



# BORDER GEO OF PAKISTAN

# BORDER GEO OF PAKISTAN AND ITS IMPLICATIONS

- Strat significance, str of a nation, chances of its progress and survival depend on its geo.
- Harnesses state's power potential.
- Influences foreign and security policies.
- Determines impact and influence of terrain on security.

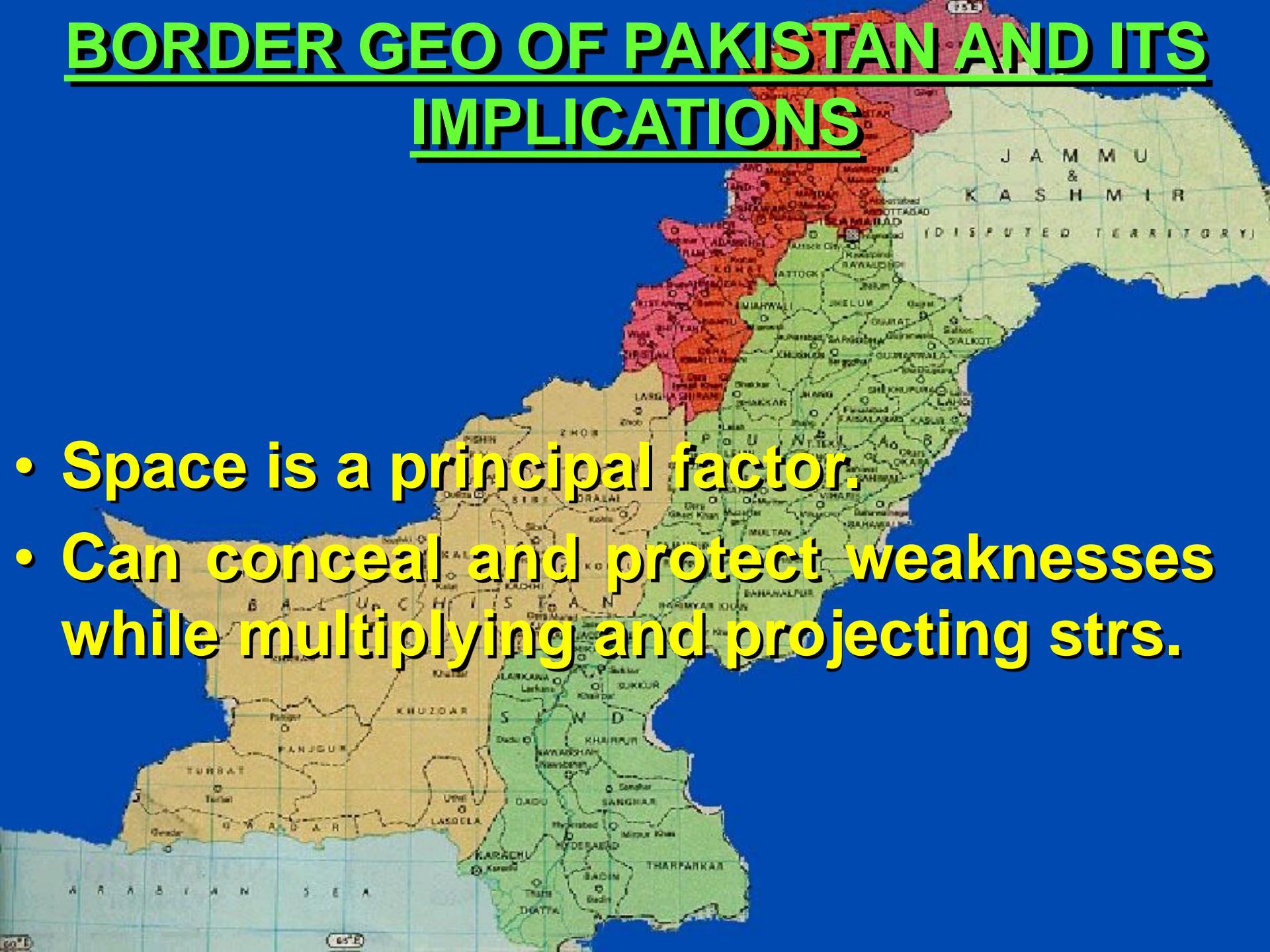


“To estimate the en sit and to  
calc the dist and degree of the  
difficulty of terrain so as to cont  
victory, are virtues of a superior  
general”

Sun Tzu

# **BORDER GEO OF PAKISTAN AND ITS IMPLICATIONS**

- Space is a principal factor.
- Can conceal and protect weaknesses while multiplying and projecting strs.





**AIM**

To familiarize you with the salient aspects of the Border Geo of Pakistan for determining its influence on the mil ops and log sp.

# **SEQ**

- **Part-I. Geo Template.** LT COL JEHAN ZEB
- **Part-II. Sec wise Description.** MAJ IJAZ
- **Part-III. Str, Weaknesses and Log Implication** LT COL JEHAN ZEB

# **NOTE**

**Concls remain confined to geo aspects and have no relevance to the force lvl and mil caps, both conventional and unconventional, possessed by both the adversaries.**

