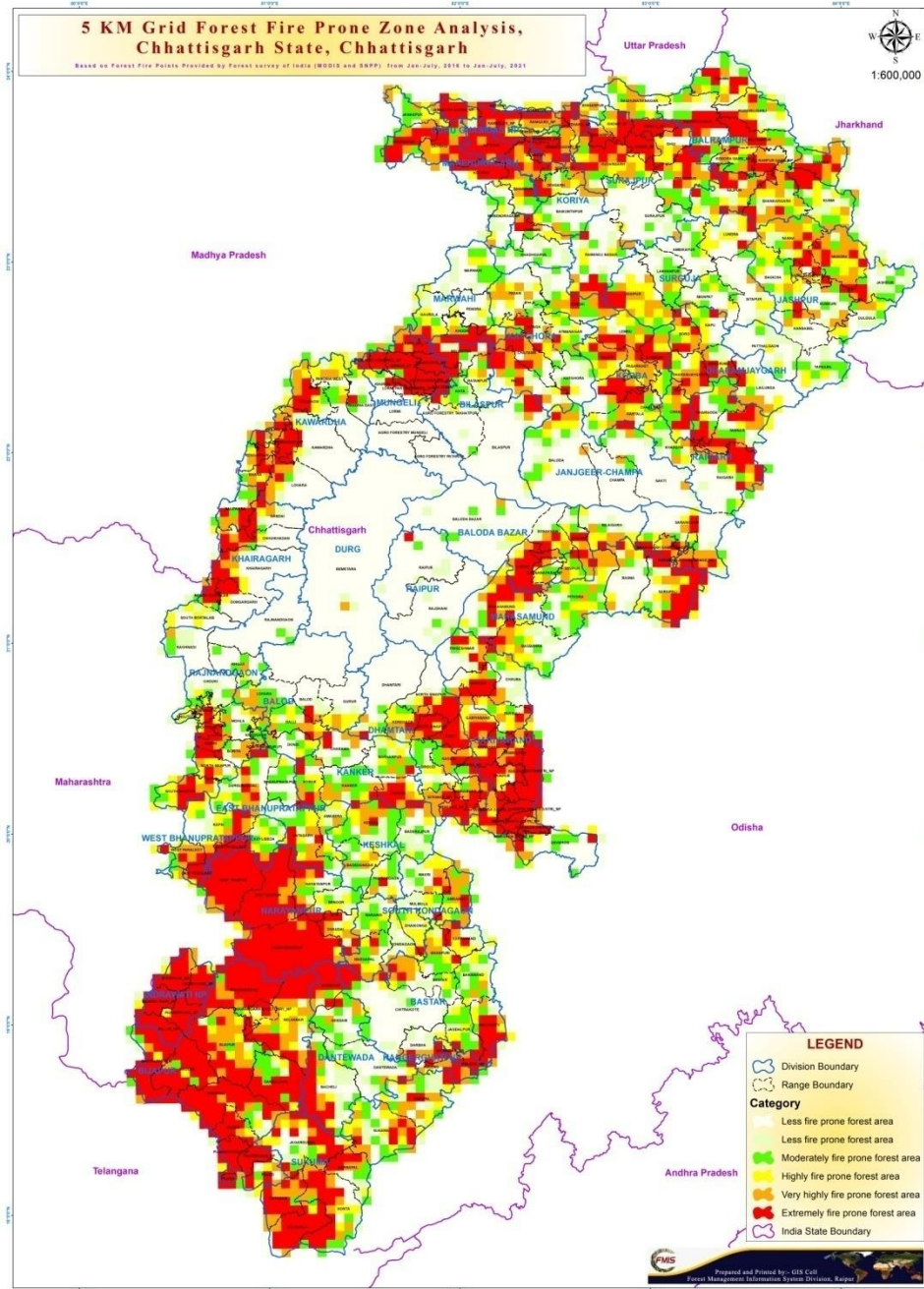


# **Needs & Challenges of Forest Fire Prone States**

**Chhattisgarh Forest Department**  
2022

# Indentification of Fire Prone Areas of Chhattisgarh

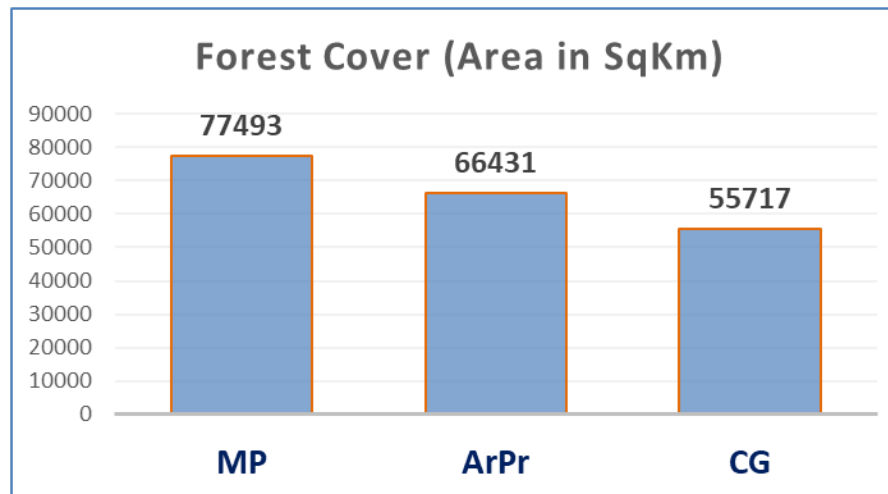


# Indentification of Fire Prone Areas of Chhattigarh

- FSI has done on the basis of last 17 years (2004-2017) fire points.
- CG-based on fire points for last 5 years with grid coverage of 5 km x 5 km

SN	Category	Geographical Area (km <sup>2</sup> )	% of GA
1	Extremely Fire prone	30428.52	22.46
2	Very Highly Fire prone	17501.46	12.92
3	Highly Fire prone	14712.49	10.86
4	Moderately Fire prone	14203.65	10.48
5	Less Fire Prone	58644.70	43.28
	Total	135490.82	100.00

# Chhattisgarh



<b>Geographical Area</b>	<b>= 1,35,192 km<sup>2</sup></b>
<b>Recorded Forest Area</b>	<b>= 59,816 km<sup>2</sup> (44.25 % of GA)</b>
<b>Forest Cover</b>	<b>= 55,717 km<sup>2</sup> (41.21% of GA)</b>
