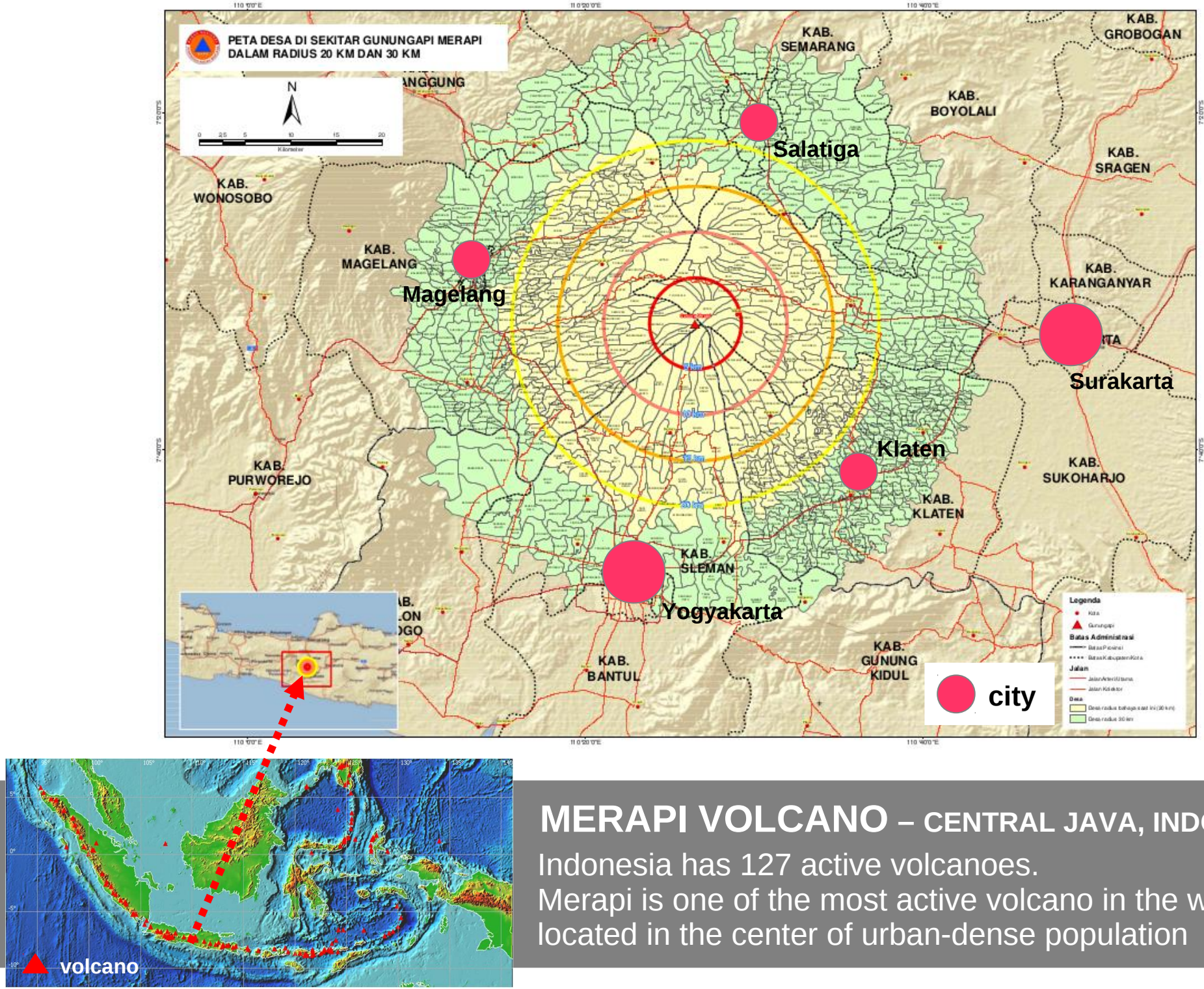


JALIN MERAPI
Information Network Across Merapi Volcano

Elanto Wijoyono
JALIN Merapi
Yogyakarta – Indonesia

GSMA's South East Regional Event – Jakarta, June 25th, 2014

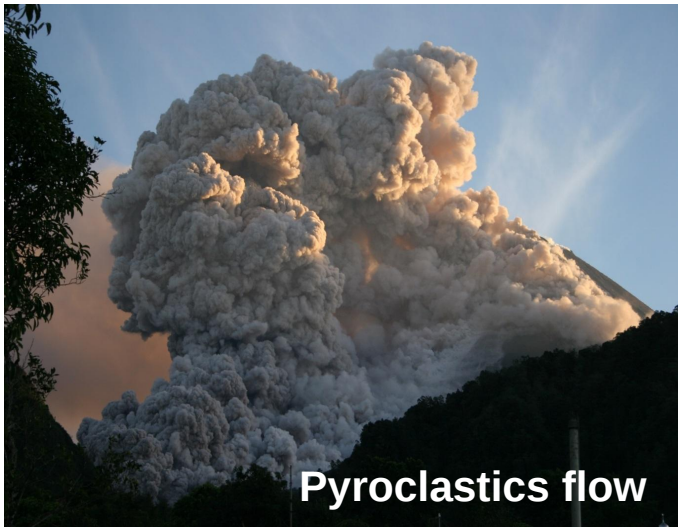


MERAPI VOLCANO – CENTRAL JAVA, INDONESIA

Indonesia has 127 active volcanoes.
Merapi is one of the most active volcano in the world located in the center of urban-dense population

THE THREAT OF MERAPI ERUPTION

















Photos: online media

Casualties:

1930: 1.359 people
1994: 64 people
2006: 2 people
2010: 353 people








LOCAL COMMUNITY OF MERAPI AND THEIR DAILY ACTIVITIES





Photos: Daniel J. Allen











Merapi Meletus

Inilah 5 Keputusan Presiden soal Merapi

Penulis : KOMPAS.com Hindra Liu | Jumat, 5 November 2010 | 14:21 WIB



Presiden Susilo Bambang Yudhoyono saat berkunjung di tenda pengungsi letusan Merapi. | ABROR RIZKI/ PRESIDENSBY.INFO

0 share 0 tweet 0 +1 komentar



JAKARTA, KOMPAS.com — Presiden Susilo Bambang Yudhoyono mengeluarkan lima keputusan terkait penanganan letusan Gunung Merapi.

Berikut lima keputusan Presiden yang disampaikan di Kantor Presiden, Jumat (5/11/2010).

1. Kendali operasi tanggap darurat mulai hari ini satu komando



VIVANEWS

VIVA |

| POLITIK | BISNIS | NASIONAL | METRO | DUNIA | SAINSTEK | SPORT | OTOMOTIF | SO

Sabtu, 13 Juli 2013 | 14:45 WIB VIDEO FOTO

FOKUS

Tatkala Presiden SBY Berkantor di Yogya

Presiden memantau langsung tanggap darurat karena krisis Merapi tak bisa diprediksi.

Minggu, 7 November 2010, 23:31 Ita Lismawati F. Malau, Nur Farida Ahniar, Sandy Adam Mahaputra



Presiden SBY di lokasi pengungsi Merapi, Purwobinangun, DIY (Rumah Tangga Presiden/Abror Rizky)

