

9 Oct 2025

traditional vs nontraditional approach

Coal ka formation ek long term process hai.

Worldwide population explosion aur energy ka trends consumption hone hand to hand chal raha hai.

Lekin coal ke Limited stock ke haasan in future isi consumption ki dependency ko

noncon
traditional se renewable
nontraditional

energy ki taraf shift kijayé

saha h jinme mainly wind

Solar, sea, etc h.

Solar first posn pos

india sahit cg me bhi ike

lige positively work kijayé

saha hai.

India in terms of solar energy

India solar energy generation
ke maamle me worldwide
third rank pe h rank I China

rank 2 USA

rank 3 India

rank 4 Japan

rank 5 Germany

India ne fy 2023-24 me japan ko
peeche chodte hue 3rd posn
achieve kiya.

future me india rank 2

haasil karna chata h.

iske liye national level pr

india ne 29 feb 2024 ^{imp} leg year

ko india me pm Namo re

PM Surya Yojna (PM Surya Yojna) Launch ki

which was launched with the tagline
bijli yojna.

WT CG

Or me ~~not~~ renewable energy
ke development k lie creda
ek authorised body hai.

CEDA stands to ~~or~~ ~~renewable~~
~~energy~~ ~~dev/pmt~~ ~~agency~~

Its ka formation 25th May 2001
~~(before state form)~~
Ko kiya gaya tha

Present chairperson Bhupendras
Saranni

(^{stück}
Saranni ki chananni)

Note g. one iska hy saipur
one h. aur rest of
l. g. alay² branches one h.

Govt of Bhupesh Baghel 2019

B Baghel ki govt ne ake
domestic home "gharsak" electricity consumers
ko bijli bill se relief dena
k die bijli bill half jaza
Start ki thi (400 units) bijli ka
bill ane pr is scheme ka
laya milta the)

isi farah se ek doosre

group ko bijli ke bill se sahat
dilane k lie more chut mor
(Ans)
bijlee scheme ki start

ki gayi thi (2013)

jiske liye executive body credi
t thi.

Present scheme

2023 me govt k change
hone ke baad ab is scheme

to discontinue ko diya gaya

8 pm sanyaash ghar scheme ho gya nahi
start kiya gaya.

isscheme ke fahat cg merahe
wala koi bhi adm. apne
ghar hi chat pr 3 kw se
3 kw tk solar panel lagne
8kta hai

iske liye Executive body
creda nahi h baiki' CSPDCL

hal.

iske peeche ka reason

excess energy ka khareeda
jana h.

Subsidy imp

i for 1 kw \rightarrow total subsidy = $\frac{480}{C+S=3}$

3 kw \rightarrow total
subsidy = 108,000
 $C+S = 78+30$

Higher subsidy ka purpose
az yada se az yada logo ko
is scheme se connect karna h.

Targets

FY 25-26

60,000 solar setups

FY

26-27

70,000 solar setups.

Random facts

16 government ne solar energy ko promote karne ke liye solar energy policy banayi hai.

Is policy ka duration 10 years ka h 2017 to 2027

Rajnandgaon me solar energy
se related SEZ develop

kiya gaya hai.

floating solar power plant
Og ka first Durg → Bhilai →
Maroda me
Setup kiya ja raha h.

Railway ka desh me biggest
solar pp. charoda bhilai me
proposed hai.

Panchayat (Trust issues)

Okil baar elected candidates
Right to Recall <sup>8 No
conf
mtm</sup> jhootha
waade koke

chunaav jeet jate h Lekin baad me
chunaav jeetne k baad ye
badal jata h. Iisi situation me
inhe depose kiya ja skta h.
iske liye 2 tareekhe hote h.

ORZR

NCM

R2R

1. R2R only directly elected
members k liye laya ja
Skta h it meas. goapam ka

2. panch goapam ka
sarpanch, janpan member 8
jipam members ko R2R ke through
recall kr skte h.

3. GP SP SP

JP Mem

ZP Mem

NCM

colleague for head/deputy head

ise arishwaas prastavr

ke naam se bhi jante h

jo ki colleagues k dvara

laga jata h.

Ye kewal head/deputy head

k lie laga skta h.

jaise

Sarpanch & up sarpanch k liye

Tanpan ke Pres & Vpres k liye

Jipan ke Pres / VPres k liye

Note: Sarpanch ek mato esa admih
jise R2R 8 NCM dono hi
tarkeeke se hataya ja skta h.

Questions inmese kera/ kise R2R

ke through depose kiya ja skta h

- 1 Panch
- 2 UPSarpanch
- 3 Sarpanch

- (a) only 1
- (b) only 1,3
- (c) only 1,2
- (d) only nota

jinme se kise NCM ke

through nahi hata ja skte

① Panch

② Sarpanch

③ Upzgrd.

④ ⑤ ⑥ Same

ans only panch ko nahi hata skte.

NCM
process

Colleagues written me NCM k
liye ek application

with the signature of $\frac{1}{3}$ ^{1st} members produce kate h.

Produced to :

① for

Grapan : S.D.M

Members	10	20
Grapan	"	25
Tanpan	"	35
Tipan	"	35

② for Tanpan : Collector

③ for ZP : director panchayat.

in After receiving of application

thru

within 15 days

no confiden

O

motion ki proceeding k lie

OB

ans

ek meeting organise ki jayegi.

NC.

is meeting ka info kam se kam

C. 7 days earlier (meeting ke 7 din
pehle di jani chahiye).

$\frac{1}{3} \rightarrow \frac{3}{4}$ Pcs & $\frac{2}{3}$ total

Meeting wale din ki proceeding

NCM ki proceeding me member apni

merzi se aate h aur voting me

participate karte h. Ye voting

secret ballot ke through hota h.

due to security reasons.

iske liye meet me present $\frac{3}{4}$ members

jo us panchayat ka formation

kرنے wale members ki total number

ke $\frac{2}{3}$ se zyada ho

isi ke according ncm successful

1.

ya fail/unsuccessful mang jata h.

2.

After proceeding meeting there are
2 chances

Q6

1 yad NCM pass → toh jis person ke
ans against NCM laya gaya tha use
immediately apna pad chodna hota

N.

2 yadi NCM fail ho jaye → toh woh
as it is open profile pr bana
use against aye / NCM nahi h.

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② yadi pehlī baar laya NCM kisi
karno se fail huatah ek saal k
baad again ncm laya ja skta h
it means kisi person ke against
do baar hi ncm laya ja skta h
& yadi dono baar ncm ke through
use hataya nahi ja skta toh ye
genuine attempt nahi mana jayega.

kyonki panchayat ka
tenure 5 saal ka hota h

har 5 saal me SEC panchayat
ke liye election conduct
karati hai.

iske liye kam se kam 6
months time lgta h.

Yadi kisi head ya deputy head
ka tenure only 6 months ka

bacha h toh is case me

uske against ncm nahi laya ja

sk.

Shrovt

Director

panchayat collector

Collector & Deputy coll

SDM T/INT

No confidence motion b appeal

NCM ke pass hone k baad within a

particular time period iske against appeal
applies for NCM's enacting

kr skte h.