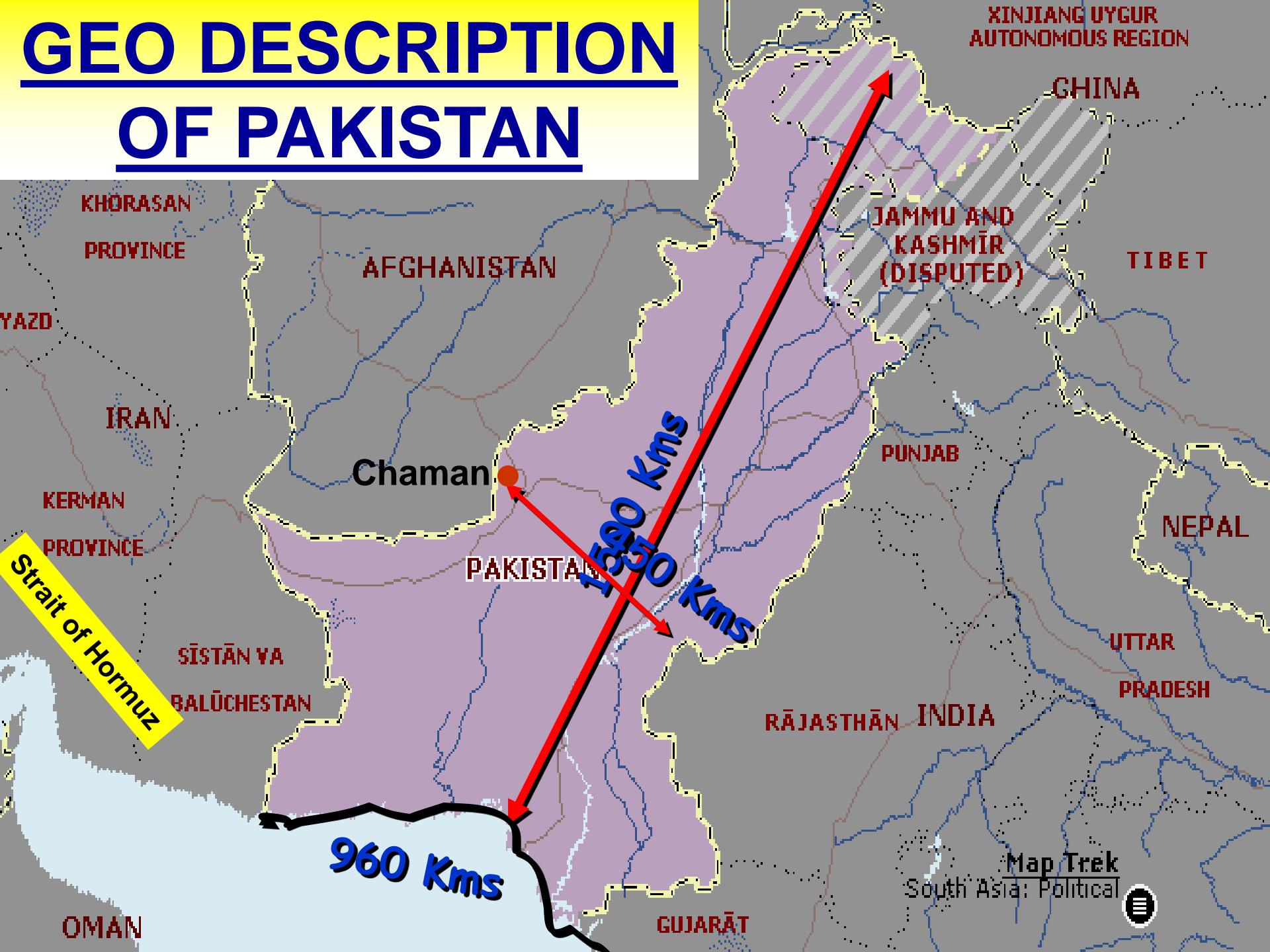
# PART-I

GEO TEMPLETE OF PAKISTAN

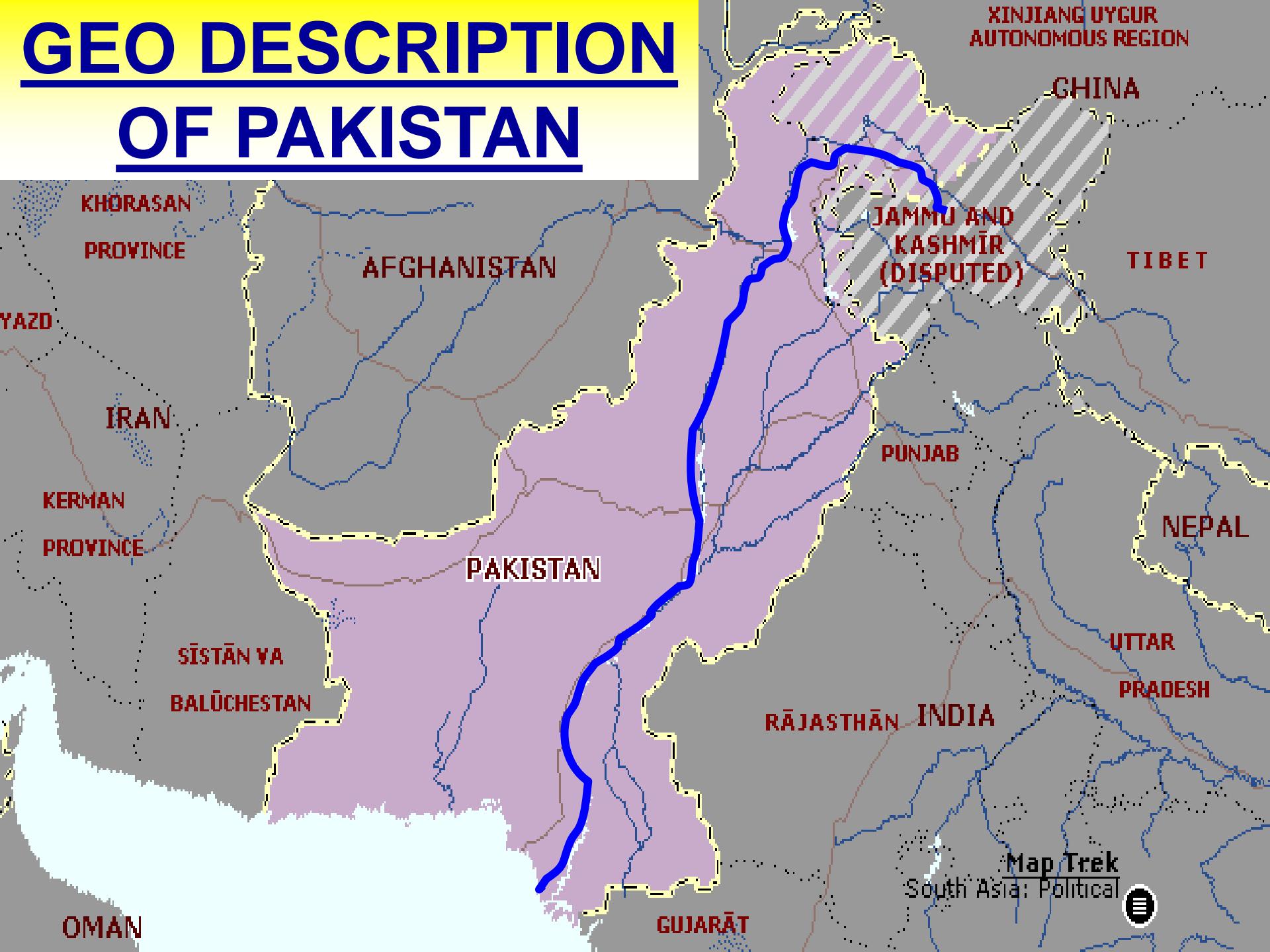
# **GEO DESCRIPTION OF PAKISTAN**



# GEO DESCRIPTION OF PAKISTAN



# GEO DESCRIPTION OF PAKISTAN



XINJIANG UYGUR  
AUTONOMOUS REGION

CHINA

KHORASAN

PROVINCE

AFGHANISTAN

YAZD

IRAN

KERMAN  
PROVINCE

SISTĀN YA  
BALŪCHESTĀN

PAKISTAN

PUNJAB

NEPAL

UTTAR

PRADESH

RĀJASTHĀN

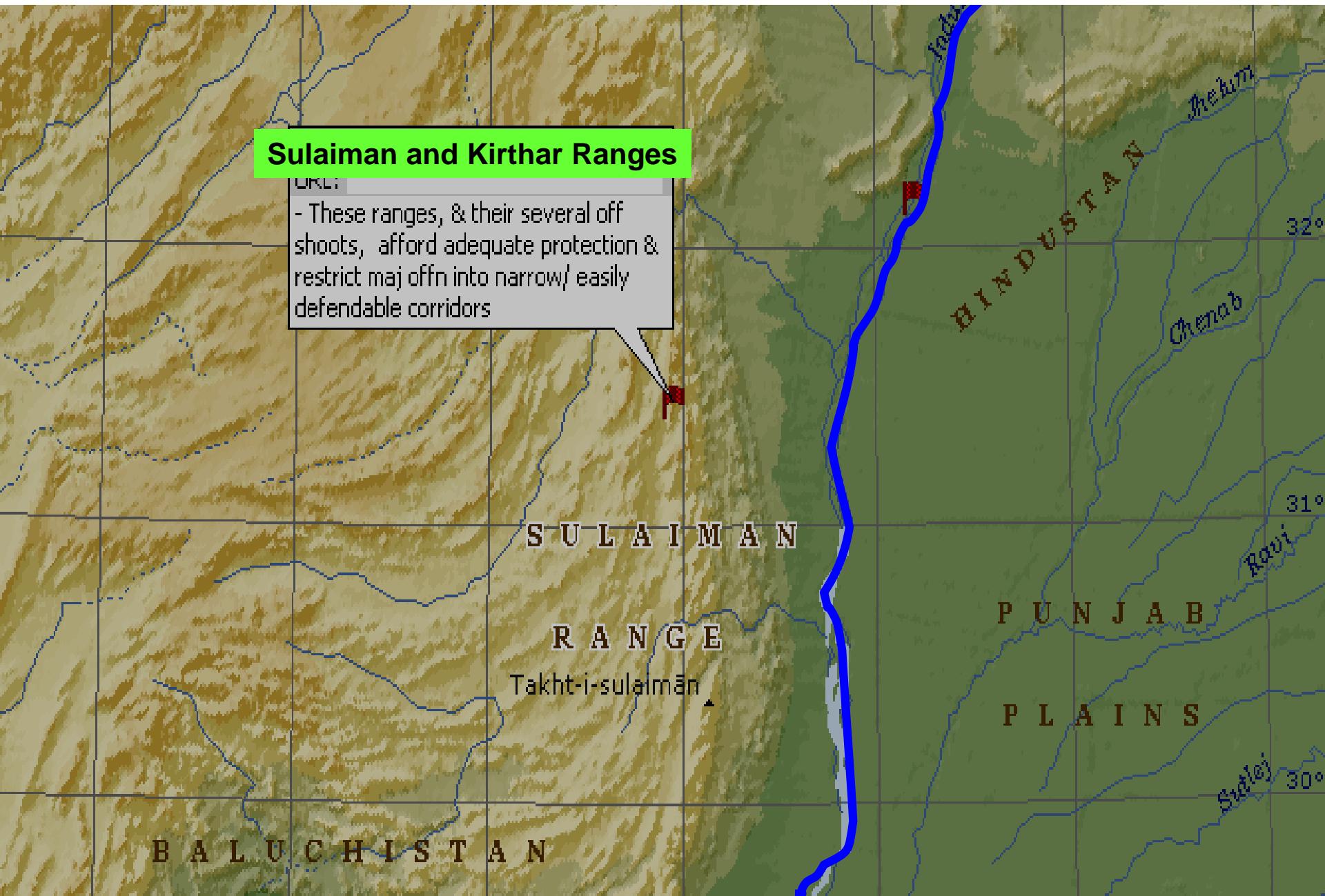
INDIA

OMAN

GUJARĀT

Map Trek  
South Asia: Political

# WESTERN HALF

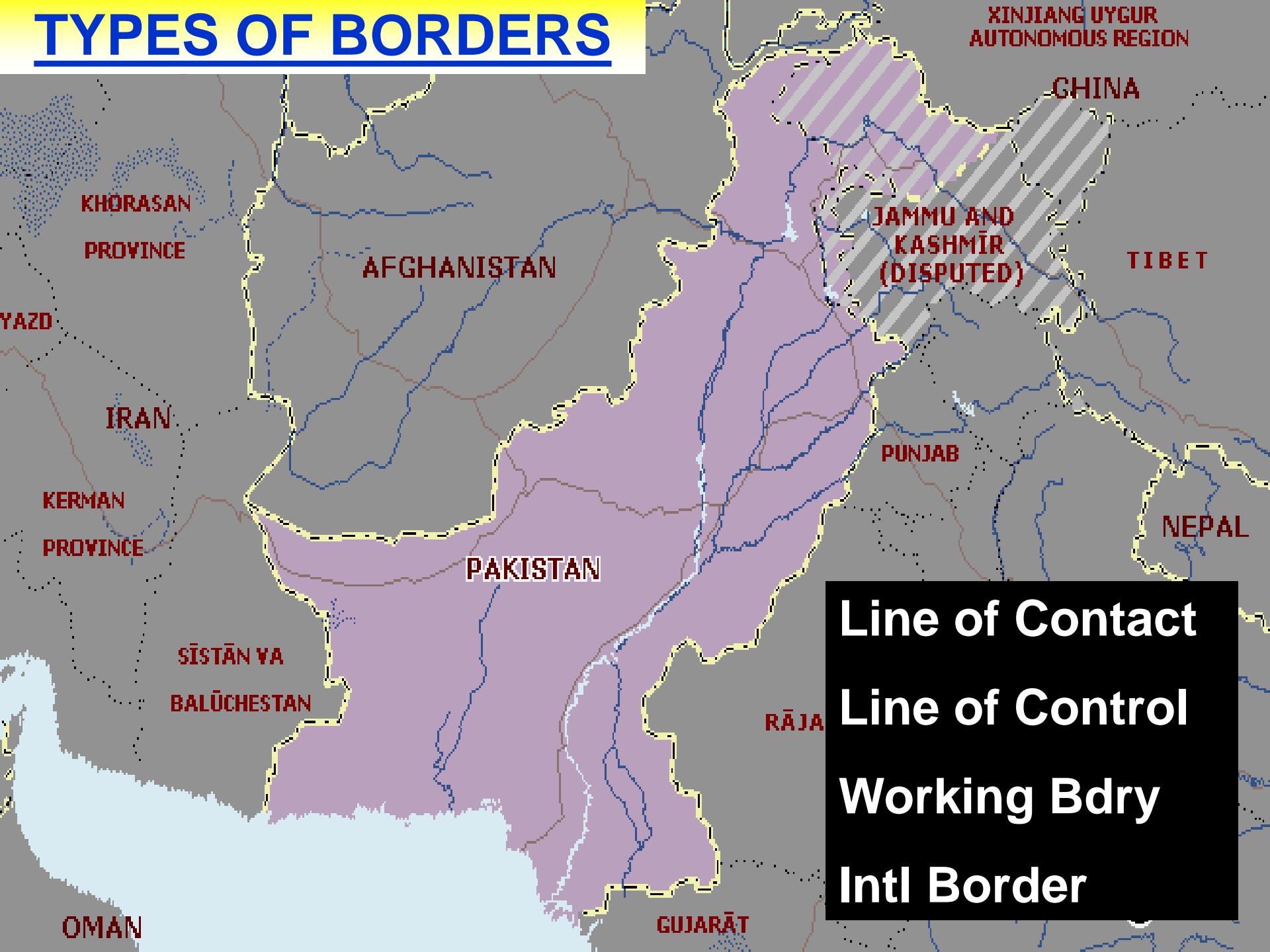


# EASTERN HALF



**Composed of plains which facilitate integrated Inf-Armr ops**

# TYPES OF BORDERS



# LINE OF CONTACT

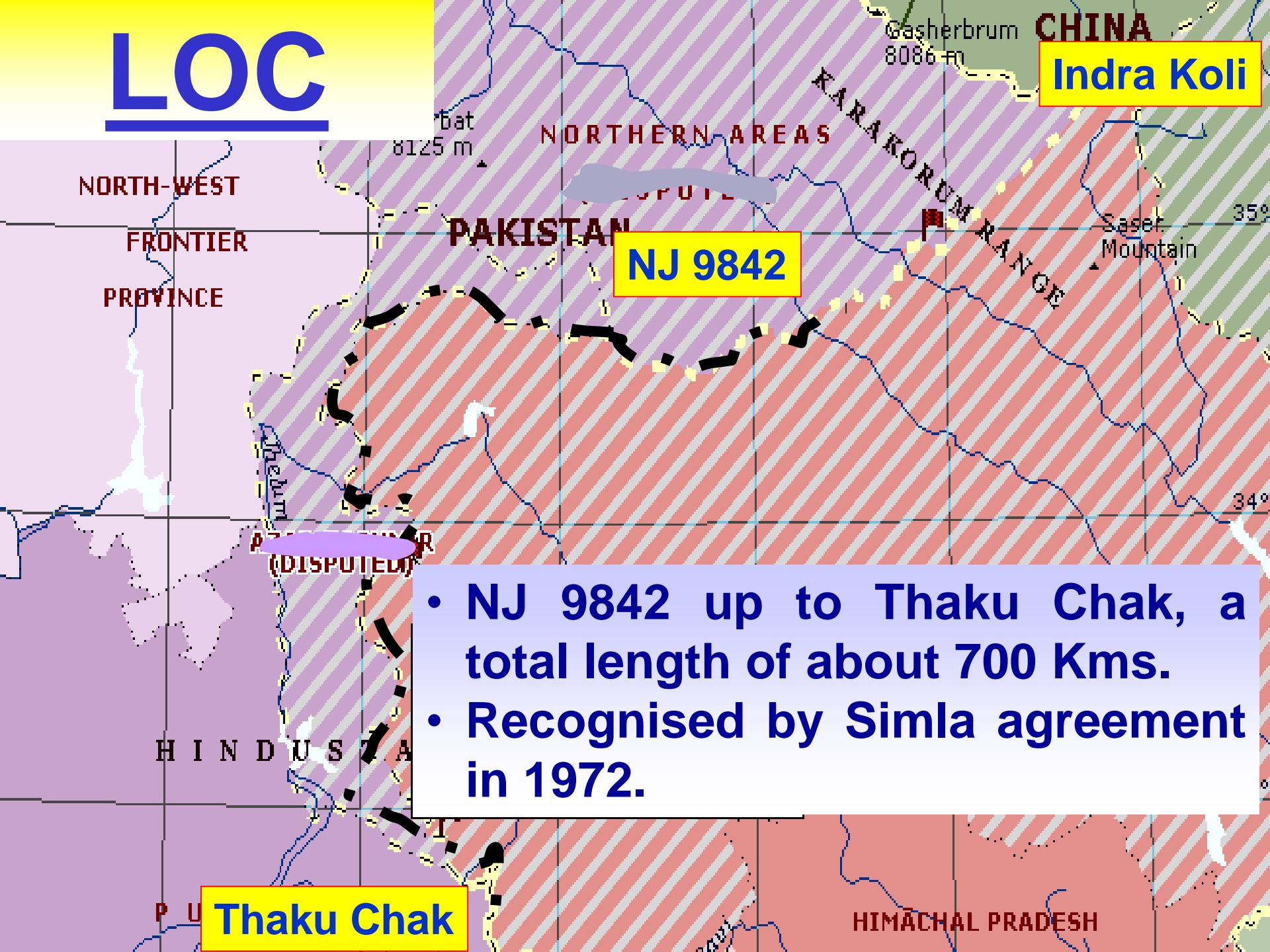
**Starting from Indra Koli Pass in the north till NJ 9842, the bdry is ref to as the Line of Contact. It is violable and not recognised by any intl or bilateral agreement.**

## Line of Contact

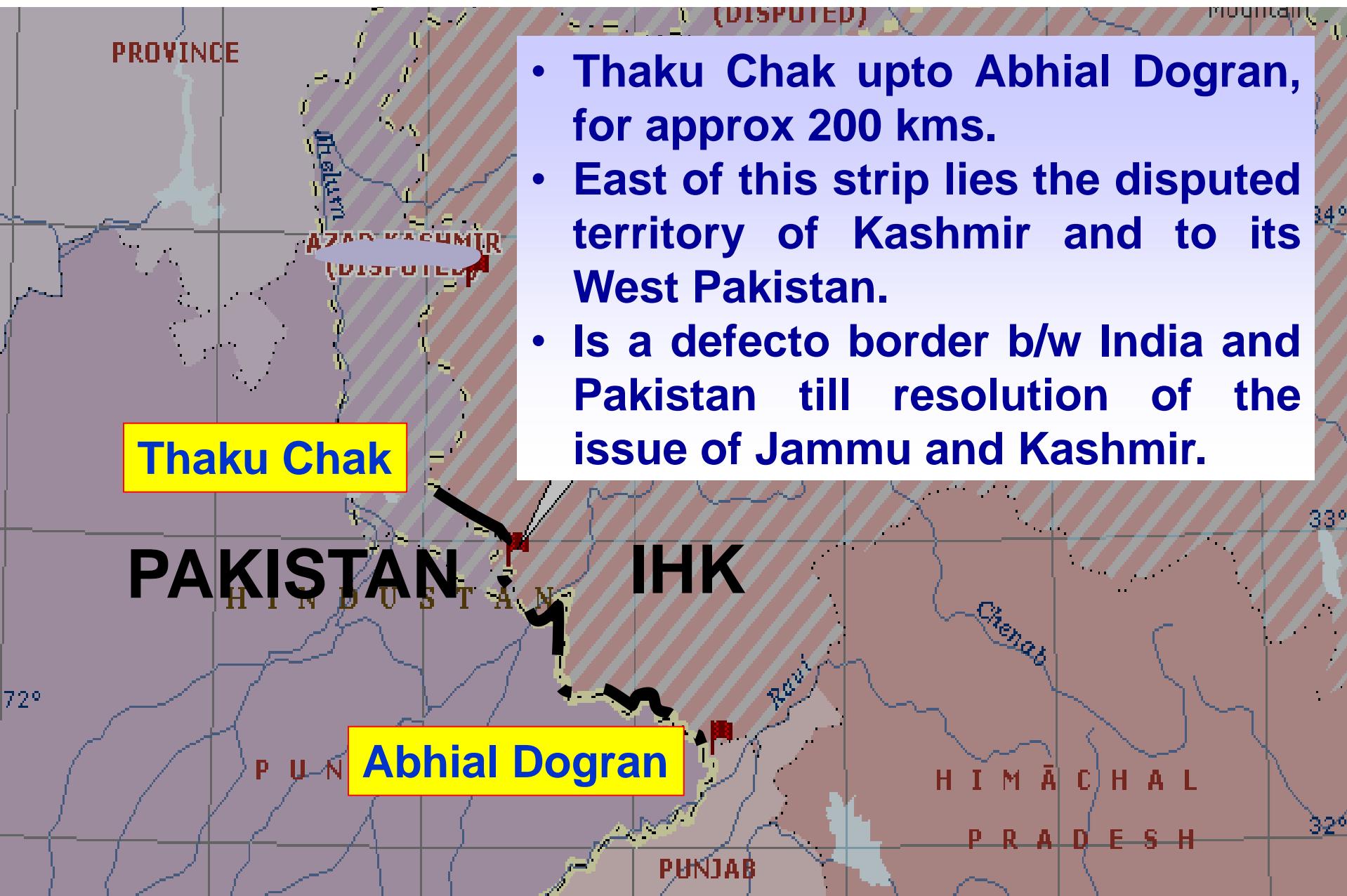
URL:

- Eastern Half(Type-1)
  - From Siachin Glacier till NJ9842 the bdry is the LOC
  - Violable & not recognised by any intl or bilateral agreement

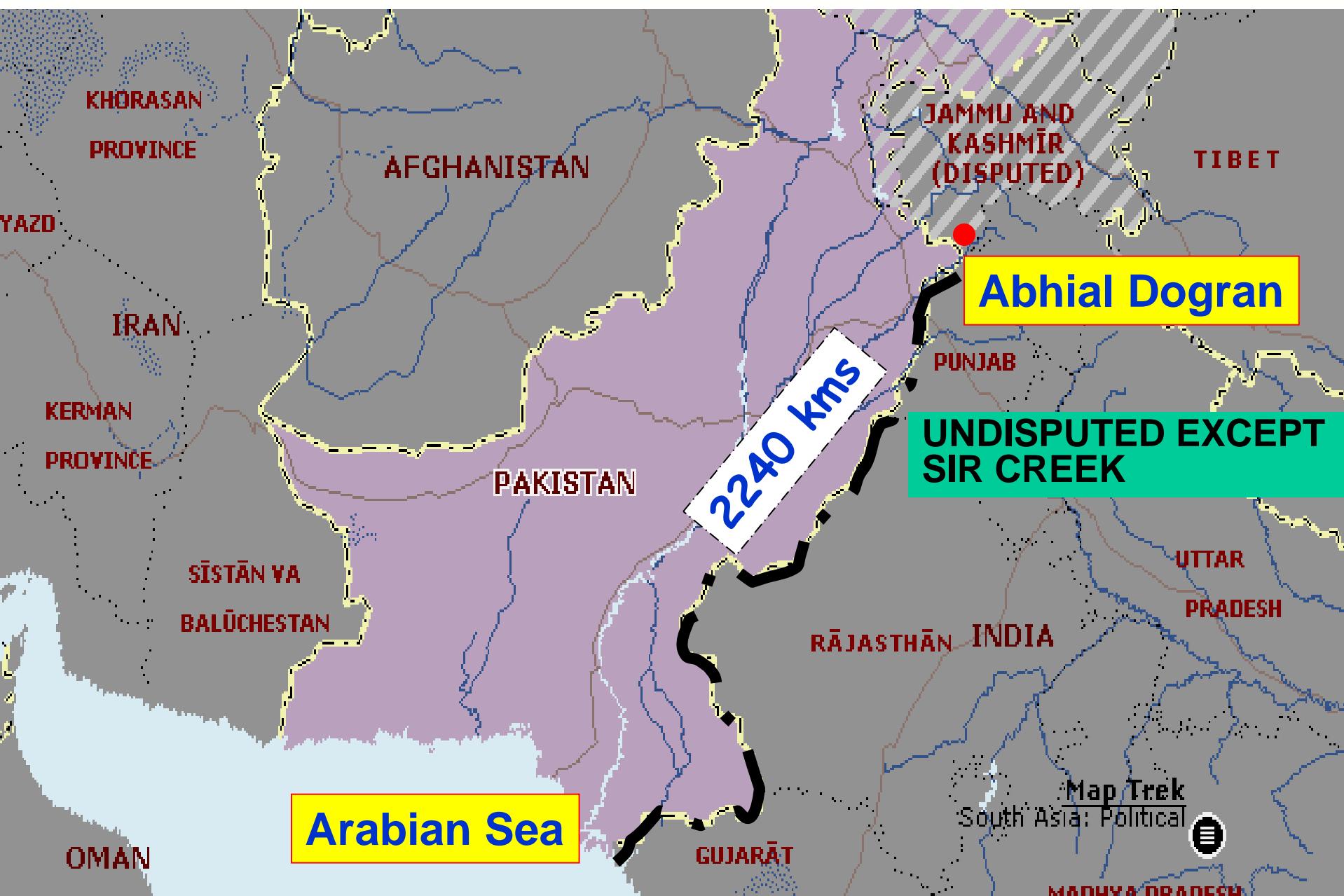
# LOC



# WORKING BDRY



# INTL BORDER



# GEO PECULIARITIES OF PAKISTAN



## Configuration Peculiarities

- Elongated shape.
- Lack of strat depth.
- Enclaves, salients and bulges.
- Diversity in terrain.

# **PART-II**

**SEC WISE DESCRIPTION**

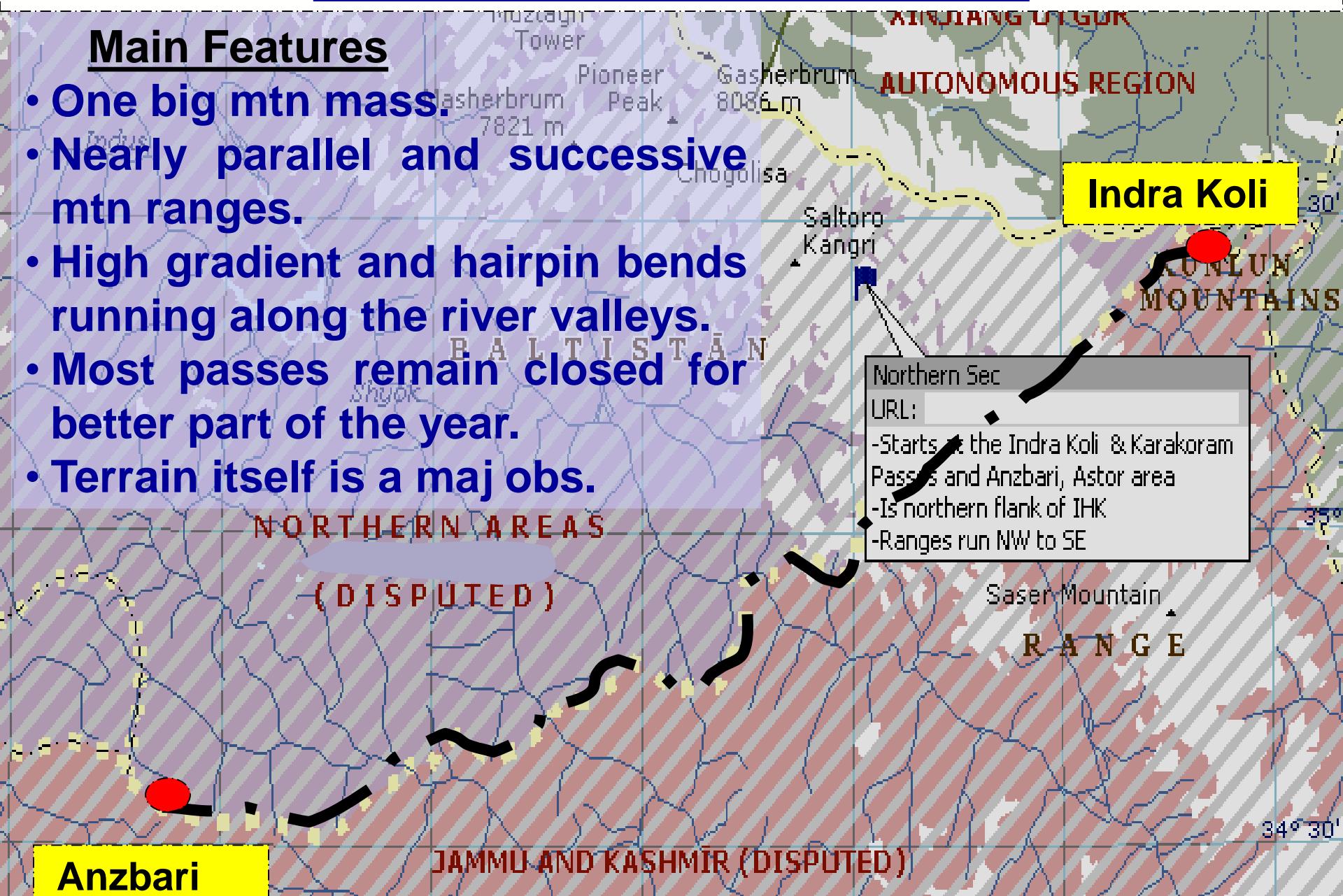
# **FIVE SECS**

- Northern Sec.
- Kashmir Sec.
- Corridors and area South of Sutlej.
- Desert Sec.
- Coastal Areas

# NORTHERN SEC

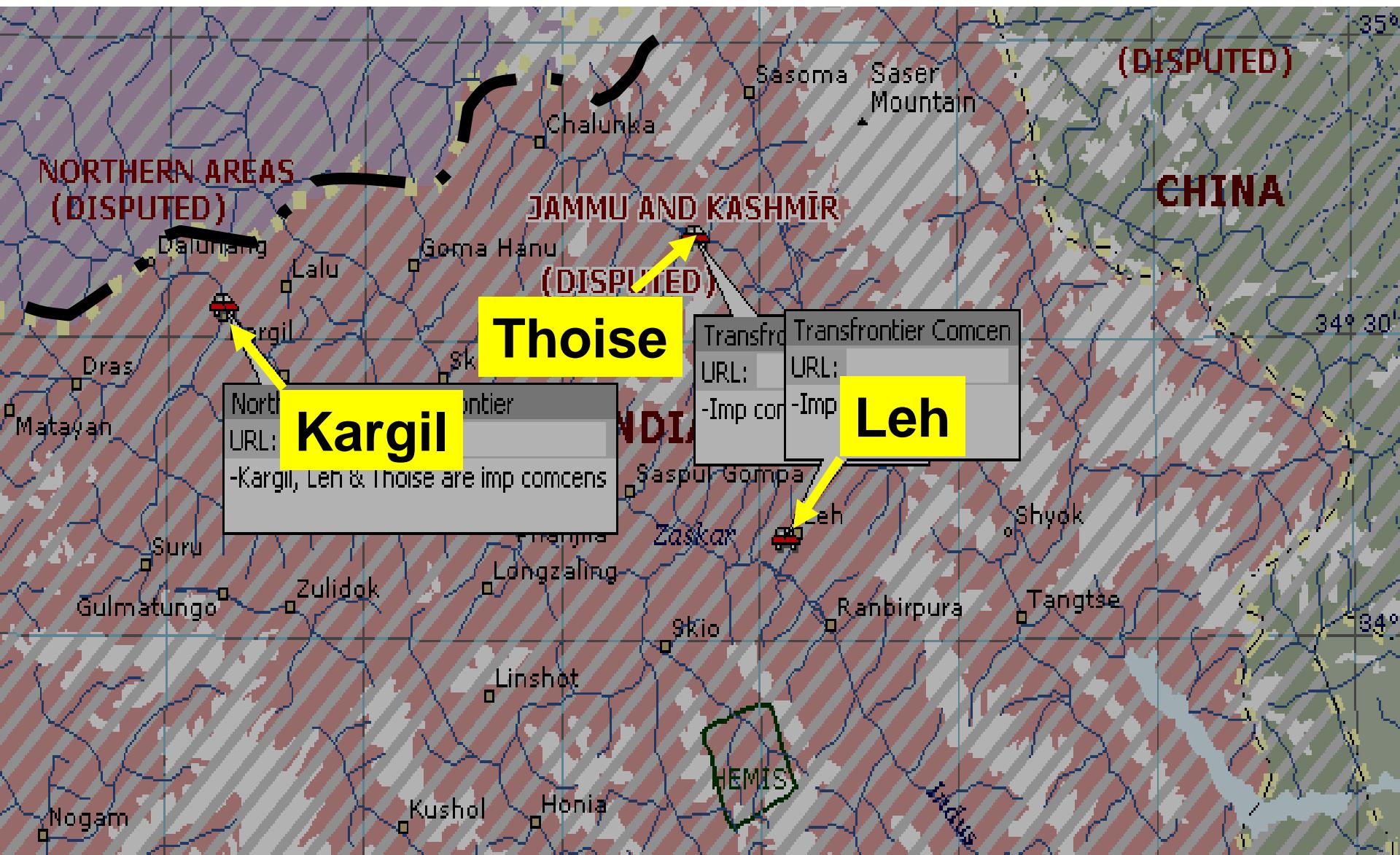
## Main Features

- One big mtn mass.
- Nearly parallel and successive mtn ranges.
- High gradient and hairpin bends running along the river valleys.
- Most passes remain closed for better part of the year.
- Terrain itself is a maj obs.



