



International Symposium

May 8, 2015

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# Facts in relief distribution after Nepal earthquake (2015)

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**Rubel Das**

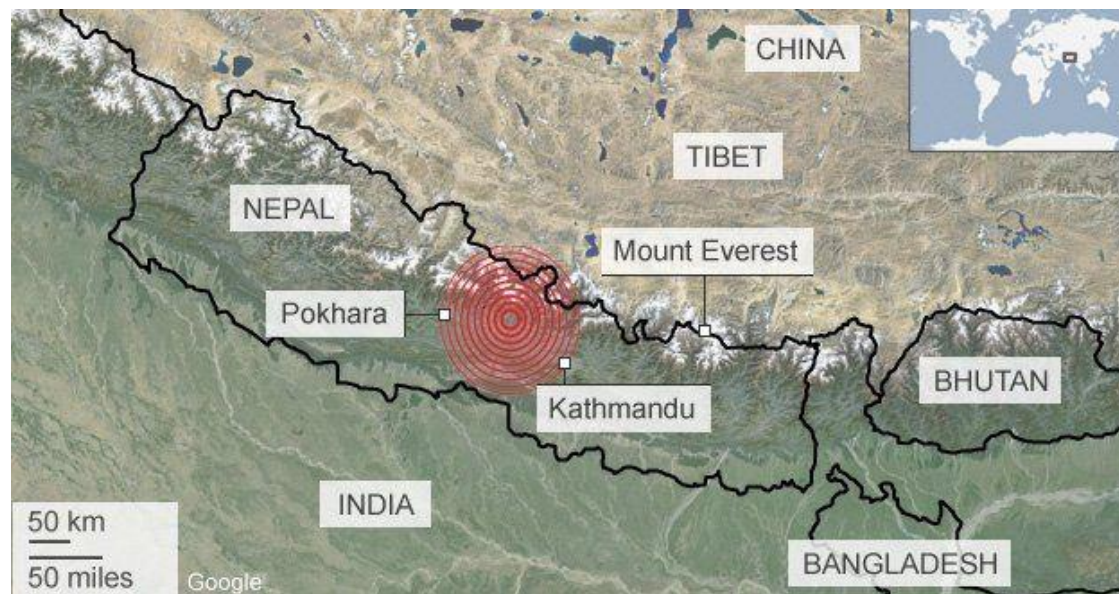
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Tohoku University

## Nepal Preliminary



- ◆ A landlocked country; (27.4 million people)
- ◆ One of the poorest countries (rank= 197<sup>th</sup> in GDP)
- ◆ 84 percent people belief Hindu religion.

## Perception of Nepalese

- ◆ Disaster is “Will of God” or as “a punishment delivered by God”: God comes to earth to solve injustice.
- ◆ Caste system is strong in Nepal. Low caste people are excluded from several social activities.



< prayers after earthquake >

Nepal was 4<sup>th</sup> vulnerable country to earthquake.  
How about preparation?

## Economical impact after 25 March 2015 earthquake



- ◆ Historical tourist structures are almost damaged
- ◆ Several Mt. Everest climbers are killed by earthquake
- ◆ Climbing path of Mt. Everest is damaged

