

CURRENT CONCEPTS IN DISASTER MANAGEMENT



SAFE COMMUNITY

**untuk Pulau-Pulau Terluar,
Daerah Terpencil &
Pedesaan**

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118**

SENDAI Framework for **DRR**

2015 -2030

- **HYOGO Framework for Action (HFA) to Disasters (2005 – 2015)**
Building The **Resilience of Nations & Communities TO DISASTERS**
- **INTERNATIONAL **Strategy fo Disaster Reduction** (1999)**
- **YOKOHAMA **Strategy for a Safer World** (1994)**
- **International Framework for Action – for The International Decade for Natural **DRR** (1989)**

➤ **Sistim Gawat Darurat Sehari-hari**

➔➔➔ **ESKALASI**

➤ **Disaster Risk Identification &
Management**

➤ ***Information & Coordination***

➤ ***Disaster Planning & EXERCISES***

➔➔➔ ***IF YOU FAIL TO PLAN,***

➔➔➔ ***THEN PLAN TO FAIL***

***SAFE COMMUNITY* → IKABI**

***SAFE COMMUNITY* → ANDA AMAN,
APAPUN YANG TERJADI PADA
ANDA & DMANAPUN ANDA BERADA**

➤ **Dicanangkan tahu 2000
diMakassar oleh**

Ketua IKABI :

*** Prof DR Dr Idrus Paturusi SpOT**

*** MenKes : Dr Suyudi**

***SAFE COMMUNITY* →**

- **Propinsi, Kabupaten, Perkotaan**
- **Pedesaan**
- **Daerah Terpencil**
- **Pulau-pulau Terluar → TNI AL**

