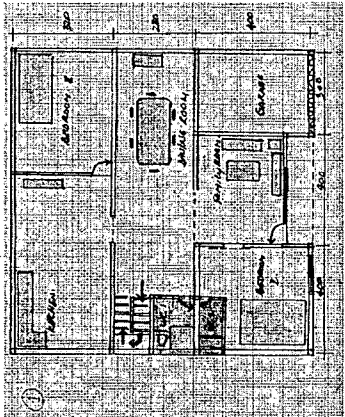


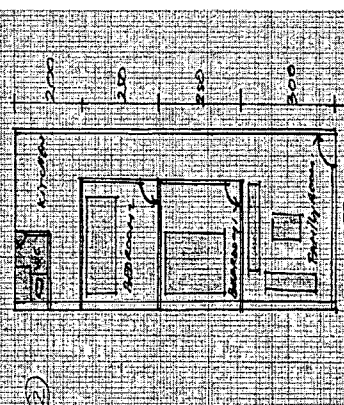

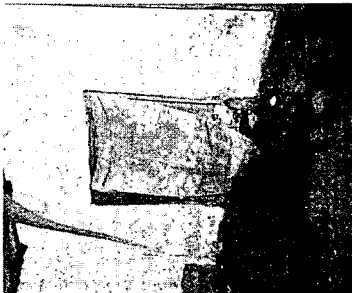
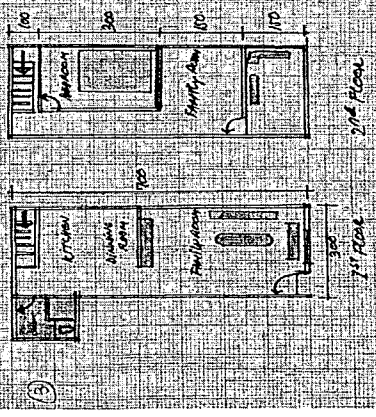

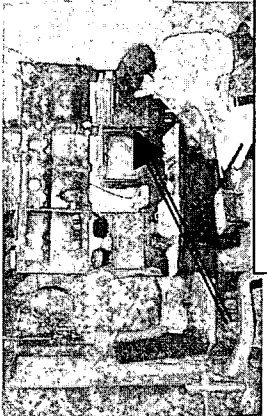



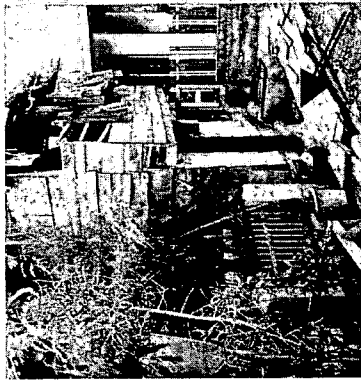
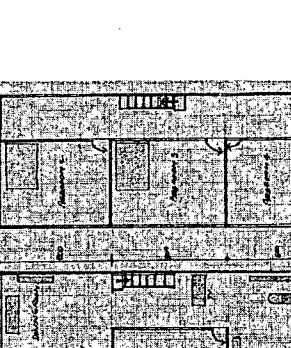