<b>Tree Cover</b>	<b>= 5,355 km<sup>2</sup> (3.96% of GA)</b>
<b>Forest + Tree Cover</b>	<b>= 61,072 km<sup>2</sup> (45.17% of GA)</b>

- **80% of the villages within 5 Km of Forest Area.**
- **Geographical Area wise 10th Largest state of country.`**

# Forest Fire in Chhattigarh

- **Registration on FSI Alert System**
  - No of officers/staff registered = 6015
  - Regular Alerts from FSI used effectively
- **State Monitoring Committee (SME) has been constituted on 9.3.2021**
- **State Action Plan on Forest Fire prepared & sent to MoEF&CC on 1.1.2022**
- **Crisis Management Plan 2022-23 sent to MoEF&CC on 07.01.2022**

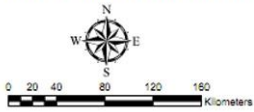


# Challenges in the fire prone districts of Chhattisgarh

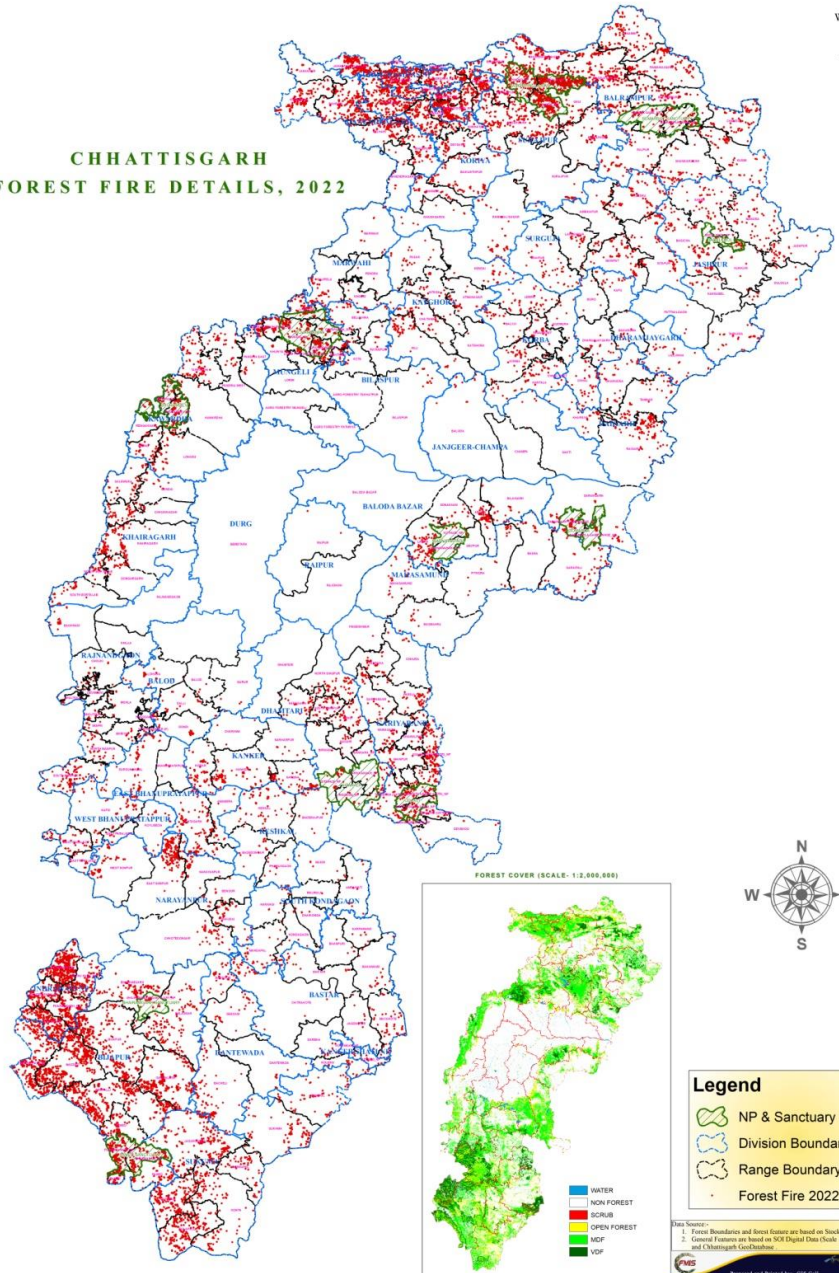
1. LWE areas including restricted movements and un-surveyed areas
2. Issues associated with collection of Mahua and Tendupatta
3. Terrain and accessibility
4. FRA and encroachments
5. Manpower shortage
6. Others