Follow us on Like 1.2m Follow 1.2M followers

BERITA TERKAIT

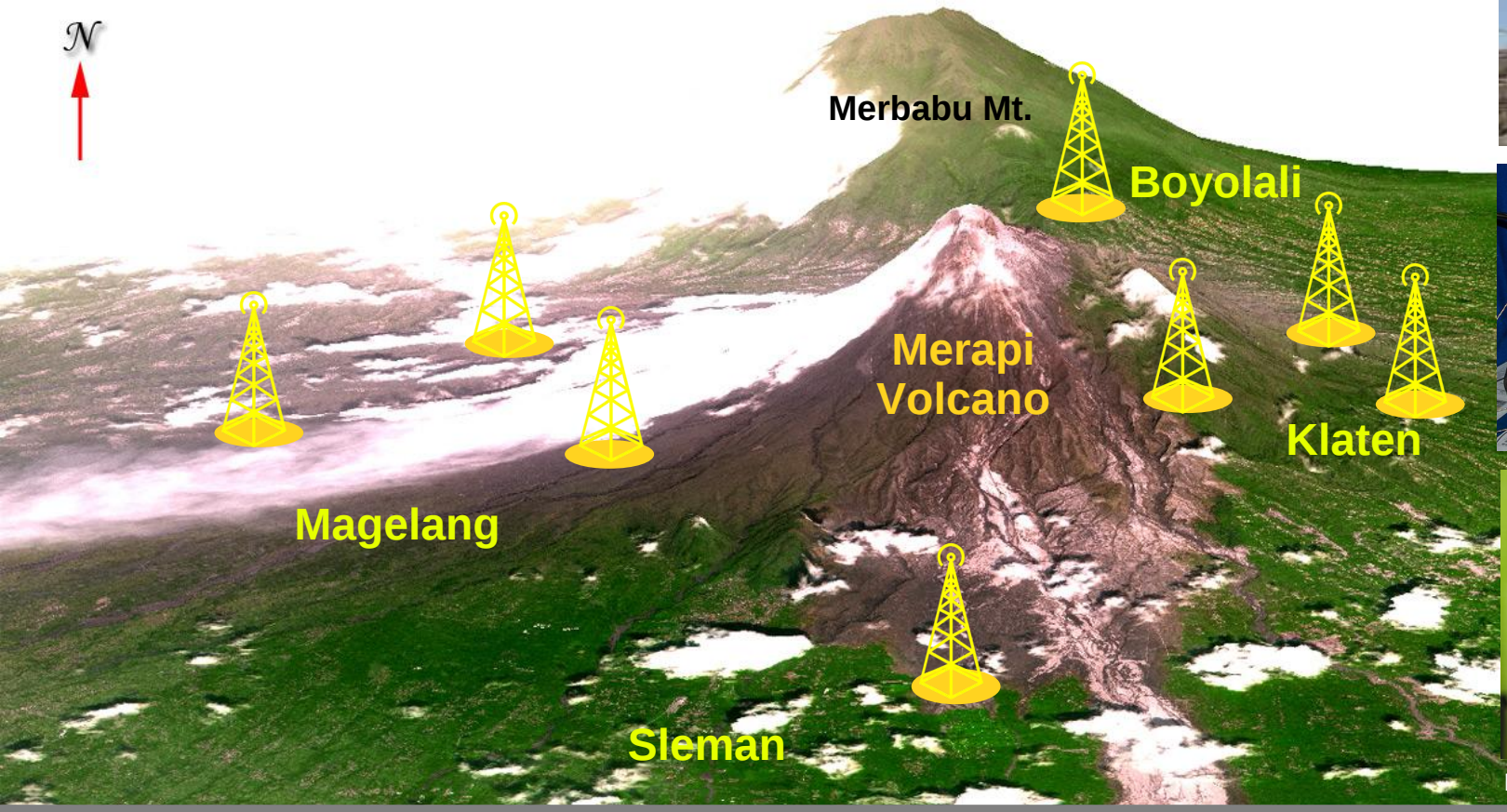


77 Jenazah Korban Merapi

WHAT MEDIA SAY ABOUT MERAPI ERUPTION ...

STAKEHOLDERS OF JALIN MERAPI:

- PASAG MERAPI (local people forum in 4 districts)
- Walkie-Talkie radio communication network
- The Netizen
- Government agencies and NGOs









Photos: Daniel J. Allen, detik.com

JALIN MERAPI
Jaringan Informasi Lingkar Merapi

JARINGAN INFORMASI LINGKAR MERAPI
INFORMATION NETWORK ACROSS MERAPI

8 Community Radios around Merapi since 2006

JALIN Merapi

Pic: http://www.crisp.nus.edu.sg/coverages/Merapi2010/sateimages/Merapi20101120-1a.jpg

MEMBER OF JALIN MERAPI - COMMUNITY RADIO

Year to join JALIN Merapi	Sleman Regency	Klaten Regency	Boyolali Regency	Magelang Regency
2006 (founder)		Lintas Merapi FM	MMC FM	K FM
2007				
2008				
2009				
2010				
2011	Gema Merapi FM			Lahara FM
2012				
2013			Merapi FM, Gemi Nastiti FM	Gema Swara FM
2014				



THE COMMUNITY RADIOS





OnAir Program

music, talkshow, news, report







Photos: Elanto W., Lintas Merapi FM





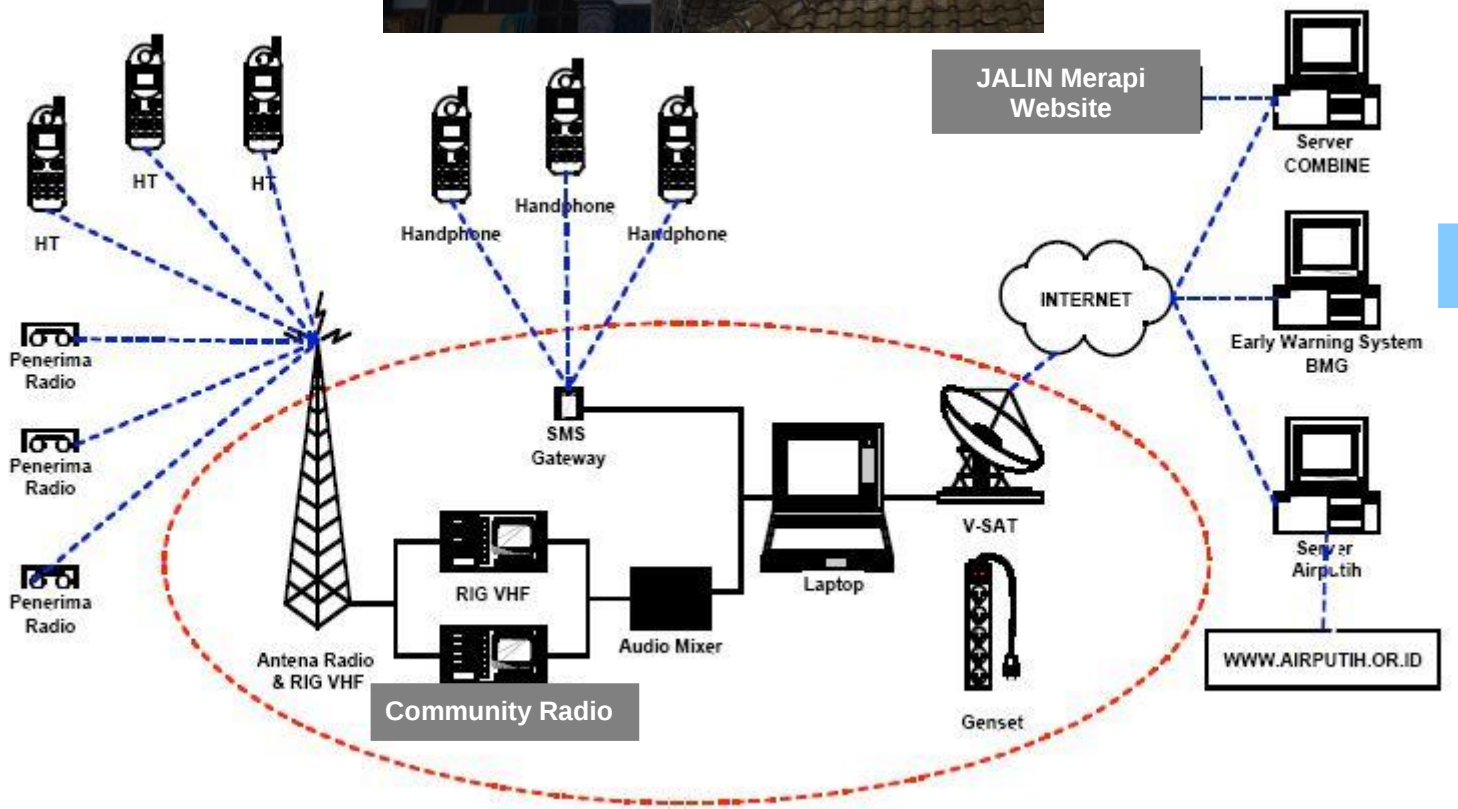
OffAir Program

community gathering, training/public education program, children program, traditional performance, etc