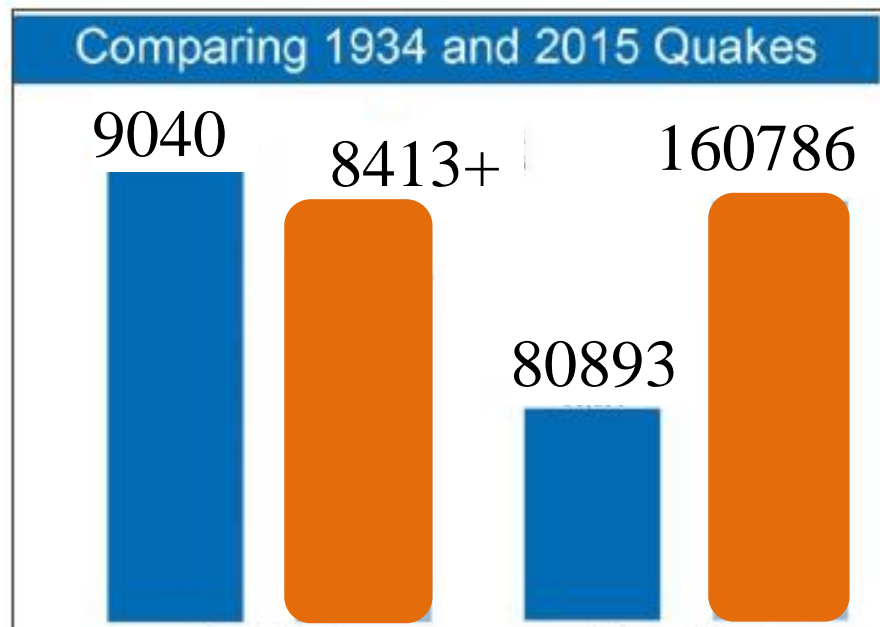
# Comparison with previous earthquake

Killed: 8413+ people

Homeless: over 2.8 million

Injured: 14,000 people

Food demand: about 3.5 million



■ 1934- M 8.4  
■ 2015 - M 7.8

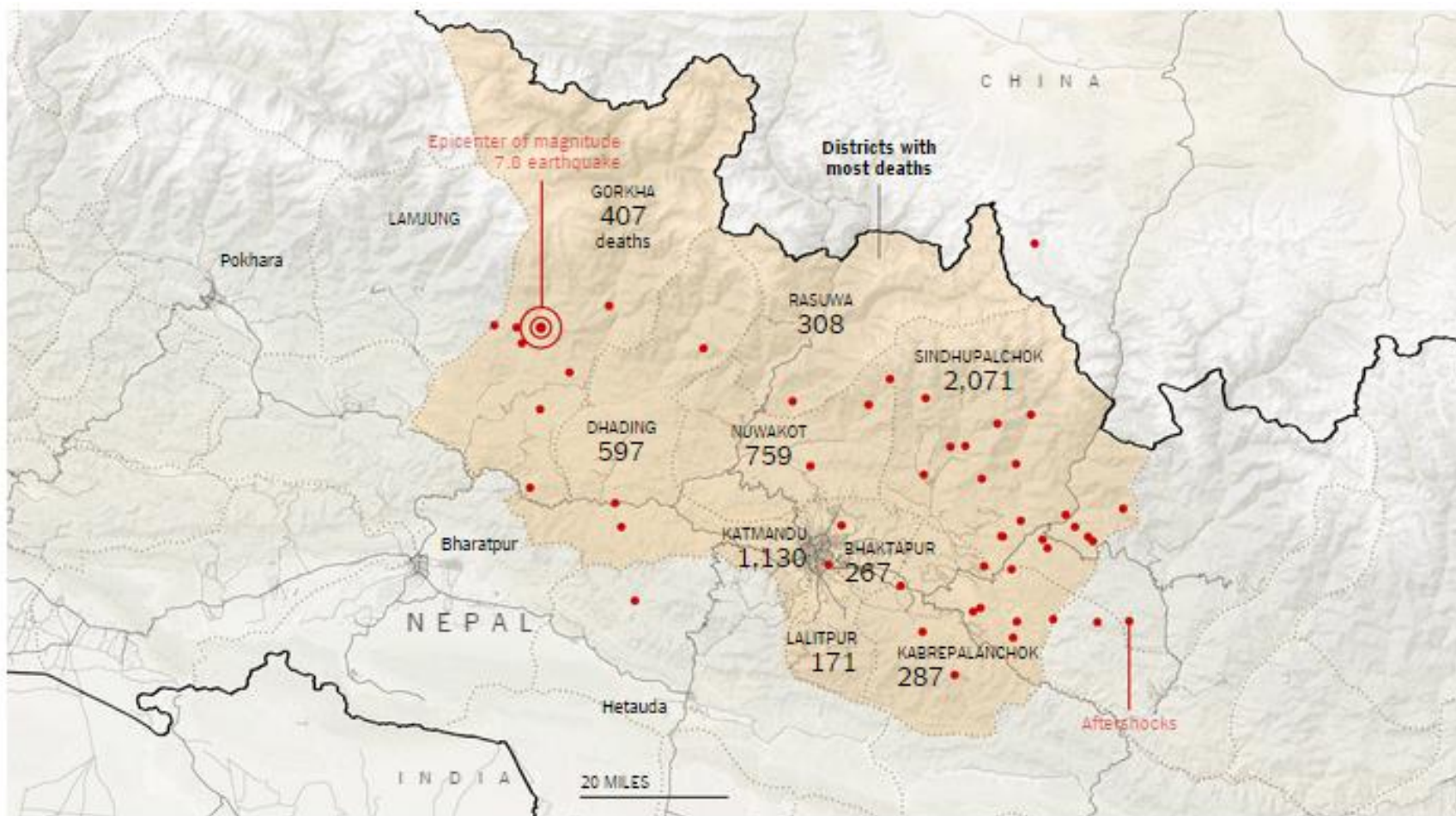
\* As May 7, 2015 subject to update