# CHHATTISGARH STATE



## CHHATTISGARH FOREST FIRE DETAILS, 2022



- Legend**
- NP & Sanctuary Boundary
  - Division Boundary
  - Range Boundary
  - Forest Fire 2022

**Map Source:**  
 1. Forest Boundaries and Forest Estate are based on Stock Map (Scale 1:15,000)  
 2. General Features are based on SDCI (Scale 1:75,000) and Chhattisgarh GeoDatabase

**Prepared and Printed by:** 2022  
 Forest Management, Planning & Survey Division, Bhopal

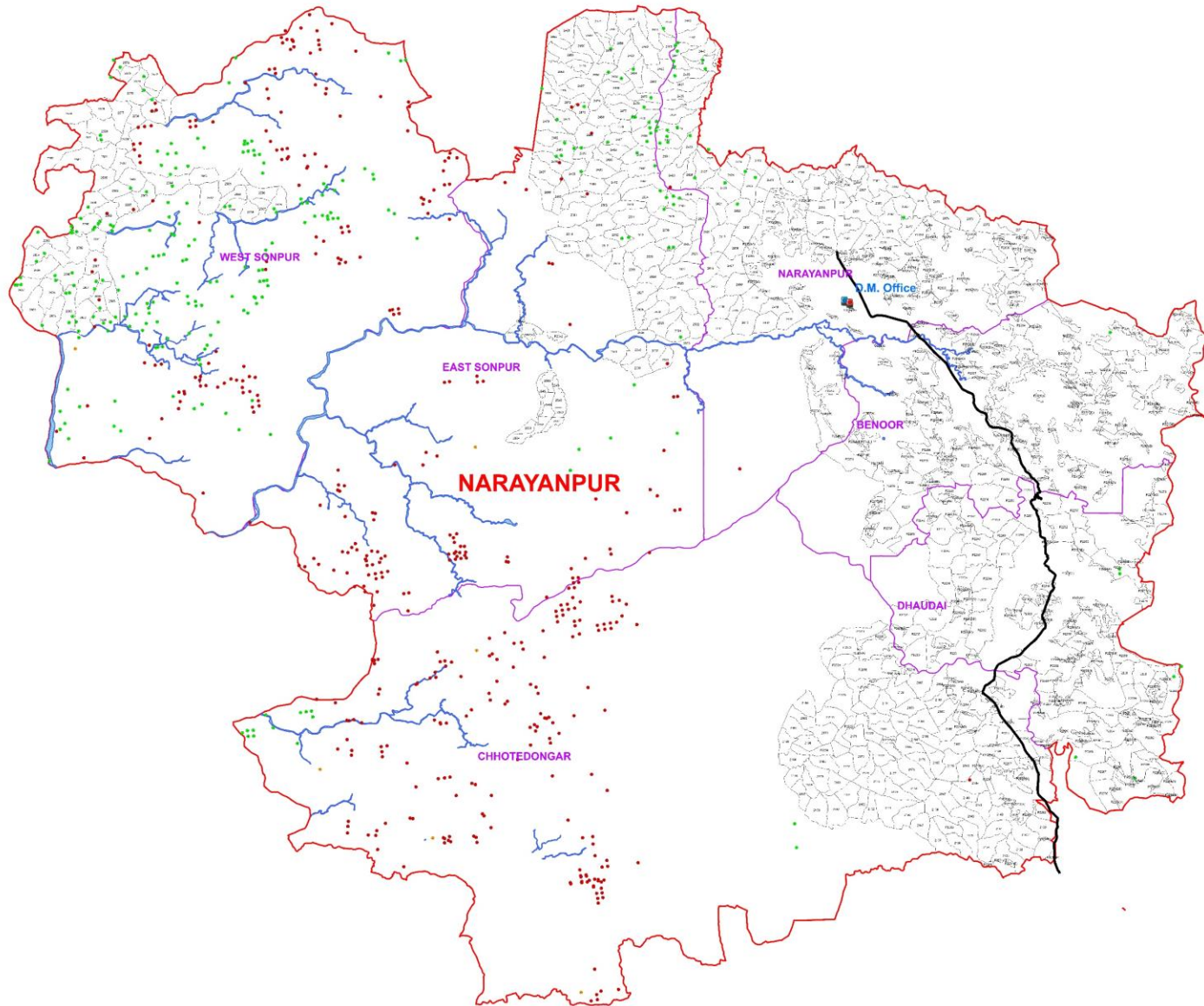
# LWE areas including restricted movements and un-surveyed areas