THE USE of IT - MEDIA CONVERGENCE



Local community of Merapi



Community outside Merapi

2006 - 2010

THE USE of IT - MEDIA CONVERGENCE



















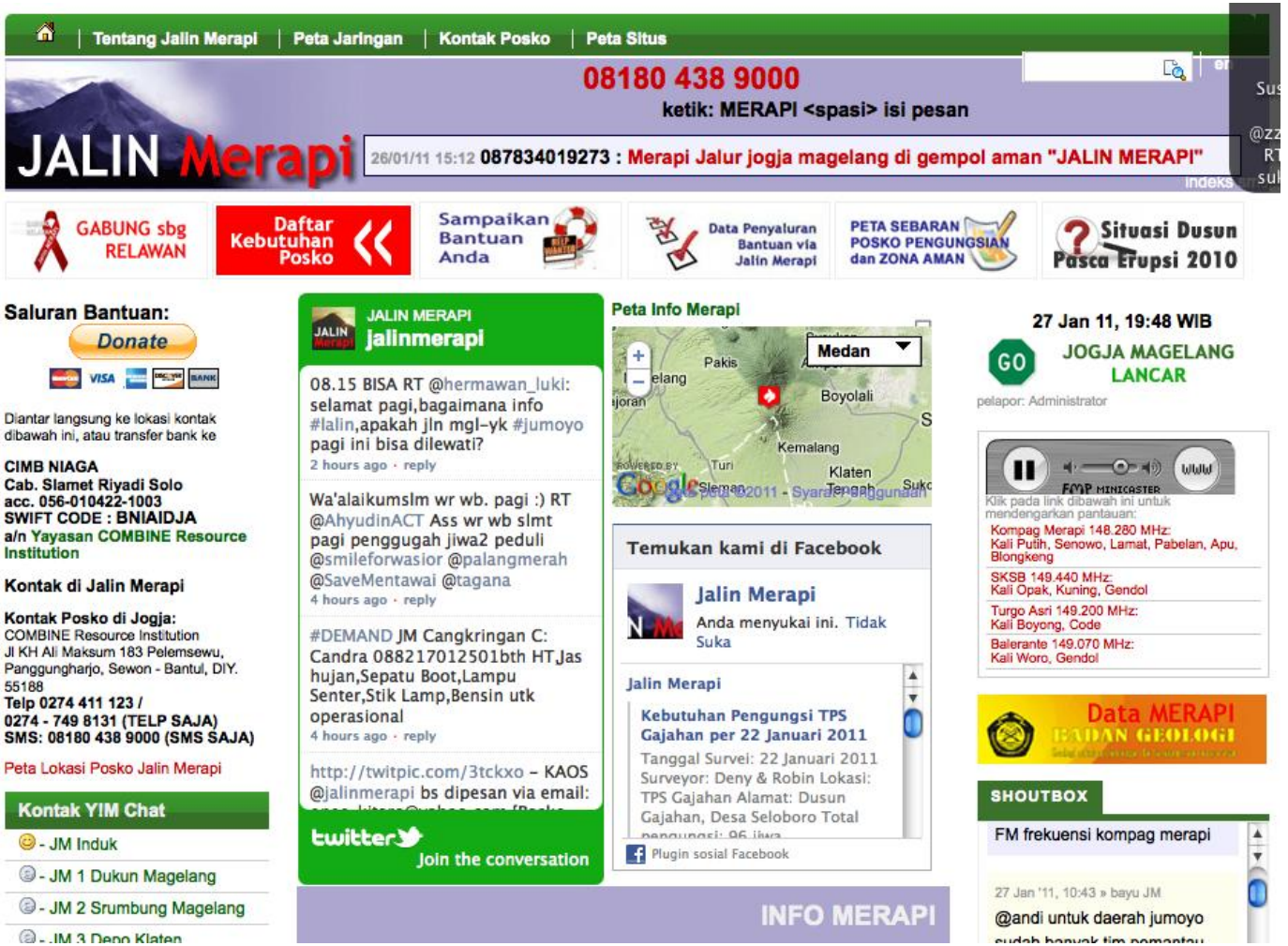




From OnAir to Online
Since 2010 - Now





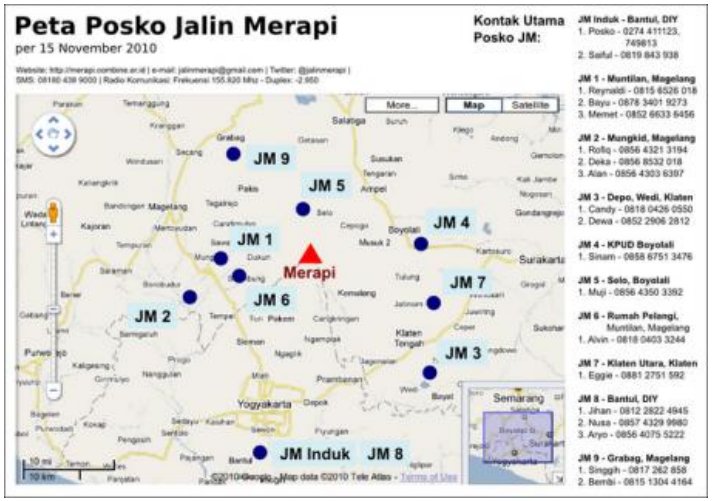


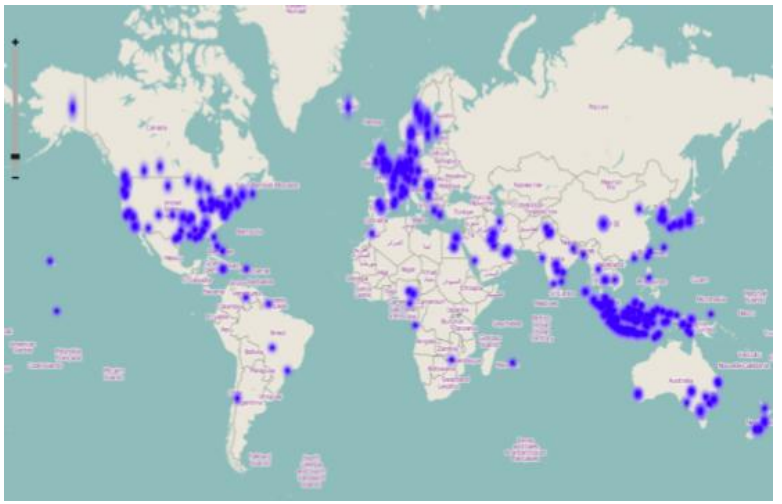
CROWDSOURCING via SOCIAL NETWORKING MEDIA DURING MERAPI ERUPTION in 2010













VOLUNTEER COORDINATION POSTS
(3000 persons in 2010 eruption)

DISTRIBUTION OF @jalinmerapi FOLLOWERS
(30.000 accounts in 2010 eruption)