GP → SDM

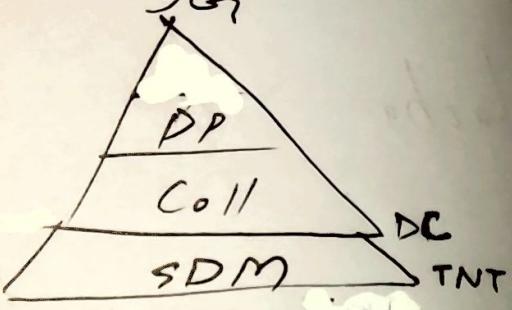
JP → Coll

ZP → DP

GP → 7 days → Collector

JP → 15 " → D. Panchayat

ZP → 15 " → Shrovt



NCM

Appeal/Result Appeal
7/30 to Gp
 SDM forenactment
 & NCM

Meeting k r watah

T/N/T

15/30 DP ← [Collector] → Gy coll
 JP

15/45 SG ← [DP] → Coll
 ZP

yaad SDM Collector aur DP ko
zakhho

meeting k liye ek level neeche ka
" " " "

Transportation

• Transportation basically "place se
doosri place ka movement dikhata h"

"ye movement humans / animals,
goods ka ho skta h.

• Transportation ke alag² mode hota h

eg/ Road Xportn

X = Trans.

Railway "

Air "

• Inne se road transporntn me
public aur pvt dono hi transport ki

facility hoti h but rail aur
air me max facility gort detab.

• India me road transport max use
kiya jana wala mode hai.

• Jiska biggest reason har chote bade
locations ka road connectivity pr
hona hai.

• Road nw ka use goods transport
ke liye bhi use kiya jata h.

• iske liye national highways pr
maximum work kiya jata h

• cg almost india ke centre me h
jo ki india ke Nko S se S E ko
W se connect karta h isiliye is
State se hokar guzarni wali
NHs ka ek importance hai.

NH 43 :

• 1 MP ke raste cg me abhi h
Ch me iski entry MCB district
Se hoti h. kyunki ye zilla MP se
apni boundary share karta h.

2 ^{MCB} Manendragarh k raste

ye ⁽¹⁾ baikunthpur ^{korea}

⁽²⁾ surajpur h

⁽³⁾ Ambikapur ^{sarguja} ko

connect karte hue ⁽⁴⁾ ashpur ki

taraf nikal jati h.

aage yah JHkhand ki taraf chal
detा h it means MP ko JHk

Se connect karne wala NH h

3 iski me total length 353 km
+ 220 ⁴³

NH 343 :

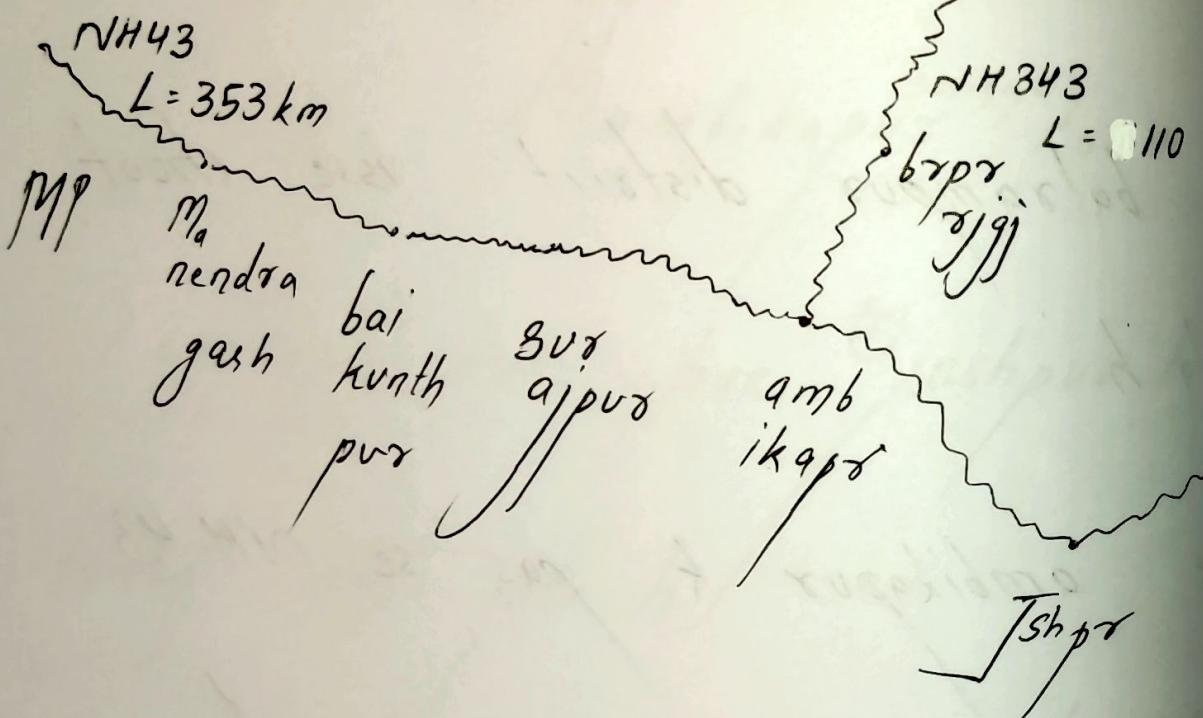
NH 43 north of 5 districts
ko connect karta h.

Only balrampur district isse choot
jata h

isliye ambikapur k pas se NH 43
ko ek expansion NH 343 ke form
me kijiye h.

To ki ambikapur se Ramnagar
ko connect karta h. $\begin{matrix} 220 \\ 43 \rightarrow 353 \end{matrix}$
iski length 110 km h. $343 \rightarrow 110$

age yah UP ki taraf badh
jata h.



NH 30 :

• Ch ko MP se connect karne NH 43
k saath² NH 30 ka bhi use
kiya jata h.

• Ch me iski entry chifii
ghati ke through hoti h jo
kawardha zille me h.

• chifi se hote hue kawardha,
bemetara, simga (^{BB}_{district}), aps,
dhamtari, charama^(kkr), kkr^(kkr),
kondagaon^(imp) me keshkal valley,
bastar/jagdalpur,
Sukma konta
hote hue south ki taraf badh jaati h.

