



UTILIZATION OF POPULATION DATA AND GEOSPATIAL TECHNOLOGY IN HUMANITARIAN RESPONSE

UNFPA INDONESIA SUPPORT IN DISASTER MANAGEMENT THROUGH THE COOPERATION BNPB AND BPS STATISTICS INDONESIA



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CONTENT



Data and IM support the Government (NDMA)



Data and IM support the Cluster



Cooperation BNPB – BPS Statistics Indonesia



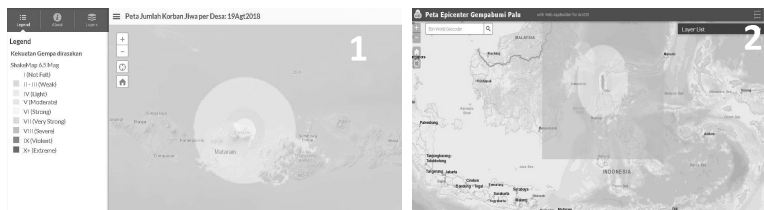
Next Initiative and Challenges

IMPACT DATA STATISTICS

ON LOMBOK EARTHQUAKE AND CENTRAL SULAWESI EARTHQUAKE-TSUNAMI

source: <http://bnpb.cloud>

No	Type of Disaster	Location	Time	Dead	Injured	IDP's	Housing Damaged			Public Facilities Damaged		
							Heavy	Moderate	Slightly	Health	Worships	Schools
1	Earthquake Mag 6.4 depth 15 Km	116.5, -8.4 28 km Northeast East Lombok-NTB Province	29 Jul18/ 5:47:39	562	1,886	431,365	75,138	33,075	108,306	28	65	978
2	Earthquake Mag 7.4, depth 11 Km followed by Tsunami, and Liquefaction	119.89, -0.2 25 Km Northeast of Donggala-Central Sulawesi	28 Sept 18/ 17:02:45	4,402	4,438	212,719	34,198	26,122	40,085	32	327	374
Total				4,964	6,324	644,084	109,336	59,197	148,391	60	392	1,352



DATA NEEDS IN DISASTER MANAGEMENT

BNPB HEAD REGULATION NO. 8 YEAR 2011 ON DISASTER DATA STANDARDIZATION

PRE DISASTER

1. Population Characteristics and Composition
2. Vulnerable groups
3. Literacy
4. Quality of Life
5. Communication
6. Economy
7. Infrastructure and Public Facilities

EMERGENCY RESPONSE

1. Disaster Information (type, time, location coordinate, cause, description, weather condition)
2. Casualties by Sex (Dead, injured, missing)
3. Population Affected (pop affected by sex, number of IDP's)
4. Damage (housing, infrastructure, public facility, etc)
5. IDP's data (location, numb of IDP's based on: sex, age group, vulnerable group, literacy, education and occupation, religion)

POST DISASTER

1. Disaster Information (type, time, location: administrative area and coordinate)
2. Damage Assessment (housing infrastructure, economy productive, social, cross sector)
3. Loss Assessment
4. Rehabilitation and Reconstruction (planning activities and budgeting, realization)
5. Source of Funding

UNFPA INDONESIA ROLE

IN SUPPORTING THE GOVERNMENT DURING EMERGENCY RESPONSE AND POST DISASTER

SUPPORT CLUSTER

- a) support RH and Prevention GBV sub-clusters in data and IM
- b) Data collecting of RH/Youth/GBV using Kobo Collect



1. PREPARATION OF BASELINE DATA OF AFFECTED POPULATION, USING SECONDARY DATA AVAILABLE:

- a) Population Census 2010
- b) PODES 2014
- c) CRVS Data 2017
- d) Population Projection

2. Utilizations of Geospatial Data and Web GIS Portal

- a). Develop ed maps of impact analysis
- b). Working and Operations maps
- c). Logistic distributions maps

POST DISASTER DATA COLLECTION

- a) Facilitated cooperation BNPB-BPS in the development of National Standard Framework on Disaster Data Collection