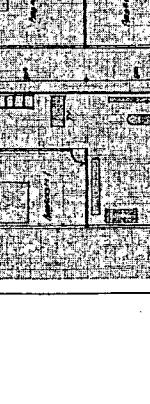

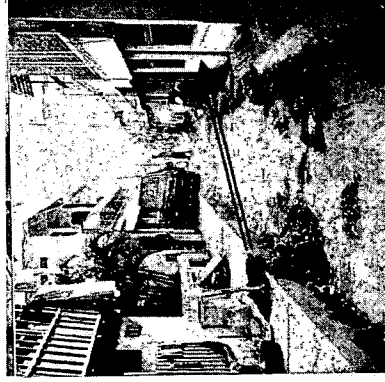
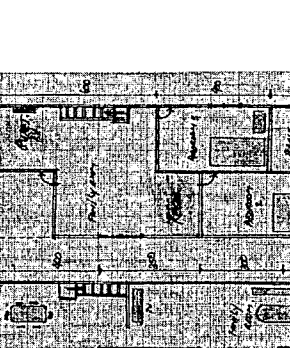
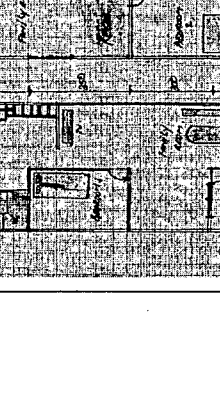


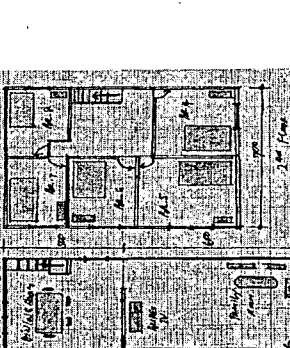
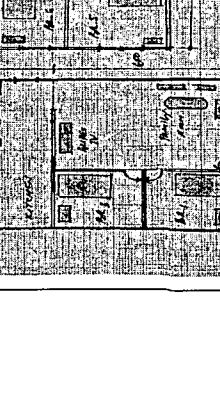
APPENDIXE 2:

RECAPITULATION OF CASED HOUSES

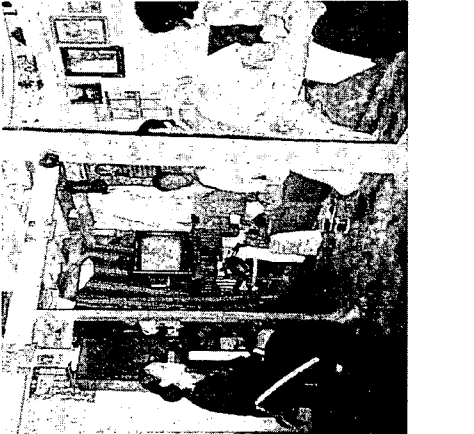
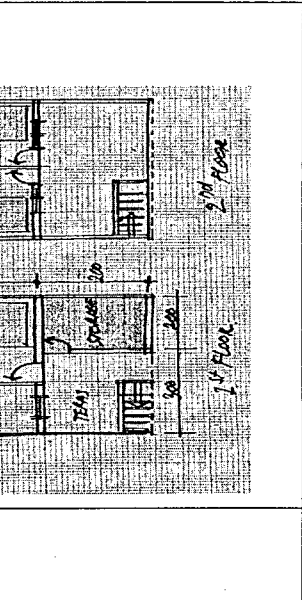
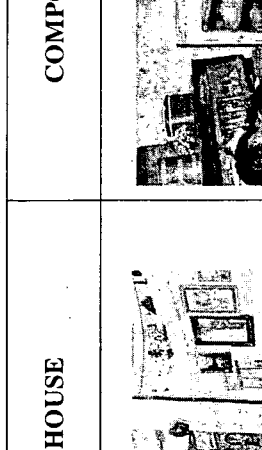
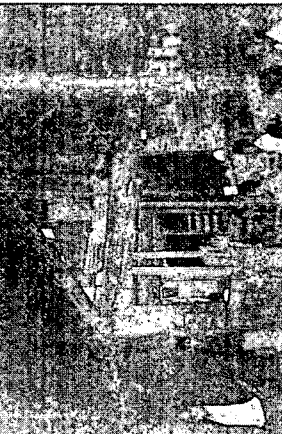
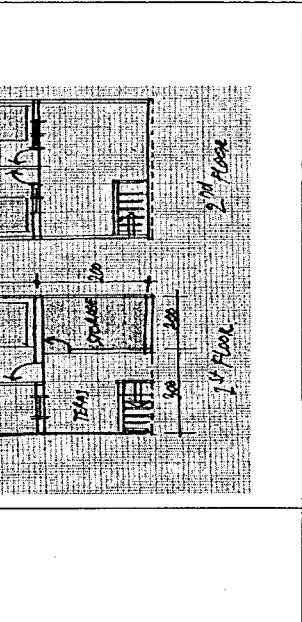
In this appendix, original data of sampled and measured 84 houses are described, in the form of house plan and photo. Based on this, a summary table, titled "Loss measurement of houses in XX district" is provided, in order to sum-up the total building material for each house, and amount of damaged (lost) material through inundation is also recorded in the form of table.