Pts to be remembered

1. NH30 is longest NH of 6

length = 636.6⁷

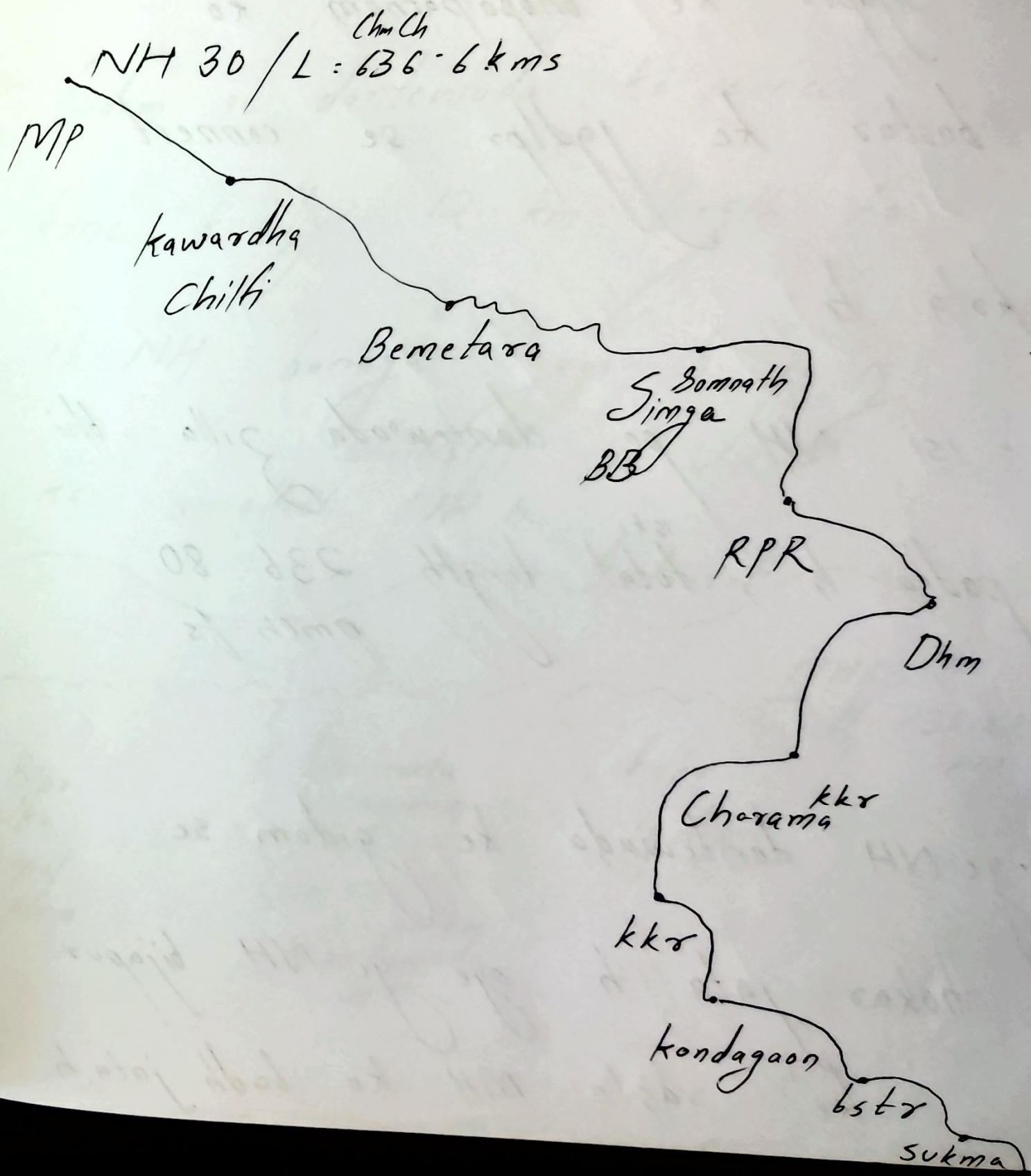
2. ye do major valleys se
a chilfi

1 keshkaal

Se hokar cross hoti h.

3. ye mp ko jg ke raaste
South india se connect krti h.

4. Ye rest of Jh to bastar
Be connect krti h.



National highway NO 63

Bijapur ke bhopal/patnam ko
bastar ke jgdlpr se connect
kota h.

isi NH pe dantewada zilla bhi
padta h, ^{isiki} total length 236.80
nmch fs

ye NH dantewada ke gidam se
hokar jata h age ye NH bijapur
ke raste MH km hadh jata h.

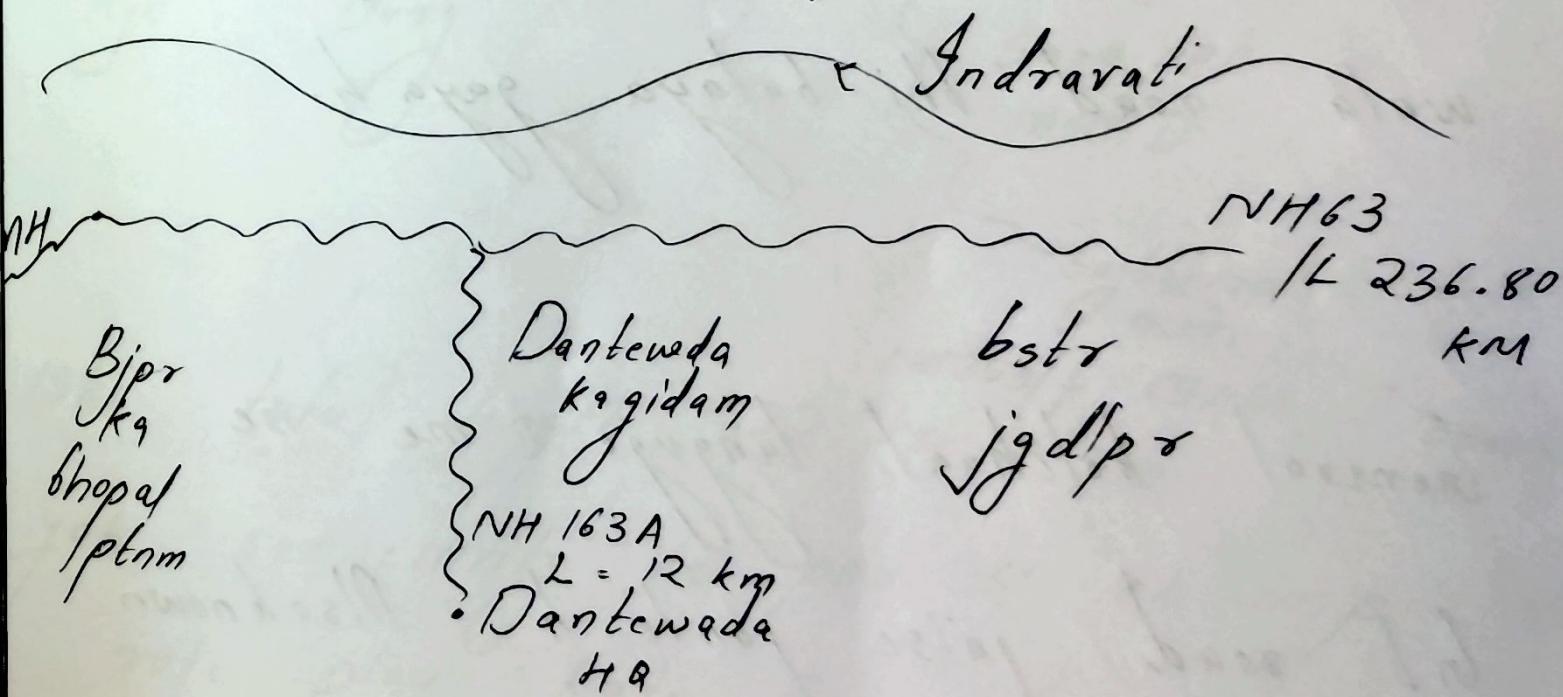
Nation H. 163A ^{12 km} ^{smallest}

Its an expansion of NH 63

Gidam se dantewada ko connect

Kone k liye 12 km length ka

ek NH banaya gaya h jo g
ka shortest smallest NH h.