\* Killed number source: Red cross, Nepal

People Killed

Damaged houses

# Tally of death: severity varies



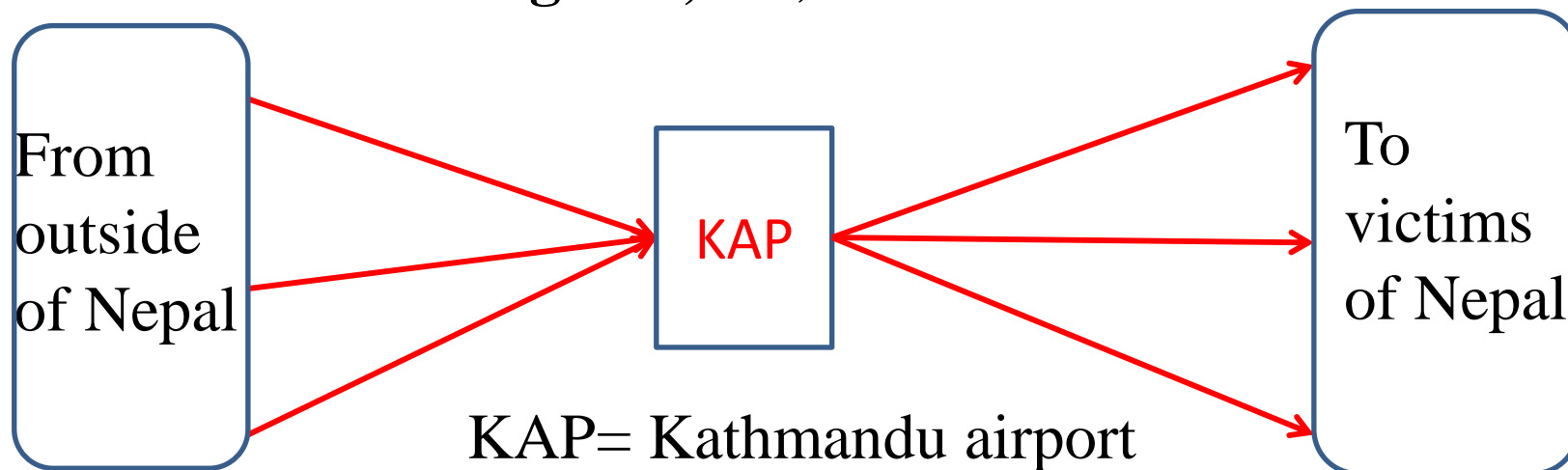
By The New York Times | Sources: Nepal National Information Technology Center, U.S.G.S.

As May 1, 2015 [USGS]