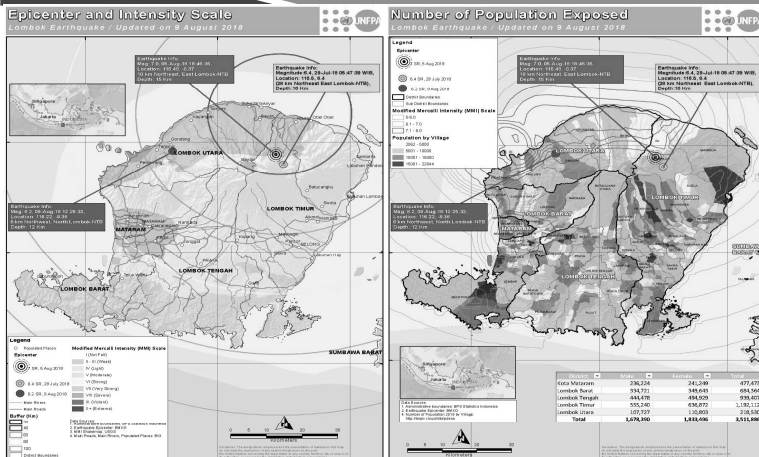
SUPPORT THE NATIONAL DISASTER MANAGEMENT AUTHORITY (BNPB) THROUGH PROVIDING DATA AND INFORMATION MANAGEMENT

(CASE STUDY FROM DISASTER EMERGENCY RESPONSE IN LOMBOK AND CENTRA SULAWESI)

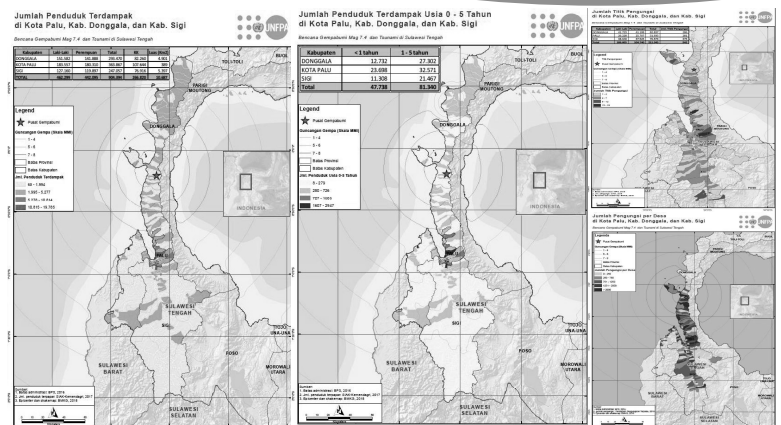


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PREPARING BASELINE DATA OF POPULATION AFFECTED AREA USING CIVIL REGISTRATION AND VITAL STATISTICS (CRVS) DATA 2017