Location : Penjaringan Sub-District, JAKARTA

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|--|--|
| 1. | H. Agus Ngatino |  |  |  <p data-bbox="321 257 603 436">Damage of practical column / reinforce steel corrosion due to chloride content. (column already change)</p> |
| 2. | Supriadi |  |  |  <p data-bbox="729 257 948 436">Medium damage and shorted of wall due to water flooding and floor fill</p> |
| 3 | Hamu Achmad |  |  |  <p data-bbox="1356 347 1434 616">Medium damage of wall Due to water flooding</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|--|--|
| 4. | Ny. Ami |  |  |  <p data-bbox="540 1310 603 1657">Small damage of wall doe to water flooding</p>  <p data-bbox="321 918 525 1478">Damage of door frame doe to humid condition</p>  <p data-bbox="392 1489 525 1892">Damage of wall doe to water flooding</p> |
| 5. | Bp. Miang |  |  |  <p data-bbox="650 1310 925 1657">Damage of door frame doe to humid condition</p>  <p data-bbox="721 1489 925 1892">Damage of wall doe to water flooding</p> |
| 6. | Bp. Budiman |  |  |  <p data-bbox="1066 1310 1340 1657">Damage of door frame doe to humid condition</p>  <p data-bbox="1136 1489 1340 1892">Damage of wall doe to water flooding</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|------------|---------------|---|
| 7. | Ny. Tayah | | | <p>The house new renovation / no damage</p> |
| 8. | Ny. Junarsih | | | <p>Damage of wall due to humidity condition</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|-----|--------------------|---|---|---|
| 9. | Ny. Sunarni |  |  |  <p data-bbox="227 1093 503 1211">Damage of furniture due to humidity condition</p> |
| 10. | Bp. Usman |  |  | <p data-bbox="227 1301 519 1346">The house new renovation / no damage</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|-----|--------------------|------------|---------------|--------------------------------------|
| 11. | Bp. Rifai | | | The house new renovation / no damage |
| 12. | Bp. Rudianto | | | The house new renovation / no damage |

LOSS MEASUREMENT OF HOUSES IN PENJARINGAN SUB-DISTRICT, JAKARTA

1. One Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | TOTAL LOSS | AVERAGE LOSS per case |
|------------|--|-----------------------|--------------|------------------|------------|-----------------------|
| | | Case 2 | Case 8 | Case 10 | | |
| Land Area | 1 Cover of Land Surface | - | Plaster | - | | |
| | 2 Height of Inundation : (cm) | 70 | 100 | 100 | | |
| | 3 Duration of Inundation (day) | 3 | 3 | 3 | | |
| | 4 Frequency of Inundation (times/year) | > 12 | > 12 | > 12 | | |
| Building | 1 Building Age (year) | 39 | 40 | 11 | | |
| | 2 Building Type | Landed House | Landed House | Landed House | | |
| | 3 Floor Area (m ²) | 35.00 | 48.00 | 60.00 | | |
| Foundation | 1 Foundation Type | Continous | Continous | Continous & Foot | | |
| | 2 Material | Stone | Stone | Brick | Stone | Stone |
| | 3 Volume (m ³) | 19.50 | 23.50 | 26.50 | | |
| | 4 Condition | MD | G | G | | |
| | 5 Loss Quantity (m ³) | 4.88 | 0.00 | 0.00 | 4.88 | 1.63 |
| Floor | 1 Floor Area (m ²) | 35.00 | 48.00 | 60.00 | | |
| | 2 Floor Cover ^{II} | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | TOTAL LOSS | AVERAGE LOSS per case |
|-----------|------------------------------------|-----------------------|---------|---------|---------|------------|-----------------------|
| | | Case 2 | Case 8 | Case 10 | | | |
| | a. Material | Soil | Plaster | Plaster | | Plaster | |
| | b. Condition | LD | MD | MD | | | |
| | c. Loss Quantity (m ²) | 3.50 | 12.00 | 15.00 | | 30.50 | 10.17 |
| 3 | Plaster | | | | Plaster | | Plaster |
| | a. Condition | HD | LD | MD | | | |
| | b. Loss Quantity (m ²) | 17.50 | 4.80 | 15.00 | | 37.30 | 12.43 |