- **Bastar Region is affected by the activities of LWE (Bijapur/Dantewada/Sukma/Narayanpur/Kanker/Kondagaon/Bastar)**
- **Abujhmad area (5000 km<sup>2</sup>) -**
  - Narayanpur, Bijapur, Dantewada
  - Unsurveyed Area
  - Home to primitive Tribes- Madia, Muriya
  - Inaccessible, difficult Terrain
  - Poor road network
  - Shifting Cultivation





# Map Of Fire Incident Narayanpur Division Year 2020



**Legend**

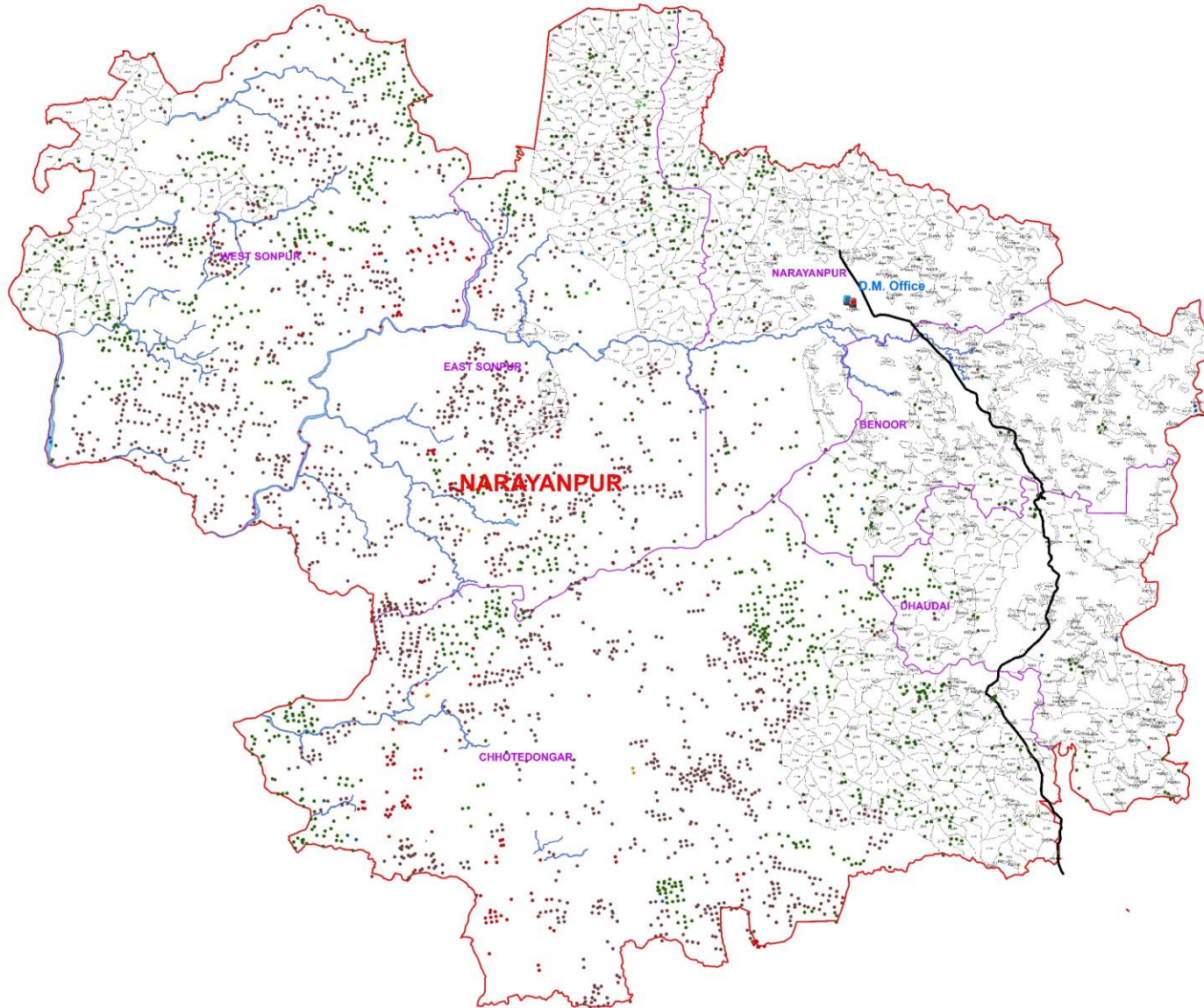
- Division Boundary
- Range Boundary
- Compartment Boundary
- Dm Office
- State Highway
- River