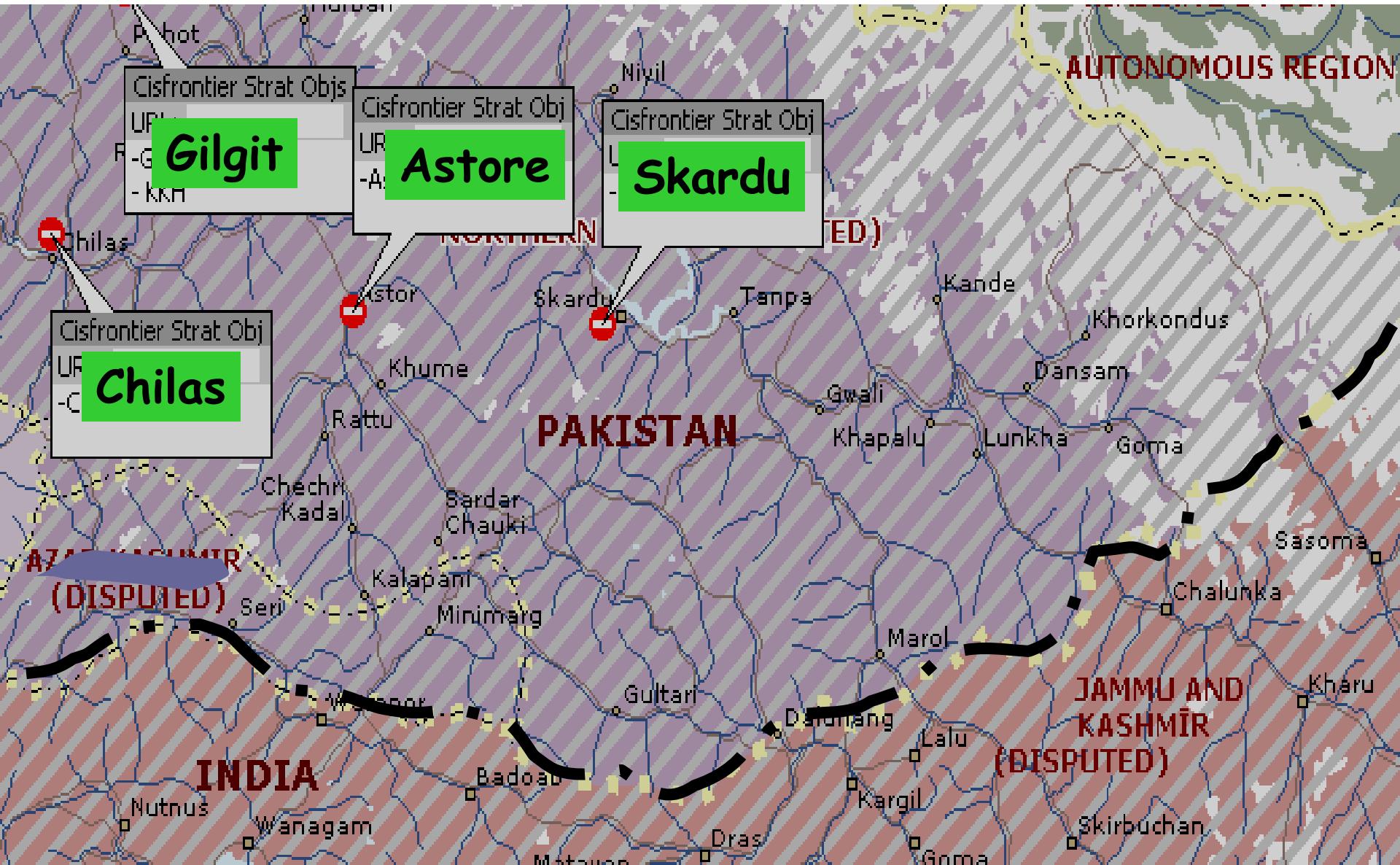
Anzbari

# TRANSFRONTIER COMM CENTRES & STRAT OBJS



# CISFRONTIER COMM CENTRES

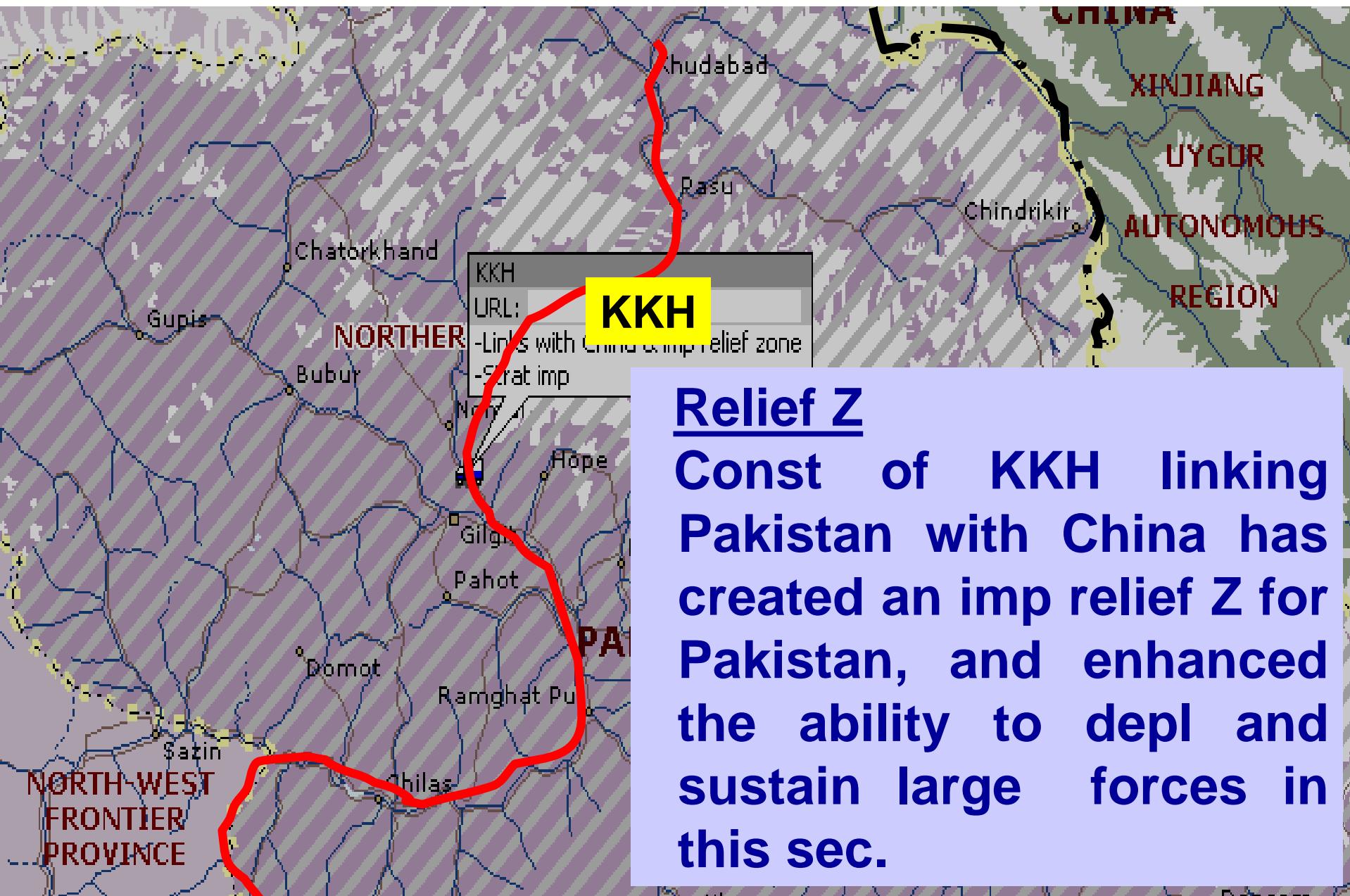
## & STRAT OJBJS



# CLIMATE

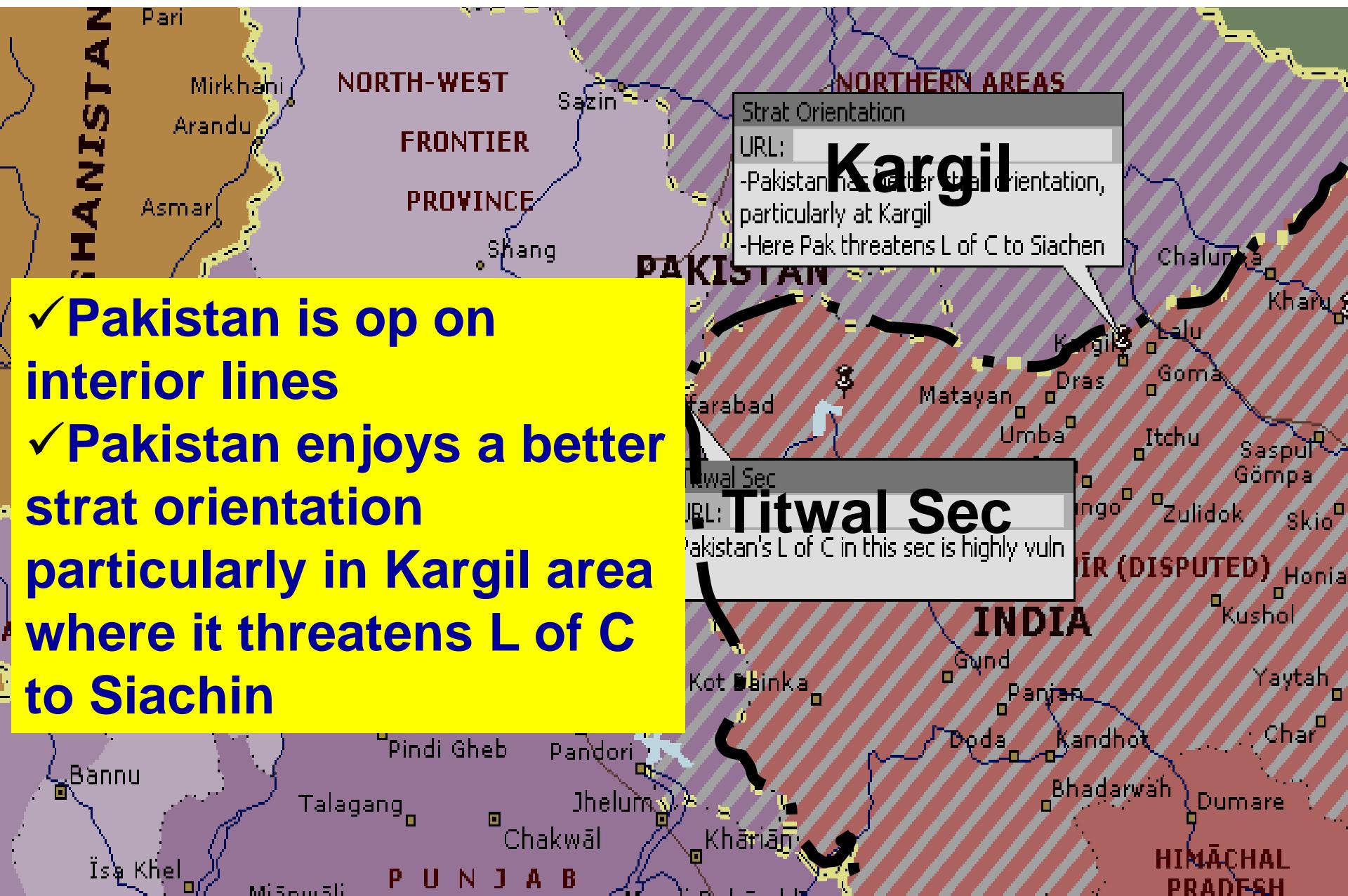


# SALIENT MIL CONCLS



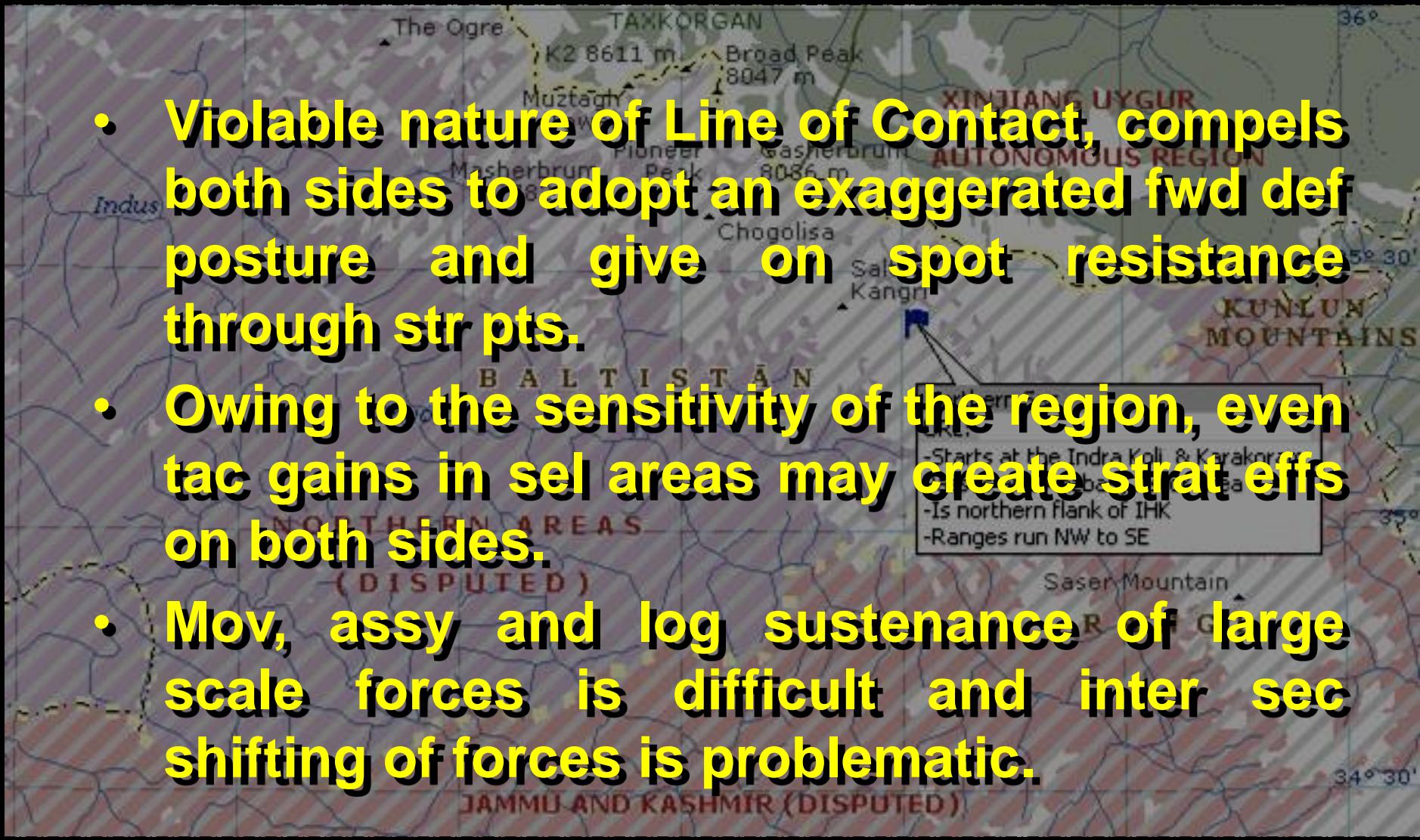
# SALIENT MIL CONCLS

- ✓ Pakistan is op on interior lines
  - ✓ Pakistan enjoys a better strat orientation particularly in Kargil area where it threatens L of C to Siachin

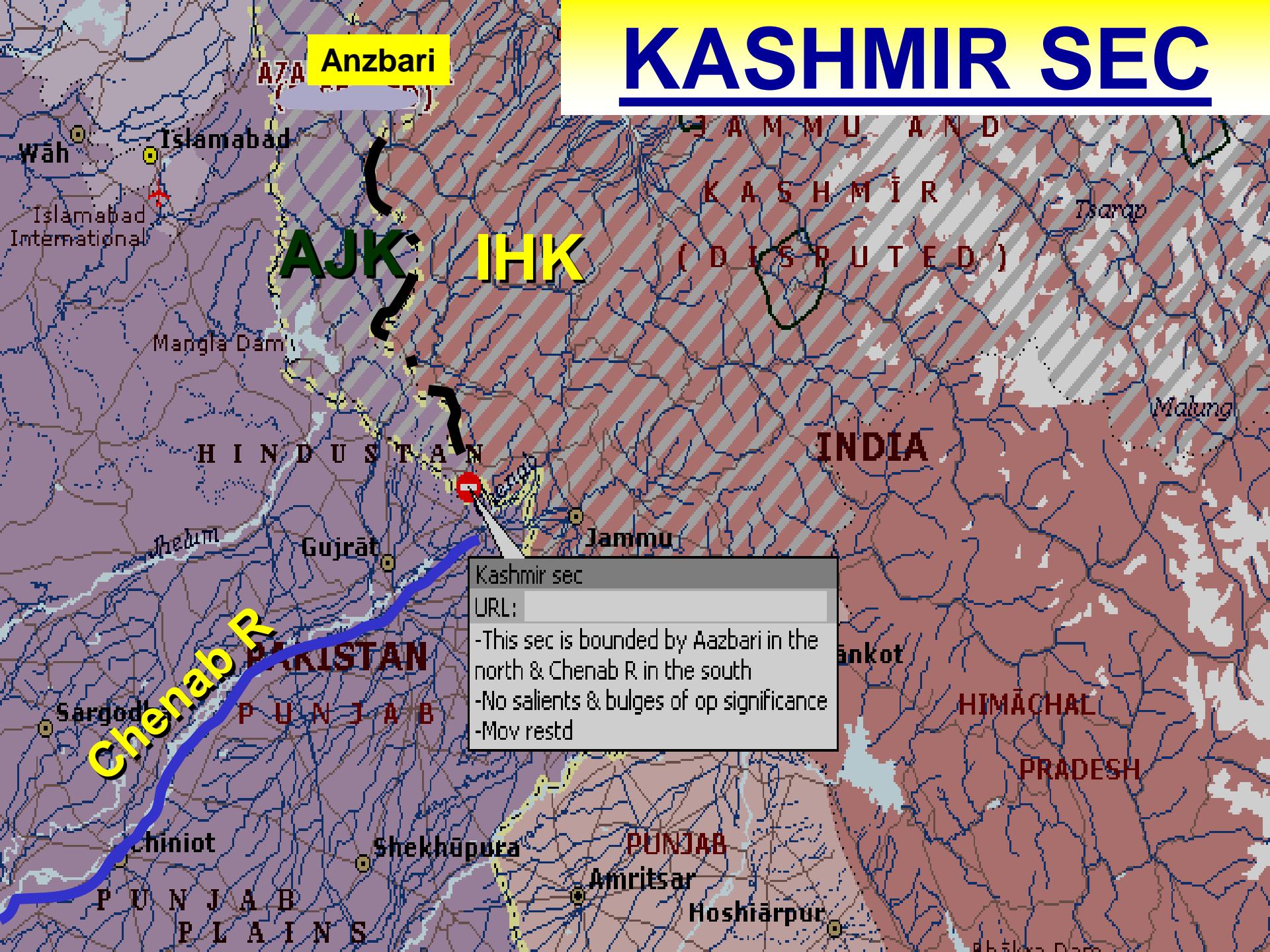


# SALIENT MIL CONCLS

- **Violable nature of Line of Contact, compels both sides to adopt an exaggerated fwd def posture and give on spot resistance through str pts.**
- **Owing to the sensitivity of the region, even tac gains in sel areas may create strat effs on both sides.**
- **Mov, assy and log sustenance of large scale forces is difficult and inter sec shifting of forces is problematic.**