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G.E. road
~~~~~

India me east to west

connectivity k liye ye NH imp h

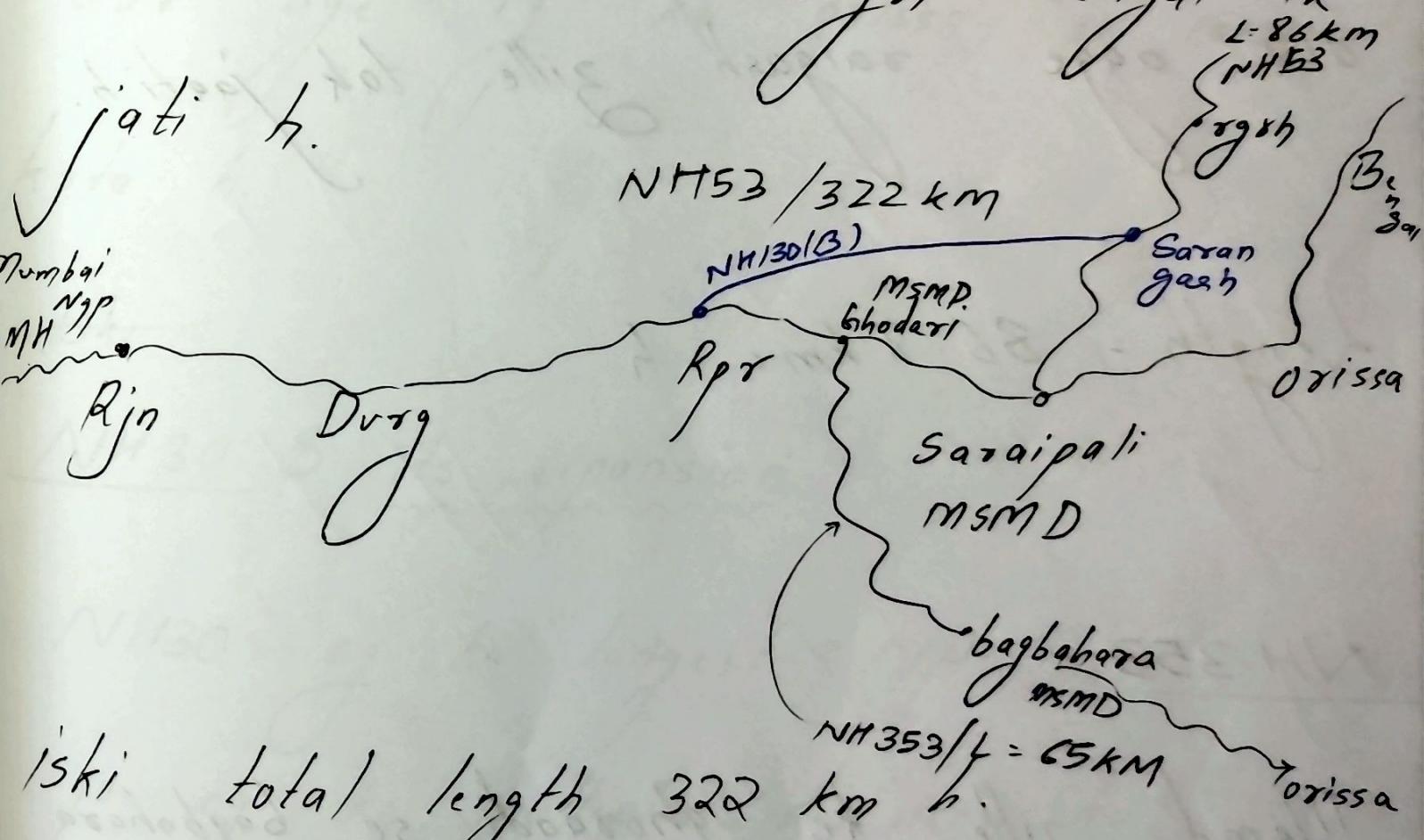
ise mumbai se calcutta ko jodne

wala road bhi bataya gaya h.

General bolchaal language me ise  
GE road jaise jante h : Also known  
as NH 53.

Furnud Ajay Chgn  
Rajn Dukan

(6) me is NH ki entry Rajn  
district se hoti h aur yah  
msmd district ke sarai pali hote  
hve orissa ke through bengal tk  
jati h.



iski total length 322 km h.  
yah connectivity ke pov se ek imp  
role play karta h.

NH 153

NH 153 , is an expansion of NH 53

jo ki Baraipali t par se nikalati h  
aur aage Raigarh zille tak jaati h.

Length = 86.8 kms. h

NH 353

Msmd zille ke ghoradi se Baghahara  
ko connect kerti h.

iska total length 65.60 km h.

Yah ek aisa route h jo cg  
ke keral 1 hi zille se hokr jatah  
aur age jg ko orissa se connect  
karta h.

iski

NH30 8 its expansion.

NH30 jg ka longest NH hai.  
jo cg ke multiple districts ko  
apna me connect karta h.

is NH30 ke aage aay<sup>2</sup> expns h.

✓ jinme NH 130

NH 130 A

NH 130 B

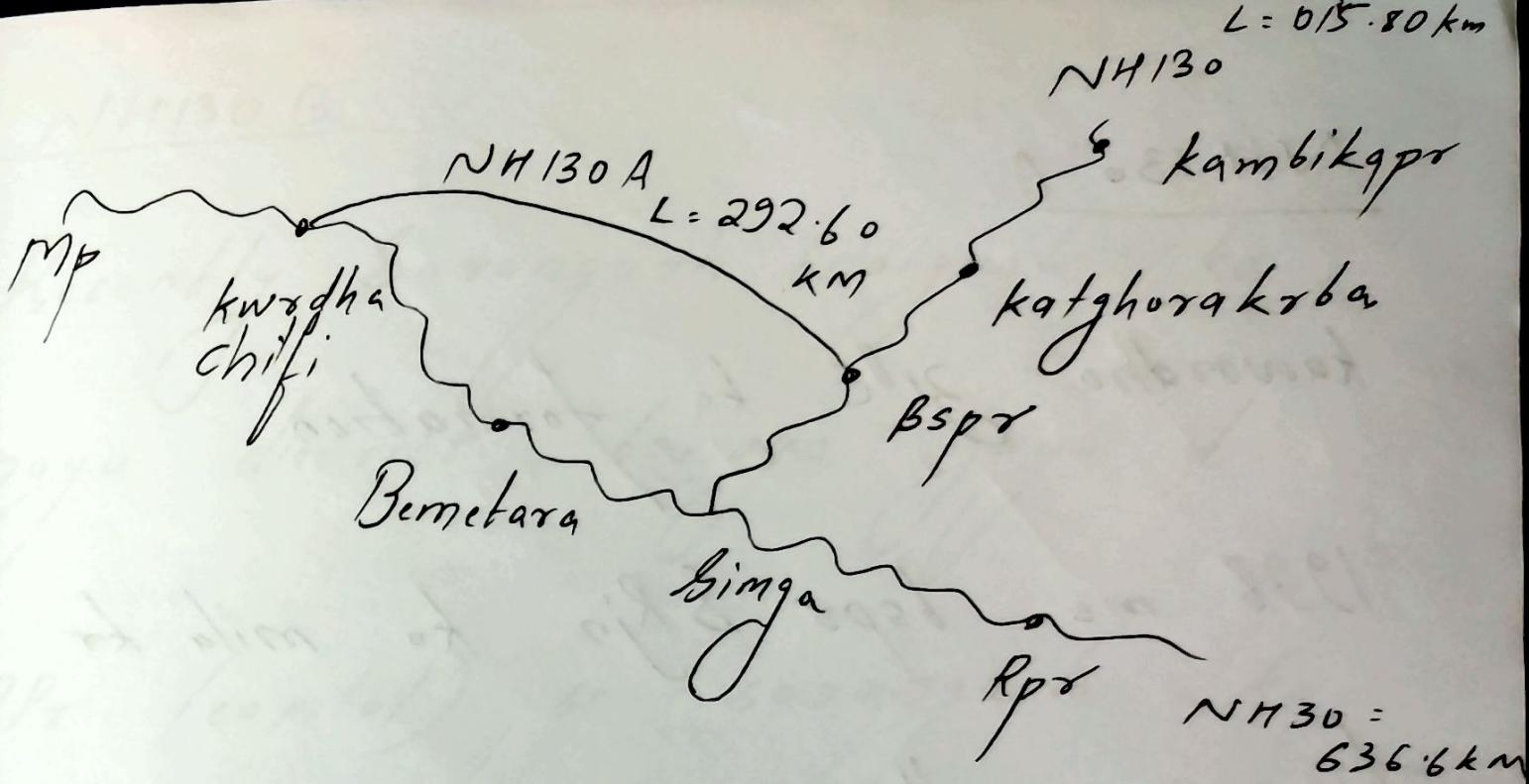
NH 130 D shamil h.

NH 130

Simga se north jo ko connect kare  
BB

k liye NH 130 start kya gaya jo

Simga se ambikapur ko connect karta h  
iskitotal length 292.60 km.



## NH 130 A

kawardha zille ka formation

1998 me bspor 8Rjo ko mila kr  
kiya gaya tha.

kudha 8 bspor ko connect kرنے  
NH30 ka ek expansion NH130A k

naam se kiya gaya jo kawardha se  
bspor ko connect karta h.

$$d = 105.80 \text{ km. h.}$$

NH 130 B

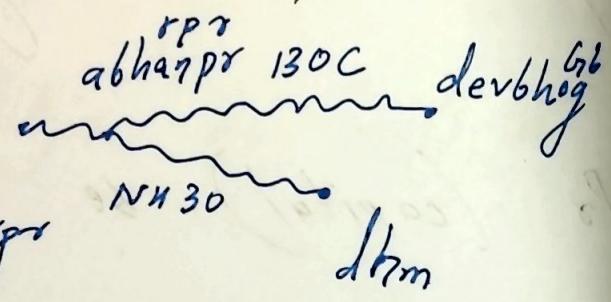
Recently Sarangash bilaigash ko  
naya district banaya gaya h.

RPs (capital) se sarangash ko  
connect kane NH 130 B create kiya  
gaya h jo ki xps BB S  
sarangash district ko apas me  
connect kati h S sarangash k  
pas jahar NH 153 me merge  
ho jati hai.

it means sarangash city NH 130B

8753 pr H

NH 130B ki length 187.50 kms h.



NH 130C

NH 30 jab rpr se dhamtari ko connect kerti h toh isi beech m

abhanpur se gariyaband ke devbhog ko connect kرنے k lie