**Year 2020**

**Month**

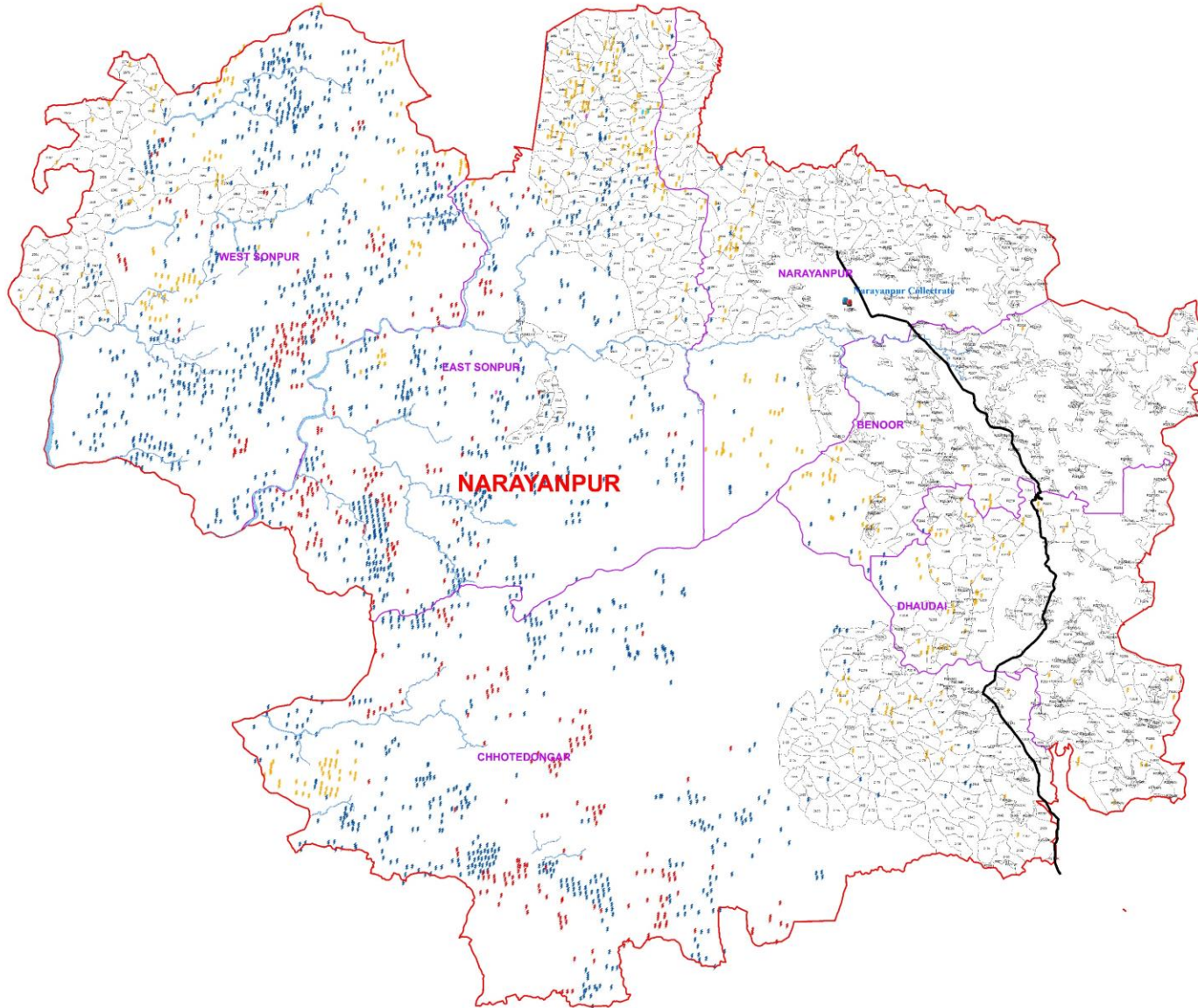
- Apr
- May
- June

# Map Of Fire Incident Narayanpur Division Year 2021



- Legend**
- Division Boundary
  - Range Boundary
  - Compartment Boundary
  - Dm Office
  - State Highway
  - River
- Year 2021**
- month**
- Jan
  - Feb
  - Mar
  - Apr
  - May
  - Jun