## Response from different sources

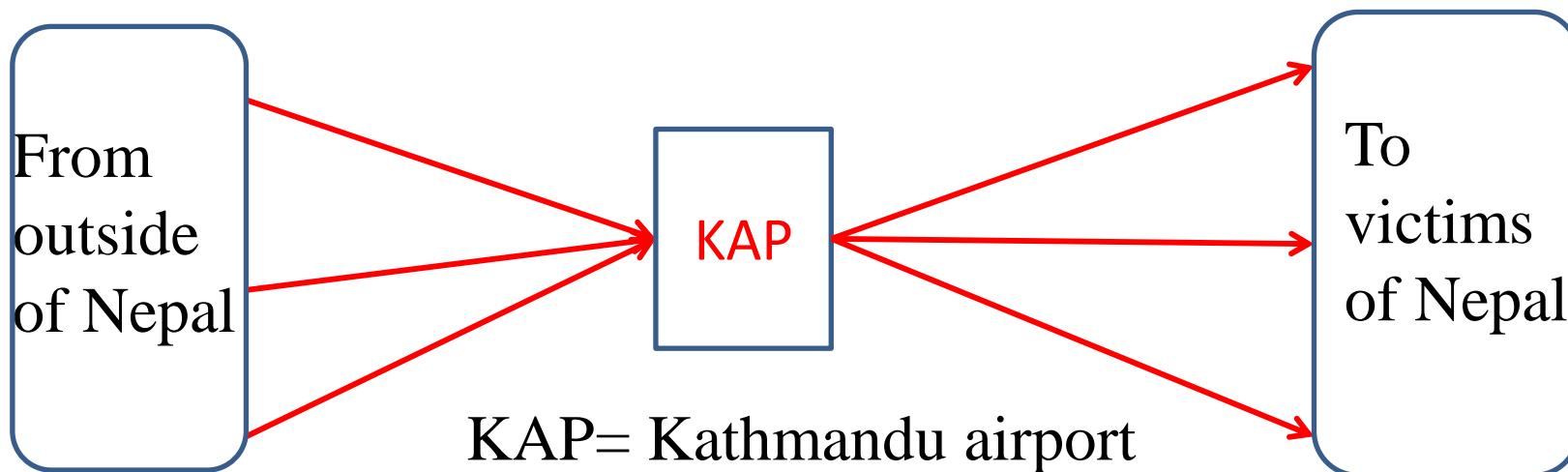
Fritz and Mathewson (1956) defined relief convergence as  
**“the movement or inclination towards a point”**

- ◆ **Personnel convergence**, i.e., movements of individuals
- ◆ **Material convergence**, i.e., movement of items



## Airport as access point

1. Why relief converge to only KAP?
2. Is it efficient? What can be alternatives?



**1. Kathmandu international airport\*: Max 190 tones**

\* Nepal has only one international airport



## Logistical preparation



### 1. Humanitarian **staging area** in Kathmandu airport

- ◆ Managed by WFP
- ◆ Provided free of cost for storage facilities to aid agencies
- ◆ Benefit: Decongest airport
- ◆ Opened: March, 2015

# Logistical problem in single convergence point



The screenshot shows the top navigation bar of The Guardian website. It includes a search bar, a subscribe button, and links for jobs, dating, more, and International beta. The main navigation bar lists various sections: world, sport, football, opinion, culture, business, lifestyle, fashion, environment, tech, and travel. Below this, there are regional and thematic categories: europe, US, americas, asia, australia, africa, middle east, cities, and development. The main headline reads: "Nepal customs holding up earthquake relief efforts, says United Nations". A sub-headline below it states: "UN Nepal representative Jamie McGoldrick says material is piling up at Kathmandu airport instead of being distributed, as death toll reaches 6,621".