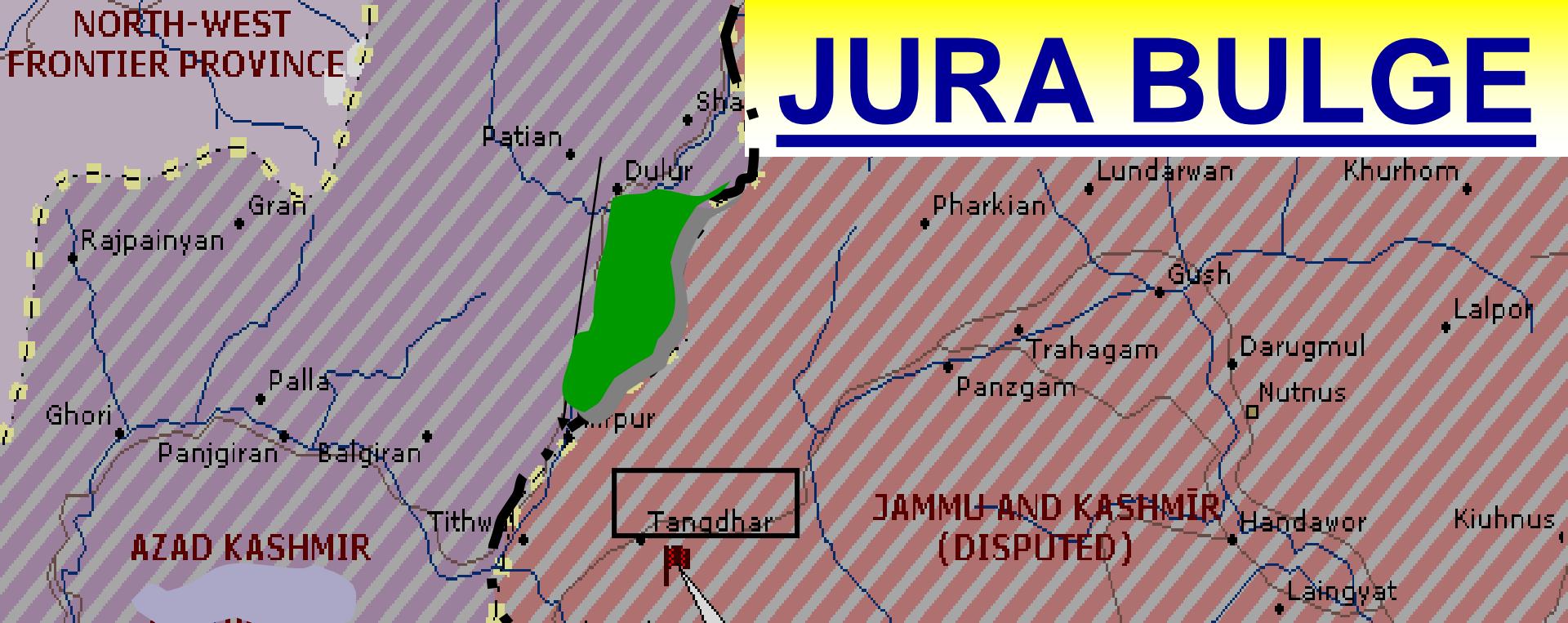


# KASHMIR SEC



NORTH-WEST  
FRONTIER PROVINCE

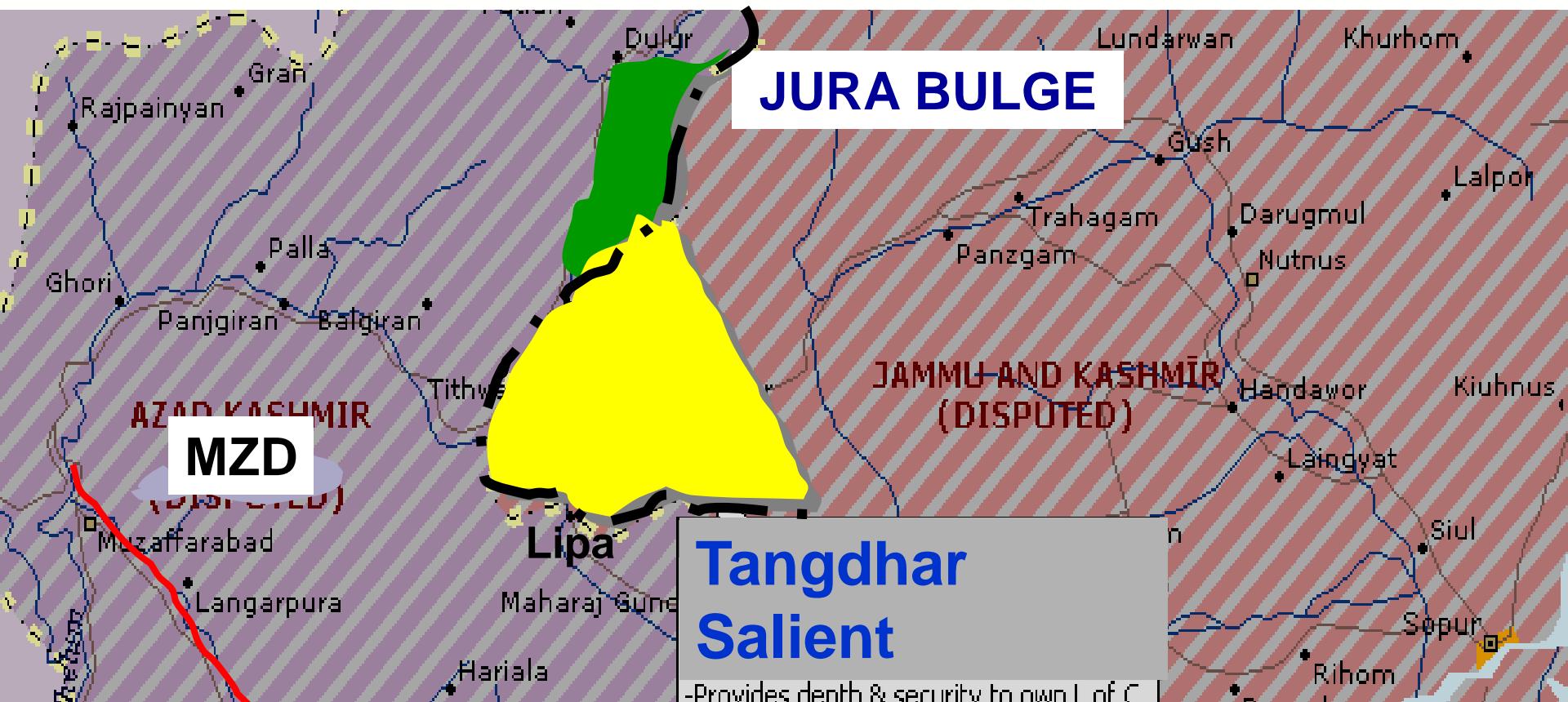
# JURA BULGE



Held by Pakistan, it provides depth and security to own L of C and threatens the base of Indian Tangdhar Salient.



# TANGDHAR SALIENT



Affords op opportunities and advs to India as it reduces the op dist to Mzd and poses a dir threat to the base of own Lipa Valley and Mzd - Chakothi Axis.



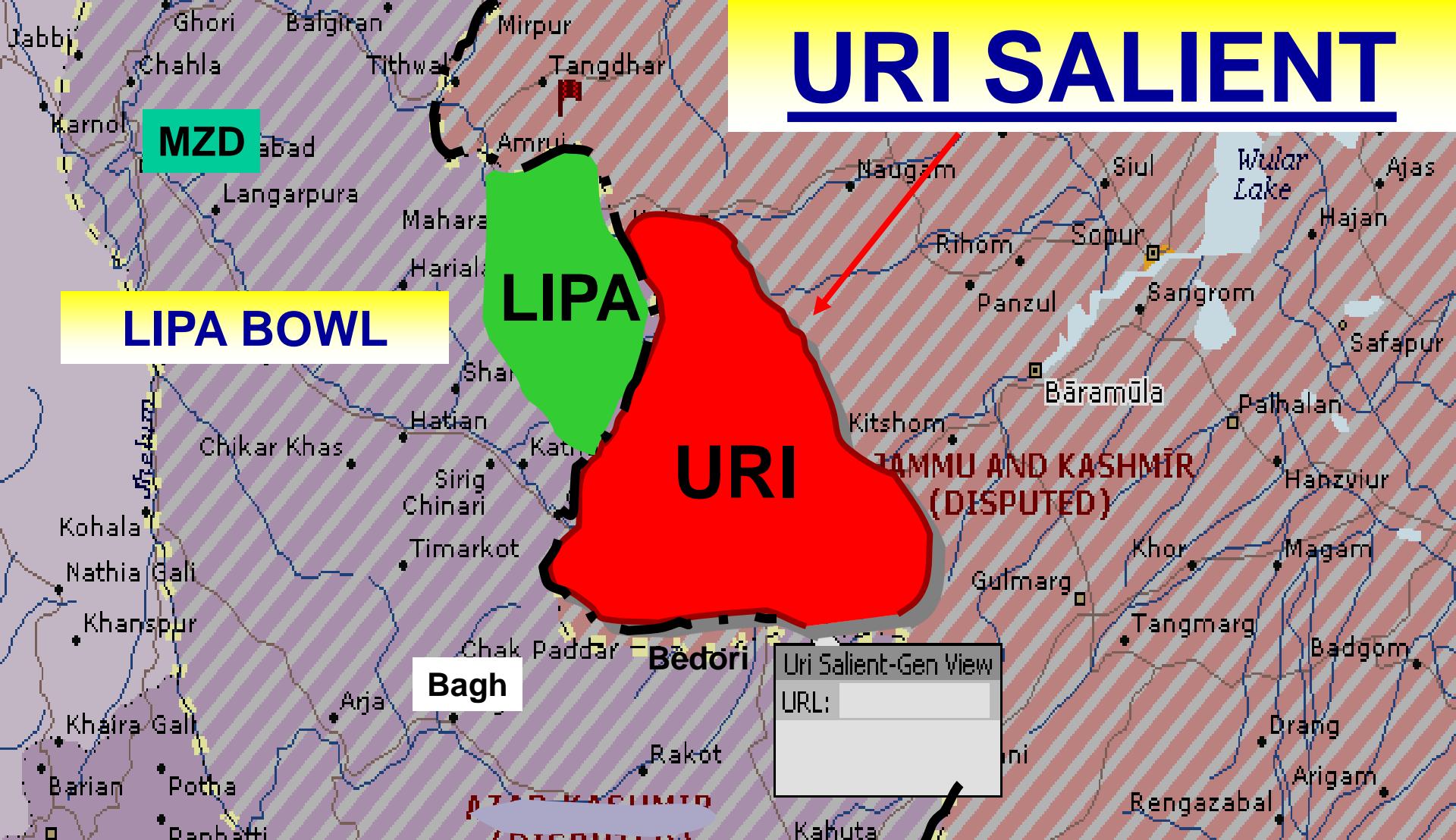
# LIPA BOWL

## TANGDHAR



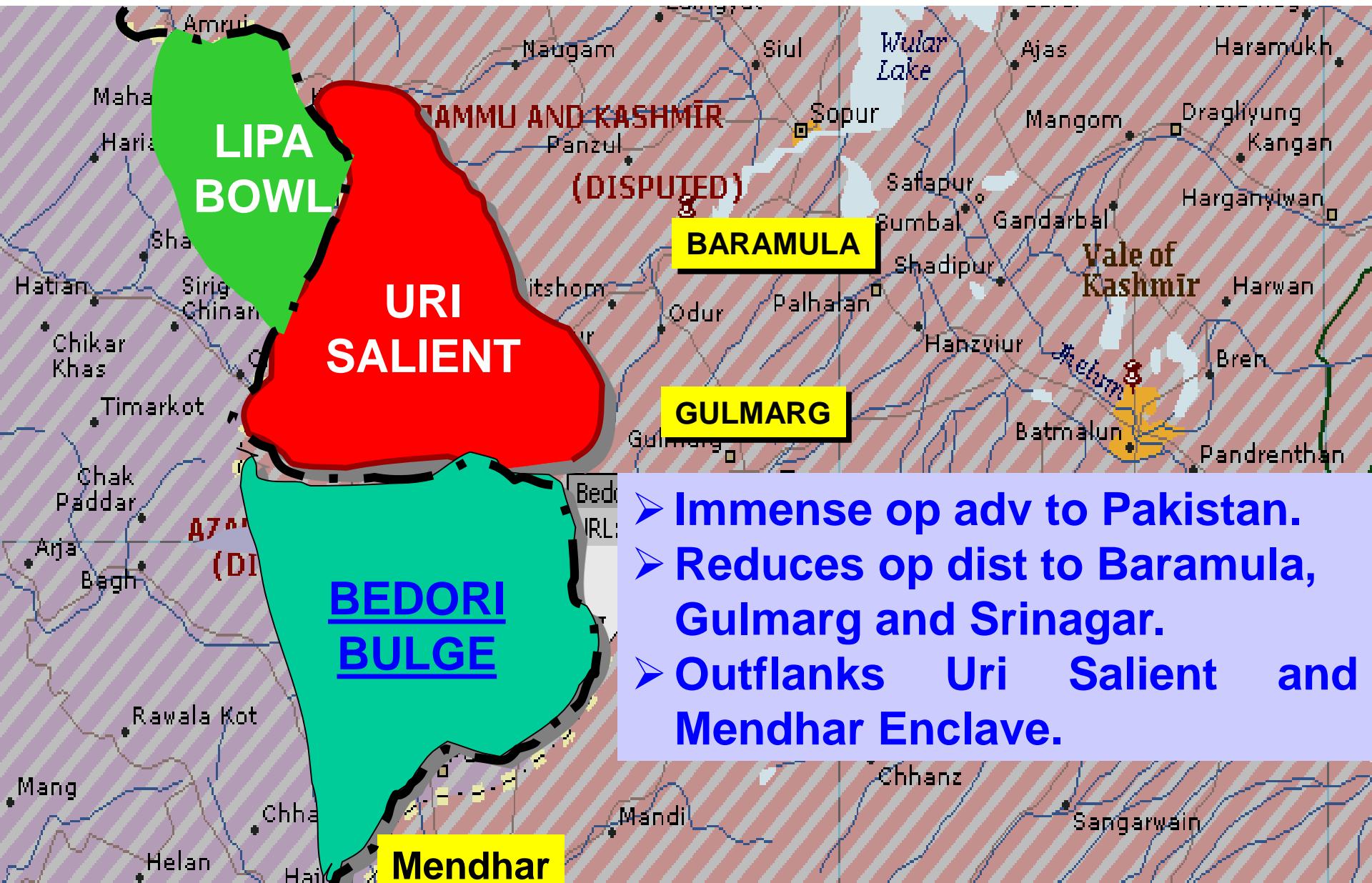
Through this Salient, we can threaten both Tangdhar and Uri Salients.

# URI SALIENT

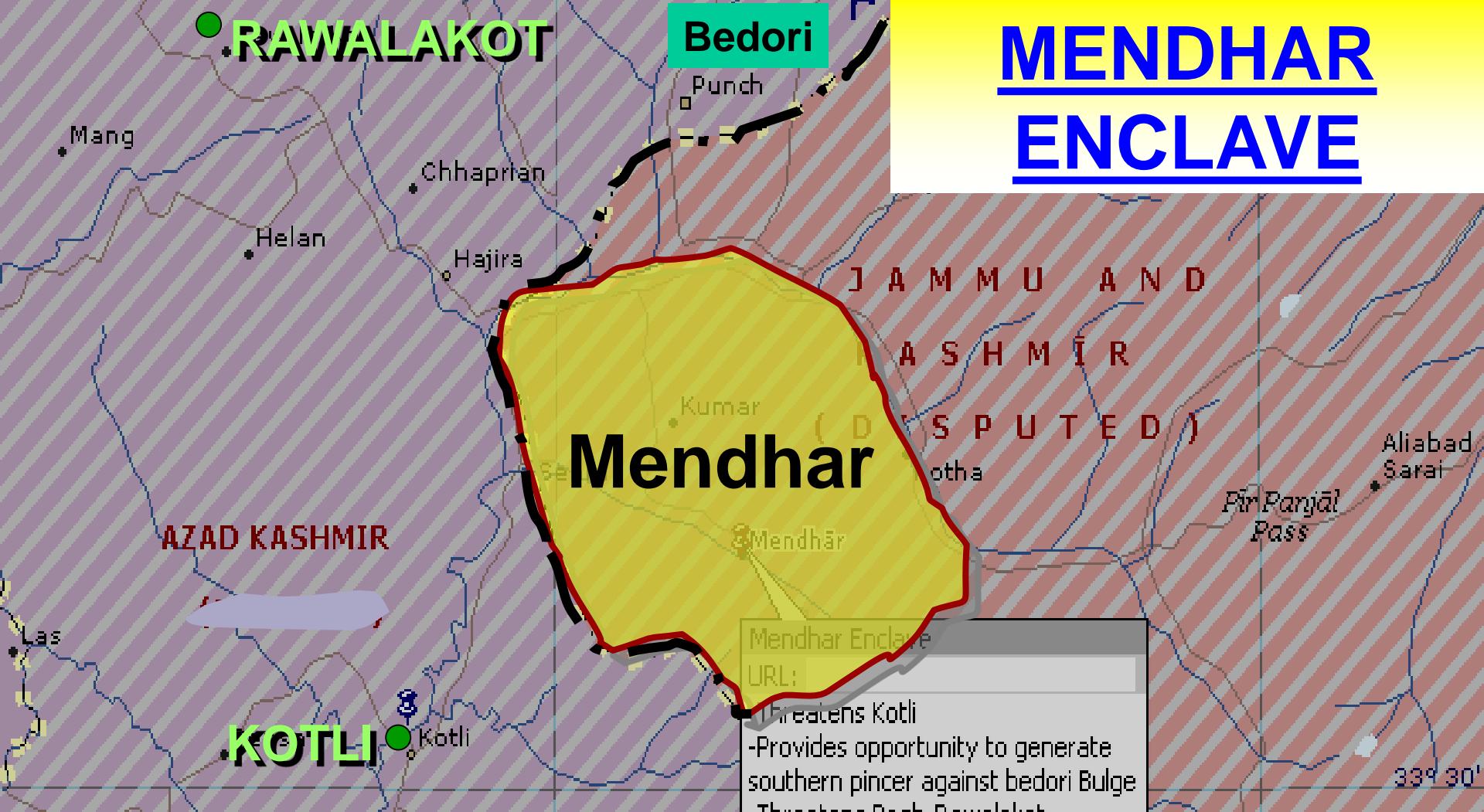


Indian held salient, which reduces the op dist to Mzd and also outflanks Bedori Bulge and threatens Bagh.

# BEDORI BULGE

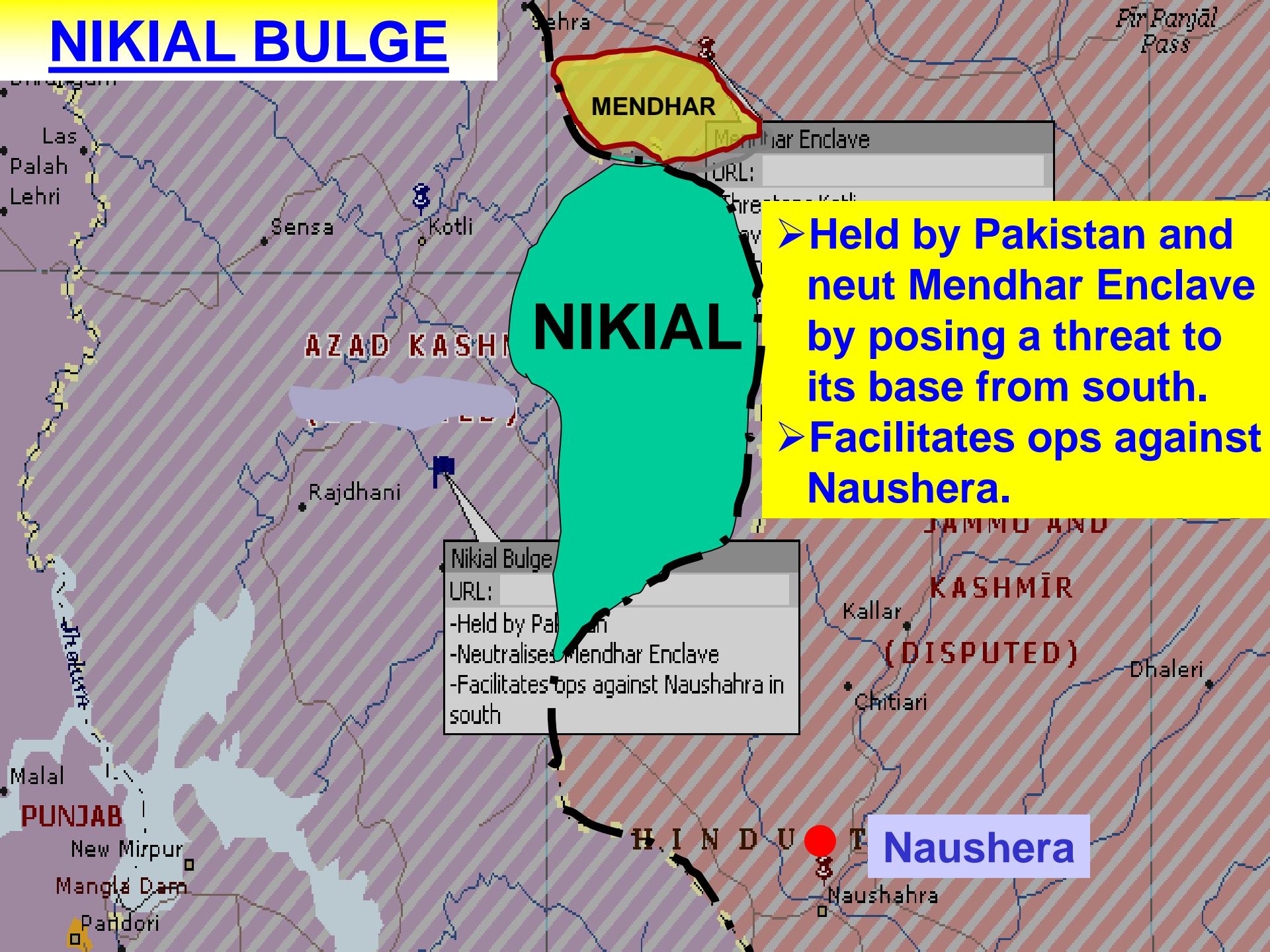


- Immense op adv to Pakistan.
- Reduces op dist to Baramula, Gulmarg and Srinagar.
- Outflanks Uri Salient and Mendhar Enclave.