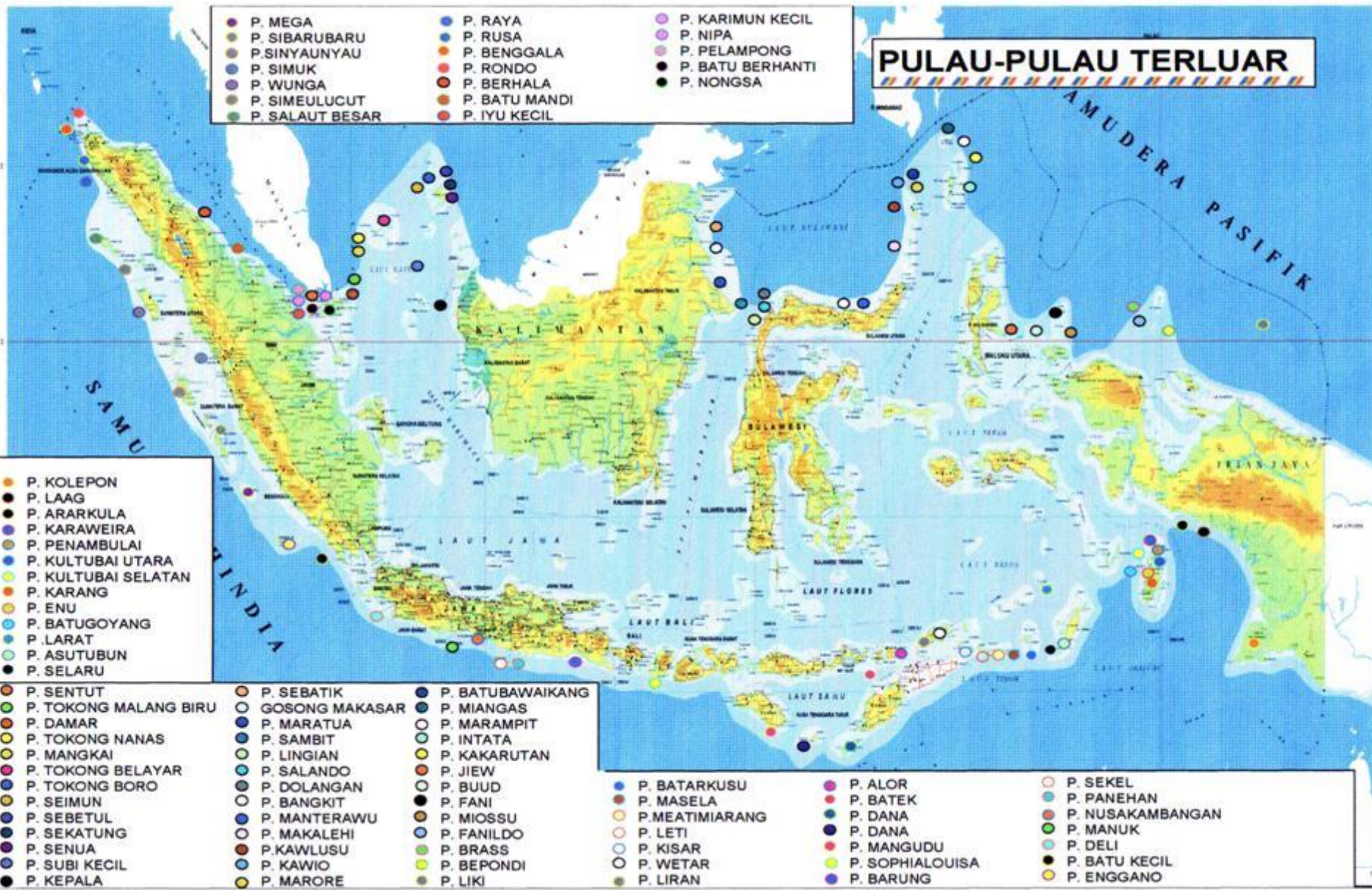
PULAU-PULAU TERLUAR

- P. MEGA
- P. RAYA
- P. KARIMUN KECIL
- P. SIBARUBARU
- P. RUSA
- P. NIPA
- P. SINYAUNYAU
- P. BENGGALA
- P. PELAMPONG
- P. SIMUK
- P. RONDO
- P. BATU BERHANTI
- P. WUNGA
- P. BERHALA
- P. NONGSA
- P. SIMEULUCUT
- P. BATU MANDI
- P. SALAUT BESAR
- P. IYU KECIL

- P. KOLEPON
- P. LAAG
- P. ARARKULA
- P. KARaweIRA
- P. PENAMBULAI
- P. KULTUBAI UTARA
- P. KULTUBAI SELATAN
- P. KARANG
- P. ENU
- P. BATUGOYANG
- P. LARAT
- P. ASUTUBUN
- P. SELARU

- P. SENTUT
- P. SEBATIK
- P. BATUBAWAIKANG
- P. TOKONG MALANG BIRU
- GOSONG MAKASAR
- P. MIANGAS
- P. DAMAR
- P. MARATUA
- P. MARAMPIT
- P. TOKONG NANAS
- P. SAMBIT
- P. INTATA
- P. MANGKAI
- P. LINGIAN
- P. KAKARUTAN
- P. TOKONG BELAYAR
- P. SALANDO
- P. JIEW
- P. TOKONG BORO
- P. DOLANGAN
- P. BUUD
- P. SEIMUN
- P. BANGKIT
- P. FANI
- P. SEBETUL
- P. MANTERAWU
- P. MIOSSU
- P. SEKATUNG
- P. MAKALEHI
- P. FANILDO
- P. SENUA
- P. KAWLUSU
- P. BRASS
- P. SUBI KECIL
- P. KAWIO
- P. BEPONDI
- P. KEPALA
- P. MARORE
- P. LIKI