1. Piling up of relief at single point
2. Limited workers
3. Congestion in unloading from cargo flight

## Logistical problem in single convergence point

4. Sorting and arranging relief items according to needs is essential



<Tents and other supplies for earthquake victims at the airport in Kathmandu >

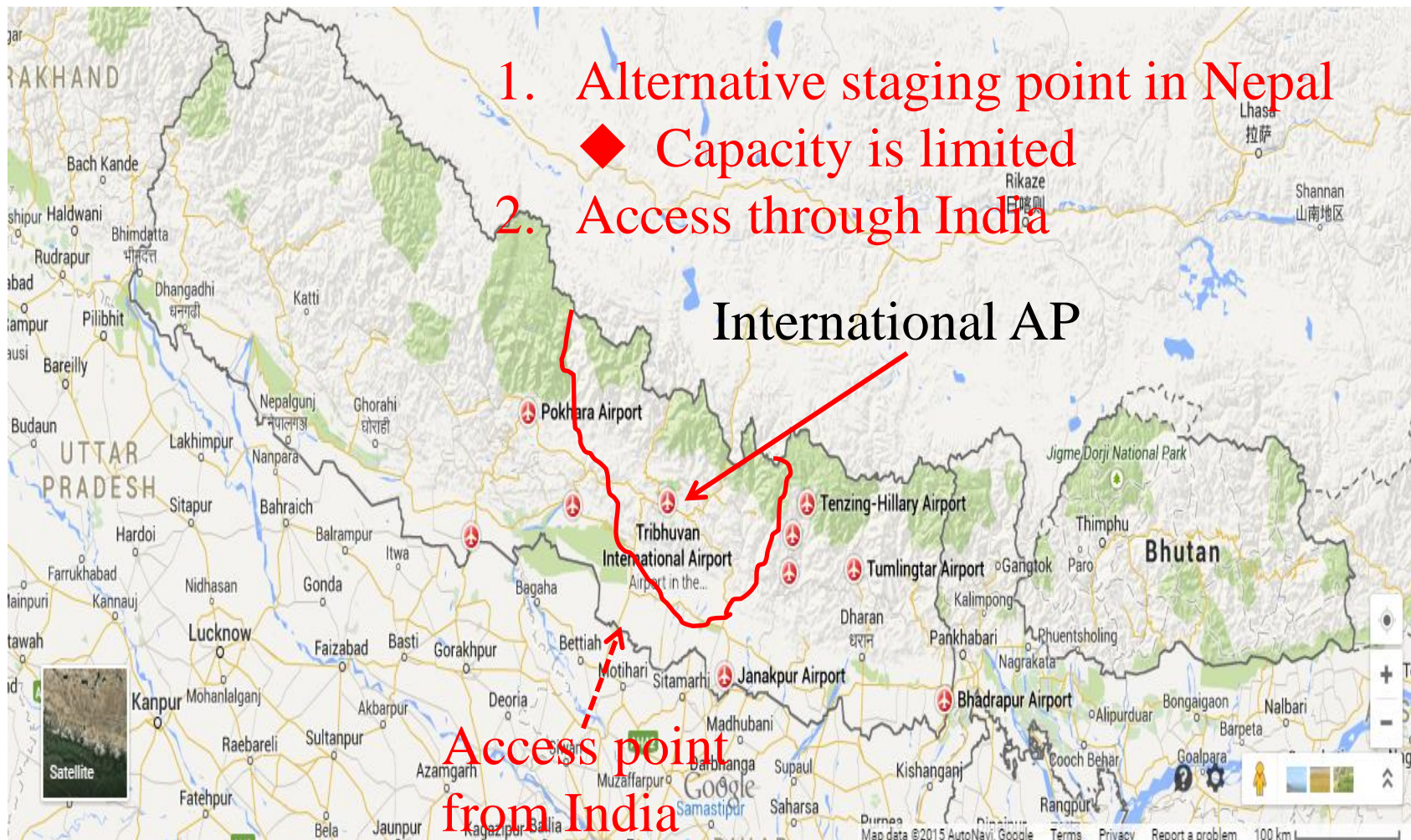
## Dispatching from Kathmandu staging area