THE ROLE OF SOCIAL MEDIA IN MEETING THE NEEDS BETWEEN IDP'S AND DONORS

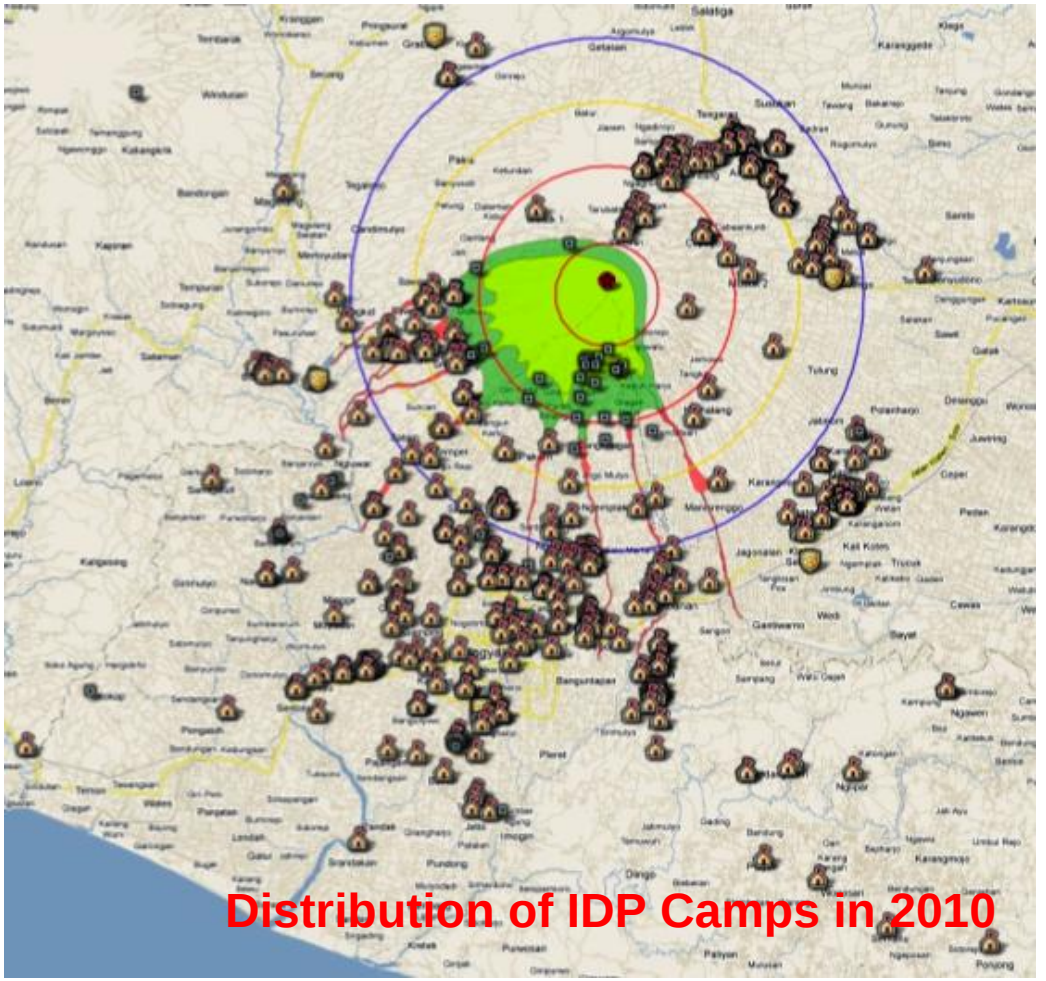
















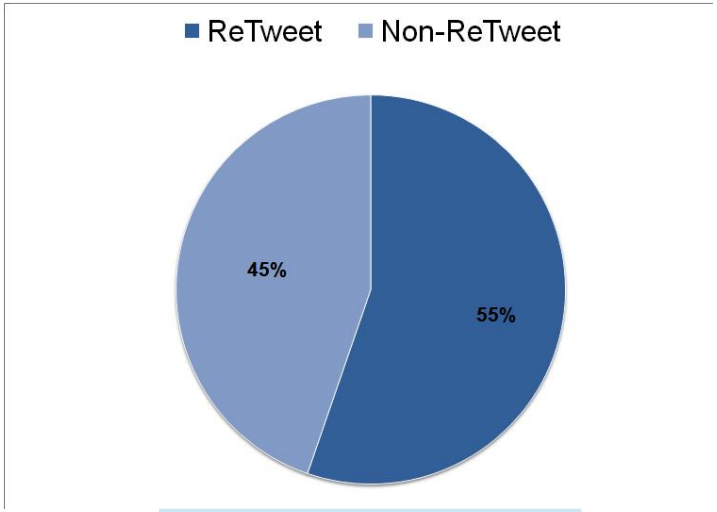




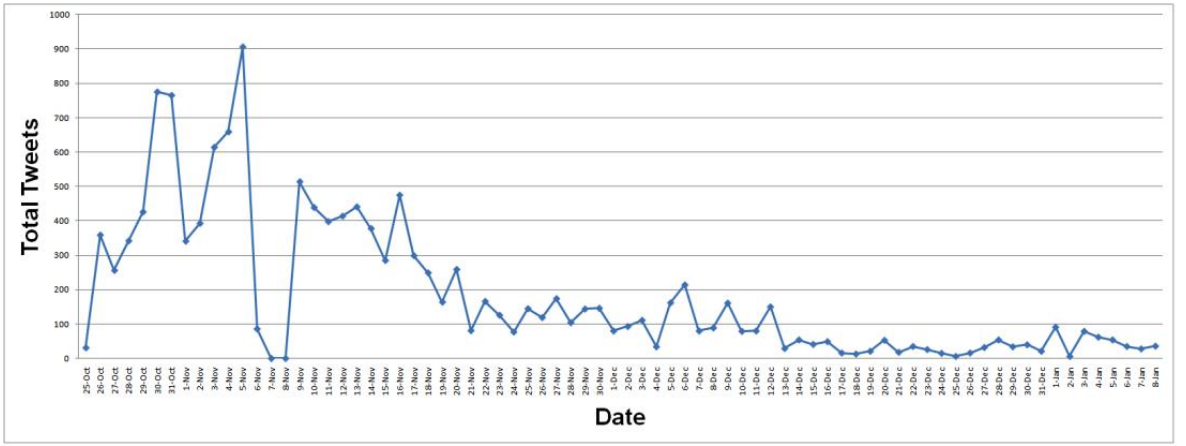
THE ROLE OF SOCIAL MEDIA IN MEETING THE NEEDS BETWEEN IDP'S AND DONORS

- Grass needed by the IDP's to feed their cattle in the shelters
- Volunteer shared it to FB
- @jalinmerapi forwarded the message to the timeline
- Some of @jalinmerapi follower had initiatives, SMS his/her partner: farmers in other region
- The message broadcasted through mosque's loud speakers
- The farmers collected the grass voluntarily
- Information about the grass sent through SMS to the memebr of JALIN Merapi FB Group
- The message broadcasted to the timeline by @jalinmerapi Twitter accounts: truck/cars needed to pick up the grass
- Transports provided by volunteers, picked up the grass and bring it to the IDP's shelter