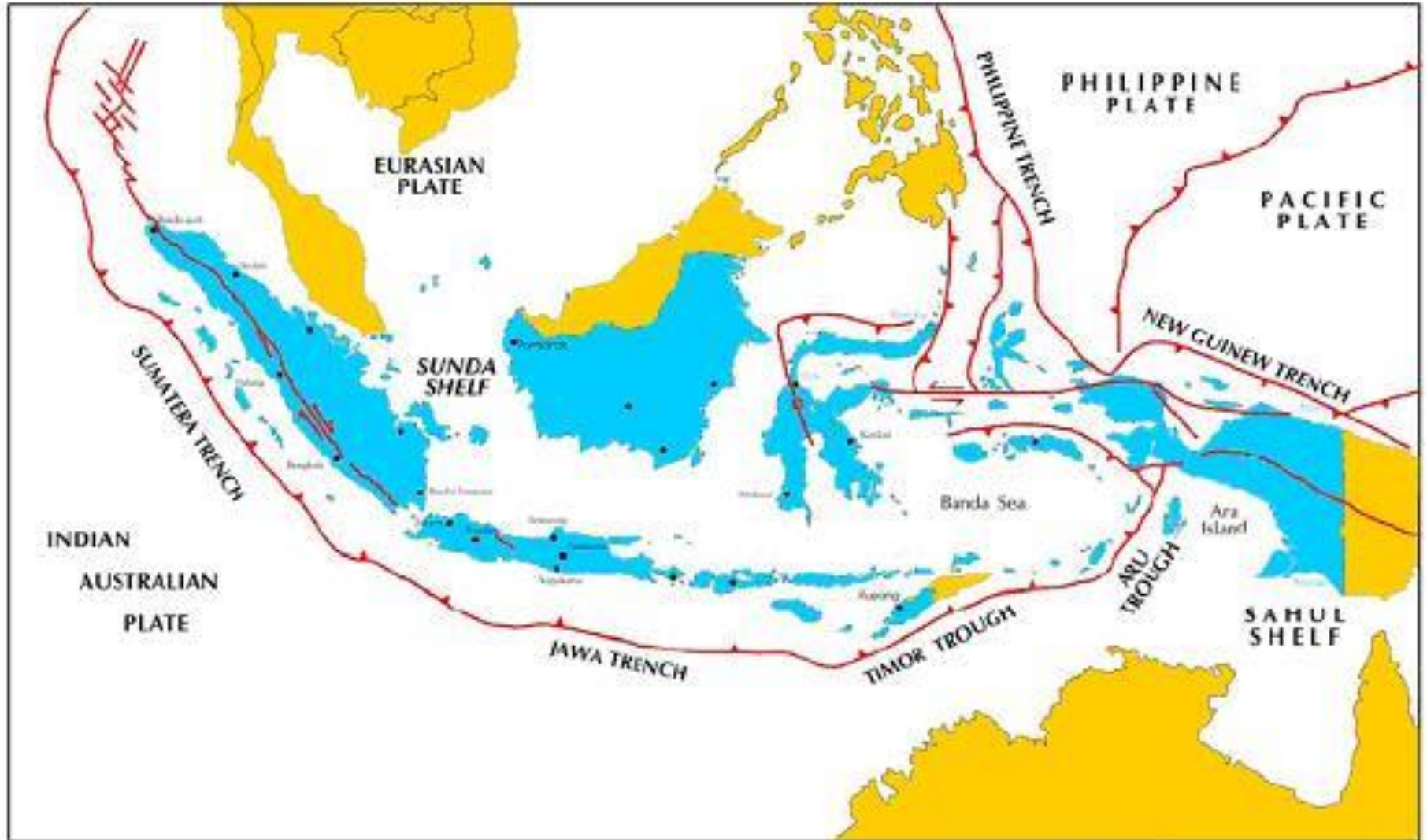
- P. BATARKUSU
- P. ALOR
- P. SEKEL
- P. MASELA
- P. BATEK
- P. PANEHAN
- P. MEATIMIARANG
- P. DANA
- P. NUSAKAMBANGAN
- P. LETI
- P. DANA
- P. MANUK
- P. KISAR
- P. MANGUDU
- P. DELI
- P. WETAR
- P. SOPHIALOUISA
- P. BATU KECIL
- P. LIRAN
- P. BARUNG
- P. ENGGANO




ANCAMAN / HAZARD di Indonesia :

- **GAWAT DARURAT (GADAR)**
sehari-hari : **Stroke,**
Serangan Jantung,
Kecelakaan
- **BENCANA & KORBAN MASSAL**
- **Panceklik**
- **Huru - Hara**
- **Penyelundupan,**
- **Negara Asing**
- **TERORISME**
- **NUBIKA / HAZMAT**

PETA TEKTONIK KEPULAUAN INDONESIA



 Patahan / sesar aktif

 Zona subduksi

1980 → Sekarang →

**YAYASAN AGD 118 terlibat dlm 89
Penanggulangan Bencana &
Korban Massal**



**10 PRINSIP PENANGGULANGAN
BENCANA & Korban MASSAL**

10 Prinsip Penanggulangan Bencana & Korban Massal ➔

1. **Tdk Mungkin Kita Dpt Menanggulangi Bencana / Korban Masal Dng Baik Bila Penanggulangan Gawat Darurat (Gadar) sehari – hari kita Buruk**
2. **Jangan Pindahkan Bencana / Korban Masal ke Rumah Sakit**
3. ***The Right Patient To The Right Hospital By The Right Ambulance At The Right Time***
4. ***Triage & Damage Control Surgery* Saja Tanpa *Definitive Surgery***
5. ***Triage & Local Rapid Assessment (Health & Needs)***