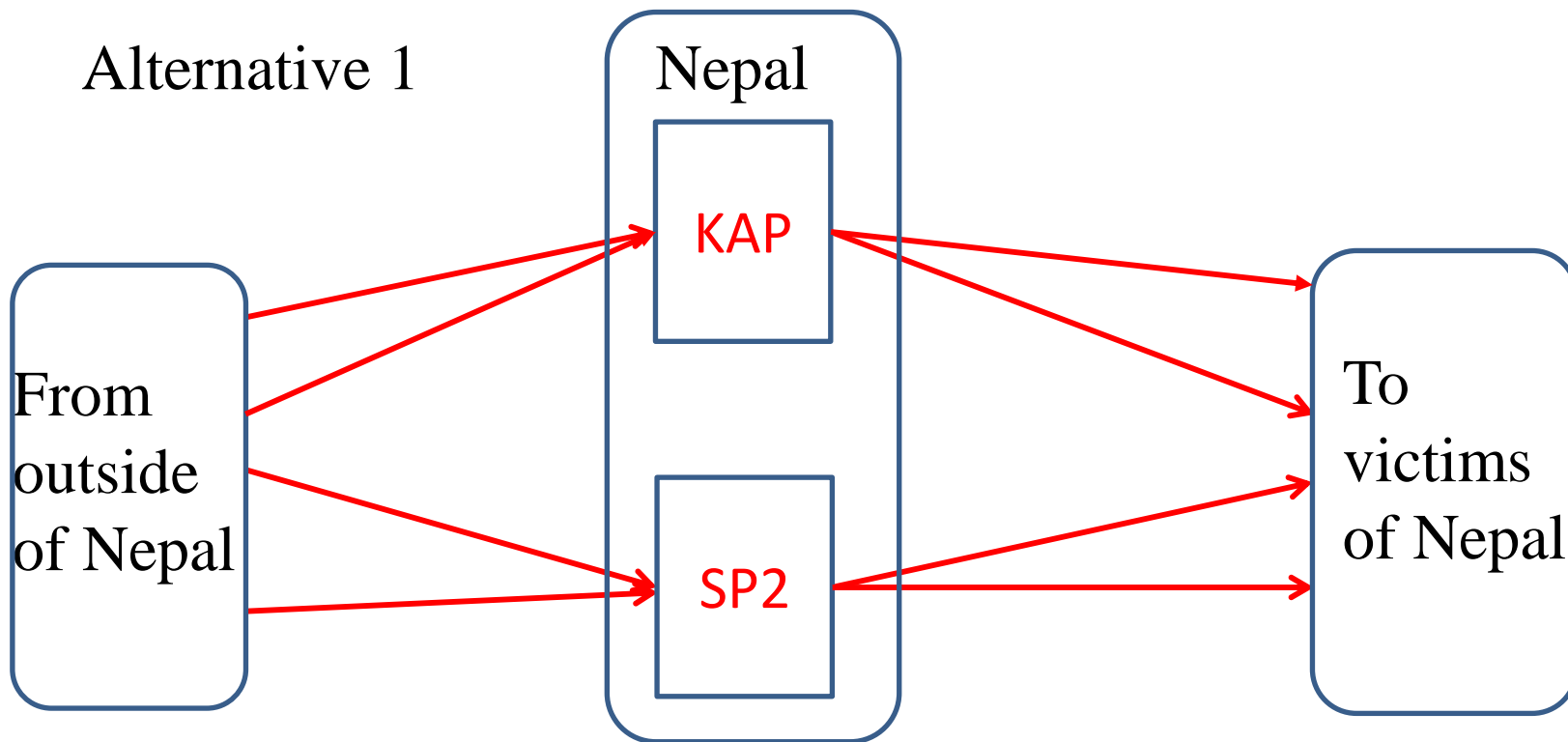
- ◆ Inaccessible due to poor development of secondary road. Even though major road are functioning
- ◆ Limited number of **truck**  
WFP contracted 25 trucks which is far less than requirement
- ◆ Difficulties in dispatching arise from shortage of **fuel, road, and drivers**