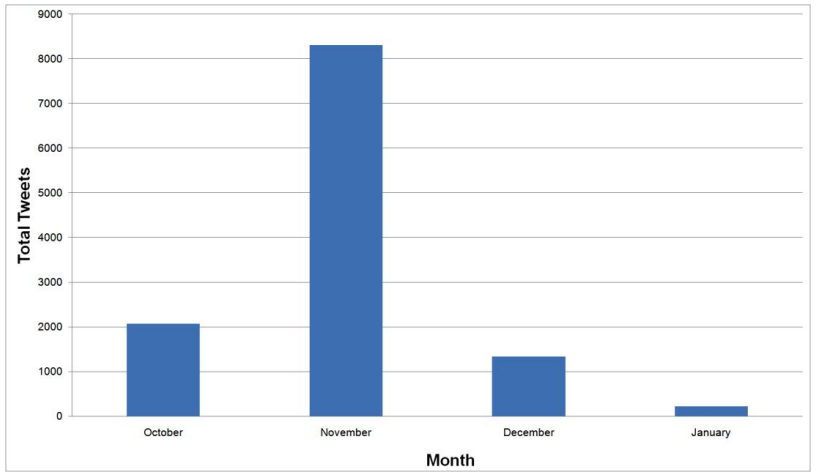
Tweet Analysis – Tweet & Retweet



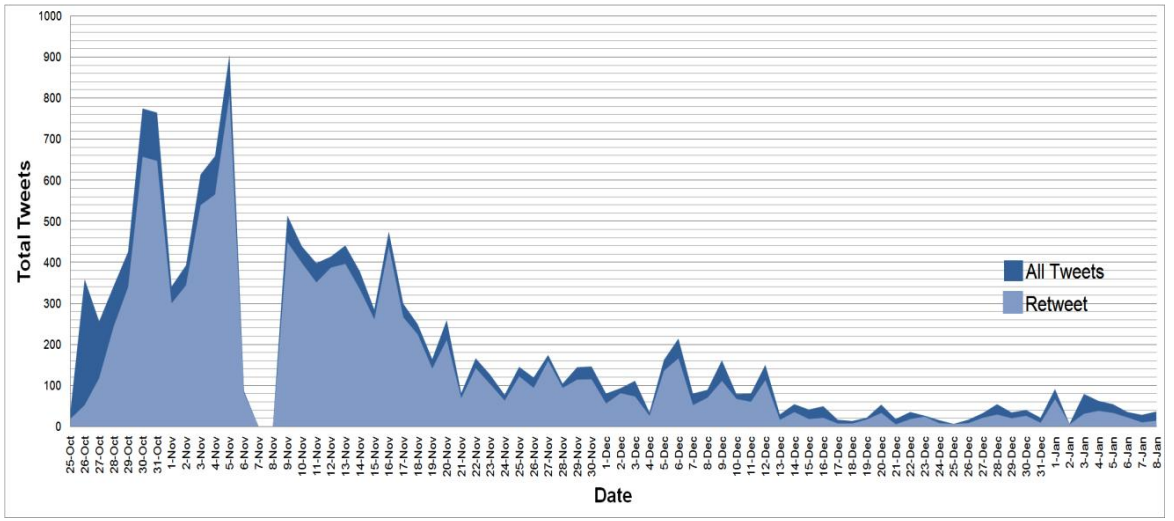
Percentage of retweet



Number of tweet



Number of tweet

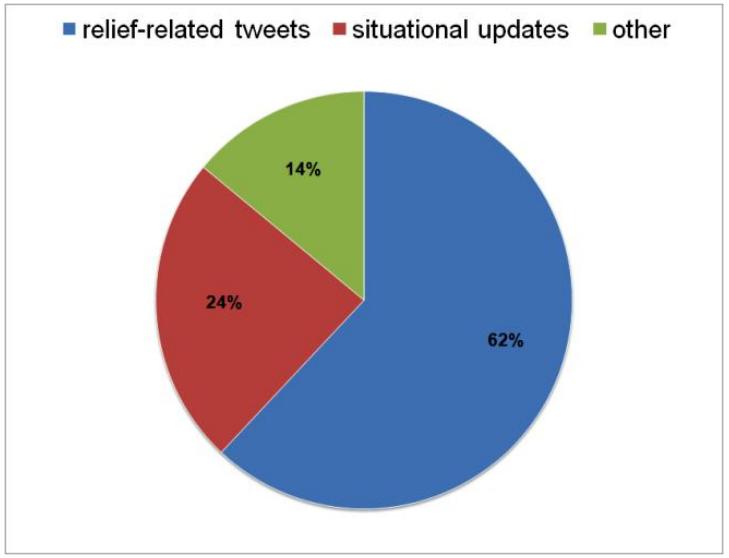


Number of retweet

Tweet Analysis - Hashtags



Popular words @jalinmerapi

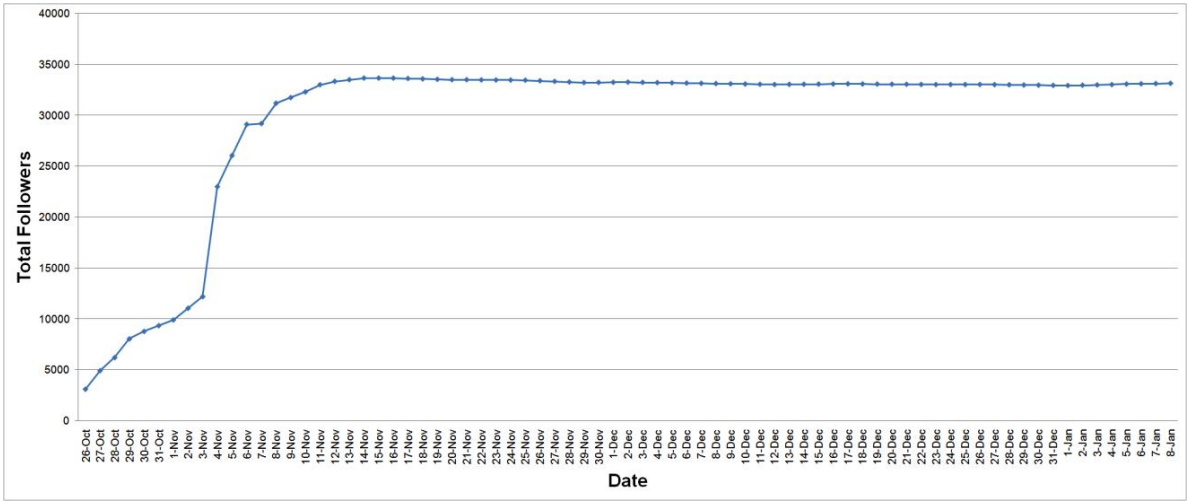


Percentage of hashtags use

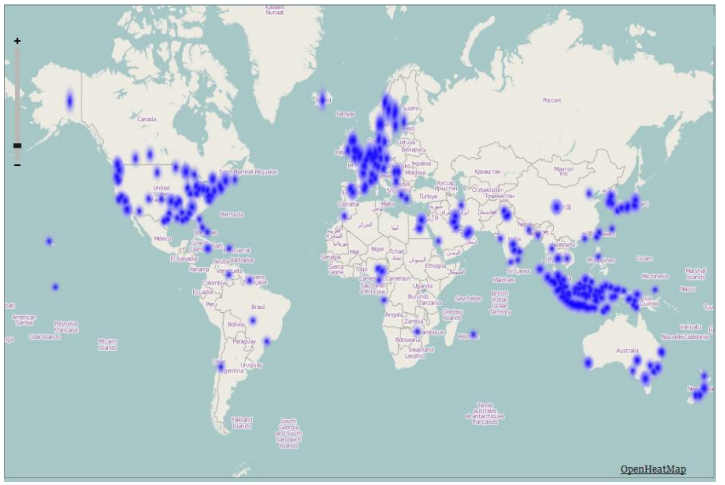
Category	Hashtag
Location	#SRUMBUNG, #KALICODE, #JOGJA, #MGL, #MENTAWAI, #MUNTILAN, #WASIOR, #KALIPUTIH, #BOYOLALI, #MUNGKID, #BYL, #KLATEN, #MAGELANG, #KLT, #YOGYA, #BROMO, #KALIGAJAHWONG, #KALIWINONGO, #BARAK, #POSKOFISIP_UAJY, #POSKO, #CODE, #KALIBOYONG, #KALI, #YK, #CP, #KALIOPAK,, #JOGJAUPDATE
Relief-related	#RELAWAN, #MEDIS, #NASBUNG, #TRANS, #DONASI, #GENSET, #BAJU, #HEAL, #OBAT, #DAPUR, #LOGS, #KARUNG, #QURBAN, #DARAH, #HT, #DROP, #HEALING, #TRANSPORT, #TERNAK, #ANAK, #CARGO, #BAYI, #LOGISTIK, #AIRPUTIH, #IDE, #URGENT, #PEDULIMERAPI, #HELP, #PRAYFORINDONESIA, #AKSI, #ACT, #IDCERITA, #SURPLUS, #BUTUH, #DEMAND, #SUPPLY
Situational updates	#LALIN, #JALANALTERNATIVE, #INFOJALAN, #UPDATE, #LISTRIK, #HUJAN, #ZONA, #ALERT, #BANJIR, #LAHARDINGIN, #GUNUNG
General information	#MERAPI, #INFO, #SHARE, #ASK, #HILANG, #DENGAR, #VIDEO, #PIC

Hashtag Classification

Tweet Analysis – Follower & Volunteer



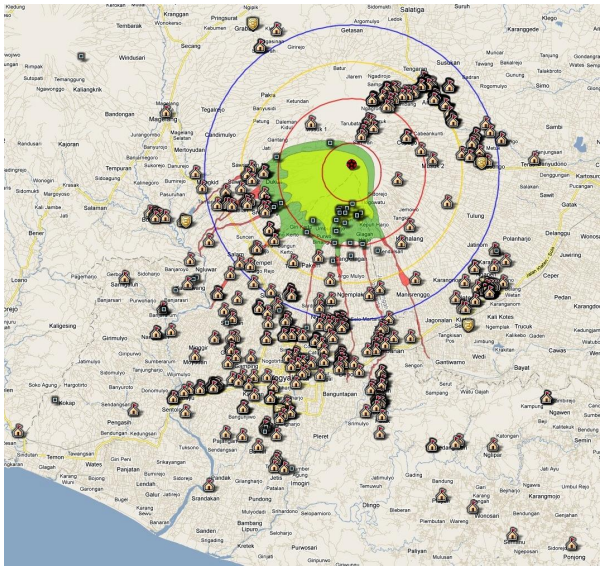
Growth of follower



Map of follower

accounting administration advertising agriculture American-studies anthropology architecture arts astronomy biology business chemical-engineering child-education civil-engineering communication computer-engineering computer-science counseling dentistry design economy English-literature environmental-science food-technology geography geology geophysics industrial-engineering informatics information-technology international-relation journalism Korean-studies law management marine-science&technology mathematics medical mineral-engineering music-education nuclear-engineering oceanography petroleum pharmacy philosophy political-science psychology social-science sociology theology urban-planning veterinary

Majors represented at @jalinmerapi network



Map of IDP's Shelters & distribution of volunteer

Lesson Learned from 2006 - 2010

- COLLABORATIVE INVOLVEMENT of ALL STAKEHOLDERS
- CONVERGENCE of TECHNOLOGY/MEDIA
- SPEED, ACCURACY and TRUST → PUBLIC VERIFICATION