| | | | | | | | | | |
|------|---|---------------------------------|--------|--------|--------------|-------|---------|-------|---------|
| Wall | 1 | Material | Brick | Brick | Brick & Wood | Brick | Wood | Brick | Wood |
| | 2 | Area (m ²) | 102.50 | 122.20 | 137.80 | | | | |
| | 3 | Surface Condition | MD | MD | MD | | | | |
| | 4 | Loss Quantity (m ²) | 25.63 | 30.55 | 34.45 | | 73.40 | 17.23 | 24.47 |
| | 5 | Plaster Condition | MD | MD | MD | | Plaster | | Plaster |
| | 6 | Loss Quantity (m ²) | 25.63 | 30.55 | 34.45 | | 73.40 | | 24.47 |

| | | | | | | | | | |
|---------------------------|------------------------------------|------------------------------------|------|------|-------|------|------|------|------|
| Door & Windows | 1 | Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | |
| | | a. Area (m ²) | 7.20 | 8.64 | 10.08 | | | | |
| | | b. Condition | MD | HD | MD | | | | |
| | | c. Loss Quantity (m ²) | 1.80 | 4.32 | 2.52 | | 8.64 | | 2.88 |
| | 2 | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| a. Area (m ²) | | 4.80 | 6.40 | 5.76 | | | | | |
| b. Door (Pcs) | | 4 | 5 | 5 | | | | | |
| c. Windows (Pcs) | | | | | | | | | |
| d. Condition | | MD | HD | MD | | | | | |
| | e. Loss Quantity (m ²) | 1.20 | 3.20 | 1.44 | | 5.84 | | 1.95 | |

| | | | | | | | | |
|---------|---|-------------------|------|------|------|------|------|------|
| Ceiling | 1 | Hanging Structure | | | | | | |
| | | a. Material | Wood | Wood | Wood | Wood | Wood | Wood |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | TOTAL LOSS | AVERAGE LOSS per case |
|-----------|------------------------------------|-----------------------|---------|---------|------------|-----------------------|
| | | Case 2 | Case 8 | Case 10 | | |
| | b. Area (m ²) | 35.00 | 48.00 | 60.00 | | |
| | c. Condition | MD | MD | MD | | |
| | d. Loss Quantity (m ²) | 8.75 | 12.00 | 15.00 | 35.75 | 11.92 |
| | Ceiling | | | | | |
| 2 | a. Material | Plywood | Plywood | Plywood | Plywood | Plywood |
| | b. Area (m ²) | 35.00 | 48.00 | 60.00 | | |
| | c. Condition | MD | HD | MD | | |
| | d. Loss Quantity (m ²) | 8.75 | 24.00 | 15.00 | 47.75 | 15.92 |