BASELINE DATA OF VULNERABLE GROUPS



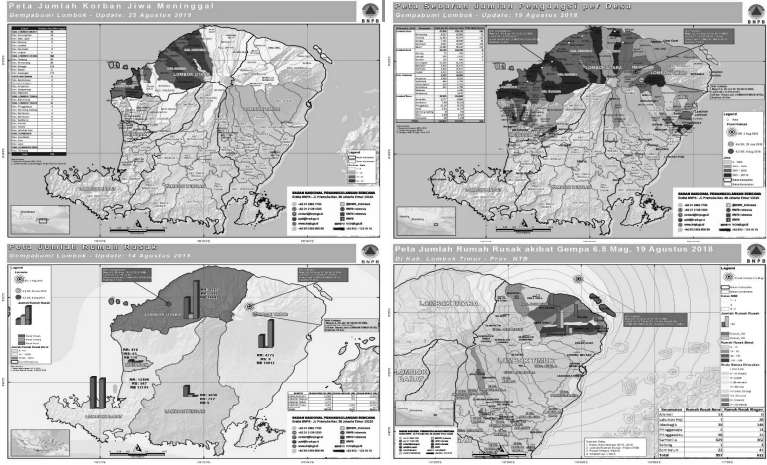
DEVELOPED MAPS AND INFOGRAPHIC

Flash Flood in Sentani, Jayapura District Papua Province, 16 March 2019

No	Camp Name	Number of IDPs	Households
1	Tanah Merah (Gantung Merah)	2,586	348
2	Tanah Merah (Gantung Merah)	151	15
3	Distrik Kabupaten Jayawijaya	75	18
4	Burmesal	182	18
5	Sabon Vere	45	13
6	Pongai	158	17
7	Pongai Luru	150	15
8	Pomona Mijap	3,273	500
9	Kelehu	100	78
10	Kelehu Yubim	170	45
11	Hulawa Timur	600	149
12	Kelehu	1,850	368
13	Kelehu Barat	600	150
14	Kelehu Tengah	23	6
15	Kelehu Selatan	900	225
16	Kelehu Utara	350	118
17	Kelehu Timur	60	20
18	Kelehu Barat	150	18
19	Kelehu Tengah	140	15
20	Kelehu Utara	134	18
21	Kelehu Timur	220	55
22	Kelehu Barat	41	12
23	Kelehu Tengah	123	10
24	Kelehu Utara	133	18
25	Kelehu Timur	138	55
26	Kelehu Barat	117	43
27	Kelehu Tengah	N/A	N/A
28	Kelehu Utara	N/A	N/A
29	Kelehu Timur	N/A	N/A
30	Kelehu Barat	N/A	N/A
31	Kelehu Tengah	N/A	N/A
32	Kelehu Utara	N/A	N/A
33	Kelehu Timur	N/A	N/A
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35	Kelehu Tengah	N/A	N/A
36	Kelehu Utara	N/A	N/A
37	Kelehu Timur	N/A	N/A
38	Kelehu Barat	N/A	N/A
39	Kelehu Tengah	N/A	N/A
40	Kelehu Utara	N/A	N/A
41	Kelehu Timur	N/A	N/A
42	Kelehu Barat	N/A	N/A
43	Kelehu Tengah	N/A	N/A
44	Kelehu Utara	N/A	N/A
45	Kelehu Timur	N/A	N/A
46	Kelehu Barat	N/A	N/A
47	Kelehu Tengah	N/A	N/A
48	Kelehu Utara	N/A	N/A
49	Kelehu Timur	N/A	N/A
50	Kelehu Barat	N/A	N/A
51	Kelehu Tengah	N/A	N/A
52	Kelehu Utara	N/A	N/A
53	Kelehu Timur	N/A	N/A
54	Kelehu Barat	N/A	N/A
55	Kelehu Tengah	N/A	N/A
56	Kelehu Utara	N/A	N/A
57	Kelehu Timur	N/A	N/A
58	Kelehu Barat	N/A	N/A
59	Kelehu Tengah	N/A	N/A
60	Kelehu Utara	N/A	N/A
61	Kelehu Timur	N/A	N/A
62	Kelehu Barat	N/A	N/A
63	Kelehu Tengah	N/A	N/A
64	Kelehu Utara	N/A	N/A
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80	Kelehu Utara	N/A	N/A
81	Kelehu Timur	N/A	N/A
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102	Kelehu Barat	N/A	N/A
103	Kelehu Tengah	N/A	N/A
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106	Kelehu Barat	N/A	N/A
107	Kelehu Tengah	N/A	N/A
108	Kelehu Utara	N/A	N/A
109	Kelehu Timur	N/A	N/A
110	Kelehu Barat	N/A	N/A
111	Kelehu Tengah	N/A	N/A
112	Kelehu Utara	N/A	N/A
113	Kelehu Timur	N/A	N/A
114	Kelehu Barat	N/A	N/A
115	Kelehu Tengah	N/A	N/A
116	Kelehu Utara	N/A	N/A
117	Kelehu Timur	N/A	N/A
118	Kelehu Barat	N/A	N/A
119	Kelehu Tengah	N/A	N/A
120	Kelehu Utara	N/A	N/A
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125	Kelehu Timur	N/A	N/A
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134	Kelehu Barat	N/A	N/A
135	Kelehu Tengah	N/A	N/A
136	Kelehu Utara	N/A	N/A
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138	Kelehu Barat	N/A	N/A
139	Kelehu Tengah	N/A	N/A
140	Kelehu Utara	N/A	N/A
141	Kelehu Timur	N/A	N/A
142	Kelehu Barat	N/A	N/A
143	Kelehu Tengah	N/A	N/A
144	Kelehu Utara	N/A	N/A
145	Kelehu Timur	N/A	N/A
146	Kelehu Barat	N/A	N/A
147	Kelehu Tengah	N/A	N/A
148	Kelehu Utara	N/A	N/A
149	Kelehu Timur	N/A	N/A
150	Kelehu Barat	N/A	N/A