6. Risk – Hazard Assessmest & Management

**7. Single Disaster Plan & Multy Hazard ➔
Disaster Plan pada Pra RS & RS, Kota,
Kabupaten dan Propinsi**

**8. The Right Team In The Right Place At The
Right Time With The Right Knowledge, Right
Skill & The Right Logistics**

**9. Pada Korban Masal – Pengungsi dengan
Jumlah Besar, yang penting adalah *How To
Stay Healthy* di Penampungan yaitu *Special
Needs People* (Ibu Melahirkan, Bayi Baru
Lahir, Ibu Hamil, Balita, Orang Tua,
Hipertensi, Jantung, Stroke, *PTSD, acat
Mental & Fisik, Public Health*)**

**10. YO – YO 24 – 48 Hrs – SAFE COMMUNITY
dengan Local Capacity Building di 34
Propvinsi**

YO-YO 24-48 Hrs →

YOU ARE ON YOUR OWN FOR

24 - 48 Hours

➤ **Laut,**

➤ **Cuaca**

→→→ **Bantuan : Laut / Udara ???**

→→→ **Melatih Masyarakat**

“SAFE COMMUNITY”

***CADRE (COMMUNITY ACTION IN
DISASTER RESPONSE)***

HAZARD / ANCAMAN

MODIFIKASI ? **RISK** **PENCEGAHAN ?**

EVENT

IMPACT

Vulnerability
(provided by nature
+ augmented by
man)

DAMAGE
(The destruction
and Injuries
resulting from
The event)

DISASTER

**Absorbing
Capacity**

**Buffering
Capacity**

**GADAR
Sehari - hari**

**Self Help
Community
Safe
Community**

CADRE :

➤ **Afganistan**

➤ **India**

➤ **Pakistan**

➤ **Bangladesh**

➤ **Vietnam,**

➤ **Laos**

➤ **Kamboja**

➤ **Myanmar**

➤ **Pilipina**

➤ **Indonesia**

CADRE : Kursus 3 hari

1. *First Aid* → Bantuan Hidup Dasar
(BHD → A, B, C, D & E)

2. MDG (*Millenium Development
Goals*)

3. Gempa

4. Banjir

5. Longsor

6. Kebakaran

7. Panceklik

→→→ **TANAM KEBON PISANG**

FIRST AID →

- **BHD** → **A, B, C, D & E (Hipertermi)**
- **Stop Bleeding** → - 6 Titik
 - Perdarahan**
 - **Balut Tekan**
 - **TORNIKET**
- **Fraktur** → **Pelepah Pisang = Bidai, Neck Collar + Lakban**
- **Batang Pohon Pisang** → **Tandu (Jangan Angkat)** → **Brawn / Brain ???**
 - **PUSH / PULL !!!**

MDG →

➤ **AKI (50% † → Perdarahan) →**

STOP BLEEDING :

- **Kondom / Balon**

- **Gurita**

- **Angkat Kaki 40-60° =**

Transfusi 500 cc

Fresh Whole Blood

➤ **AKB (Hipotermi) → Bungkus Selimut, Daun Pisang (Ikan Pepes), Selimut & Buli-buli Panas**

LOCAL WISDOM :

➤ **Gempa / Tsunami :**

- **Jangan tinggal di daerah Lempeng tektonik / Pantai**
- **Banda Aceh >< P.Simulue**
- **Rumah Pakai Kaki / Balok**