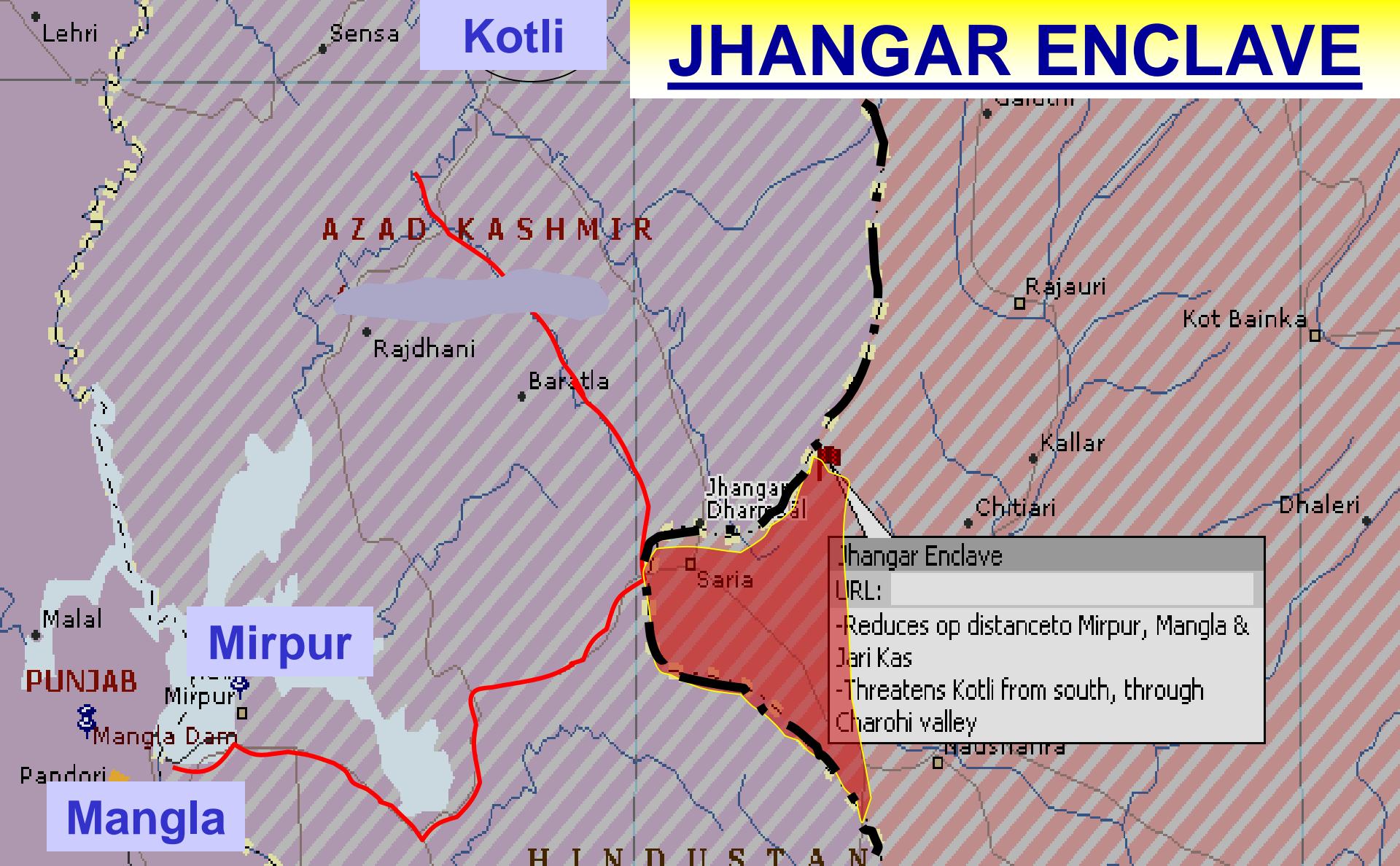
Indian held enclave, which threatens Kotli and provides an opportunity to generate a southern pincer against the Bedori Bulge, threatening Rawlakot – Bagh.

# NIKIAL BULGE



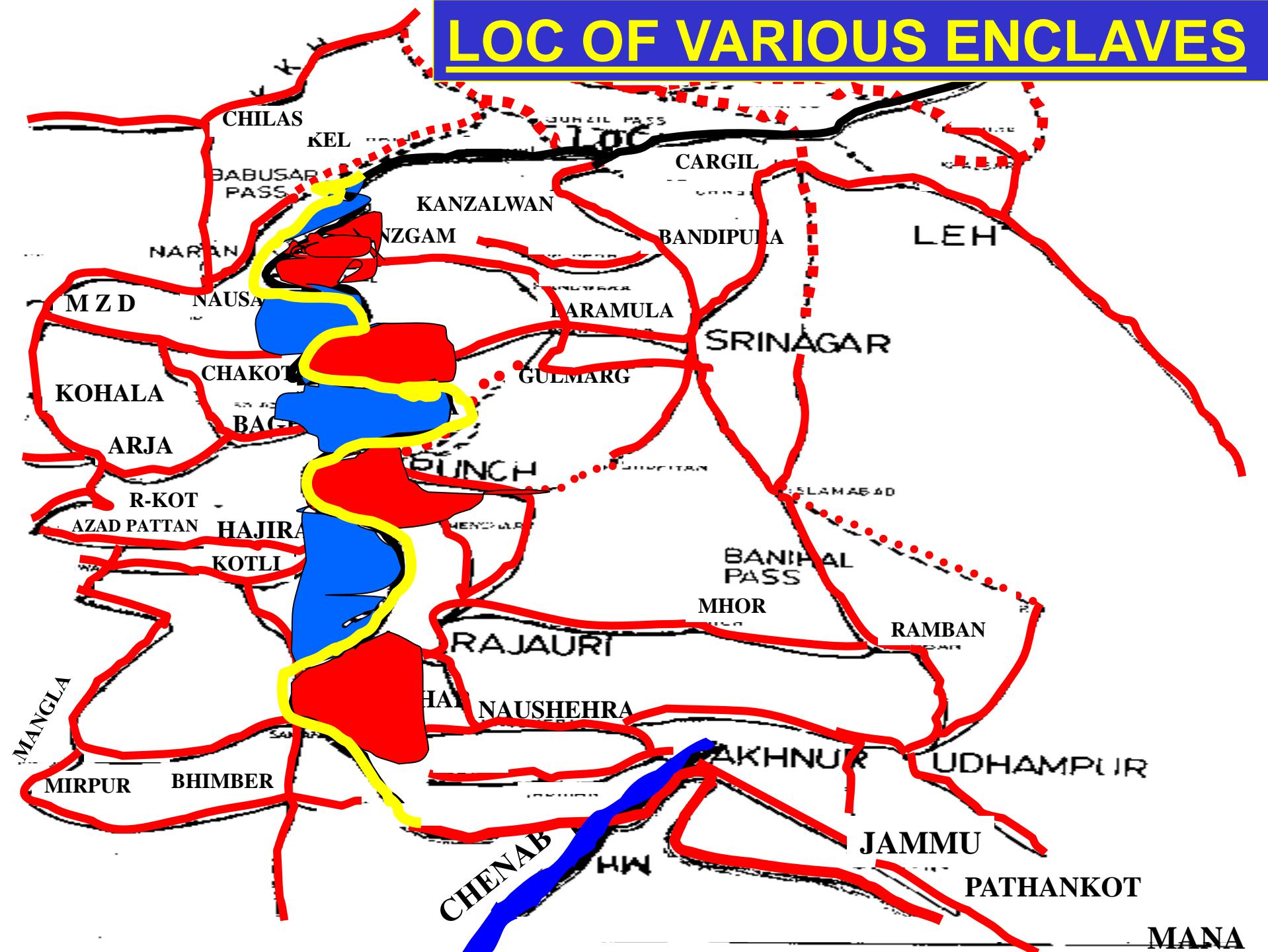
Kotli

# JHANGAR ENCLAVE



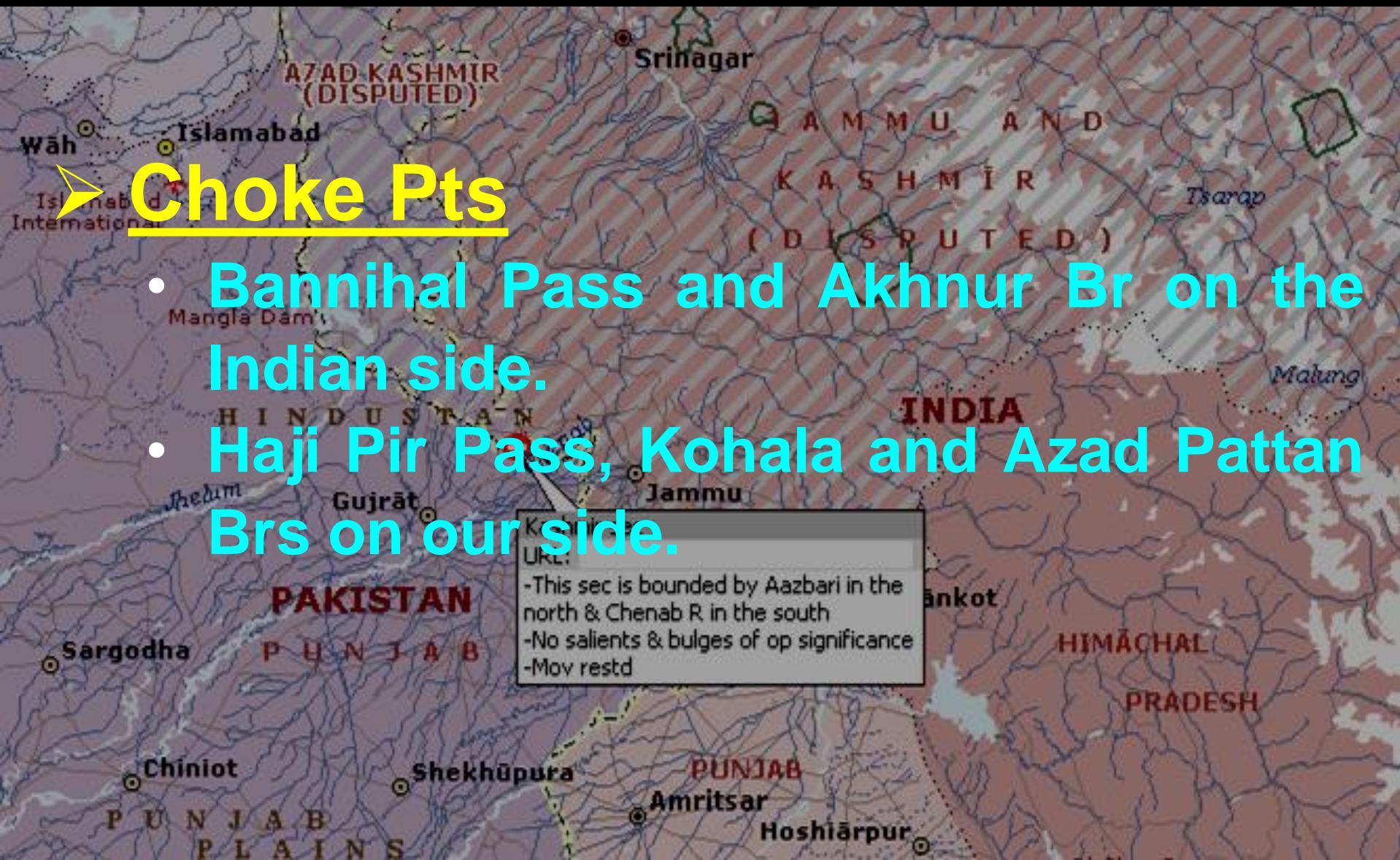
- Of great adv to India.
- Reduces op dist to Mirpur and Mangla Dam.
- Threatens Kotli from south through Charohi Valley.

# LOC OF VARIOUS ENCLAVES



MANA

# SALIENT CONCLS



# SALIENT CONCLS

## Strat Imp

- All main rivers originate and flow through IHK.
- Con of rivers by India and her water diversion plans will have adverse effs on Pakistan's irrigation sys having mil orientation.
- Loc of Mangla Dam, Marala HW and vuln of L of C accentuate our sensitivity.
- India is equally sensitive to Kashmir due to political reasons and also because access to Ladakh is only possible through Kashmir.

# SALIENT CONCLS

## Strat Objs

- Transfrontier strat objs are Baramula, Srinagar, Naushera and Akhnur.
- Cisfrontier strat objs are Mzd, Mangla - Mir Pur Complex, Khn and Marala HW.

URL:  
-This sec is bounded by Aazbari in the north & Chenab R in the south  
-No salients & bulges of op significance  
-Mov restd

# SALIENT CONCLS

## ➤ Forms of Strat Mntrs

- Indians are op on interior lines having Srinagar as their main base of op.
- Pir Panjal Range and Bedori Bulge neut interior lines adv to India particularly in Central Sec of Kashmir.

## ➤ Strat Posture

- Violable nature of LOC, avail of successive lines of hill features and lack of depth in Mzd, Mirpur/ Mangla and Khn/ Gujrat sub secs, dictate fwd def posture.
- Offn posture by us against Akhnur is favoured by terrain.

# SALIENT CONCLS

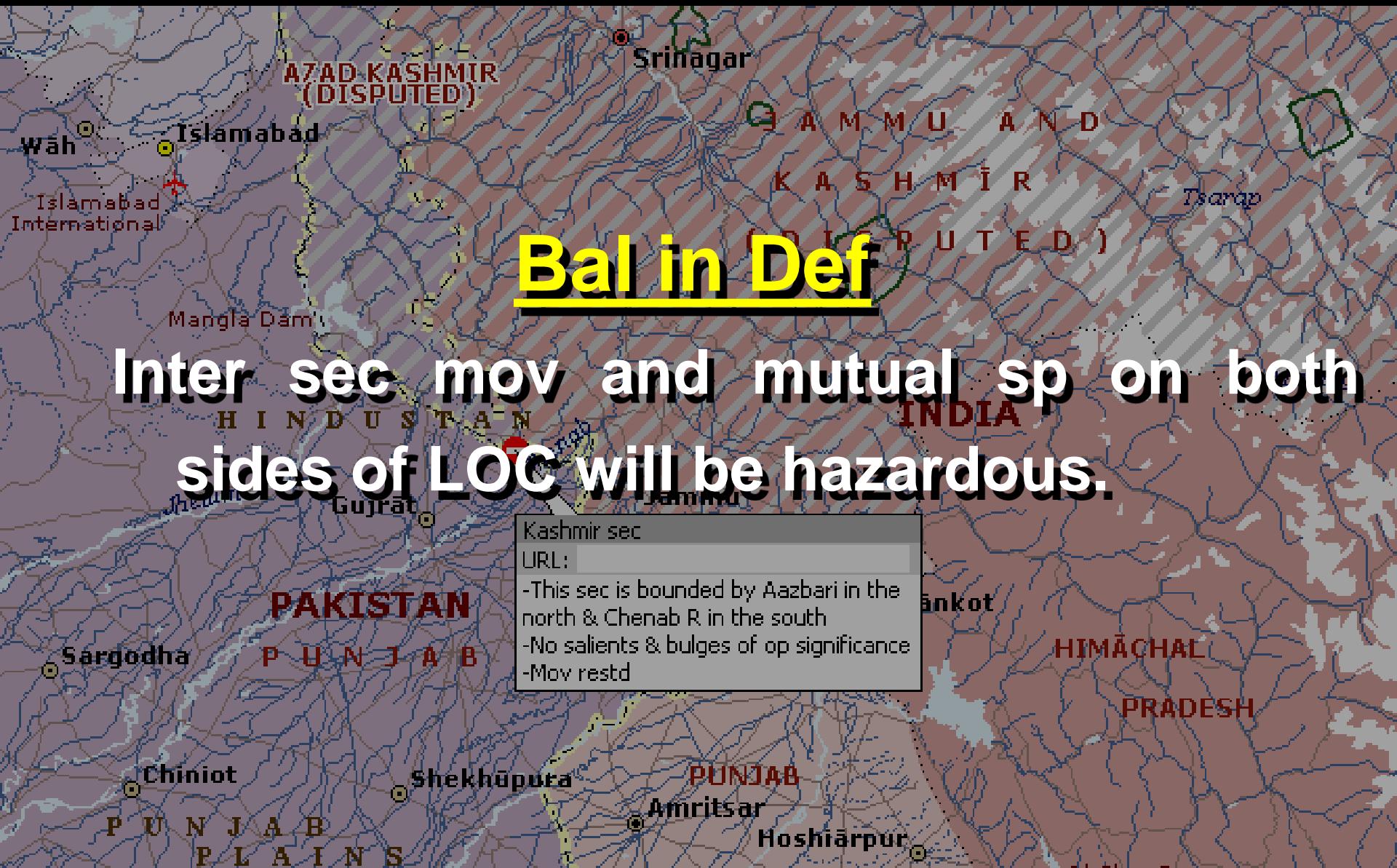
**Bal in Def**

Inter sec mov and mutual sp on both sides of LOC will be hazardous.

Kashmir sec

URL:

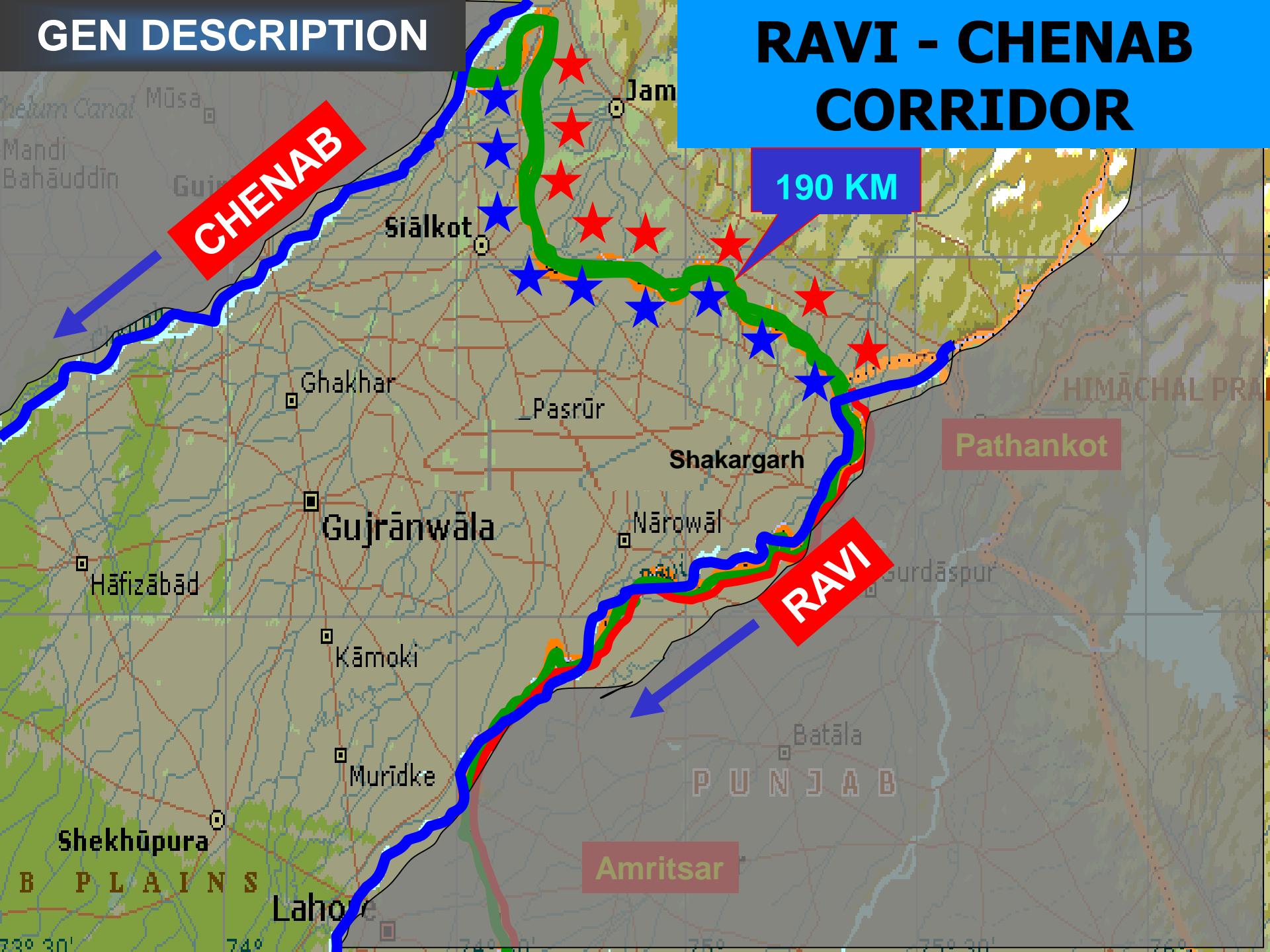
- This sec is bounded by Aazbari in the north & Chenab R in the south
- No salients & bulges of op significance
- Mov restd



# **CORRIDORS AND AREA SOUTH OF SUTLEJ**

# GEN DESCRIPTION

# **RAVI - CHENAB CORRIDOR**



# STRAT IMP OF RCC

- 
- En's L of C and life line to IHK runs perilously close to the intl border.
  - Madhopur HW regulates water in River Ravi and canals network in Ravi-Beas Corridor (RBC). Its capture by Pakistan can have strat consequences.