THE RECENT PROGRAM OF

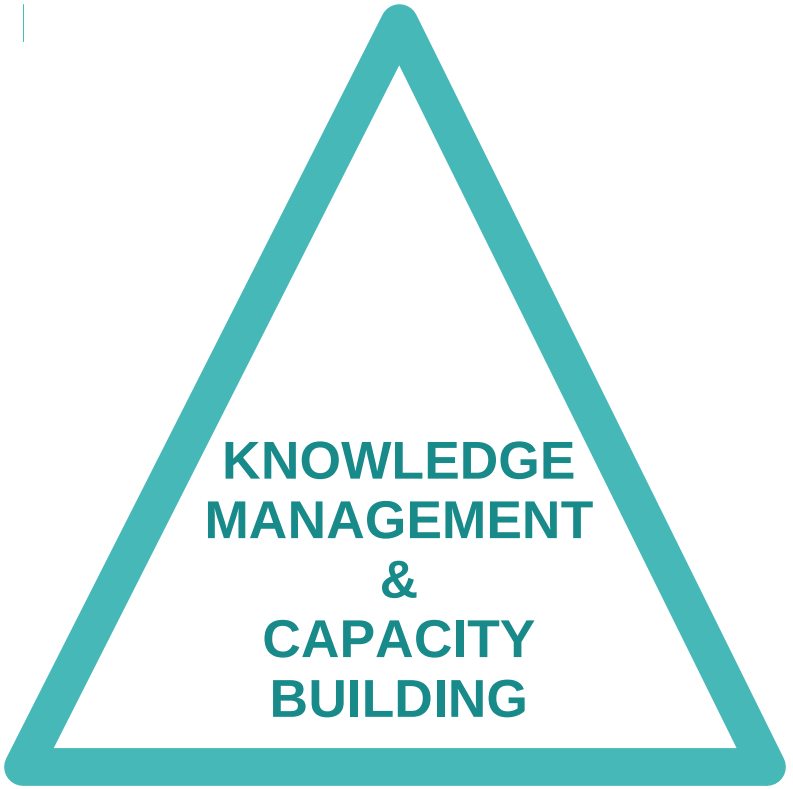
JALIN MERAPI

Jaringan Informasi Lingkar Merapi



DISASTER RISK REDUCTION (DRR) PROGRAM

COMMUNITY
RADIO/MEDIA



VILLAGE GOVERNMENT

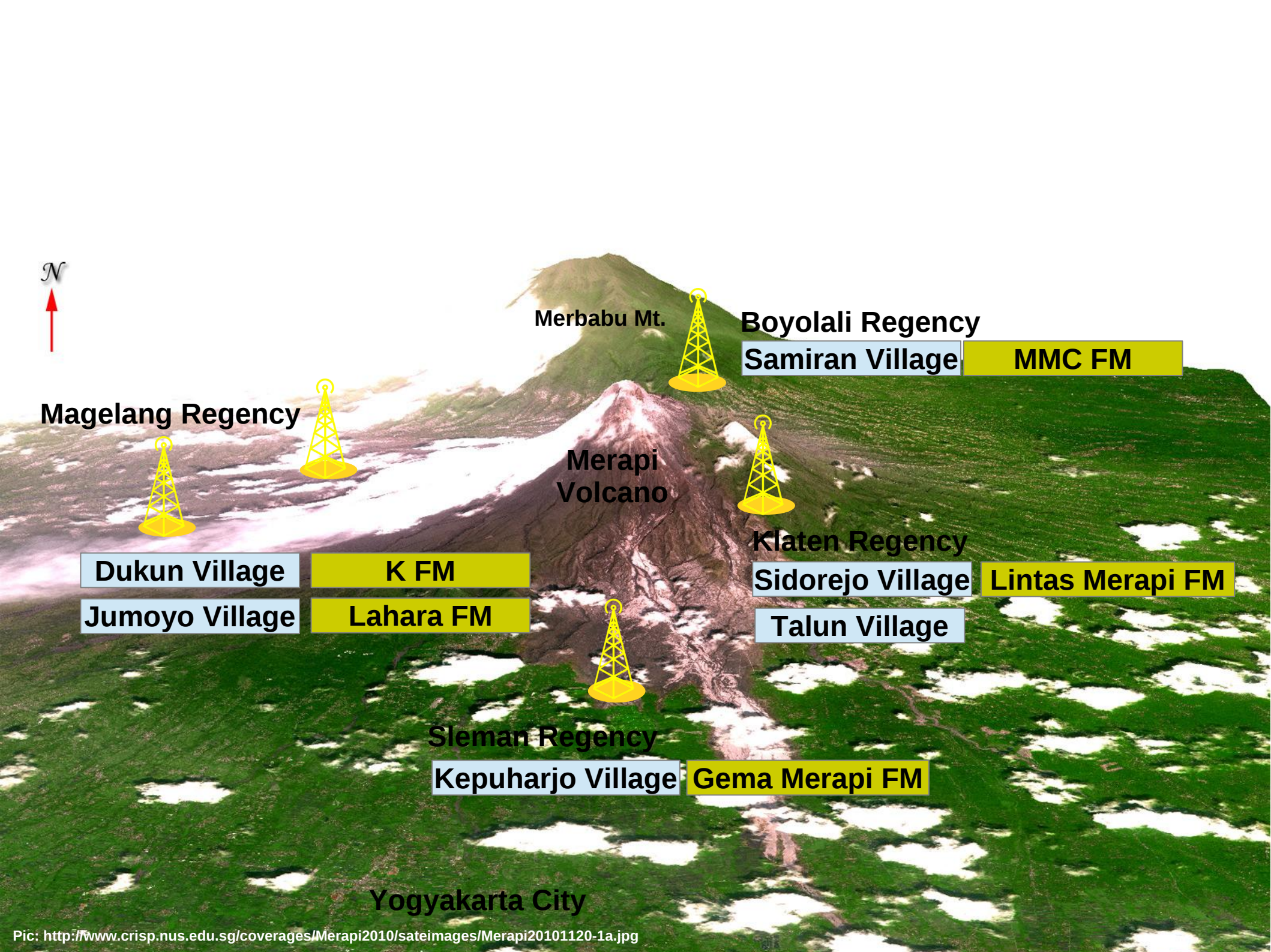
DRR TEAM (IN THE VILLAGE LEVEL)



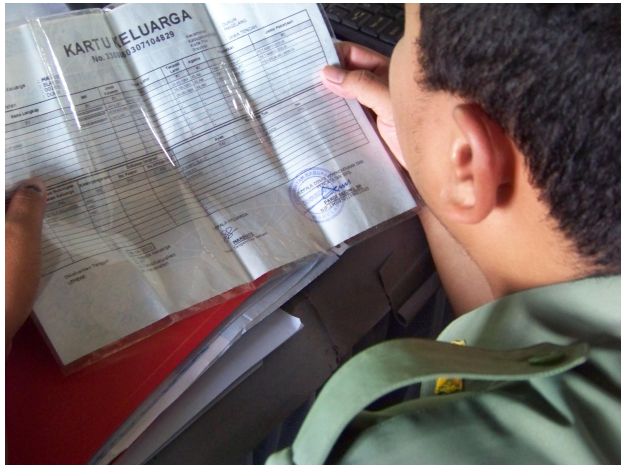




Collaboration program between:
- COMBINE Resource Institution (http://combine.or.id)
- FMYY Kobe Japan (http://www.tcc117.org/fmyy/en/)
- 5 Community Radios in Merapi
- 6 Village Government in Merapi



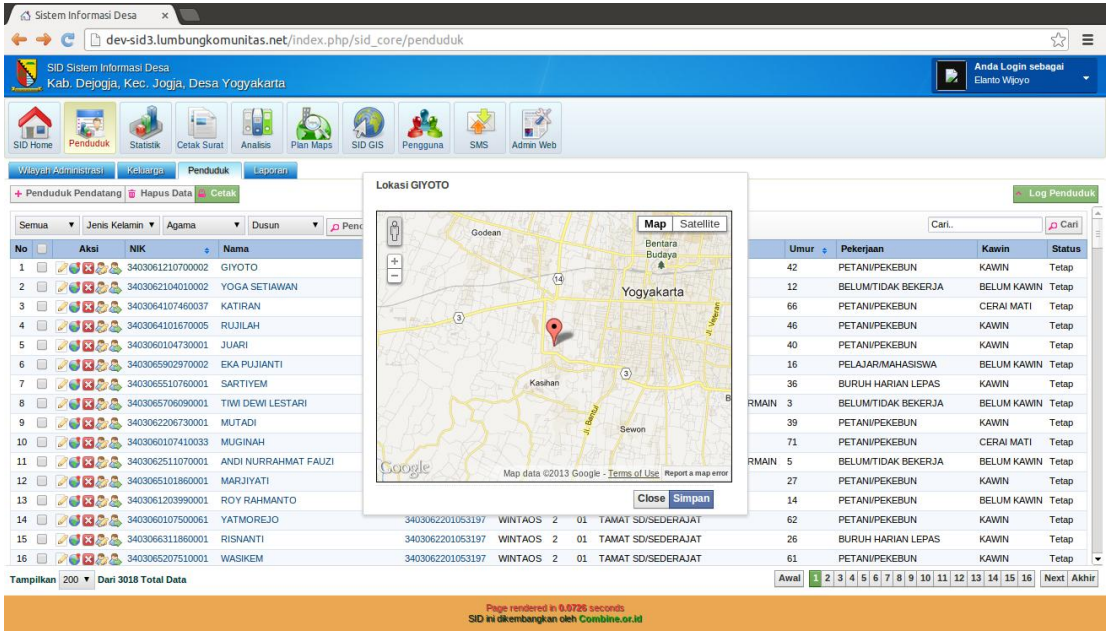
Pic: http://www.crisp.nus.edu.sg/coverages/Merapi2010/sateimages/Merapi20101120-1a.jpg