Beton

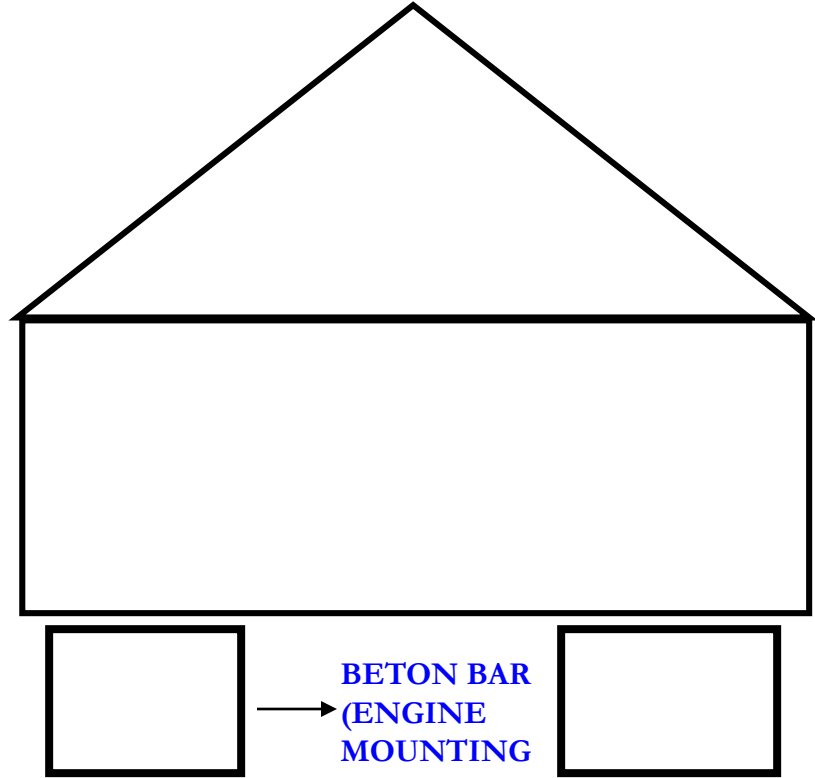
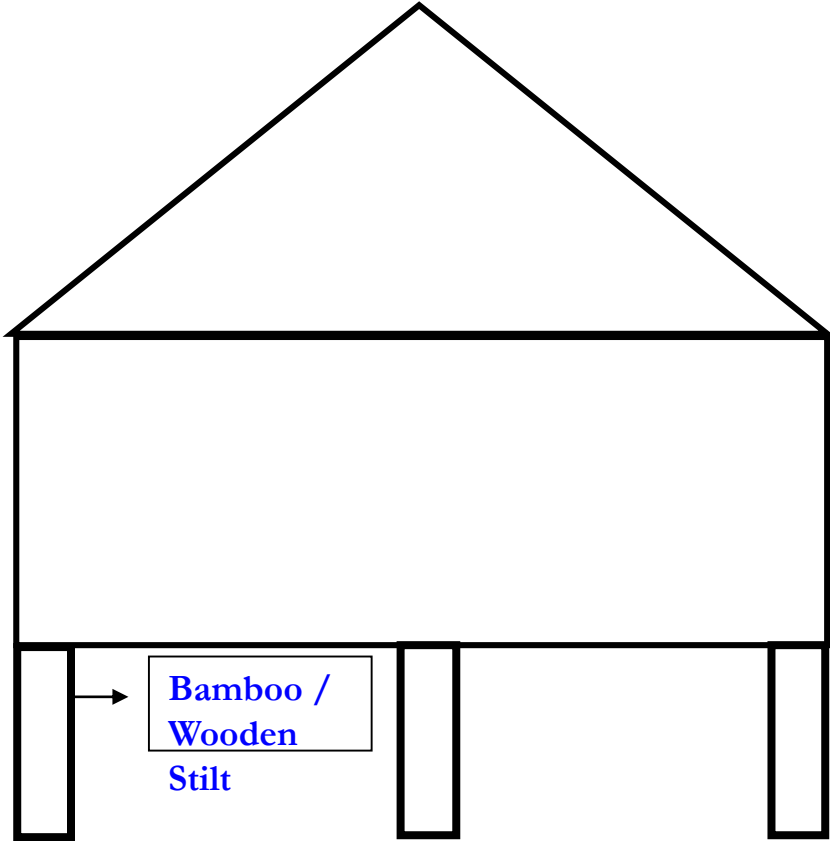
➤ **SAR Rumah Rubuh →**

* ***“HEARING TECHNIQUE”* +**

Koordinat

* **Linggis + Pipa Besi + Batu →**

Dongkrak



BANJIR :