# Map Of Fire Incident Narayanpur Division Year 2022



**Legend**

- Division Boundary
- Range Boundary
- Compartment Boundary
- DM Office
- State Highway
- River

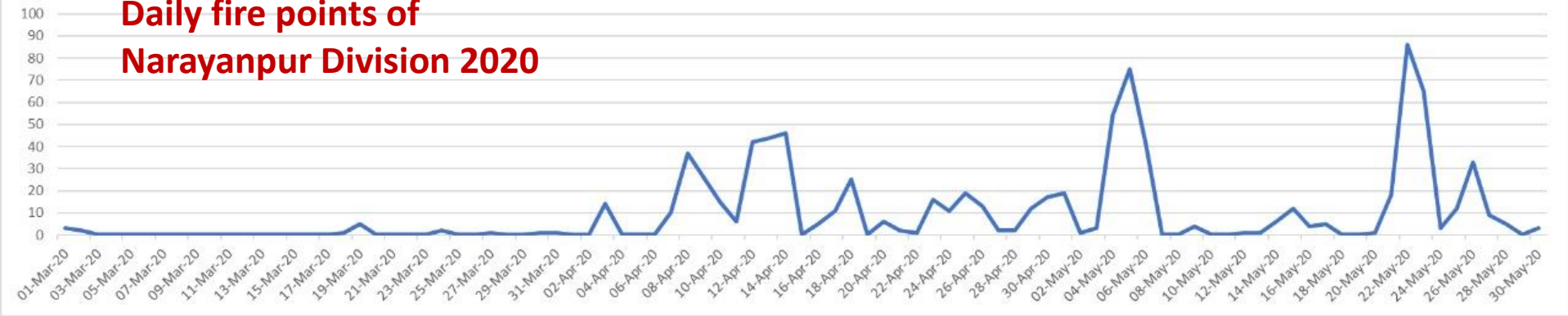
**Year 2022**

**Month**

- January
- February
- March
- April
- May

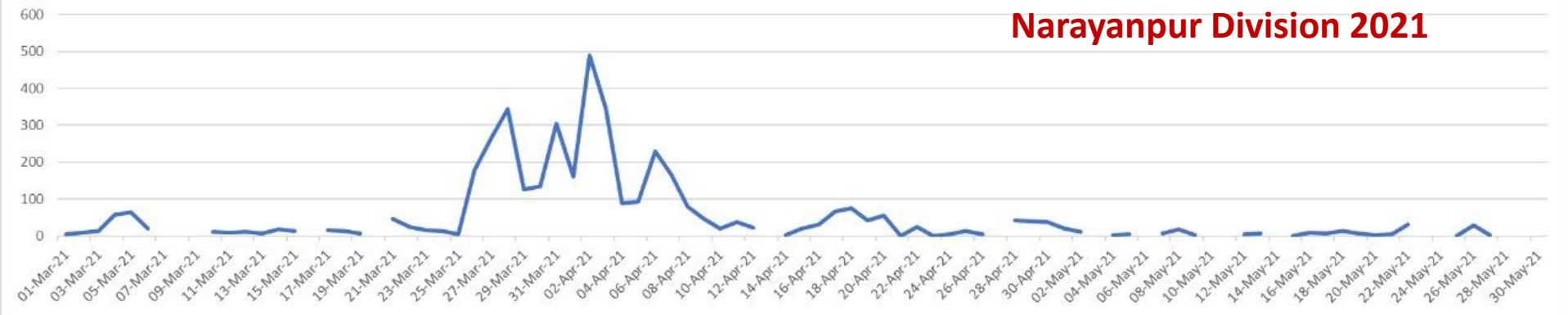
# Daily fire points of Narayanpur Division 2020