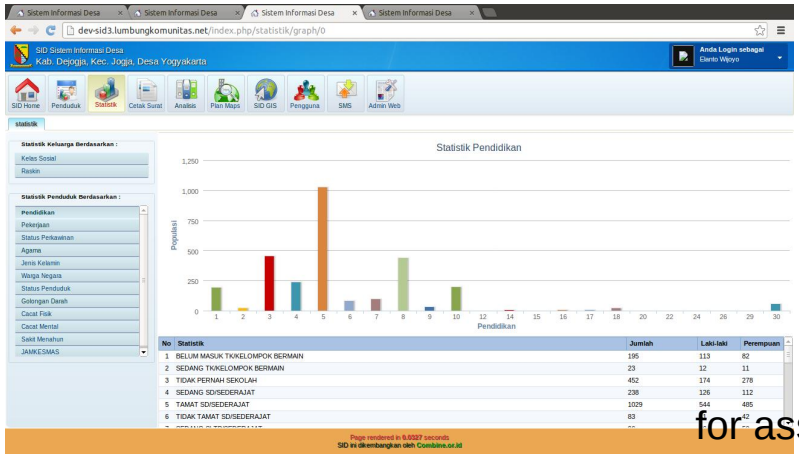












VILLAGE GOVERNMENT

Development & implementation of village information systems.
An open source initiative of database management systems
for asset-based community development by COMBINE Resource Institution
(http://lumbungkomunitas.net - Sistem Informasi Desa/Village Information Systems)













DISASTER RISK REDUCTION (DRR) TEAM

Simulation of evacuation/Emergency drill
BOKOMI program with primary school students











COMMUNITY RADIO

Develop Disaster Management Audio Material (DMAM) beside the regular OnAir Program









Documentation of the experiences and knowledge on Merapi
from the community radio member and local community.
The audio material will be broadcasted onair and uploaded online.

DMAM Workshop













Photos: Junichi Hibino (FMYY Kobe)
Video (links): - http://www.youtube.com/watch?v=MraBWh4Regs
- http://www.youtube.com/watch?v=qSX0oAeBw9M

Documentation of local/traditional knowledge

Video (links): - http://www.youtube.com/watch?v=my_IM_TJCOk
- http://www.youtube.com/watch?v=D7_r6rZD1OY

DMAM Workshop







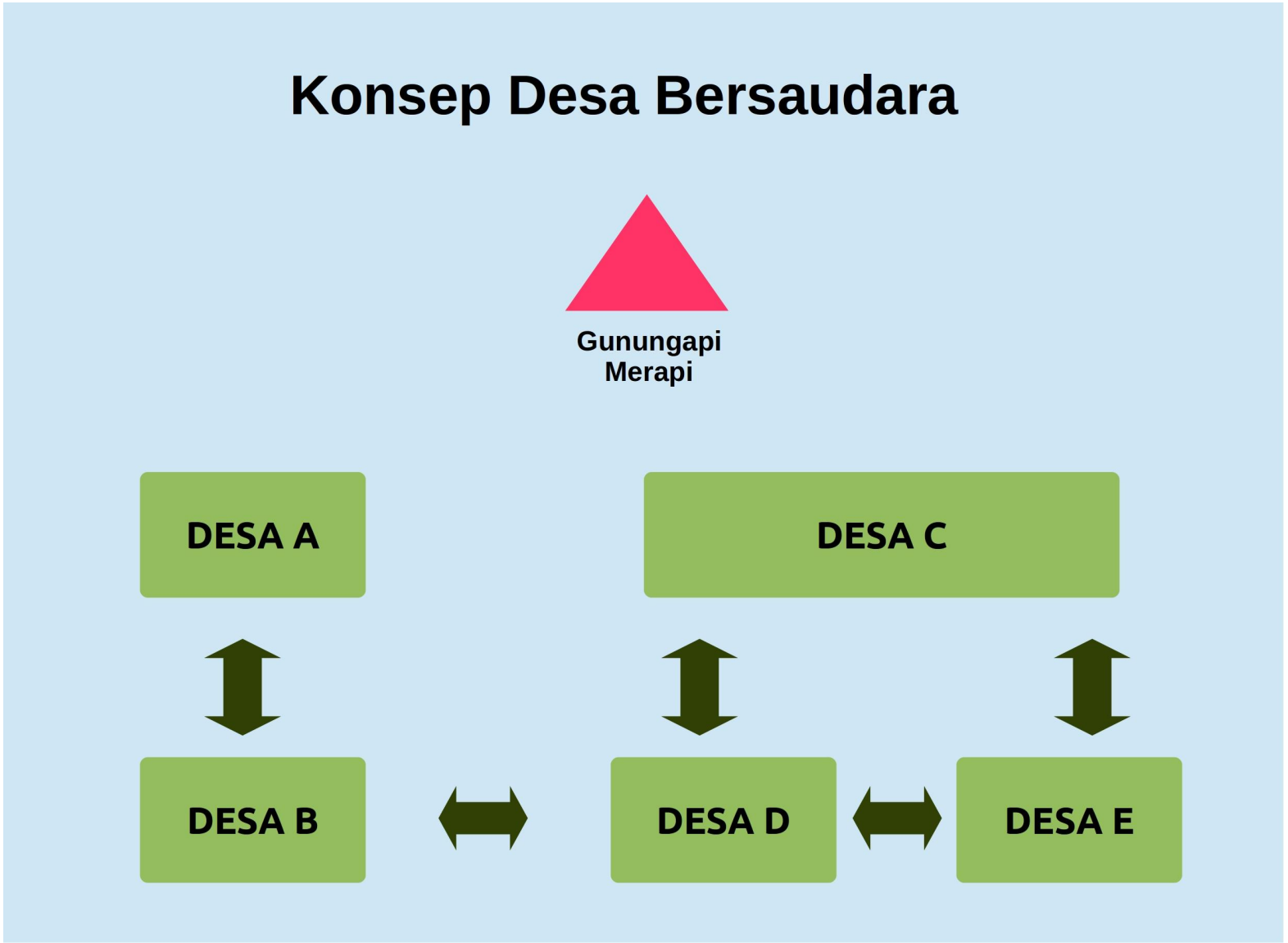






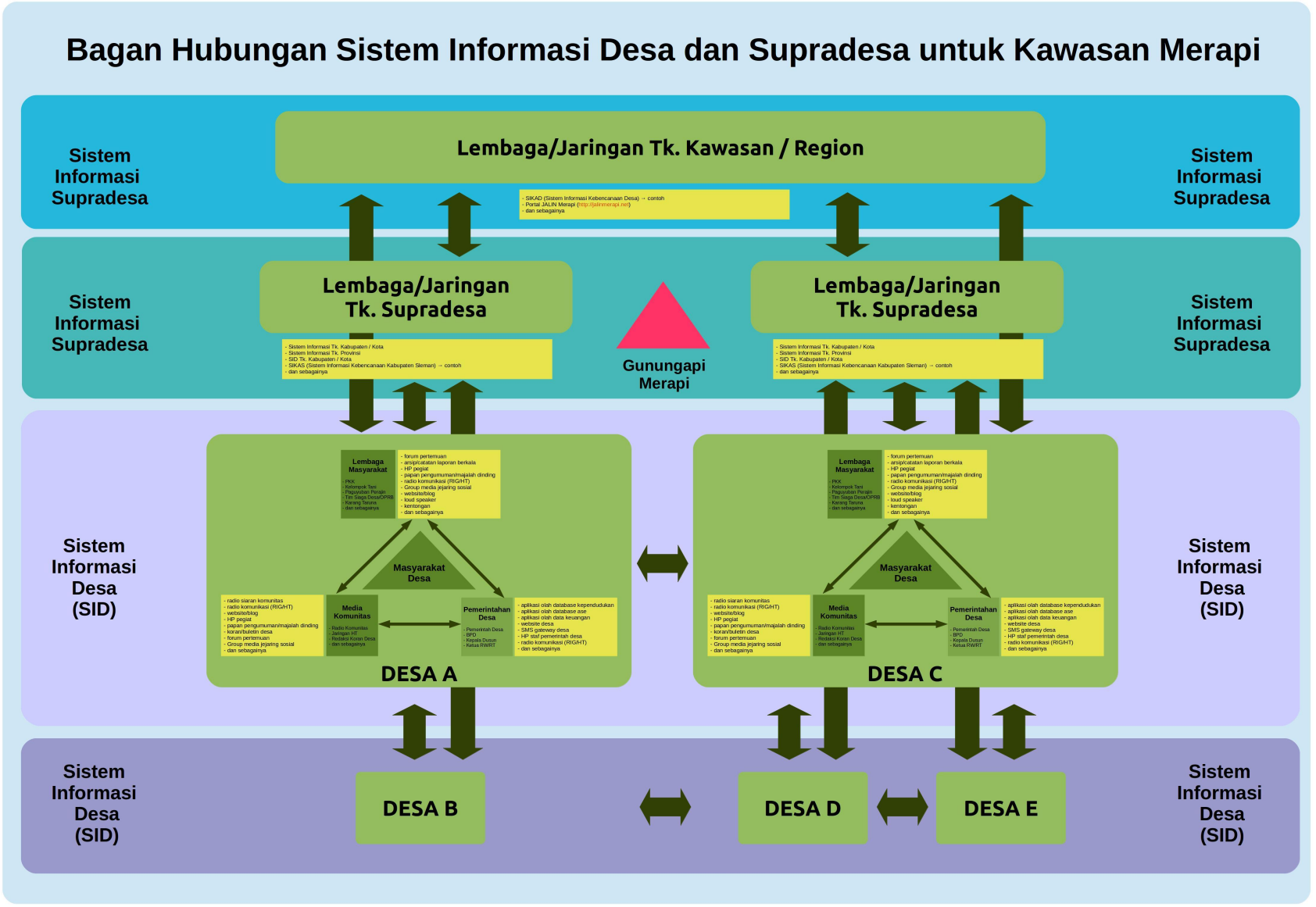


SISTER VILLAGE (DESA BERSAUDARA) PROGRAM



Desa = Village

Relation between Information Systems in the Village Level and in the Area/Regional Level



