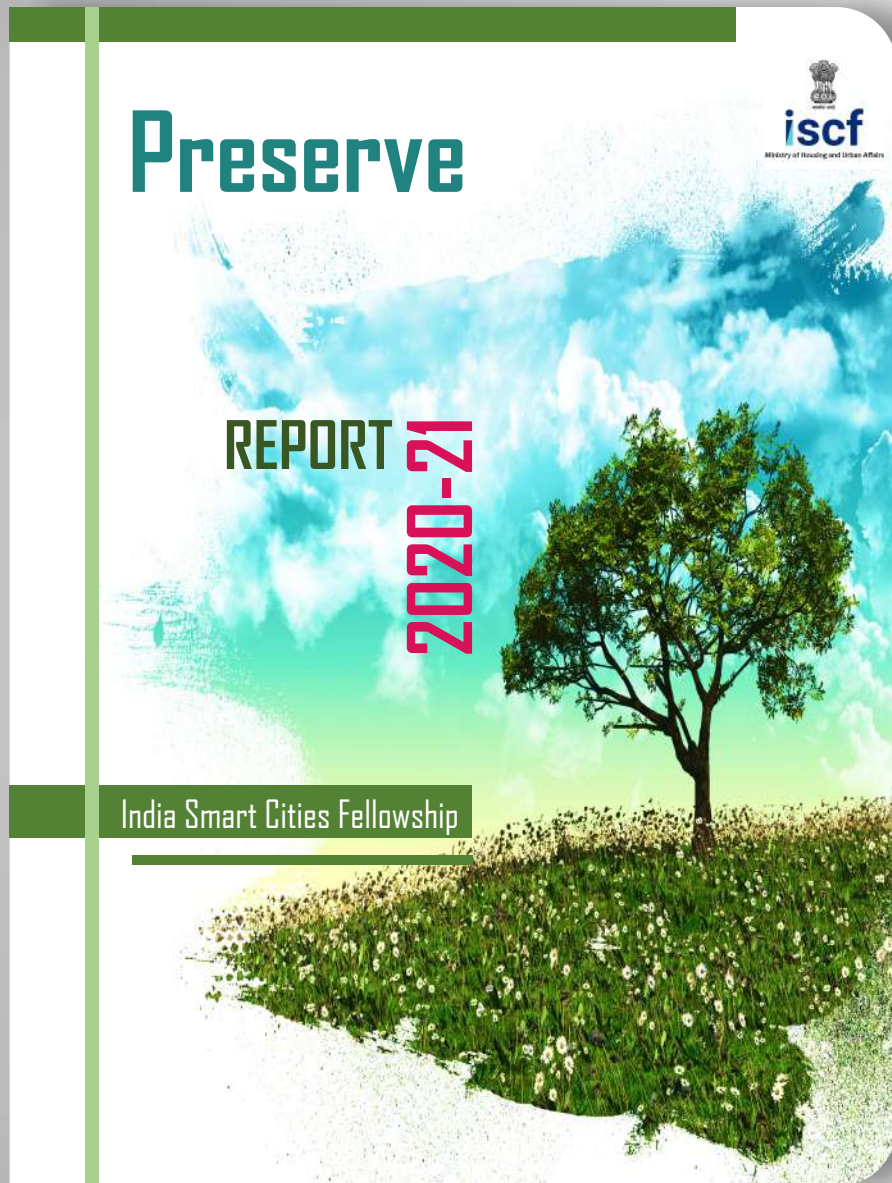
By Express News Service

KOCHI: The 'Serve to Preserve' campaign aimed at creating a greener Kochi was officially launched on Friday by launching tree-mapping in wards 1-5 of Kochi Corporation. Deputy Mayor K A Ansiya inaugurated the campaign. An initiative of Cochin Smart Mission Ltd (CSML), the programme being implemented with the support of the fellows from India Smart City Fellowship will develop an interactive digital tool aimed at creating a greener Kochi.

The proponents of the campaign said that through tree mapping, they are hopeful of developing the existing green cover in Kochi and maintain green spaces with the support of the public. The mapping mainly aims at taking tree count of the city thereby launching ways for the maintenance of existing and newly planted trees and parks. "The programme will help in maintaining the green lung of the fast-growing city. We are keenly looking to launch more such initiatives. Let this be a new beginning," said the deputy mayor in her inaugural address.

The mapping activities were carried out by 30 volunteers who were registered online. The volunteers, with the help of the Smart Kochi App of the CSML, completed the mapping of 170 trees in two hours. The survey was mainly concentrated in West Kochi area. The CSML will extend the tree survey to other areas of the city in the coming days.