| Roof | Roof Structure Type | Simple Frame | Simple Frame | Simple Frame | TOTAL LOSS | AVERAGE LOSS per case |
|------|------------------------------------|--------------|--------------|--------------|------------|-----------------------|
| | | | | | | |
| | b. Area (m ²) | 63.25 | 77.00 | 124.00 | | |
| | c. Condition | MD | HD | LD | | |
| | d. Loss Quantity (m ²) | 15.81 | 38.50 | 12.40 | 66.71 | 22.24 |
| | Roof Cover | | | | | |
| 2 | a. Material | Roof Tile | Roof Tile | Asbestos | Roof Tile | Asbestos |
| | b. Area (m ²) | 63.25 | 77.00 | 124.00 | | |
| | c. Condition | MD | MD | LD | | |
| | d. Loss Quantity (m ²) | 15.81 | 19.25 | 12.40 | 35.06 | 11.69 |
| | | | | | 12.40 | 4.13 |

| Structure System | Beam | Simple Frame | Simple Frame | Simple Frame | TOTAL LOSS | AVERAGE LOSS per case |
|------------------|------------------------------------|--------------|--------------|--------------|------------|-----------------------|
| | | | | | | |
| | b. Volume (m ³) | | | | | |
| | c. Condition | MD | | | | |
| | d. Loss Quantity (m ²) | | | | | |
| | Column | | | | | |
| 2 | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | TOTAL LOSS | | AVERAGE LOSS per case | |
|---------------------|------------------------------------|--------------------------------|---|--------------------------------|------------|------|-----------------------|------|
| | | Case 2 | Case 8 | Case 10 | Brick | Wood | Brick | Wood |
| Clean Water | a. Material | Brick | Brick | Brick | | | | |
| | b. Volume (m ³) | | | | | | | |
| | c. Condition | MD | G | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | |
| 3 | Beam-Column Joint Condition | MD | | LD | | | | |
| Clean Water | 1 Resource | PDAM | PDAM | PDAM | | | | |
| | 2 Water Reservoir Condition | - | - | - | | | | |
| | 3 Water Pump Condition | - | - | - | | | | |
| | 4 Water Tap Condition | - | - | - | | | | |
| Waste Water | From Toilet | Cubluk | Septic Tank | Septic Tank | | | | |
| Electricity | Energy Consumption: (watt) | 450 | 450 | 450 | | | | |
| Physical Adaptation | | Increase the floor up to 80 cm | Increase the floor up to 50 cm & build masonry at front of door up to 30 cm | Increase the floor up to 60 cm | | | | |
| | | | | | | | | |
| | | | | | | | | |

2. Two Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|-----------|--------------|--|--------|---------|--------|---------|---------|---------|---------|---------|------|------|------|------------|-----------------------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | | |
| Land Area | 1 | Cover of Land Surface | - | Plaster | - | Plaster | Plaster | Plaster | Plaster | - | - | - | - | - | - | - |
| | 2 | Height of Inundation : (cm) | 70 | 20 | 80 | 40 | 80 | 84 | 100 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| | 3 | Duration of Inundation (day) | 2 | 1 | 2 | 3 | 7 | 6 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 4 | Frequency of Inundation (times / year) | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 | > 12 |

| | | | | | | | | | | | | | | | | |
|----------|---|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Building | 1 | Building Age (year) | 20 | 40 | 32 | 20 | 35 | 32 | 16 | 9 | 32 | 32 | 32 | 32 | 32 | 32 |
| | 2 | Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House |
| | 3 | Floor Area (m ²) | 125.00 | 42.00 | 180.00 | 100.00 | 156.50 | 126.00 | 60.00 | 72.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 | 70.00 |
| | | a. 1 st Floor | 50.00 | 21.00 | 90.00 | 50.00 | 96.50 | 63.00 | 30.00 | 36.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 |
| | | b. 2 nd Floor | 75.00 | 21.00 | 90.00 | 50.00 | 60.00 | 63.00 | 30.00 | 36.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 | 35.00 |