Information Systems In the Area/Regional Level

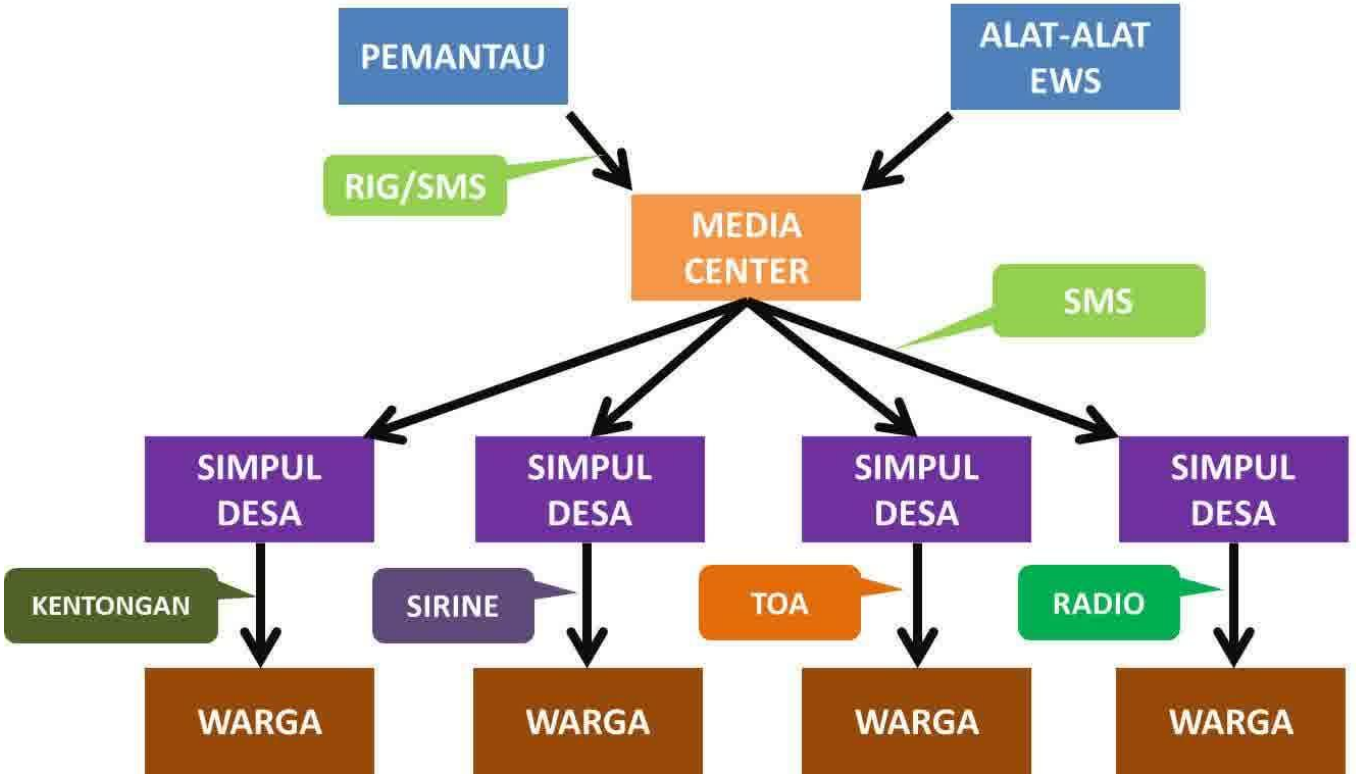
Information Systems In the District Level

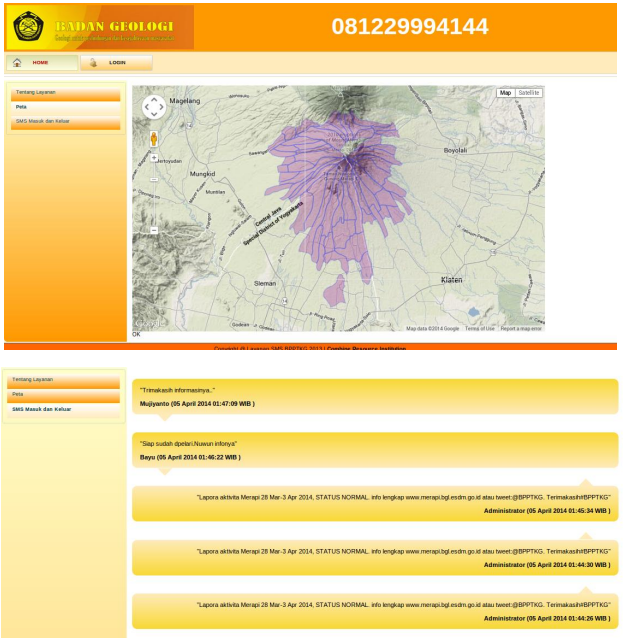
Information Systems In the Village Level

Information Systems In the Village Level

SIKAD MERAPI BY GEOLOGICAL AGENCY

Alur Informasi Peringatan Dini







SMS Gateway: Early Warning Systems for the Villages around Merapi Volcano

KNOWLEDGE SHARING

ANNUAL INTERNATIONAL FIELD STUDY FROM OSAKA UNIVERSITY









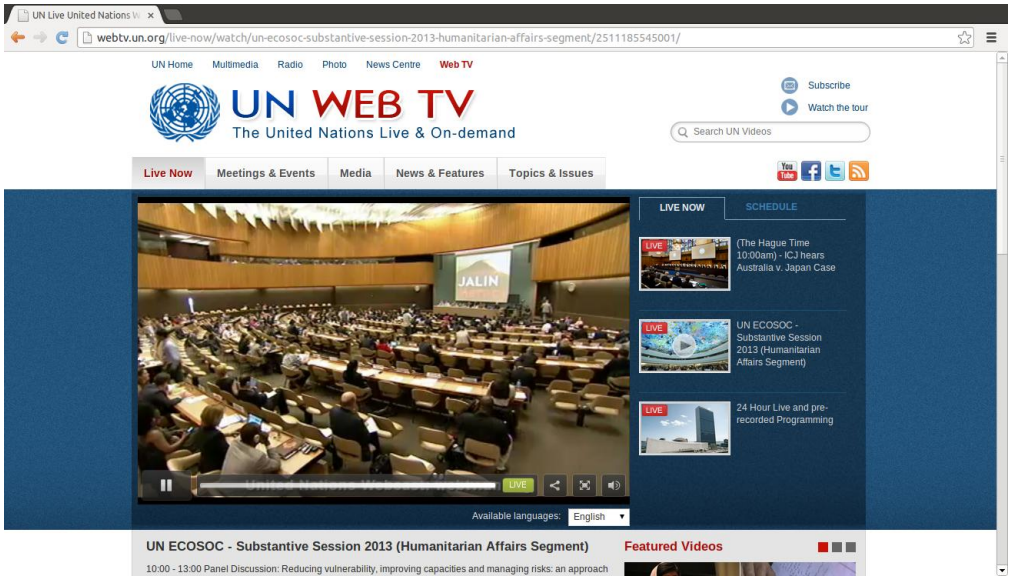
2012

2013

KNOWLEDGE SHARING

PRESENTATION AT THE UN ECOSOC – HUMANITARIAN AFFAIRS SEGMENT IN GENEVA (JULY 16, 2013) BY MR. SUKIMAN (LINTAS MERAPI FM)





KNOWLEDGE SHARING

SERIES OF DISCUSSION/WORKSHOP WITH THE LOCAL & NATIONAL NETWORK













AN IMPORTANT THING TO REMEMBER :

“ It is not technology which will change the world, rather than the People who use it.”

E-mail: jalinmerapi@gmail.com
Website: http://jalinmerapi.net
Twitter: @jalinmerapi, @jalinmerapi_en







UN WEB TV