NH 130C create kiyा gaya h.

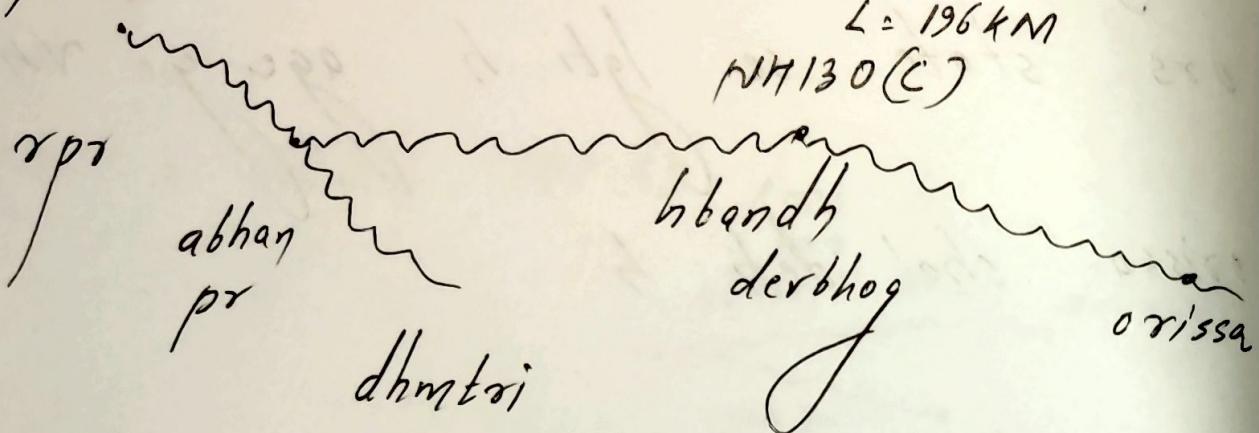
Gariyaband district ki boundary  
ors state se jti h aagegi NH  
orissa chal deti h

SG me iska length 196 km k aspash.

gariyaband jo kisi time paral affected  
area mana jata tha, is NH ka  
importt role h paral morment ko  
lun kرن ke liye.

$L = 636 \text{ km}$

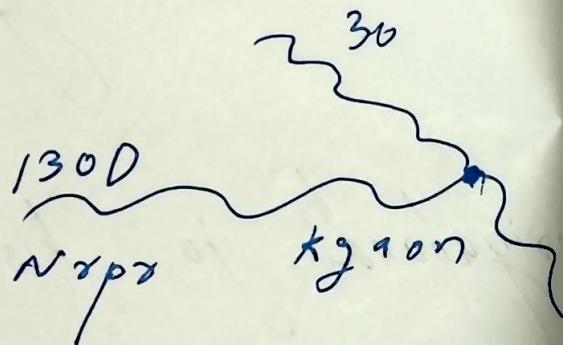
NH 30



$L = 196 \text{ KM}$

NH 130(C)

NH 130(D)



NH 30 ek aisa NH hai jo  
CG ko Bastar se connect krta h.

LB me Bastar ek esa division

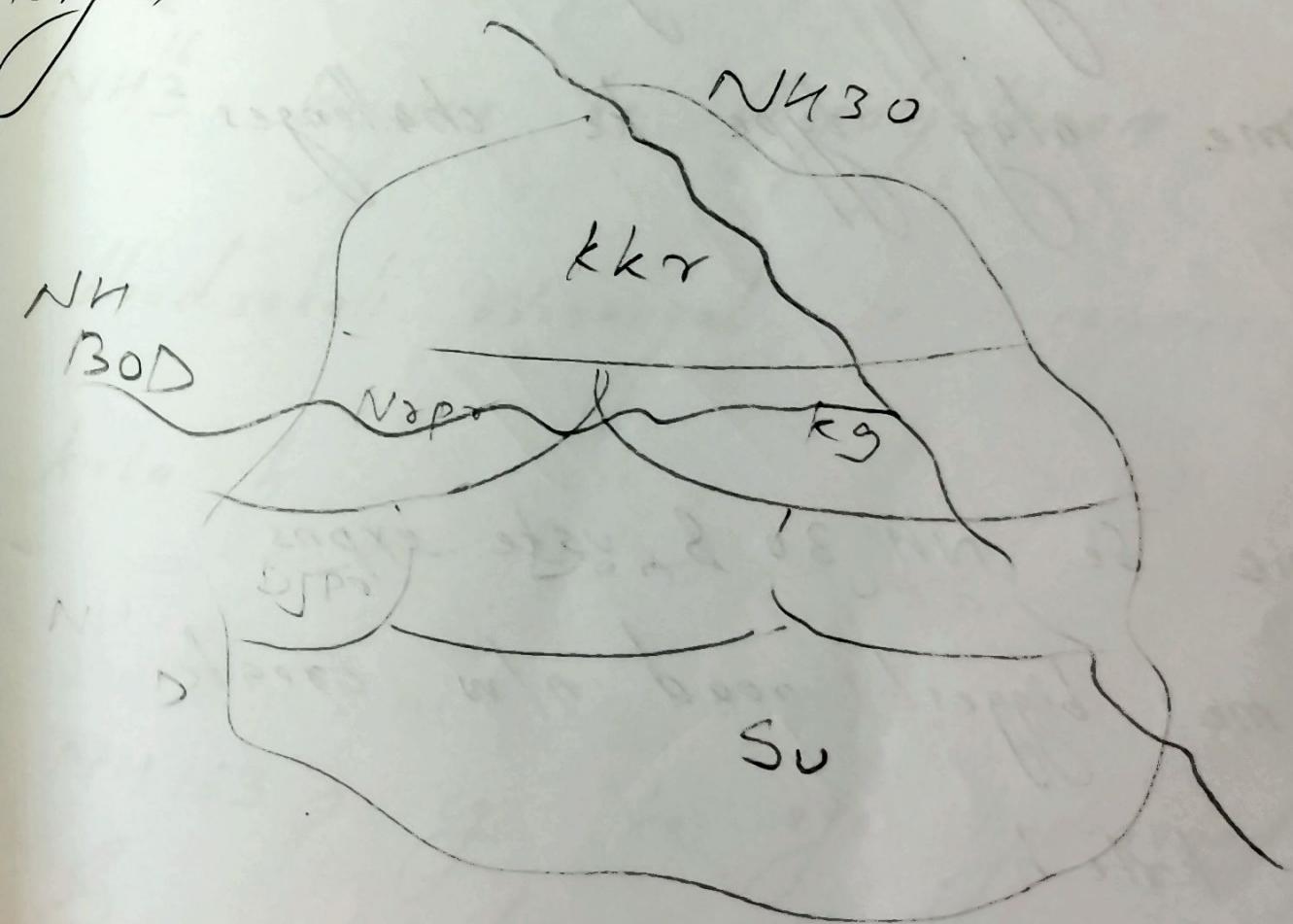
mano jata tha jahan naxi mormts  
mar tha

isiliye bastar ke do zille Orissa  
Orissa

ko apas me connect kore

NH 30 ka expansion NH 130D

k naam se kija gaya iski total  
length 49.70 km h.



Is NH ke banne se poora bstr  
dvsn ab sps se well connect ho  
chuka h lekin in poore NHS  
me max/sbse beda challenge  
keshkaal valley pr h jahan most of  
the time alag type ke challenges  
hai.

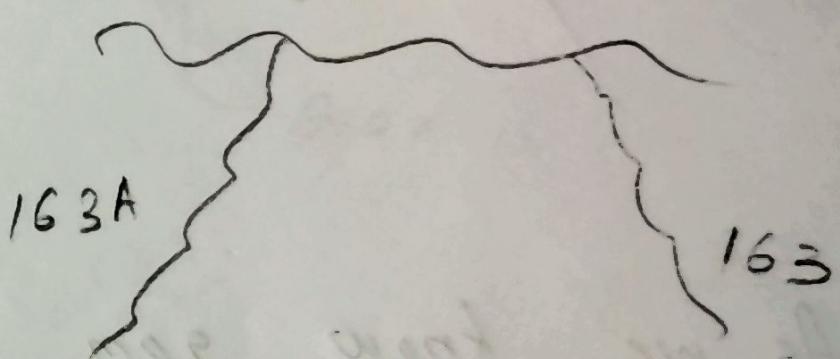
is logic se NH 30 & uske expns  
eg me biggest road n/w create  
karte h.

NH 163

NH 63 ke do expansions h

① NH 163

② NH 163 A.



NH<sup>16</sup>3 Bijapur ke bhopal/gattnam ko  
Bhadra kali Warangal se connect  
karta h.

NH 163 → cy ko age hyderabad  
8 nizamabad se acchi connectivity  
detu h l = 36 km

NH 45

NH 45 bilaspur & gpm

ko apas me connect karta h.

As we know gpm bilaspur zilla  
se a/g hokar  $1^{\circ} 46' 20''$  me  
ek naya zilla banaya gaya tha.

is NH ka length 98.3 kilometers

kabirchabootra GPM

NH45  
L: 98 km

karkikota

Rtnp &

Bsp &

Bharat me saint kabir ne  
religion ke prachaar k lie alag<sup>2</sup>  
jagah pr movements kije isi  
duration me inka movement gpm  
k pas bhi hua jis jagah pr  
inhone sermon diya ise kabirchabootra boffer

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NH 30 / NH 130 (CD) <sup>Manpur</sup> } kurud      NH 130 (D)  
L = 108.40 km

NH 30 jo ki  $\int g$  ka longest NH  
h, ke kai expansions me se NH 130

CD bhi hai jo  $\int kurd$  (dhamtari)

Se orissa state ko connect kerti h

As we know  $\int g$  ki smallest  