# STRAT IMP OF RCC

**Imp comm centre of Sialkot and Marala HW which regulates water into a no of def oriented canals right upto river Sutlej, have immense imp for the successful conduct of def ops in RCC as well as RBC.**

# SIGNIFICANT CONCLS (RCC)

## ➤ Strat Obj

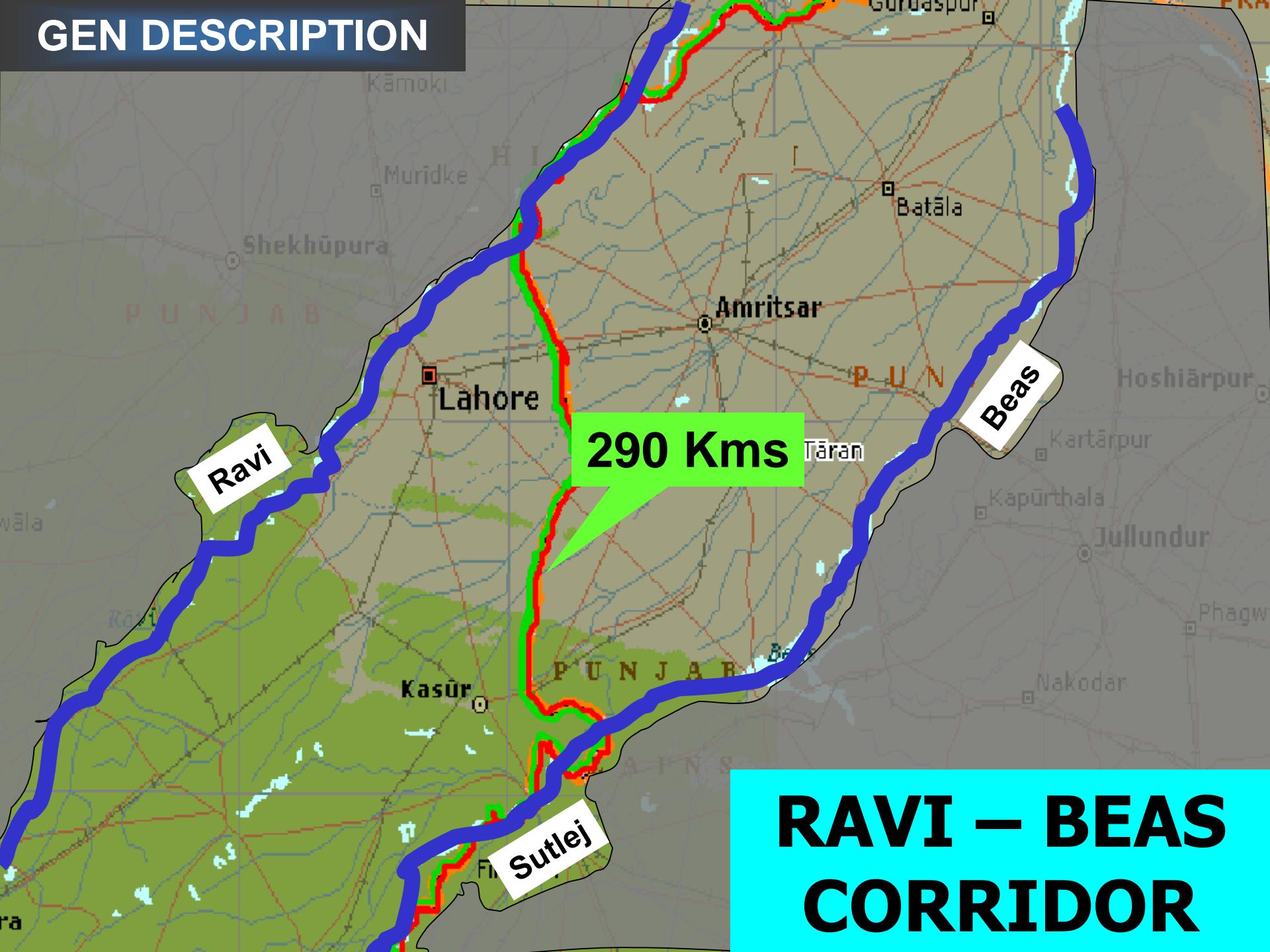
- Transfrontier. Line Akhnur – Jammu – Samba-Kathua and Madhopur HW.
- Cisfrontier. Sialkot, Marala HW, Line MRL – Pasrur and Line Wazirabad – Gujranwala – Shahdara.

# SIGNIFICANT CONCLS (RCC)

## ➤ Forms of Strat Mnvs

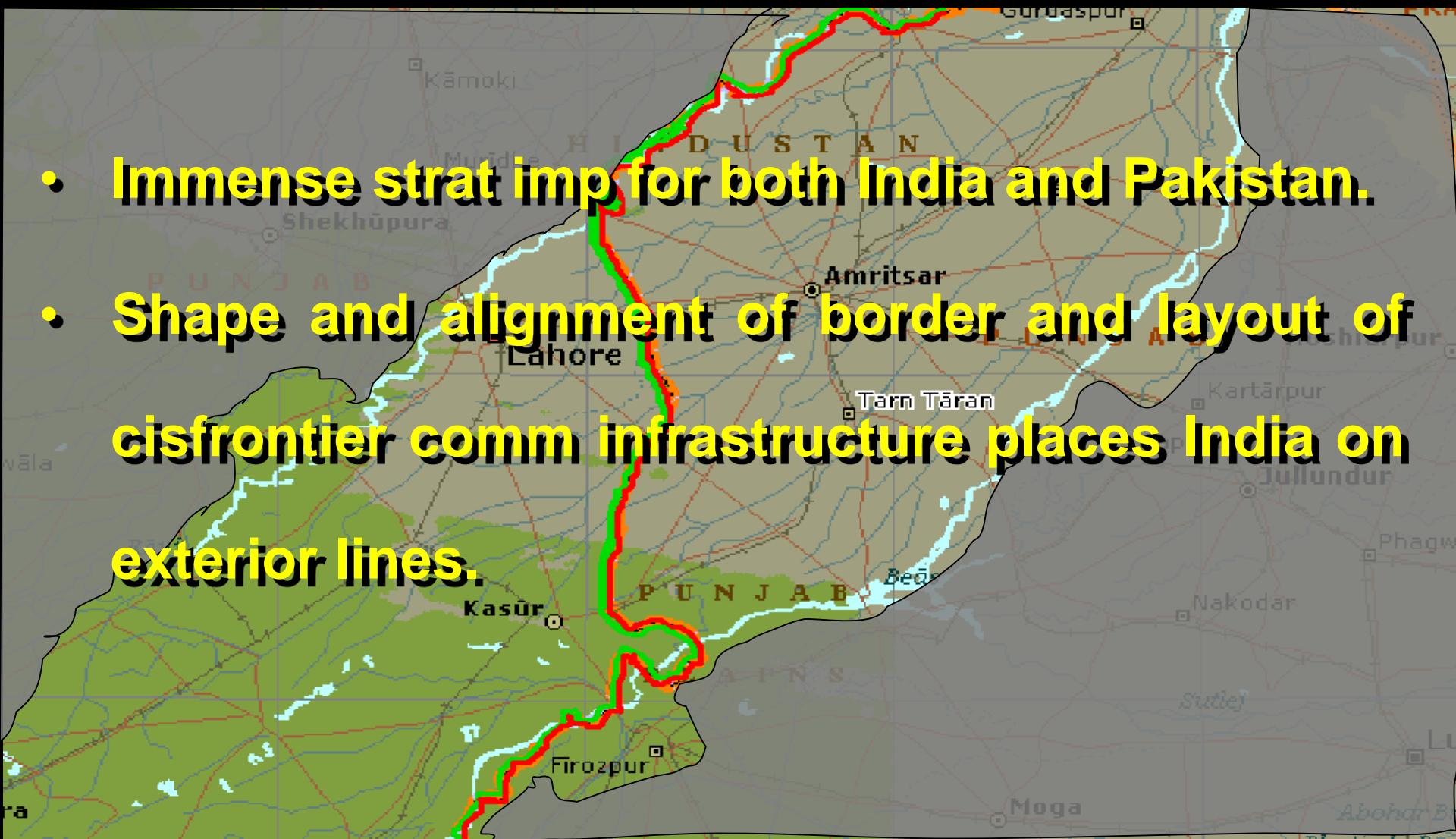
- En is op on exterior lines which affords her an opportunity for a classic double envelopment against Pasrur initially, Gwa and Shahdara subsequently.
- Contrarily, Pakistan will have the time and space advs of central assy while op on interior lines.

## GEN DESCRIPTION



# SIGNIFICANCE OF RBC

- Immense strat imp for both India and Pakistan.
- Shape and alignment of border and layout of cisfrontier comm infrastructure places India on exterior lines.



# **SIGNIFICANT CONCLS ( RBC )**

- Compulsion on India to adopt fwd def posture all along RBC.
- Lack of depth and vuln of strat objs of Lahore and Balloki HW dictate an overall fwd def posture.
- Terrain favours dev of bi-directional threat to Lahore from Amritsar and simultaneously threatening Balloki HW.

# **SIGNIFICANT CONCLS ( RBC )**

- RBC outflanks own def in RCC. Dev of op across River Ravi in conjunc with offn in RCC could be highly advantageous to India.
- RBC provides a most suitable avenue for launching offn by Pakistan from dir of Kasur, as strat objs are well within reach.
- River Beas provides an ideal def line to consolidate the gains and improvement of own def posture.
- Bi-directional threat can be dev against RBC from RCC and Kasur.

# **SIGNIFICANT CONCLS ( RBC )**

- Due to highly dev obs sys on both sides of the border, vertical envelopment becomes imp.
- Suitable time for mil ops dictated by climate, monsoon rains and river flow, is Oct to Mar.

# AREA SOUTH OF SUTLEJ

Bounded by River Sutlej and Salamsar. Covering the avenues  
Idg to Central Punjab .

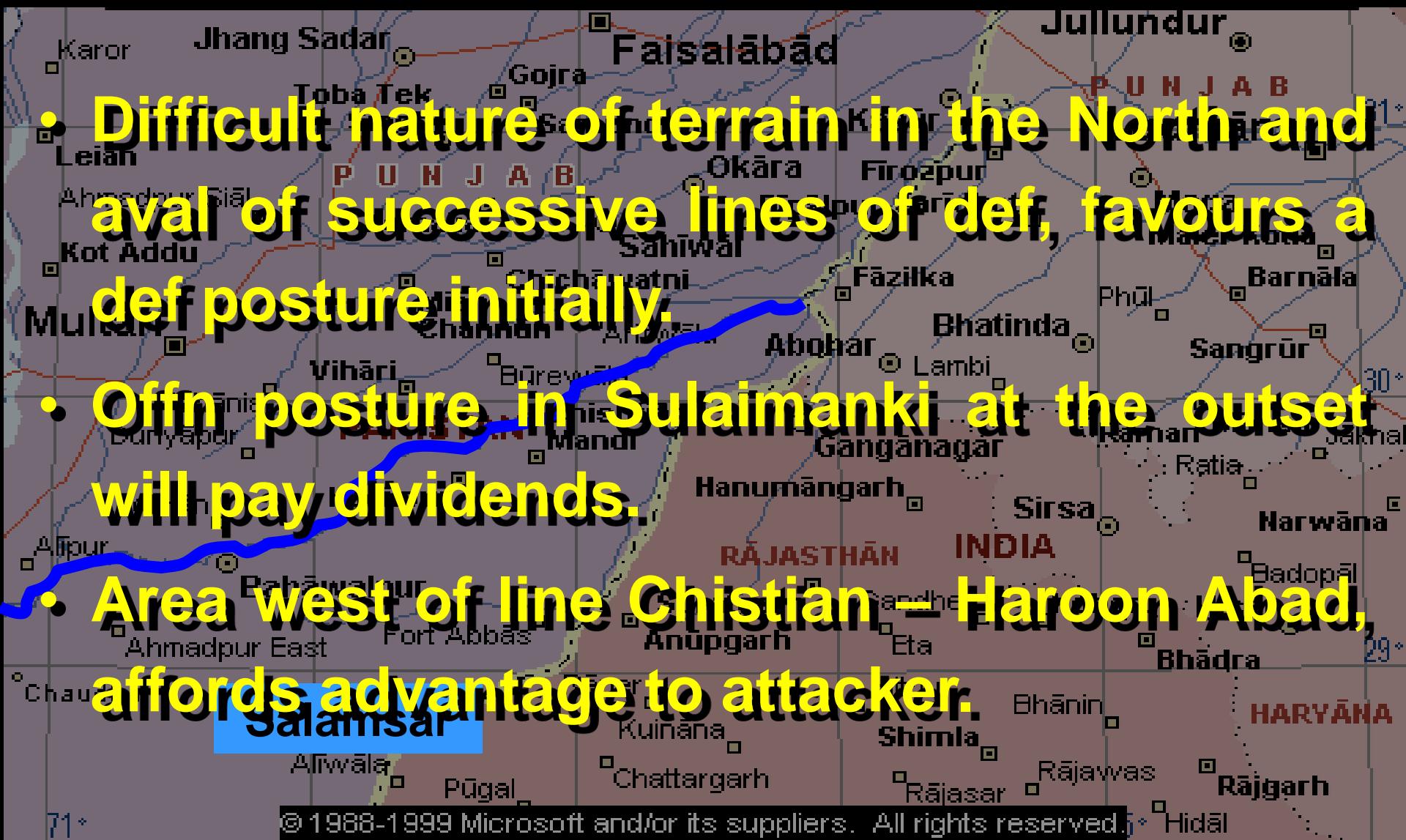


# IMP CONCLS

- Affords large scale emp of mech forces.
- Effs of a maj effort in this Sec can be comb with other efforts in the NE as well as to the SW.
- Maj success across River Sutlej would directly threaten Central Punjab.

# IMP CONCLS

- Difficult nature of terrain in the North and availability of successive lines of def, favours a def posture initially.
- Offn posture in Sulaimanki at the outset will pay dividends.
- Area west of line Chistian, Haroon Abad, affords advantage to attacker.



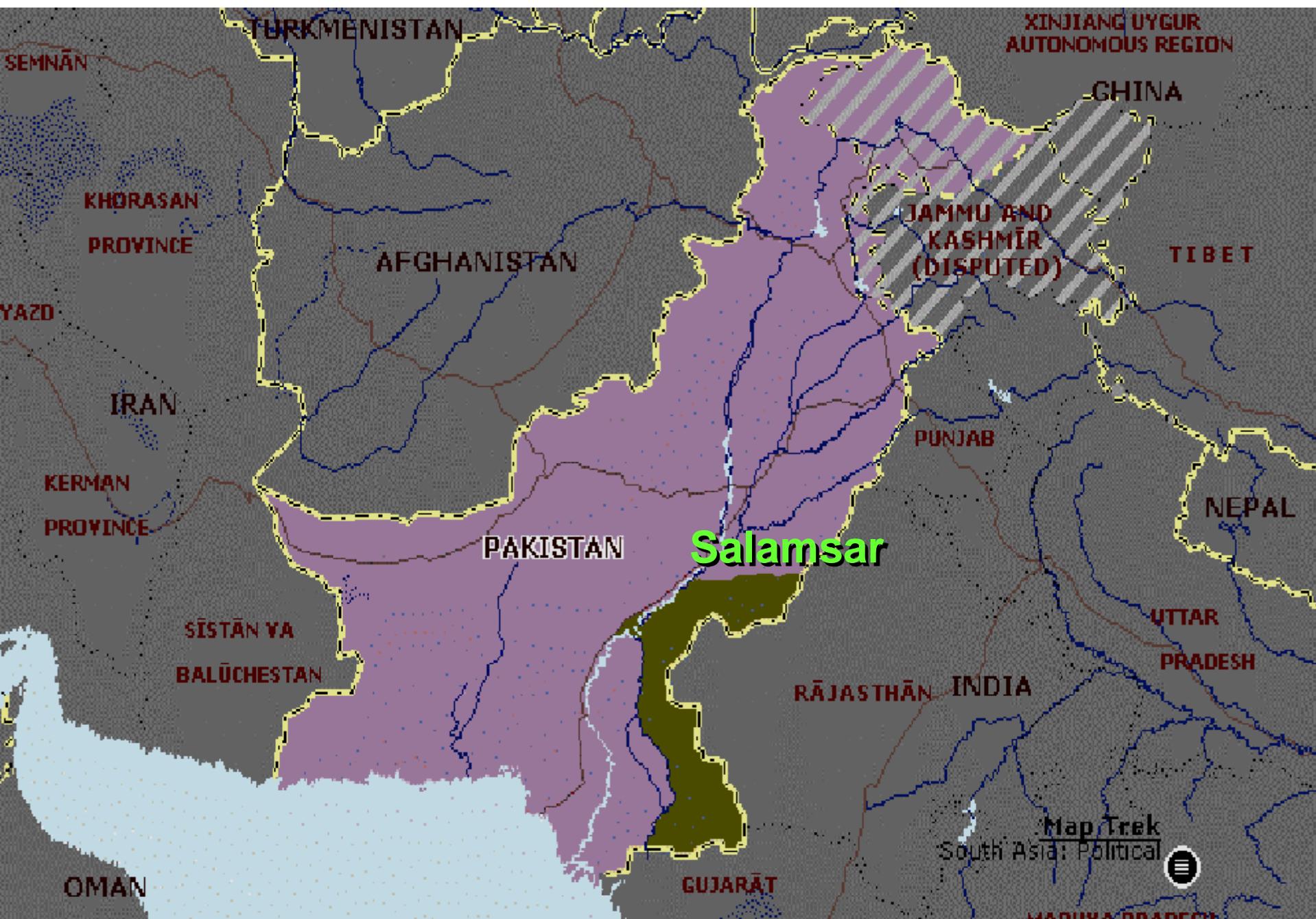
# IMP CONCLS

- Huyxings over Sutlej are ltd to Sulaimanki, Islam HW, Tibbi Lal Beg and Bahawalpur.

This can prove to be a serious handicap for the mov of own mech forces North and South of the River.

- No lateral links b/w the three parallel rly lines astride rivers Sutlej and Ravi.