➤ ***Dry Proofing*** → RS Atmajaya

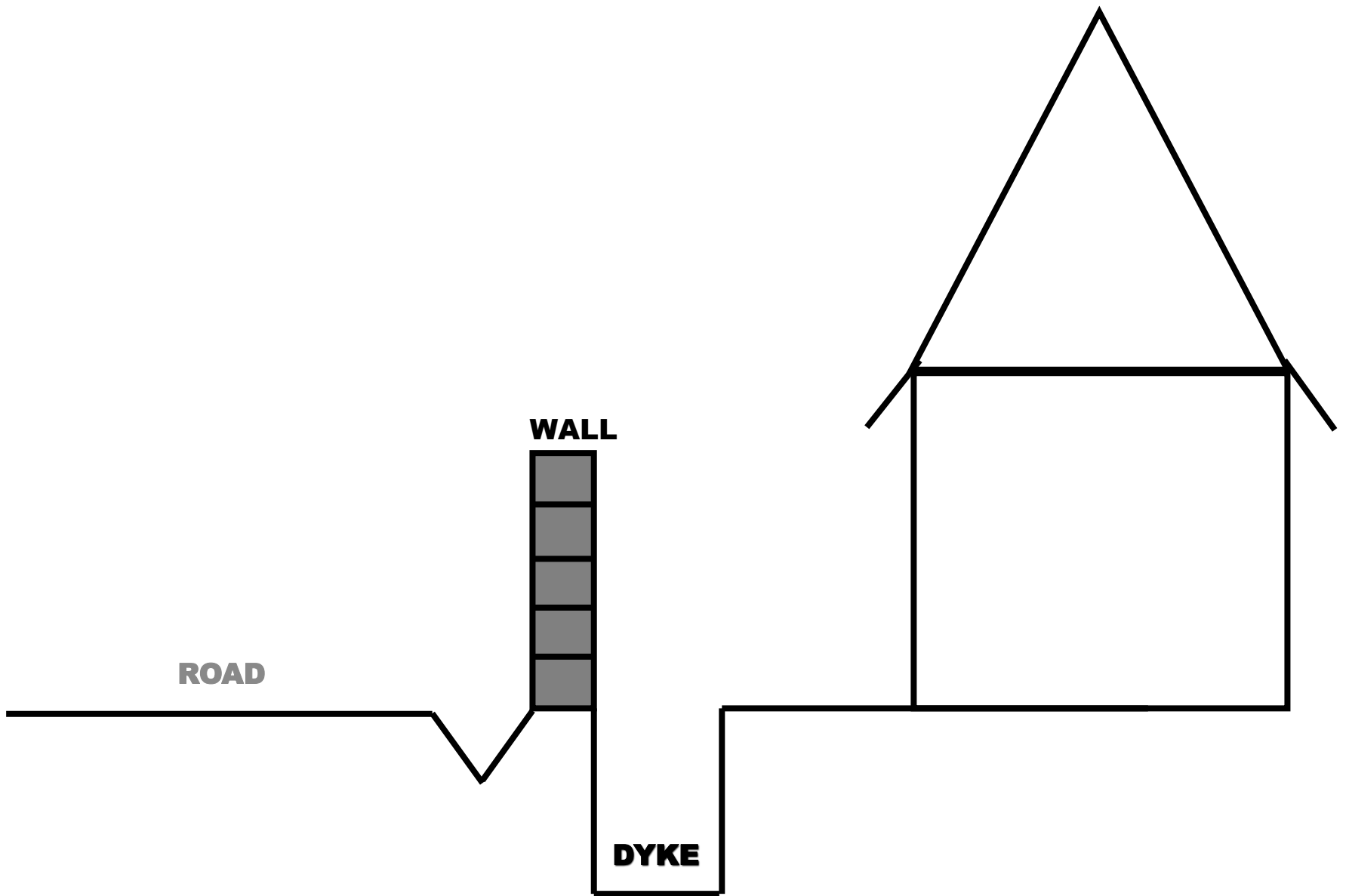
➤ ***Wet Proofing*** → RSAL

Mintoharjo ???

➤ **Batang-batang Pisang +**

Tusuk Bambu → *Jadi Rakit*

➤ **Hujan → Daun Pisang jadi *Payung***



ROAD

WALL

DYKE

ROAD

LONGSOR :

- **Deforestation → Reforestation**
- **Jangan tinggal di daerah hutan yang gundul**
- **Longsor >< *Snow Avalance (02)***
- **SAR → Bilik Bambu**

Kebakaran :

- **Bangunan Tidak Mudah Terbakar**
- **Atap Seng / Asbes**
- **Kaso Besi Ringan**
- **Sambungan Listrik**
- **Kain Basah → 02 (-)**
- **Antara Rumah → Gang Anti Api**

KORBAN MASSAL Dengan

Luka

➤ **Korban Banyak →**

(A, B, C, D, E, F & G) →

Wound Care In Disaster Situation

➤ **Tenaga & Sarana Kurang →**

BELATUNG

Wound Care in Disaster Situations

In a disaster, ALL wounds are contaminated. Do not suture wounds. Suturing wounds may cause infection.