| | | | | | | | | | | | | | | | | |
|------------|---|-----------------|-------------------|------------|-------------------|------------|------------|------------|------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Foundation | 1 | Foundation Type | Continuous & Foot | Continuous | Continuous & Foot | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot |
| | | | Continuous & Foot | Continuous | Continuous & Foot | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot | Continuous & Foot |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | |
|-----------|----------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|---------|-------|-------|-------|------------|-------|----|-----------------------|-------|------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Brick | Stone | RC | Brick | Stone | RC | Brick | Stone | RC | |
| 2 | Material | Stone & RC | Stone | Brick | Stone | Brick | Stone | Brick | Stone | Brick | Stone | Brick | Stone | Brick | Stone | RC | | | | |
| 3 | Volume (m ³) | 37.50 | 14.50 | 23.50 | 21.25 | 32.25 | 23.00 | 16.50 | 36.00 | 16.70 | | | | | | | | | | |
| 4 | Condition Loss | G | G | G | G | LD | G | G | G | MD | | | | | | | | | | |
| 5 | Quantity (m ³) | 0.00 | 0.00 | 0.00 | 0.00 | 3.23 | 0.00 | 0.00 | 0.00 | 4.18 | | | | | | | 7.40 | 0.00 | 0.00 | 0.00 |

| Floor | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | |
|--------------------------|-----------------------|---------|---------|---------|---------|-------------------|-------------------|---------|---------|---------|-------|----|------------|-------|----|-----------------------|-------|-------|------|------|------|
| | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Brick | Stone | RC | Brick | Stone | RC | Brick | Stone | RC | | | |
| A. 1 st Floor | 1 | 50.00 | 21.00 | 90.00 | 50.00 | 96.50 | 63.00 | 30.00 | 36.00 | 35.00 | | | | | | | | | | | |
| | 2 | Ceramic | Ceramic | Plaster | Ceramic | Plaster & PC Tile | Ceramic & Plaster | PC Tile | Ceramic | Plaster | | | | | | | | | | | |
| | 3 | 0.00 | 0.00 | 9.00 | 0.00 | 24.13 | 6.30 | 3.00 | 0.00 | 0.00 | 8.75 | | | | | | 32.96 | 15.06 | 3.15 | 3.66 | 1.67 |
| B. 2 nd Floor | 1 | 75.00 | 21.00 | 90.00 | 50.00 | 60.00 | 63.00 | 30.00 | 36.00 | 35.00 | | | | | | | | | | | |
| | 2 | | | | | | | | | | | | | | | | | | | | |
| | 3 | 0.00 | 0.00 | 9.00 | 0.00 | 24.13 | 6.30 | 3.00 | 0.00 | 0.00 | 8.75 | | | | | | 51.18 | | | 5.69 | |

| COMPONENT | DESCRIPTION | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | |
|-----------|------------------------------------|-----------------------|---------|--------|---------|--------|--------|--------|---------|---------|---------|---------|---------|------------|------|-------|-----------------------|------|--|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Case 12 | Case 12 | Case 12 | | | | | | |
| | Cover | Ceramic | Ceramic | Wood | Ceramic | Wood | Wood | Wood | Wood | Ceramic | Wood | Wood | Ceramic | Wood | | | | | |
| | a. Material | G | G | MD | G | LD | LD | LD | MD | G | LD | MD | G | MD | | | | | |
| | b. Condition | 0.00 | 0.00 | 22.50 | 0.00 | 6.00 | 6.30 | 7.50 | 0.00 | 8.75 | 0.00 | 8.75 | 0.00 | 51.05 | 0.00 | 14.75 | 1.64 | 5.67 | |
| 3 | Plaster | | | | | | | | | | | | | | | | | | |
| | a. Condition | G | G | | G | LD | G | | | | | | | | | | | | |
| | b. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | |

| Wall | A. 1 st Floor | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | |
|--------------------------|--------------------------|---------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|------------|-------|---------|-----------------------|--|--|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Case 12 | Case 12 | Case 12 | | | | | | |
| 1 | Material | Brick | Brick | Wood | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Wood | Brick | Wood | | | |
| | 2 | Area (m ²) | 195.00 | 75.40 | 122.20 | 156.00 | 167.70 | 119.60 | 85.80 | 93.60 | 87.75 | 87.75 | 93.60 | 87.75 | 87.75 | 87.75 | 87.75 | | |
| | 3 | Surface Condition | LD | G | MD | LD | HD | LD | LD | LD | LD | MD | LD | LD | MD | LD | MD | | |
| | 4 | Loss Quantity (m ²) | 19.50 | 0.00 | 12.22 | 15.60 | 83.85 | 11.96 | 8.58 | 9.36 | 21.94 | 148.85 | 34.16 | 16.54 | 3.80 | 16.54 | 3.80 | | |
| | 5 | Plaster Condition | LD | LD | | LD | LD | G | LD | LD | | Plaster | | Plaster | | Plaster | | | |
| | 6 | Loss Quantity (m ²) | - | 7.54 | | 15.60 | 16.77 | 0.00 | 8.58 | 9.36 | | 57.85 | | 6.43 | | 6.43 | | | |
| B. 2 nd Floor | | | | | | | | | | | | | | | | | | | |
| | 1 | Material | Brick | Brick | Wood | Brick | Wood | Brick | Wood | Brick | Wood | Brick | Wood | Brick | Wood | Brick | Wood | | |

| COMPONENT | DESCRIPTION | DATA OF CAVED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|-----------|-------------|---------------------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--|--|------------|-----------------------|-------|---------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Case 12 | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | 2 | Area (m ²) | 195.00 | 70.20 | 152.50 | 143.00 | 101.40 | 80.60 | 89.70 | 95.55 | | | | | | | |
| | 3 | Surface Condition | LD | G | MD | MD | LD | MD | G | MD | | | | | | | |
| | 4 | Loss Quantity (m ²) | 19.50 | 0.00 | 38.13 | 0.00 | 35.75 | 10.14 | 0.00 | 23.89 | | | | | 85.54 | 62.01 | 9.50 |
| | 5 | Plaster Condition | LD | LD | | | | G | LD | | | | | Plaster | | | Plaster |
| | 6 | Loss Quantity (m ²) | 19.50 | 7.02 | | 0.00 | | 0.00 | | 8.97 | | | | 35.49 | | | 3.94 |

| | | | | | | | | | | | | | | | | | | | |
|----------------|---|------------------------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|------|------|--|
| Door & Windows | 1 | Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | Wood | | |
| | | a. Area (m ²) | 11.20 | 5.76 | 11.52 | 10.60 | 18.00 | 18.72 | 10.10 | 11.52 | 21.60 | | | | | | | | |
| | | b. Condition | G | LD | MD | G | MD | LD | MD | LD | MD | | | | | | | | |
| | | c. Loss Quantity (m ²) | 0.00 | 0.58 | 2.88 | 0.00 | 4.50 | 1.87 | 2.53 | 1.15 | 5.40 | | | | | 18.91 | | 2.10 | |
| | 2 | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | Wood | | |

| COMPONENT | DESCRIPTION | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|-----------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|---------|--|--|--|------------|-----------------------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | | |
| | a. Area (m ²) | 6.40 | 3.20 | 8.00 | 9.60 | 14.40 | 9.60 | 4.80 | 8.00 | 9.60 | | | | | | |
| | b. Door (Pcs) | 5 | 4 | 6 | 6 | 10 | 6 | 5 | 7 | 9 | | | | | | |
| | c. Windows (Pcs) | | | | | | | | | | | | | | | |
| | d. Condition | G | LD | MD | G | MD | LD | MD | LD | MD | | | | | | |
| | e. Loss Quantity (m ²) | 0.64 | 0.32 | 2.00 | 0.00 | 3.60 | 0.96 | 1.20 | 0.80 | 2.40 | | | | | | 1.32 |