interstate boundary dhamtari ki orissa  
se Jgti h isiliye ye  $\int g$  & ors kab  
well connectivity deti h L 108.40 km.

## MMA district

ye pehle zin district ka part  
tha but baad me isek ek separate  
district banा diya gaya.

In zille me naxal mrmbs ko  
ctrl kare k lie NH30 ke  
ek expansion ke through dhmtari  
balod & mma zille ko interconnect  
kiya gaya.

NH30 ke is expansion ko

NH NH 930 ke naam se jina jata

" , Jski length approx 115.40 km h.  
CD //

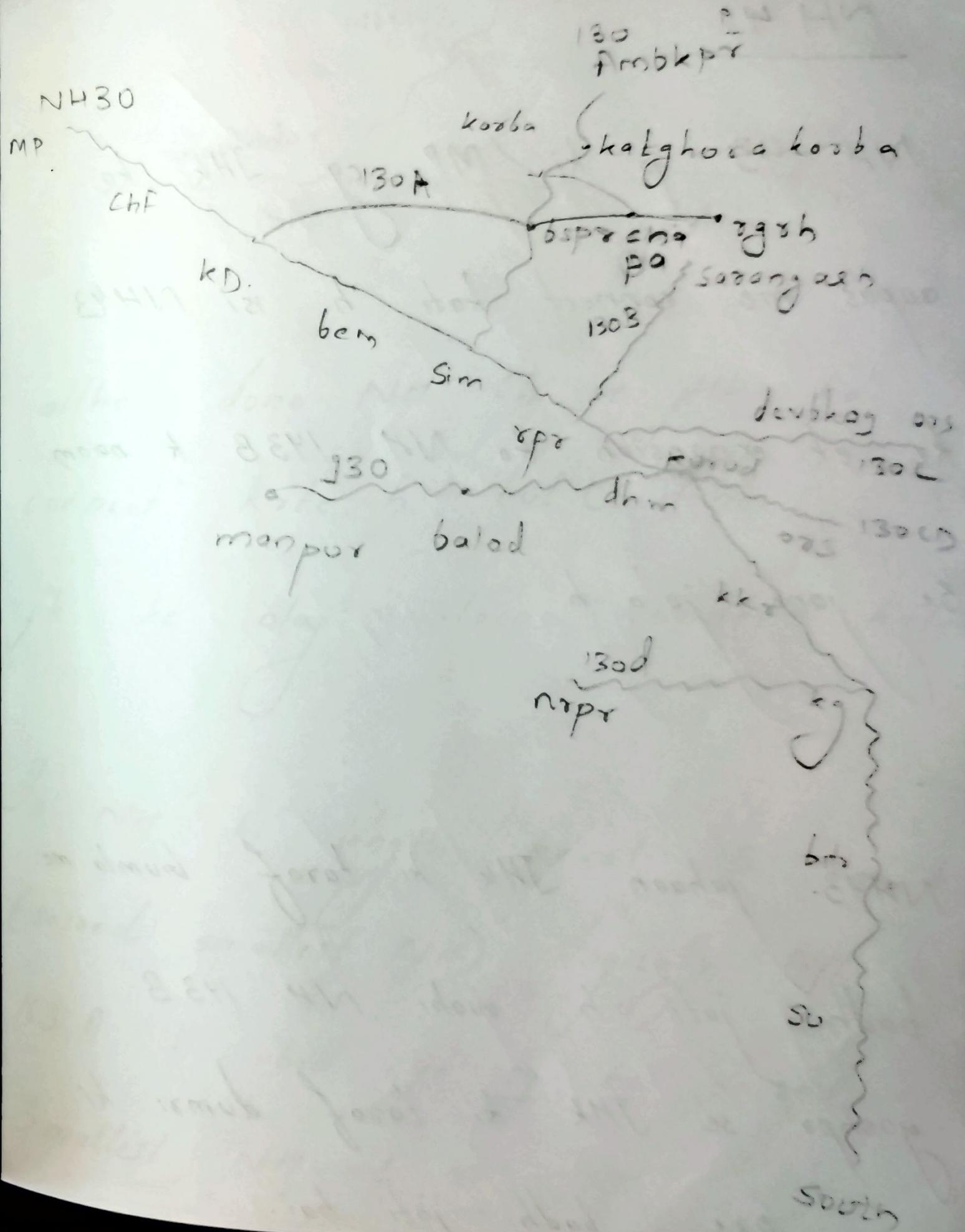
Se IN SABKO BLANK MAP ME BANAN

As

inter.

se

wall



143 b

NH 43

NH

NH 43 jo ki MP cg JHK ko

NH

aapas me connect kati h isi NH 43

h, & ke ek expansion ko NH 143B & nam

CD

se jana jata h.

Se

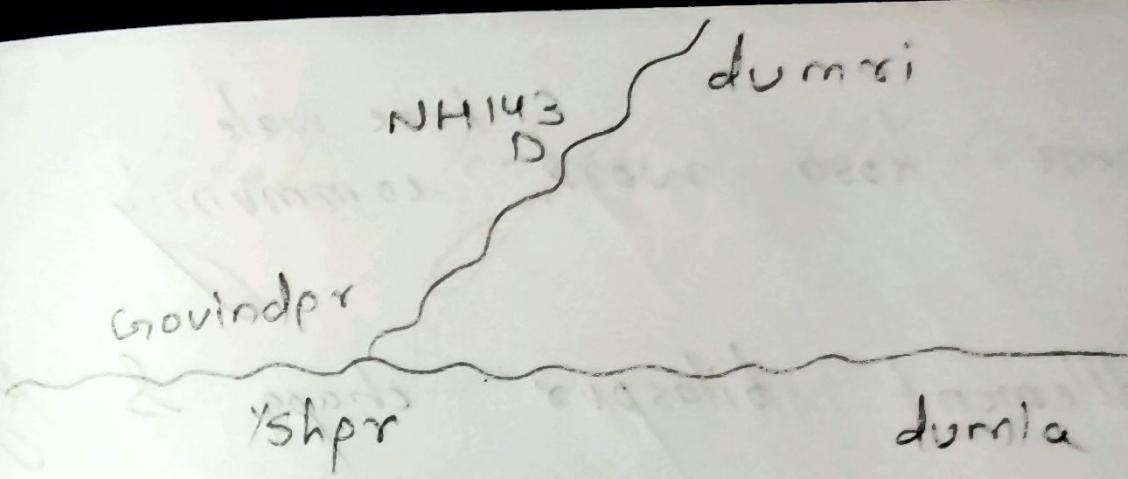
As NH 43 jahaan JHK ki taraf humko

inters badh jati h wahi NH 143B

se yashpa se JHK ki taraf dumri ki

wall

ore badh i hai



altho dono NH cb se jhk ko  
 connect kate h but √ dono  
 jk ke alop<sup>2</sup> locns connect krtch

9s NH ki length kaval 15 km 3.  
 (second smallest NH) logically NH  
 163 A k bad ye of ka second  
 smallest NH h.

CG me kosa work <sup>kone wale</sup>  
community

ka settlement bilaspur chapa & Rgarh

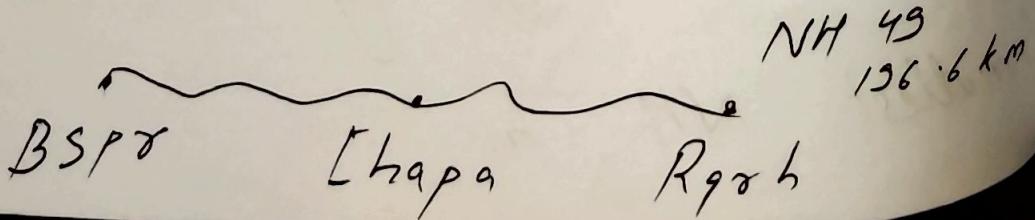
zille me h inhe apas me

connect kone ek silk route develop

kiya gaya jise NH 49 / bspc rgarh

route ke nam se jana jatah

Ye eg ke 3 major districts ko  
connect keta h.



iski total length 196.60 km h.

Expansion of silk route:

LG me kose ka work kora  
district me bhi hota h isliye  
chapa & kora ko apas me connect  
krne NH 49 ke expansion ko  
NH 149B ke naam se create kiya  
gaya jo chapa ko katghora se  
connect karta h. Length 70-20km

NH MS

NH RL

NH TMS

NH RM

NH RP

NH TMS A



NH MRM

NH TRP B

NH TMS B



NH TMS C

NH TRM B

NH TMS D

—

NH TMS CD

NH Chm

NH LM

NH PMS

NH fChm

NH TLM

NH bChm a



NH MLM

Ch ka longest NH NH30 h jiske

bad second largest NH 43 b s

no 3 pr NH 153 haj.

LG me presently 20 NHS ; maintained by

central government with the  
help of NHAI

CB me NHs length 3500 km

jo cg ke districts ko ek dusre  