Follow these steps when managing wounds during disasters to prevent infection and further tissue loss.

A. ABC

1. **Scene assessment**
2. **Primary Survey:** airway, breathing, circulation, disability, environment/exposure.
3. **Stop bleeding** preferably by direct local pressure. Consider use of a tourniquet if direct pressure fails.

Record time of tourniquet and remove within 1 - 1.5 hours*
(*upper limb: within 1 hour, *lower limb: within 1.5 hours)



B. Baseline Wound Assessment

1. Distal function
2. Associated fractures
3. Underlying structures
4. Need for exploration or extension.



C. Control Contamination

1. **Anaesthesia:** Use anaesthesia if available and indicated.
2. **Clean:** Wash the wound. Use potable (drinkable) water, saline or antiseptic solution. DO NOT use river water or seawater.
3. **Remove foreign matter:** Pick out removable foreign material
4. **Scrub** the wound to remove embedded foreign material.
5. **Explore** to assess wound and underlying structures:

This may require extension of wound margins.
6. **Excise:** Debride to remove remaining foreign material and necrotic and devitalised tissue. This may require trimming or excision of wound edges.



D. Dress, Don't close, Document

1. **Leave wound open**
2. **Pack wound loosely** with moist gauze. Saline soaked gauze is best.
3. **Dress** with clean, dry dressing
4. **Document** on dressing, label or case notes: Place, date and time; Procedure; Proceduralist & Plan.



E. Essential medicine, Explain & Elevate

1. **Elevate the limb** and minimise wound movement
2. **Consider Tetanus status:** administer Tetanus Toxoid prophylaxis if unimmunised or uncertain
3. **Broad spectrum antibiotics:**
 - Single dose if no established infection
 - IV route if practical
 - Continue if hands, feet or underlying fracture
 - Continue if established infection
4. **Elevate and rest the affected limb** where possible



F. 48 hour follow-up

1. Re-inspect the wound
2. Plan for definitive wound closure if no signs of infection
3. Re-debride and further excise if signs of infection, necrosis or contamination persist.

G. Get Specialist Help for:

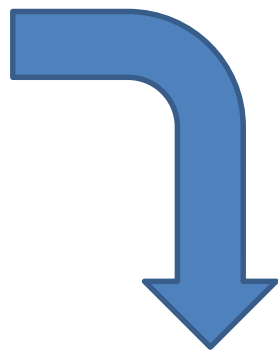
1. Wounds that can't be closed
2. Complex orthoplastic reconstruction
3. Complex wounds in children
4. Decisions about amputation and withdrawal of care.



*Special Cases

1. **Splinting:** Preferably use a splint in cases of suspected or confirmed fractures; Wounds on the limb: test distal function.
2. **Definitive fracture management:** Soft tissues are best treated by fracture stabilisation.
3. **Amputate:** Remove devitalised and mangled tissue/limbs in unsalvageable cases; Is surgical input to decision-making possible?
4. **Absence of distal pulses** or other signs of distal limb ischaemia requires immediate attention.
5. **Fasciotomy:** (for compartment syndrome) should be considered in all limb trauma when pain is out of proportion to injury.
6. **Delayed primary closure (2-5 days) where tissue defect:** Alternative closure technique with skin graft or flap (local or free); Secondary closure (> 5 days).
7. **Crush injury:** Aggressive fluid resuscitation; Alkalinisation with bicarbonate; Serum CPK and electrolyte monitoring at 6-hourly intervals.
8. **Blast injury**
9. **Extrication:** Amputation indicated when alternative retrieval failed, for life-saving purposes only; Amputation by specialised team in coordinated effort; Maximum limb preservation must be considered.





ORDER IN CHAOS :

- 1. ATLS (1995) & Sistim PenanggulanganGawat Darurat **Terpadu** (SPGDT) Surabaya 1997.**
- 2. *Safe Community* (Makassar Declaration 2000).**
- 3. **HOPE** (*Hospital Preparedness for Emergencies & Disasters*) :**

➤ ***Risk Assessment & Management.***

➤ ***Structural Collapse & Functional Collapse.***

➤ ***Management Support & Medical Support.***

➤ ***Command & Control →***

Vertical Control & **HORIZONTAL CONTROL** →

☠ Security (110)

☠ Rescue (113)

☠ 118 EAS (118)

**→→→ *The Right Patient to The Right Hospital by
The Right Ambulance at The Right Time***

TERIMA KASIH