IMPACT ANALYSIS MAPS



WEB GIS TO SUPPORT HUMANITARIAN RESPONSE

HTTP://GIS.BNPB.GO.ID

Geoportals Kebencanaan Indonesia

Web GIS Banjir Bandang Sentani

Data Kebencanaan Indonesia
 Galeri Peta
 Sharing Data Kebencanaan

ONLINE DASHBOARD INFOGRAPHIC

Dampak Gempa NTB



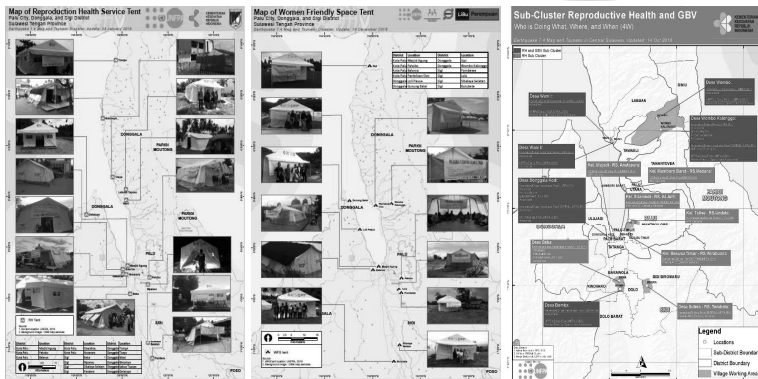
SUPPORT REPRODUCTIVE HEALTH SUB-CLUSTER IN THE DATA COLLECTING AND INFORMATION MANAGEMENT

(CASE STUDY FROM DISASTER EMERGENCY RESPONSE IN LOMBOK AND CENTRA SULAWESI)

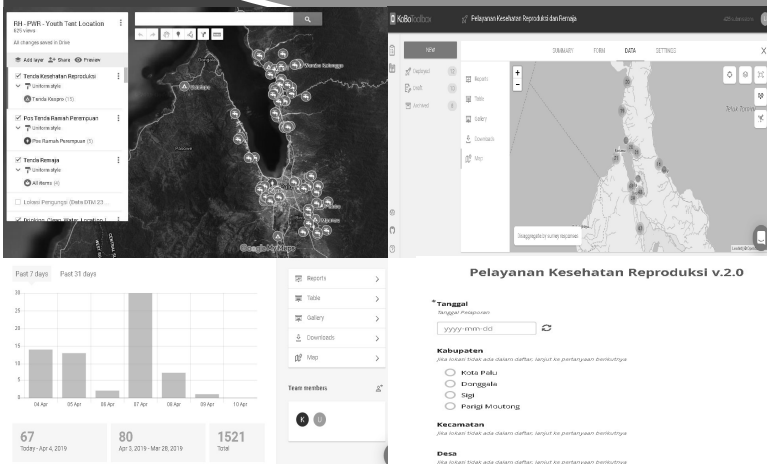


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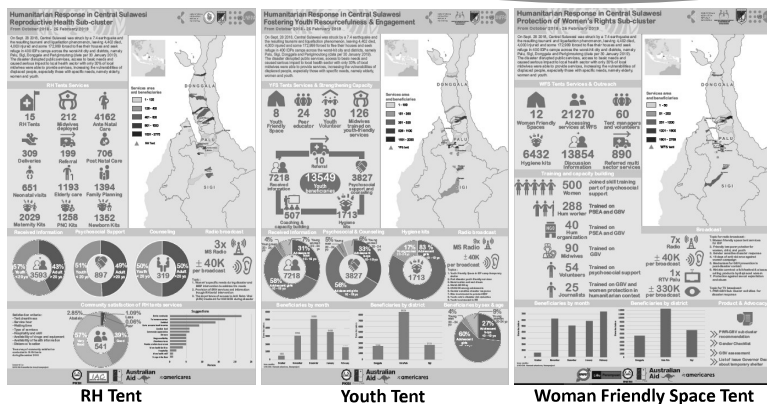
MAPS LOCATION OF REPRODUCTIVE HEALTH/WFS/YOUTH TENT