WFP=World food program



# Alternatives of single convergence point

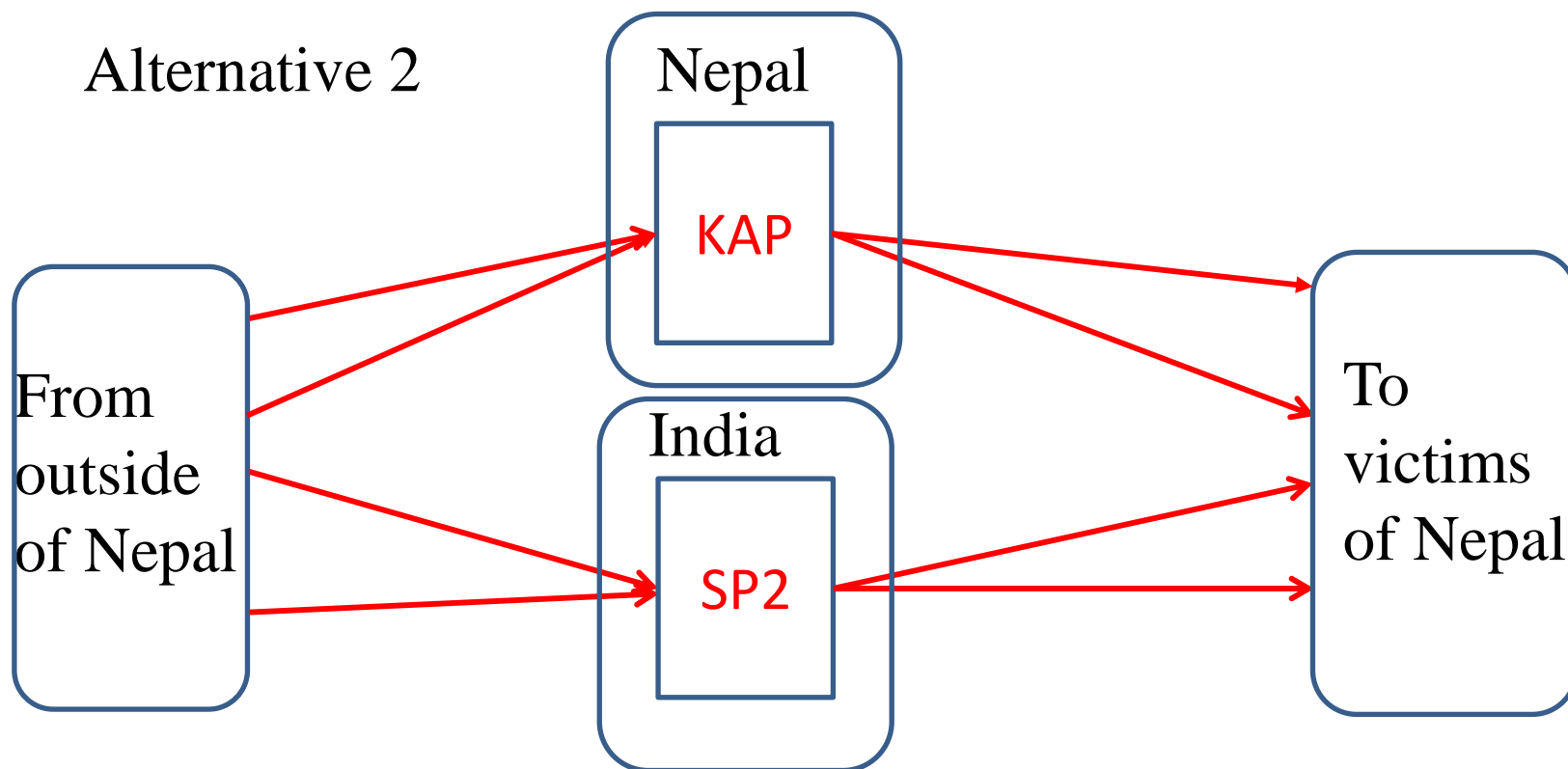




SP= staging point

1. Need to introduce more staging point within Nepal
2. Though all airports are not equipped with proper facilities

## Alternative 2



SP= staging point

1. Nepal and India have close tie.
2. After Haiti earthquake, Dominican Republic's airport was utilized

## Challenges in last mile



- ◆ Damage of road infrastructure after earthquake
- ◆ Several rural areas are not accessible even in normal period

	Nepal (2007)	Bangladesh (2007)
Road density (km/1000 sq km)	121	2079
Rail track length km	59	2835

Source: World bank



## Challenges in last mile



- ◆ Villagers carry WFP relief product
- ◆ Need helicopter to access remote areas

## Need to consider

◆ Required respect to victims culture

MailOnline India

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'We did not touch the Pakistani aid': Quake-struck Nepal launches inquiry as Pakistan sends 'beef masala' to country where cow slaughter is banned

- Cows are treated as sacred in Nepal, where the majority are Hindus
- Killing a cow used to be punishable by death, but now carries a 12-year jail term
- Nepalese government officials have informed the country's PM
- An internal inquiry is underway and the matter will be raised with Pakistan