# DESERT SEC



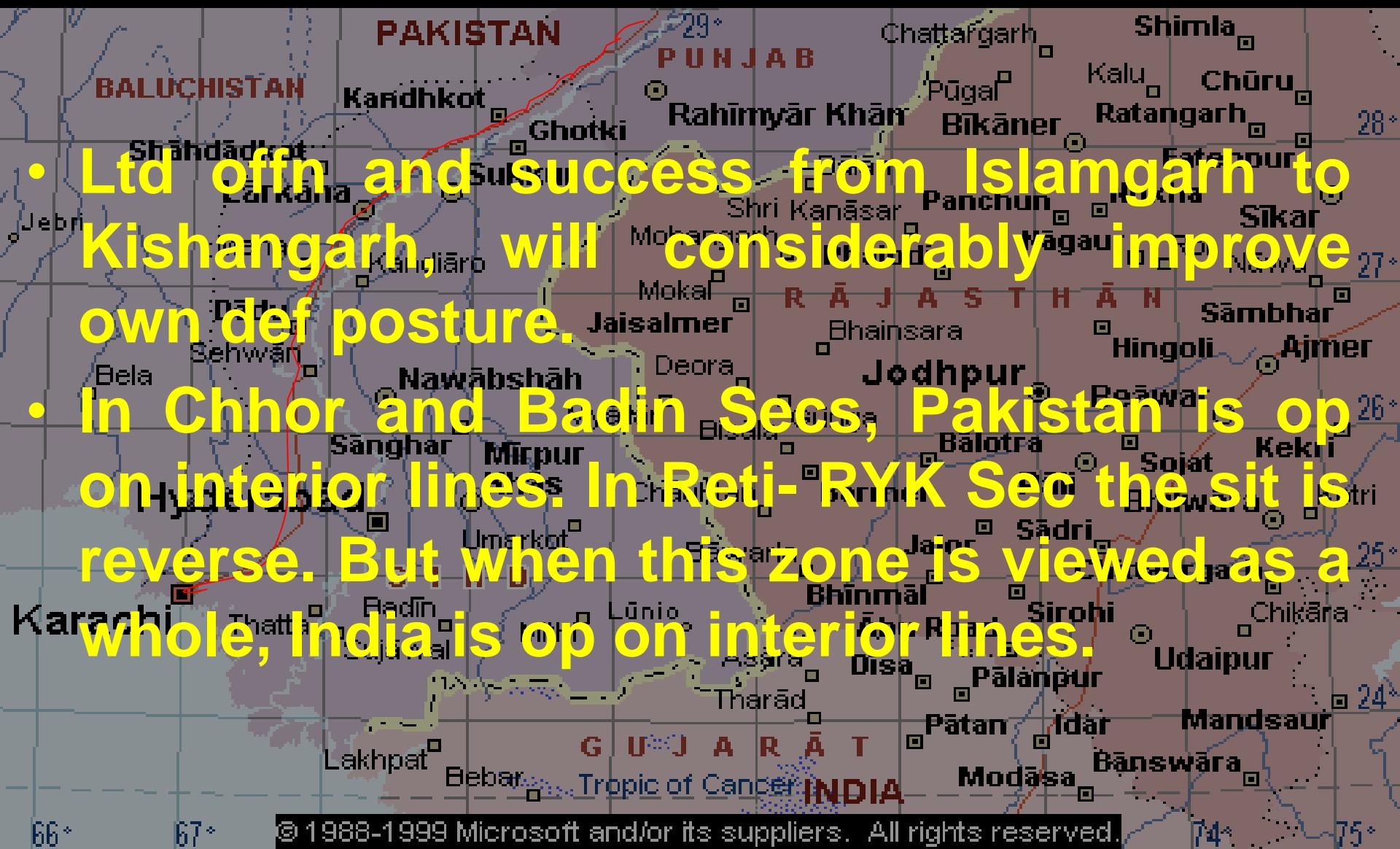


# SALIENT CONCLS - DESERT SEC



# SALIENT CONCLS - DESERT SEC

- Ltd offn and success from Islamgarh to Kishangarh, will considerably improve own def posture.
- In Chhor and Badin Secs, Pakistan is op on interior lines. In Retj-RYK Sec the sit is reverse. But when this zone is viewed as a whole, India is op on interior lines.



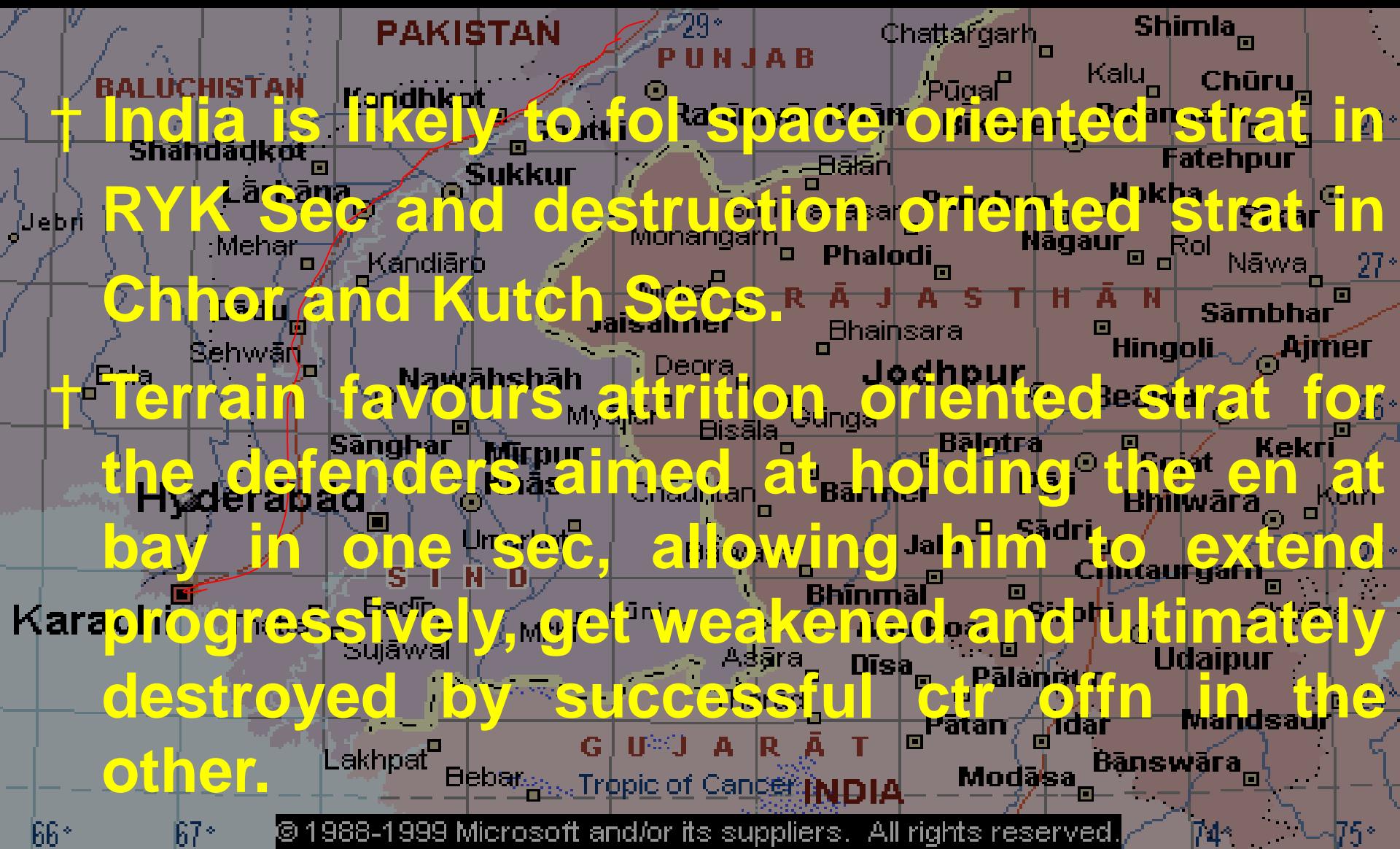
# SALIENT CONCLS - DESERT SEC



# SALIENT CONCLS - DESERT SEC

+ India is likely to follow space oriented strat in RYK Sec and destruction oriented strat in Chhor and Kutch Secs.

+ Terrain favours attrition oriented strat for the defenders aimed at holding the en at bay in one sec, allowing him to extend progressively, get weakened and ultimately destroyed by successful ctr offn in the other.



# COASTAL AREAS



# COASTAL AREAS OF PAKISTAN

Dasht River



ARABIAN SEA

Tropic of Cancer

Sir Creek

# **IMP OF SEA COAST**

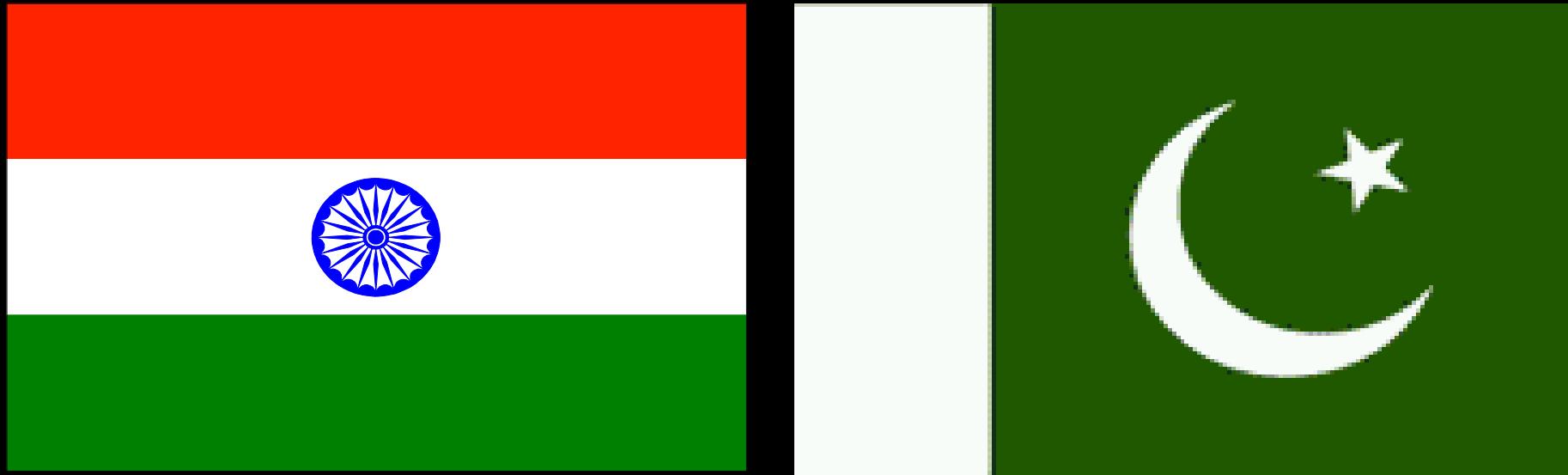
- Occupies a strat posn in eco and def. Dev new ports and comm infrastructure on Makran coast would:-
  - Reduce our dependence and corresponding vuln on a single port complex.
  - Inc strat depth towards west of Indus.
  - Enhance national power potential and War Stamina.

# PAKISTAN & INDIAN SLOCs



# PART-III

STR,WEAKNESSES AND  
LOG IMPLICATIONS



# **STRENGTHS AND WEAKNESSES OF ADVERSARIES**



# STRENGTHS AND WEAKNESSES

# **STRS**

- Comparatively poor infrastructure in the desert sec by default/design, provides some immunity to Pakistan against an Indian main effort in this area, due to the enormous log sp needed to sustain a maj op.
- Well fwd loc of cantts, facilitate assy/emp of forces in a short time to deal with any dev on the border.

# **STRS**

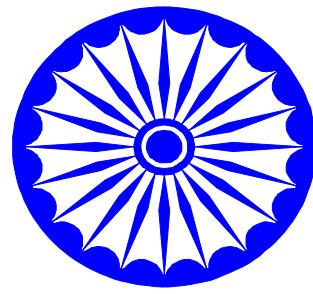
- Border configuration and better comm infrastructure, particularly laterals, facilitate ops on interior lines in the critical areas of Punjab, allowing Pakistan to generate greater cbt power with comparatively smaller forces.

# **WEAKNESSES**

- Obvious problem of def arises from the elongated shape, lack of strat depth and the closeness of its maj comm centers and arteries.
- Total dependence on a single sea Port of Karachi /Port Qasim can be highly detrimental to national security, spec in a long drawn war.

# WEAKNESSES

- Absence of a natural barrier/ obs all along the Eastern border, compels dependence on a number of front line canals. The water of which can be indir reg by India.



# **STRENGTHS AND WEAKNESSES**

# **STRS**

- Enormous land mass of almost 3 million sq kms and large population base, provides her with tremendous adv incl considerable strat depth and abundant resources.
- Well dev comm infrastructure provides India with the ability to:-

- Simultaneously undertake and sp multiple offn in desired theatres of ops.
- Threaten multiple objs from a single assy thus compounding Pakistan's problem of identifying Indian intentions/interests.
- Flexibility to shift and assemble forces at an unexpected place in a short time frame.

# **STRS**

- An eff water reg cap over rivers Chenab, Ravi and Sutlej has provided India with the ability to degrade our obs sys (ref earlier).



# **WEAKNESSES**

- India presents a critical vuln in RCC due to close proximity of her troubled IHK region, uncertain Punjab and lifeline to Kashmir. Moreover, both the rds to IHK can be choked at Pathankot, where they have a common origin.
- Overall, India is op on exterior lines vis-à-vis Pakistan. Hence, Shifting of forces from one Z to the other would be difficult and time consuming.

# WEAKNESSES

- In desert Z due to under dev comm infrastructure on the Cisfrontier, India will have to extend her log bases fwd for op against the green belt. Thus despite the terrain facility to ideally exploit the potential of her mech forces, this so far remains a likely retardation factor towards the tempo of her ops.

# IMPLICATIONS ON LOG

- Log orientation.
- Dependence on rly.
- Compartmentation eff of rivers.
- Absence of local resources.
- Northern area log base.
- Space mgmt in RCC / RBC.





A photograph of a sunset over a calm sea. In the foreground, dark silhouettes of rocks or cliffs frame the scene. The sun is low on the horizon, casting a bright yellow glow that reflects off the water. The sky is a gradient of orange and yellow.