"Serve to Preserve" campaign covered by The New Indian Express



01

02

03

04

05

Media coverage



“Serve to Preserve” campaign covered by The News Minute



01

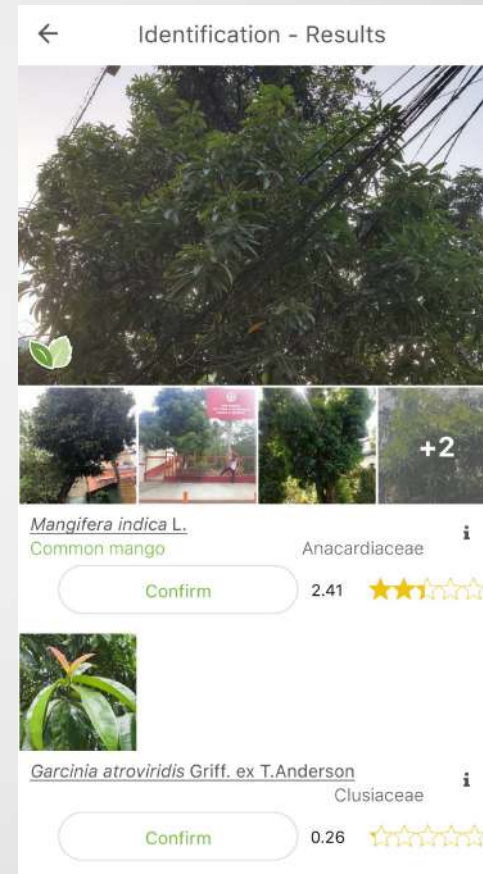
02

03

04

05

Scale-up Strategy



Identification of tree species

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

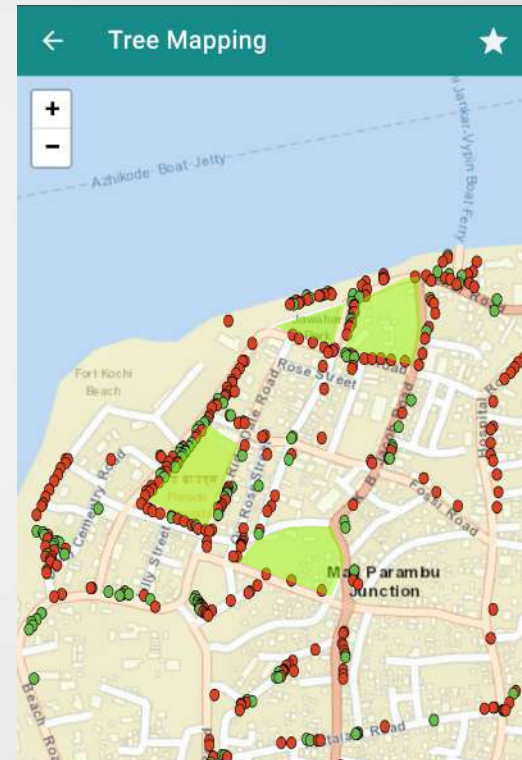
02

03

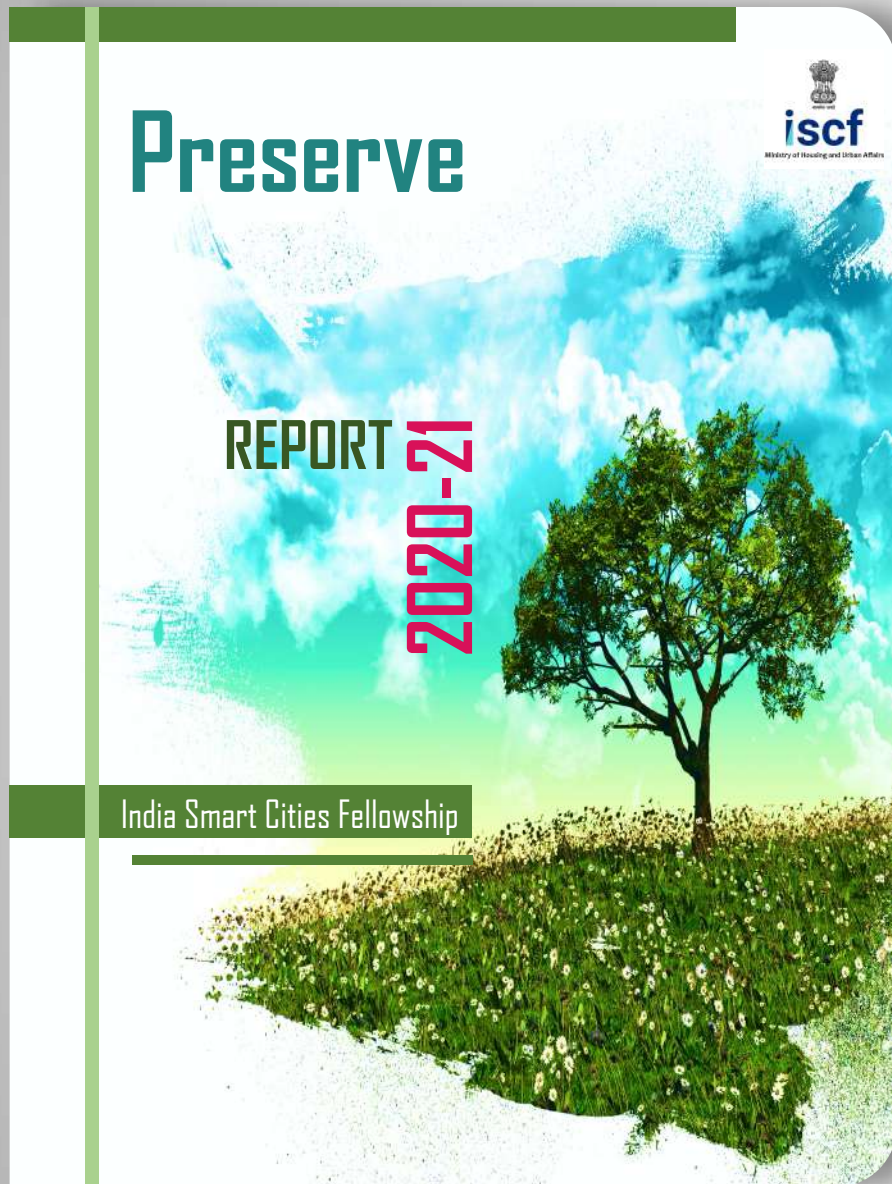
04

05

Scale-up Strategy



Green space mapping
with amenities



01

02

03

04

05

Scale-up Strategy



Citizen interaction module; Collaboration with NGOs, Businesses, CSRs..



01

02

03

04

05

Replicability

- Open source; Existing application support from the city
- Baseline GIS layer
- Not to leverage existing data but to help the city create environment data

Preserve



REPORT
2020-21

India Smart Cities Fellowship

01

02

03

04

05

THANK YOU!