no of incident



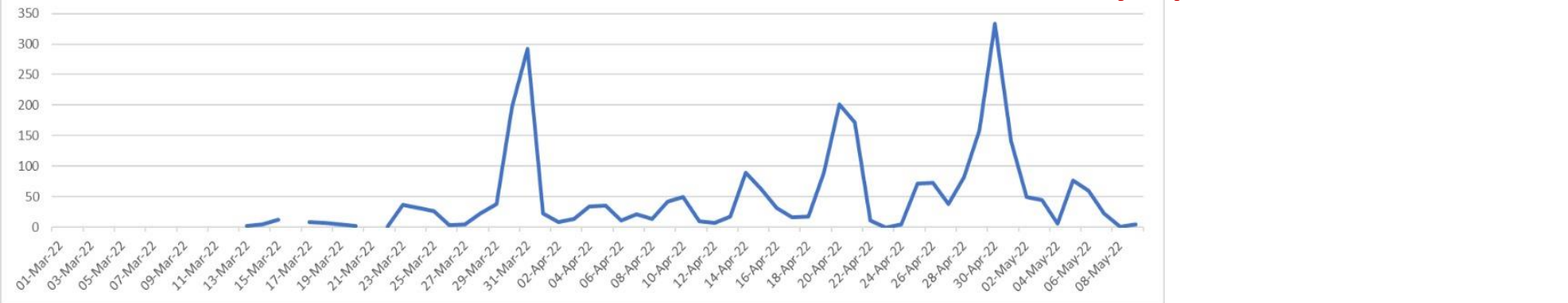
# Narayanpur Division 2021

no of incident



# Narayanpur Division 2022

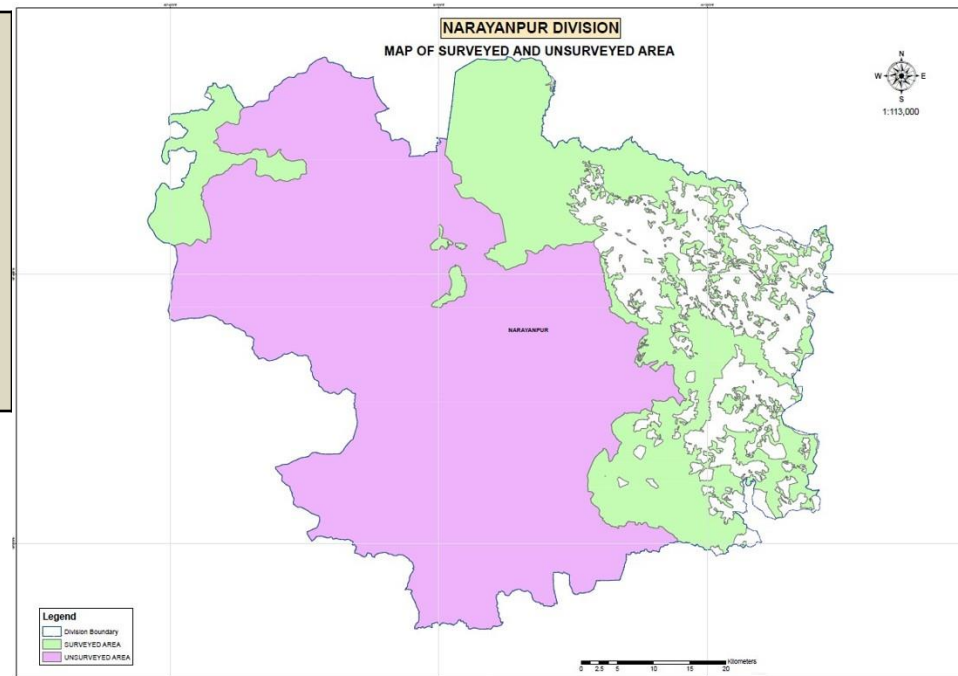
no of incident



## Some observations.....

- Un-Surveyed areas have burnt a month later than surveyed forest areas
- The burning of surveyed forest areas coincided with period of mahua collection and tendupatta pruning
- The security issue for forces.....visibility ???

Narayanpur Division  
Surveyed Forest Area  
~1.15 lakh ha  
Unsurveyed Area  
~2.70 lakh ha



# Issues associated with collection of Mahua flowers

- **Villagers have tendency for floor burning, that spreads fire in forest.**
- **Very important in rural economy of CG**
- **5 Lakh Families collect Mahua Flower during March-April every year**
- **Total collection - 6 Lakh quintals**
- **Minimum Support Price. Rs. 33/ per kg**
- **Total Purchase Value- 200 Crores**

## MAHUA



# Issues associated with pruning of tendupatta root stock

- Before Tendupatta collection, pruning of root stock is done around last March. And the villagers have tendency to put fire to forest floor instead of pruning in all areas.
- 14 lakh Families are involved
- Collection rate Rs. 4000/- per standard bag
- Total collection - 16 lakh standard bags
- Payment to pluckers - Rs. 640 Cr.