se connect karta h iske sath

hi cg ke national neighbour states  
ko bhi well connect karta h cg ko.

# Railway transportation

Presently ~~in~~ me 33 district h

in me se abhi bhi kuch zille

rly se connected nahi h.

in zillo ko railway se connect

kone railway corridors banaye ja  
tahe h.

# Development of Railway

India me railway ka revolution

Lord Dalhousie ke dvara

1854<sup>L.R</sup>  
laya gaya.

Inke hi samay India me railway  
lines ka development start hua 1858

India ki pehli train Mumbai to  
Thane sun ki gayi

Lekin <sup>fn</sup> me pohchte pohchte  
late ho gayi.

Y me awy ka expansion <sup>fn</sup> 1882

Se start hua

1882 <sup>fn</sup> me NGR se RJN tk

bengal Nagpur railway company ne  
is state ki first railway line

bichayi. jo ki ek gauge <sup>choti</sup> line thi

FL formation of congress.  
1885 → is saal railway ne  
broadgauge line bichayi &  
connectivity ka expansion nagpur se  
opr tk kiga gaya.

FL 1887 → CG railway ka merger  
Bengal Nagp Railway company me  
ko diya gaya taki rwy ko  
devpt faster ko ske. isi sal  
Rin ko cg ka first Rwy Bt

banaya gaya jiki bsp  
PS

1890 me awy stn bana

Lekin presently bsp awy k  
ek bade centre k roop me  
jana jata h.

India 16 A.

ff nk tt ff  
1888 → 27<sup>th</sup> Nov 1888 ko

chalayi gayi jo ek regular  
train thi aur yeh bengal &  
npr ko connect kore chalayi thi

FP  
1889 → BNC mill jo ki cg ki  
pehli industry thi, ko gyan me  
birf isliye lgaya lgaya kyonki  
rjn rail connected tha 1892  
• establish<sup>mnt</sup>  
• prod<sup>PR</sup>  
1894

• name chg CP → BNC mill  
in 1897

FP  
1889 me railway expansion towards  
BSP kya gaya.  
BSP se mp umariya ko connect kya gaya.

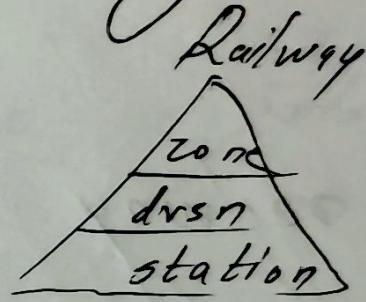
<sup>ps</sup>  
1890 → bilaspur ko rwy stn

declare kiya gaya cg ka longest  
rwy platform isi rwy stn pr h.  
(India ka longest godakhpur)

1890 to 1900

In dus salon me cg me  
rwy expansion fastest hua.

cg wala part ab kolkata zwy  
ke control me aa gaya  
1900 mer bsp ko ek zwy  
division banaya gaya.



Atal bihari Vajpayee govt (1998)

is govt me 1998<sup>PF</sup> me bsp ko  