THE USE OF KOBO COLLECT APPS IN RH TENT SERVICES DATA COLLECTING



INFOGRAPHIC FOR REPRODUCTIVE HEALTH - WOMAN FRIENDLY SPACE - YOUTH TENT SERVICES



KEY ACHIEVEMENT OF THE COOPERATION BNPB AND BPS STATISTICS INDONESIA IN 2013-2018



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POPULATION DATA INTEGRATED INTO DISASTER DATA SYSTEM

HTTP://BNPB.CLOUD

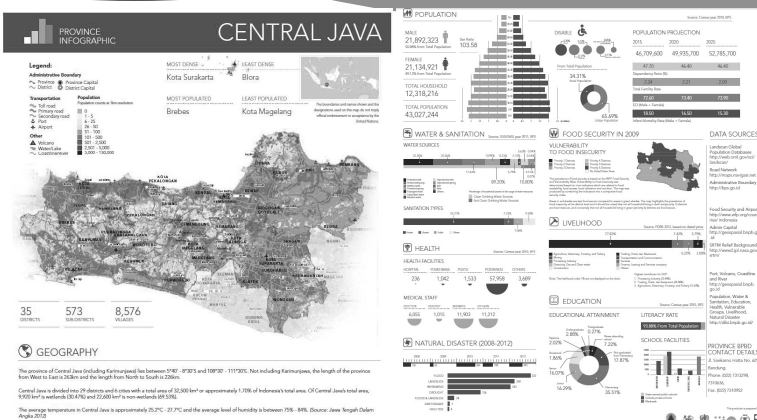
DIBI BADAN NASIONAL PENANGGULANGAN BENCANA

Table 1. Penduduk Menurut Jenis Kelamin

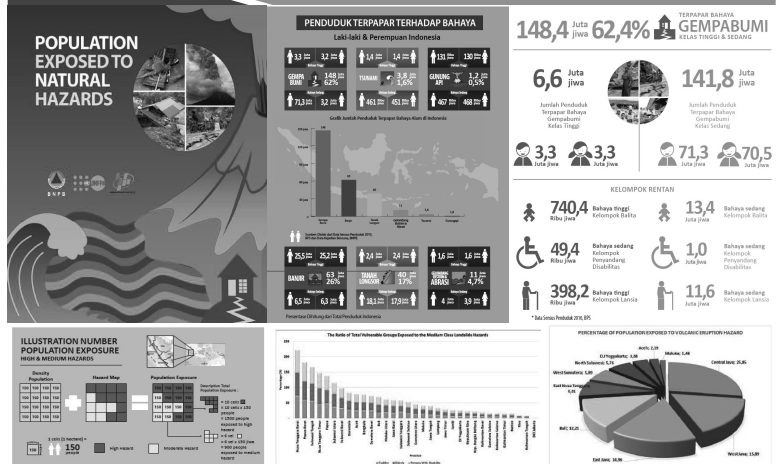
Wilayah	1. Penduduk Menurut Jenis Kelamin	Jumlah
1. ACEH	2. Jumlah Rumah Tangga	2,245,458
2. SUMATERA UTARA	3. Jumlah Penduduk Perempuan	6,498,850
3. SUMATERA BARAT	4. Jumlah Penduduk Laki-laki	2,442,532
4. RIAU	5. Jumlah Perempuan Sedang Sekolah	2,895,199
5. JAMBI	6. Jumlah Laki-laki Sedang Sekolah	1,511,155
6. SUMATERA SELATAN	7. Pendidikan Perempuan 15 Tahun Ke Atas	3,657,747
7. BENGKULU	8. Pendidikan Laki-laki 15 Tahun Ke Atas	838,269
8. LAMPUNG	9. Status Perkawinan Perempuan Umur 15-49 tahun	3,691,703
9. BANGKA BELITUNG	10. Penduduk 5 Tahun Ke Atas yang Mengalami Gangguan Parah	598,202
10. KEPULAUAN RIAU	11. Penduduk 5 Tahun Ke Atas yang tidak dapat baca tulis	917,019
11. DKI JAKARTA	12. Penduduk 5 Tahun Ke Atas yang Tidak Dapat berbahasa Indonesia	4,736,849
	13. Penduduk 15 Tahun Ke Atas yang Buta	
	14. Penduduk 15 Tahun Ke Atas Menurut Bidang Pekerjaan	
	15. Penduduk 15 Tahun Ke Atas Menurut Status Usaha	
	16. Jumlah Rumah Tangga Menurut Jenis Lantai	
	17. Jumlah Rumah Tangga Menurut Pemasangan	
	18. Jumlah Rumah Tangga Menurut Sumber Udara Air Minum	
	19. Jumlah Rumah Tangga Berfasilitas Jamban sendiri	
	20. Jumlah Penduduk 15 Tahun Ke Atas yang Buta	
	21. Jumlah Penduduk 15 Tahun Ke Atas yang Tidak Dapat Berbahasa Indonesia	

Population Census data and Population Projection are integrated into disaster data system