# FRA and encroachments

- FRA has given lot of scope for vested interest to clear the area by burning and girdling
- Encroachment extension along revenue areas and village boundaries by burning
- Burning of agricultural areas that spreads to forest areas
- It's a open truth and how much destruction it is bringing to the Indian Forests is visible.





## Shortage of manpower

- 24% of the positions of Forest Guard/forester/Dy Rangers/Rangers are vacant



## Terrain and accessibility

- The areas of Bastar are full of small hillocks and valleys that's are very difficult for the staff to access and difficulty in moments.
- There is no water on top making physically very straining activity. Mobilisation of villagers is difficult.

## Other issues of concern

- Traditional practices like Parad, hunting by burning.
- Destructive practice of MFP collection, *Boda (truffles)* , *Futtu (Mushroom)* etc.
- Keeping away wild animals and pests



# Need to address....

- Recruitment of Front Line Staff
- Employing more Fire Watchers
  - CAMPA is providing one fire watcher per beat during fire season.  
Average size of beat = 15 m<sup>2</sup>. Total 4150 Beats in state.

- Need more Fire fighting Equipments and better tools to equip the frontline workers:

CAMPA has provided 1496 Fire blowers

CSS: FPM also 365 fire blowers.

More are necessary.



- **Need more vehicles and equipment**
- **Paucity of funds:** State fund is approx. 8Cr. used in fireline cutting, cleaning. CSS:FPM fund approx. 3Cr used for equipment, fireline maintenance, awareness etc. Fund is Insufficient.
- More fire lines to be maintained all along **compartment boundaries** not only RF/PF boundaries. Fire line maintenance has to be repeated activity with regular burning and cleaning after leaf fall.

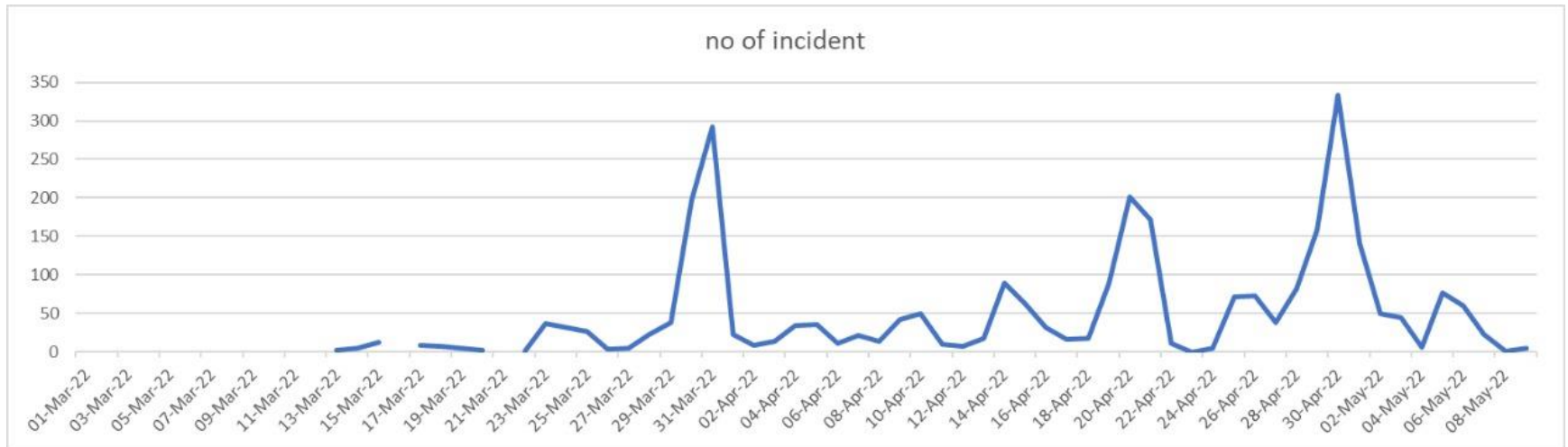


# Way ahead....

## ❖ Forest Succession and Climax .....

Central Indian Forests are Stable Sub-Climax or Bio-climax or Pre-climax Forests

## ❖ Micro-Management .....



Thank you all



Raju Agasimani, IFS  
CCF Kanker  
May 2022