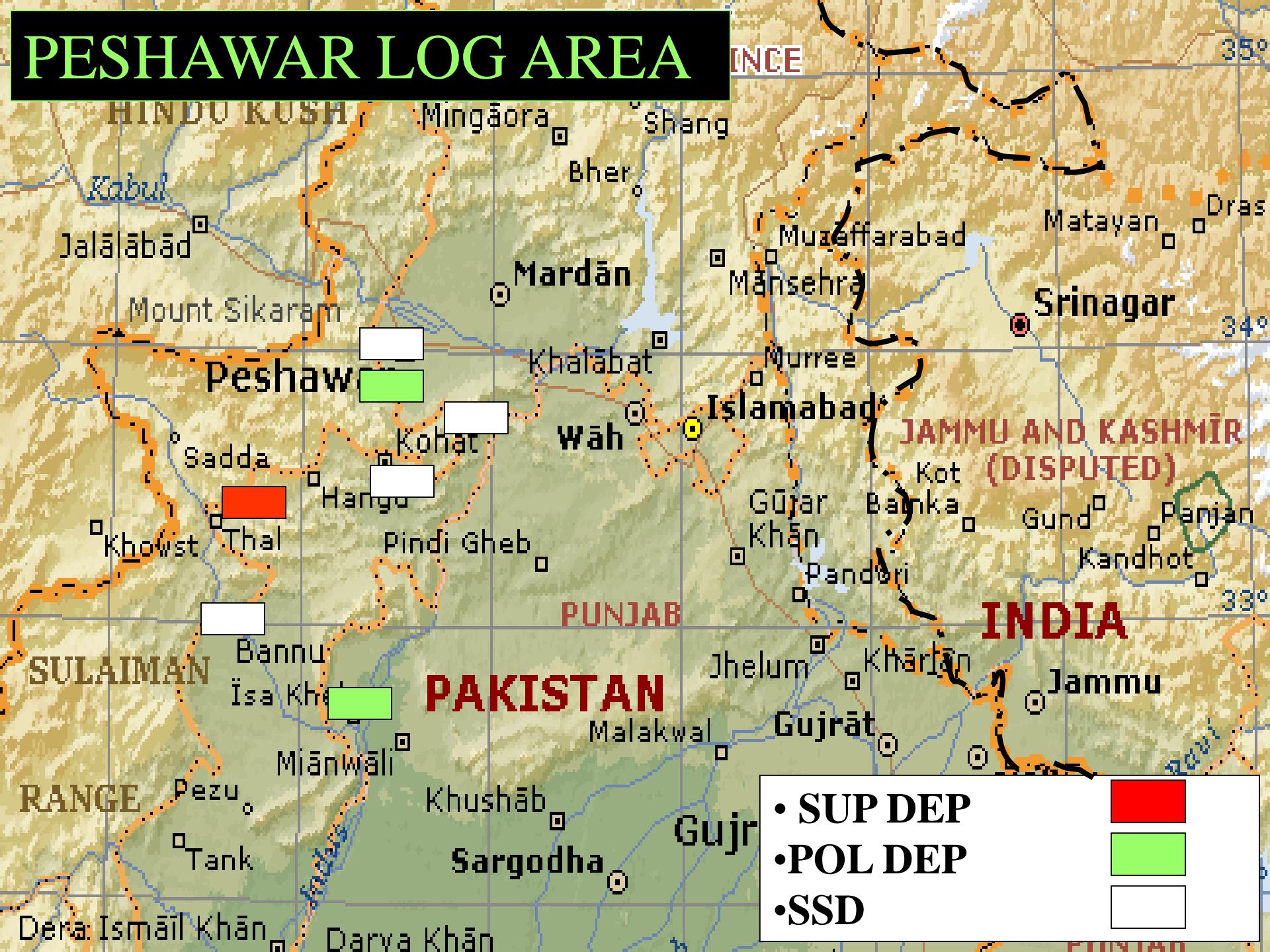
**CONCL**





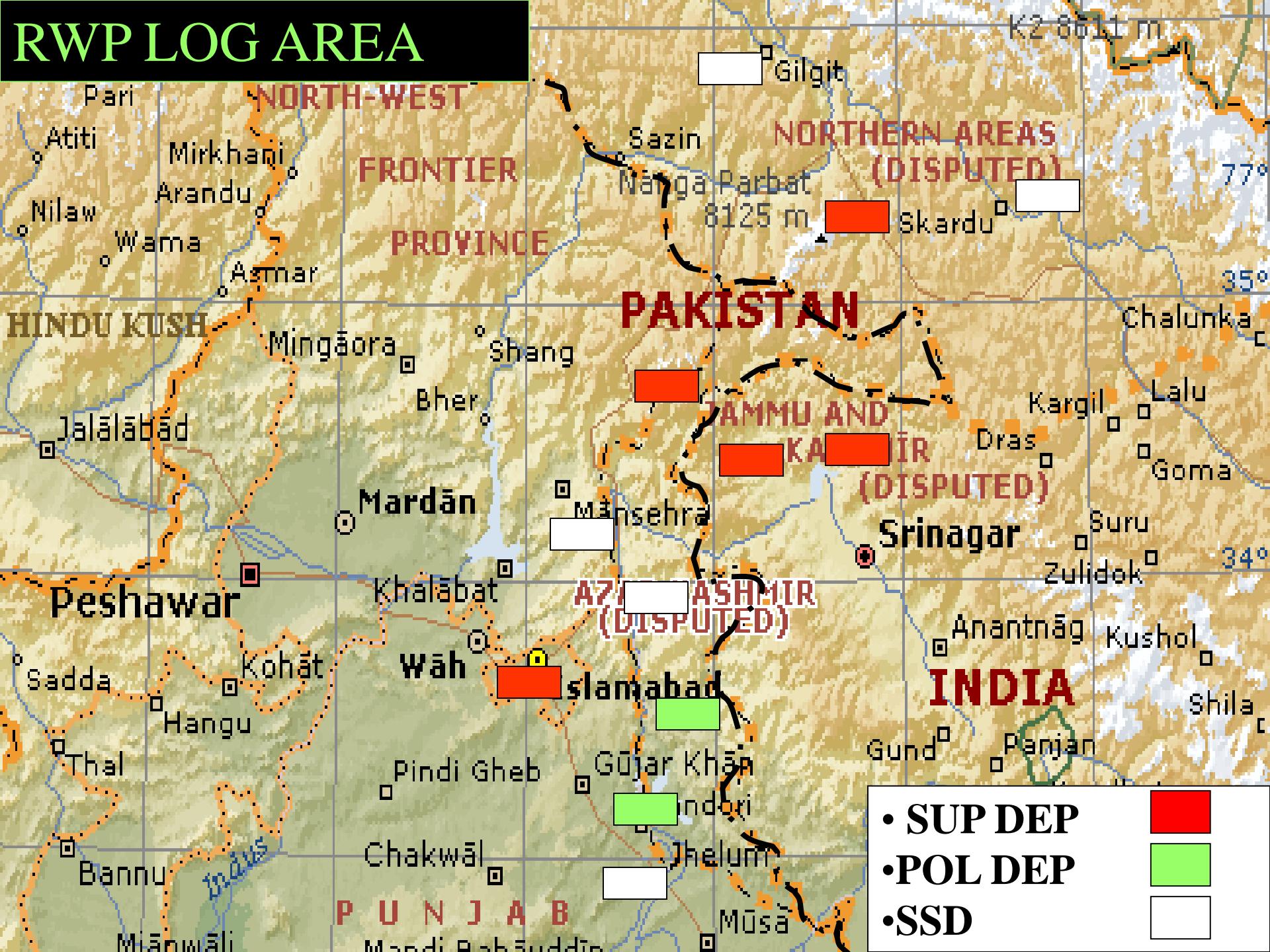
# **EXISTING LOG INSTLS**

# PESHAWAR LOG AREA



- SUP DEP
- POL DEP
- SSD

# RWP LOG AREA



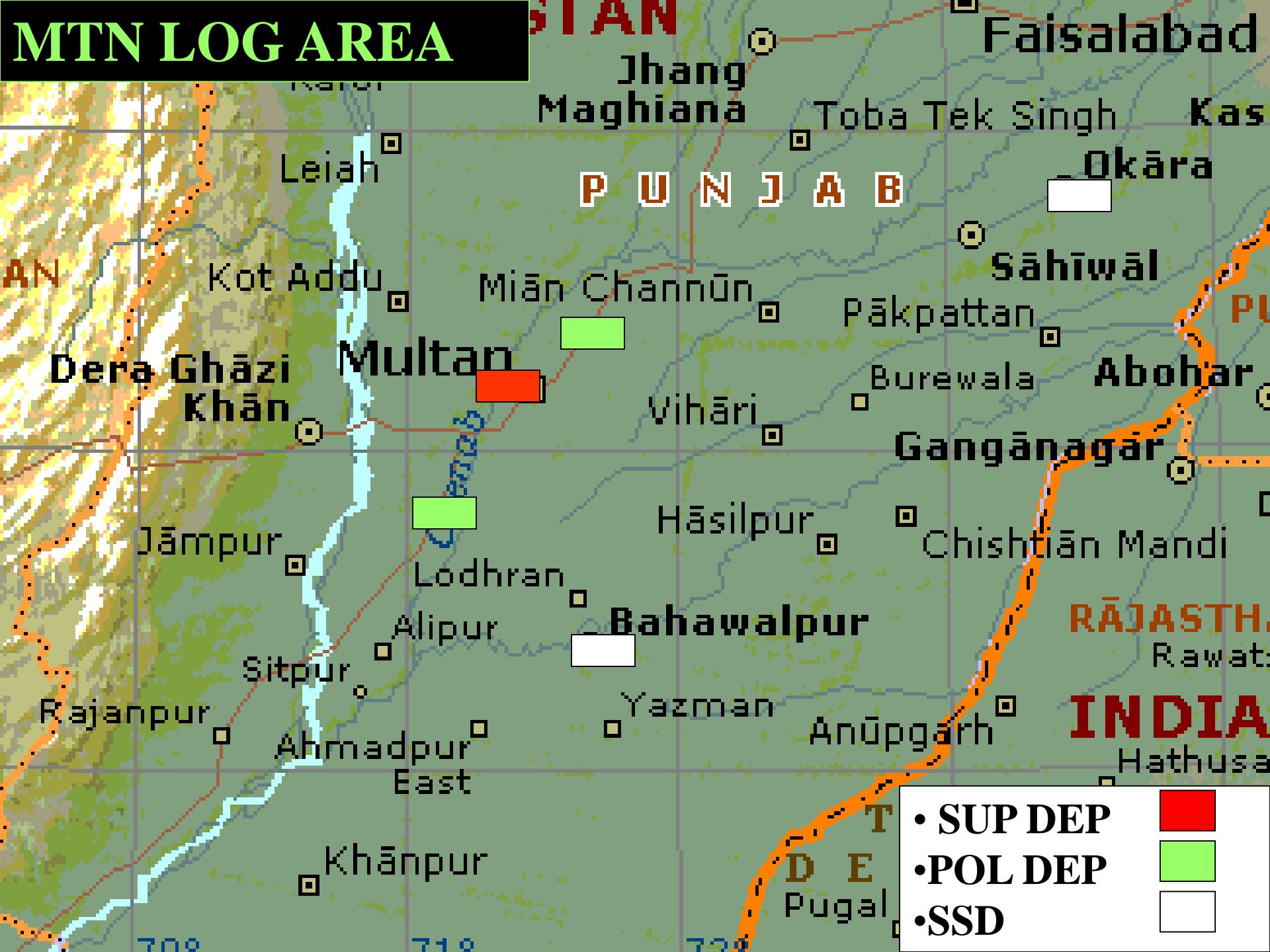
# GWA LOG AREA



# LHR LOG AREA

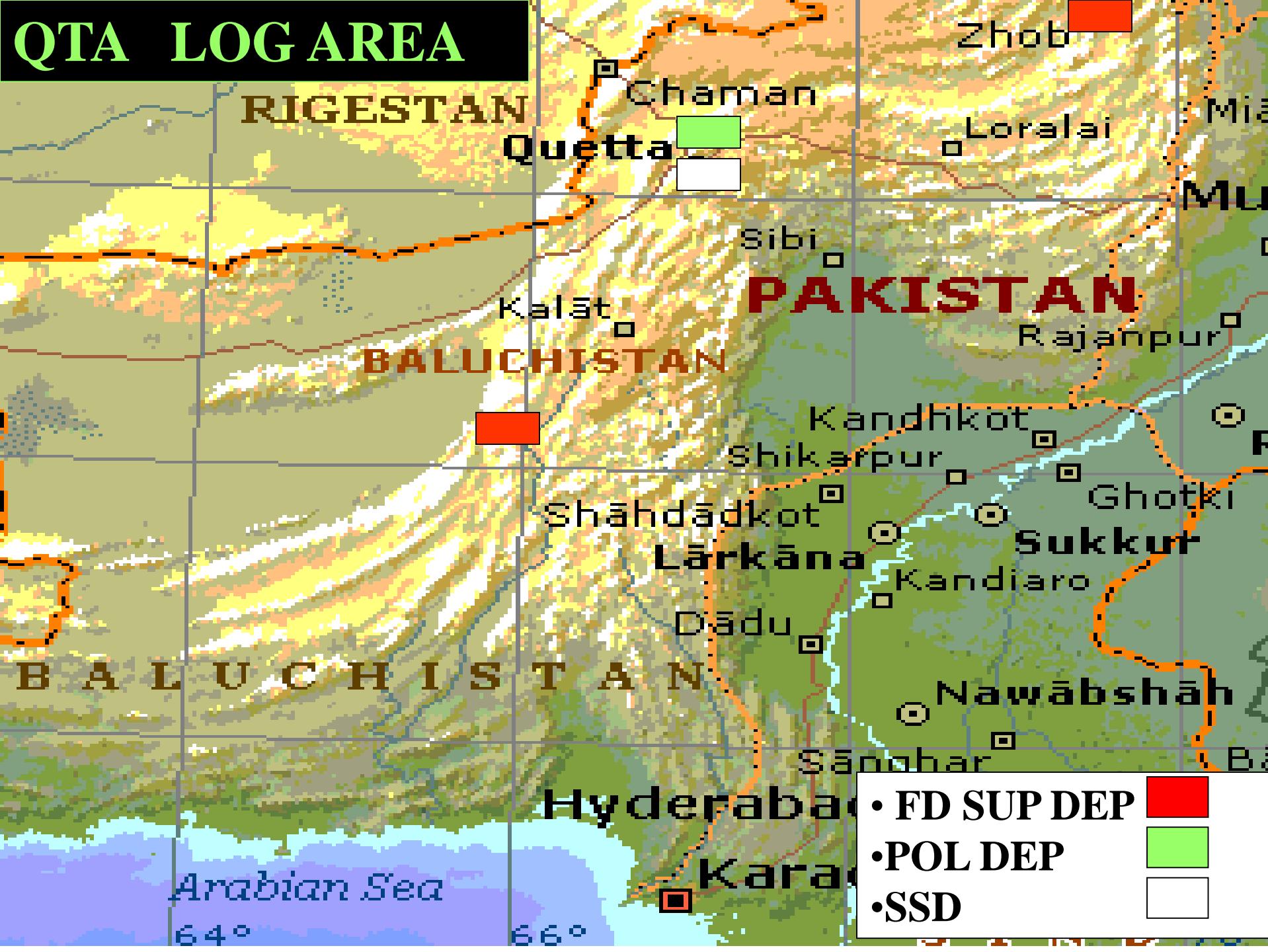


# MTN LOG AREA

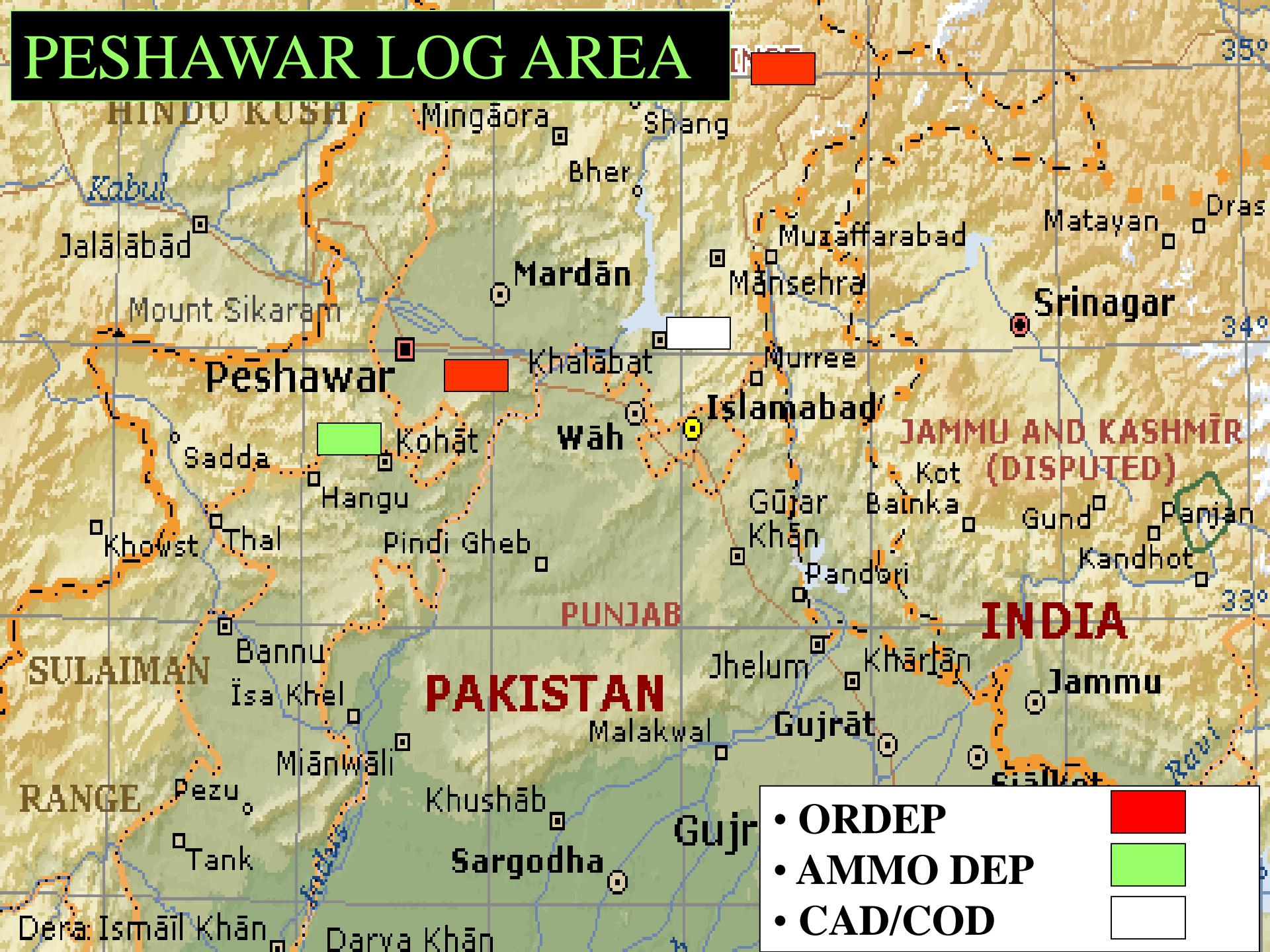


# KCI LOG AREA



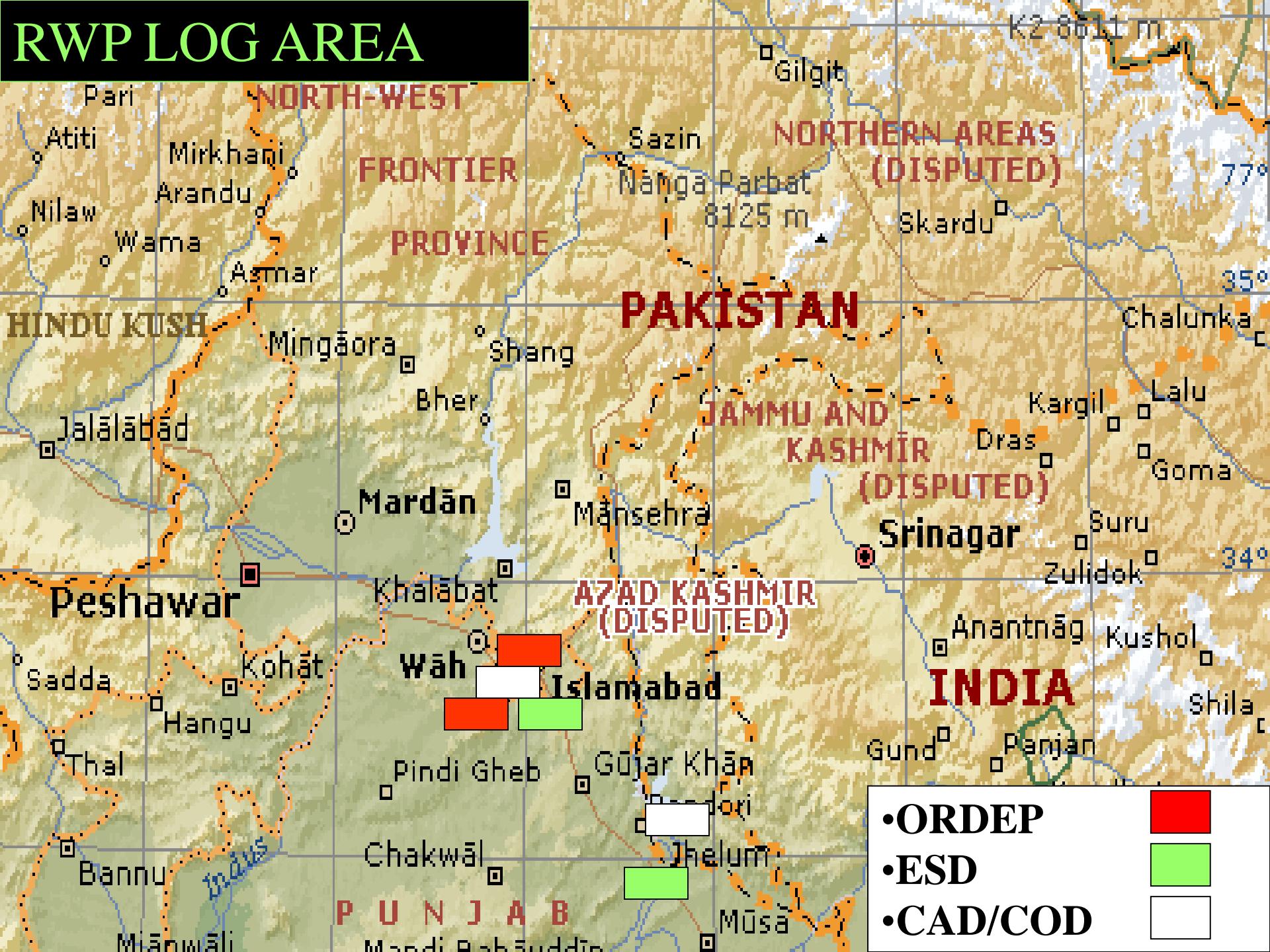


# PESHAWAR LOG AREA



- ORDEP
- AMMO DEP
- CAD/COD

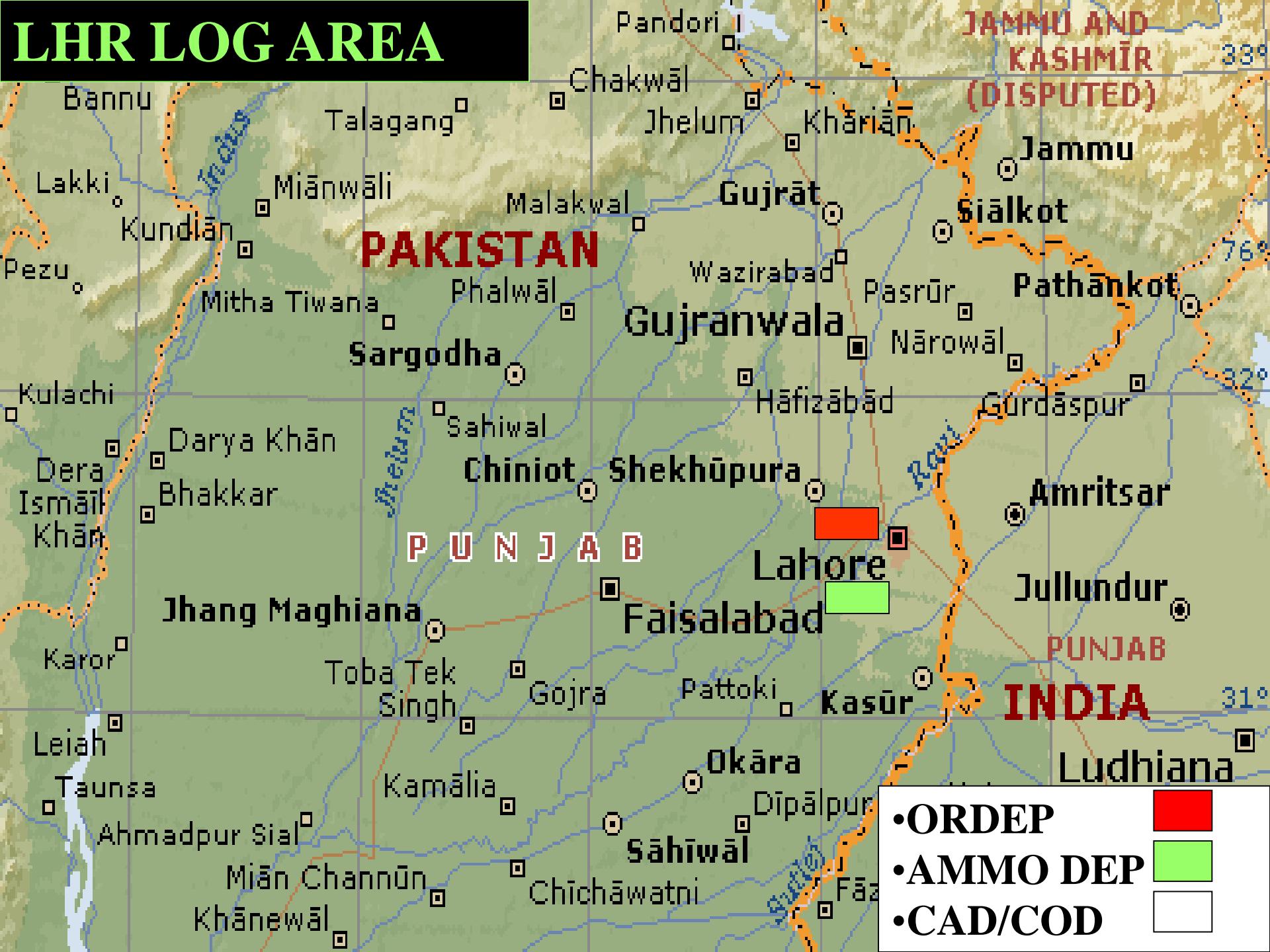
# RWP LOG AREA



# GWA LOG AREA



# LHR LOG AREA



# MTN LOG AREA



# KCI LOG AREA

UCHISTAN

AKISTAN

ESTAN

Karachi

SIND

Rajanpur

KH

Rah

Kandhkot

Shāhdādkot

Dādu

Kandiaro

Ghotki

Sukkur

Nawābshāh

Sānghar

Mirpur Khās

Hyderabad

Sujawal

- ORDEP
- AMMO DEP
- CAD/COD



66°

68°