railway ka ek naya zone banaya  
jana declare kiya gaya

division, <sup>+ 103 years</sup> Zone

but due to political instability

the project delay hua &  
finally <sup>SM</sup> 2003 me

3 railway divisions k sath

SECR indian rws kg <sup>TLH</sup> 16<sup>th</sup>

rwy zone bana.

Is rwy zone se mumbai howrah

ki well connectivity h jiski wajah se

is route pr wagons ka ana  
jana bohot hota h.

Overall revenue me  $\frac{1}{6}$  revenue ka

contribution isi any zone se jata h

iske alawa is route pr kai passenger  
trains bhi chalti h.

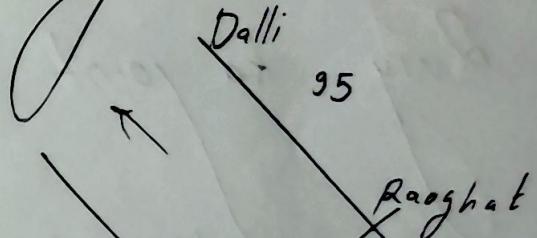
## Challenges in railway work

- Biggest challenge bastao ko railway se connect kرنو tha due to natural events.
- iske liye ek project start kiya jise dandkaranya rail aur bolte h
- fatal 235 ka railway track bichaya gaya jise do

alag<sup>2</sup> steps me complete kia  
gaya

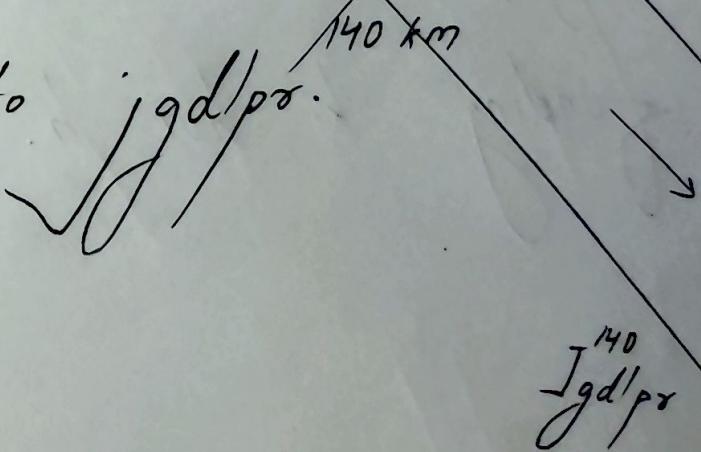
Step 1

Dalli rajhara to raoghat  $\overset{55 \text{ km}}{\curvearrowright}$



Step 2

Raoghat to jgd/pr.  $\overset{140 \text{ km}}{\curvearrowright}$



Iske do objectives the  
1. Us me bastar area ko swy se  
well connect kong taki development process fast ho.

2. iron ore supply k lie  
is any line ki need thi.

Yah sail + NMDC + Govt +  
Rwy ka joint venture h it means  
in sabhi ne milkr iske lie  
funding ki hui h.

## Water transportation

Ch me officially ch hi river  
pr wtr transportn ki facility h  
Shabri/kolab ge.

Ye sukmq ke konta ko AP  
re kunawaram tk connect krti h  
in waterways ka total length  
almost 36 km Hai.

13 Oct 2025

## Air transportation

Itko rest of india & rest of world se connect krne ke liye state ke aag<sup>2</sup> hisso ko air transportn ki facility se kuhnekt kiya gaya h.

Iske alawa state ke kuch major cities ko apas me

connect kone k liye bhi ye  
buridha samne ati h.

## Airports / Airstrips

1 RPR → state formation & bad  
rpr se lage naya rpr ke  
mana me. 7 Nov 2012 ko

tab ke president pranav

mukherjee ne is airport ka  
inauguran kiya.

Altho ye g ka first  
airport h use <sup>badmcfuture</sup> future expns