By ASTHA SAXENA  
PUBLISHED: 22:17 GMT, 29 April 2015 | UPDATED: 16:25 GMT, 30 April 2015

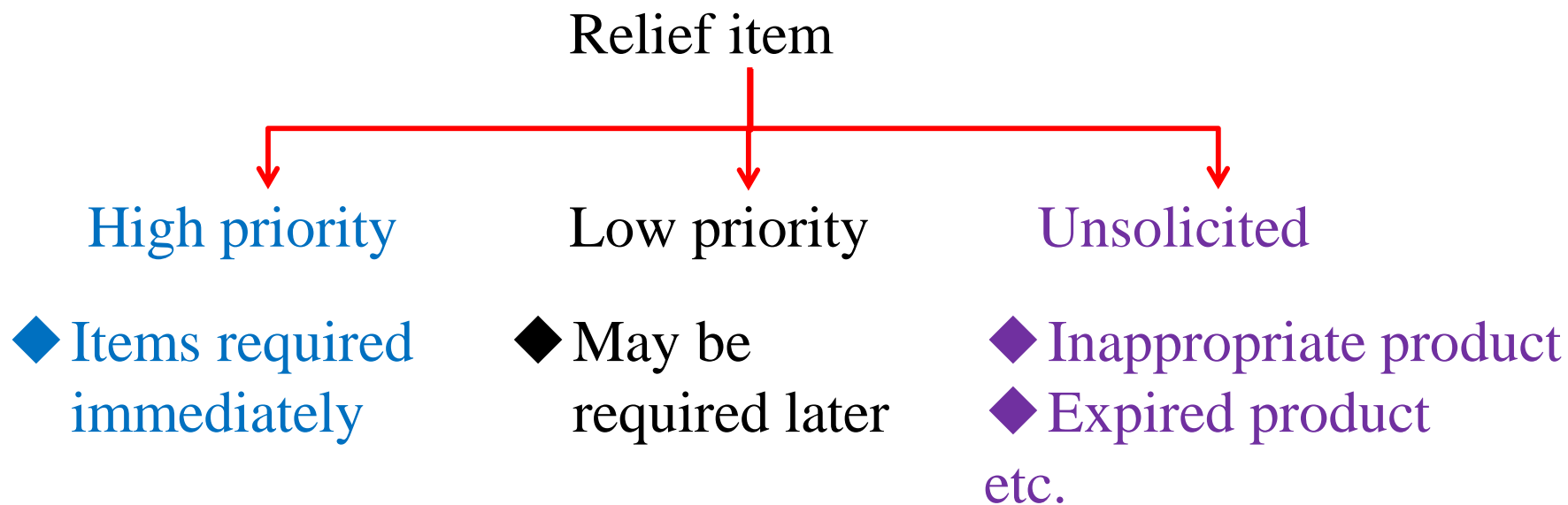
◆ Customs processing was strict

On Friday, Nepal was reported to have exempted only tarpaulins and tents from import taxes, prompting UN resident representative Jamie McGoldrick to warn the government to loosen customs restrictions to deal with the increasing flow of relief material. The guardian , May 2

◆ Many victims did not receive relief support.



# Classification of relief item



## Need to avoid



A massive pile of **useless** cloth after Haiti earthquake 2010; (source JHV)

Similar situation was observed after Japan earthquake

# Leaving Kathmandu

1. People is interested to leave Kathmandu due to poor support
2. There are limited number of bus (or other transport)
3. High density of Kathmandu makes relief distribution challenging

## Nepal earthquake: Kathmandu residents flee as relief stalls

THE AUSTRALIAN | APRIL 30, 2015 12:00AM

[AFP](#)

More: [AFP](#)

**Riot police battle to contain crowds trying to leave Kathmandu**

 AFP

### Density

Kathmandu	Tokyo
13225 person/ sq km	6038 person/sq km
Source: wikipedia	

## Suggestion

1. Cash donation to donor is preferable
2. Procurement of relief items from local market
3. Collaboration with local organization to understand victims need
4. Priority of relief: Avoid bringing unsolicited item
5. Priority of need changes frequently.
6. Centrally updated information sharing

Thank you for listening

For further contact

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# Updated route, Nepal-WFP