PROVINCIAL INFOGRAPHIC BASELINE DATA



POPULATION EXPOSED TO NATURAL HAZARDS



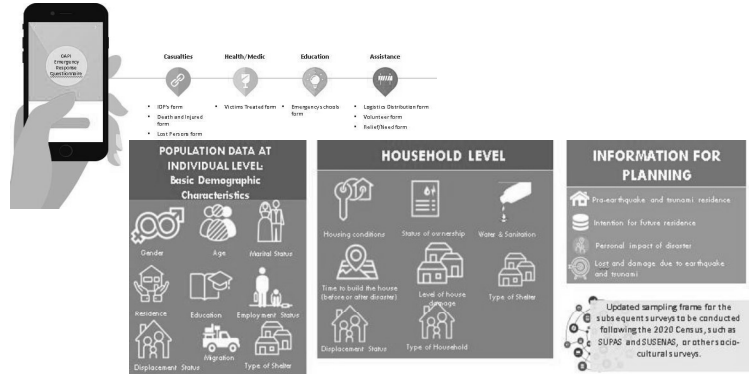
NEXT INITIATIVES OF THE COOPERATION BNPB – BPS STATISTICS INDONESIA FOR THE YEAR 2018 - 2023



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DEVELOPMENT OF NATIONAL STANDARD FRAMEWORK ON DISASTER DATA COLLECTION

(PRE DISASTER, EMERGENCY RESPONSE,
AND POST DISASTER) USING CAPI



POST DISASTER PILOT CENSUS IN CENTRAL SULAWESI

REPUBLIC OF INDONESIA PENDATAAN PASCA BENCANA SULAWESI TENGAH 2019 PETA BANGUNAN ENTRI KEUMAH	
BLOK I. KETERANGAN TEMPAT	
01	Provinsi
02	Kabupaten (KAM)
03	Kecamatan
04	Desa/kelurahan
05	Unit Desa/ Kelurahan
06	Posko BDR
07	Posko BDR
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General Condition:

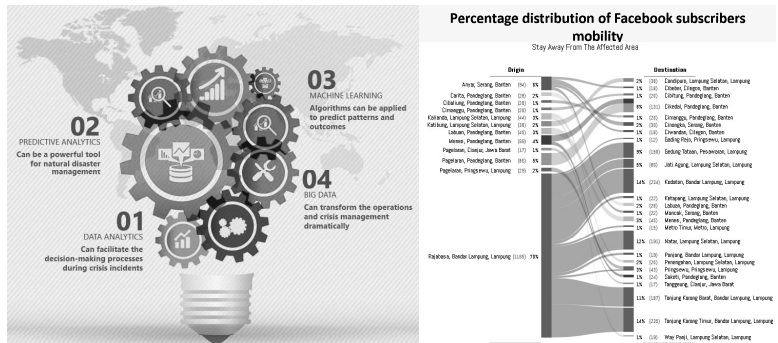
1. Pilot census conducted for 2 villages in Palu City
2. Enumerator from local government staff
3. Using Instrument tools developed by BPS Statistics Indonesia
4. Using combine methods

Instrument tools:

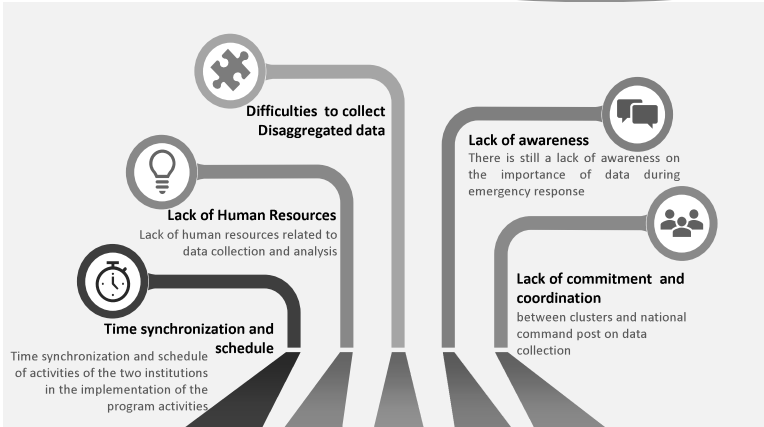
1. Questionnaire using CAPI
2. Methodology including concept and definition
3. Field Mechanism

BIG DATA ANALYSIS USING THE CALL DETAILED RECORD (CDR) AND MOBILE POSITIONING DATA (MPD)

FOR IDP'S MOVEMENT ANALYSIS DURING EMERGENCY RESPONSE



CHALLENGES



THANK YOU



"Alone we can do so little; together we can do so much".