| Ceiling | Hanging Structure | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|---------|------------------------------------|-----------------------|---------|---------|---------|----------|----------|---------|---------|---------|--|--|--|------------|-----------------------|--|-------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | | | |
| 1 | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | - | Wood | Wood | | | | | | | |
| | b. Area (m ²) | 125.00 | 42.00 | 180.00 | 100.00 | 156.50 | 126.00 | - | 72.00 | 70.00 | | | | | | | |
| | c. Condition | LD | LD | MD | G | MD | G | MD | MD | MD | | | | | | | |
| | d. Loss Quantity (m ²) | 12.50 | 4.20 | 45.00 | 0.00 | 39.13 | 0.00 | 0.00 | 18.00 | 17.50 | | | | | | | 15.15 |
| 2 | a. Material | Asbestos | Plywood | Plywood | Plywood | Asbestos | Asbestos | Plywood | Plywood | Plywood | | | | | | | |
| | b. Area (m ²) | 125.00 | 42.00 | 180.00 | 100.00 | 156.50 | 126.00 | - | 72.00 | 70.00 | | | | | | | |
| | c. Condition | LD | LD | MD | G | MD | G | MD | LD | MD | | | | | | | |
| | d. Loss Quantity (m ²) | 12.50 | 4.20 | 45.00 | 0.00 | 39.13 | 0.00 | 0.00 | 7.20 | 17.50 | | | | | | | 8.21 |
| | | | | | | | | | | | | | | | | | 51.63 |
| | | | | | | | | | | | | | | | | | 73.90 |
| | | | | | | | | | | | | | | | | | 17.50 |
| | | | | | | | | | | | | | | | | | 8.21 |
| | | | | | | | | | | | | | | | | | 5.74 |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | | |
|-----------|------------------------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|---------------------|--|--|--|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | | | | | | | | | |
| | | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | | | |
| Roof | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | | |
| | b. Area (m ²) | 150.00 | 42.50 | 132.00 | 94.50 | 127.25 | 87.50 | 52.50 | 63.75 | 59.50 | | | | | | | | | | | | | |
| | c. Condition | G | G | MD | G | LD | G | MD | LD | MD | | | | | | | | | | | | | |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | 33.00 | 0.00 | 12.73 | 0.00 | 13.13 | 6.38 | 14.88 | | | | | | | | | | | | | |
| | Roof Cover | | | | | | | | | | | | | | | | | | | | | | |
| | a. Material | Asbestos | Asbestos | Roof Tile | Asbestos | Asbestos | Asbestos | Asbestos | Zink | Roof Tile | Zink | | | | | | | | | | | | |
| | b. Area (m ²) | 150.00 | 42.50 | 132.00 | 94.50 | 127.25 | 87.50 | 52.50 | 63.75 | 59.50 | | | | | | | | | | | | | |
| | c. Condition | G | LD | MD | G | MD | LD | LD | LD | MD | | | | | | | | | | | | | |
| | d. Loss Quantity (m ²) | 0.00 | 4.25 | 33.00 | 0.00 | 31.81 | 8.75 | 5.25 | 6.38 | 14.28 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

| Structure System | Beam | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | | | |
|------------------|------------------------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|---------------------|----|-------|--|--|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | | | | | | | | | | |
| | | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | Roof Structure Type | | | | |
| Structure System | a. Material | RC | Brick | Wood | RC | Brick | RC | Brick | RC | Wood | RC | Brick | RC | Wood | RC | Brick | RC | Wood | RC | Brick | RC | Brick | | |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | | | | | | | | |
| | c. Condition | G | G | MD | G | MD | G | LD | G | MD | | | | | | | | | | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | | | | | | |
| | Column | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
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| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | |
|-----------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|---------|------|------|------|------------|----|------|-----------------------|--|--|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | Wood | RC | Wood | | | | | | |
| | a. Material | RC | Brick | Wood | RC | Brick | RC | Brick | RC | Wood | RC | Wood | RC | Wood | RC | Wood | RC | | |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | | | |
| | c. Condition | G | G | LD | G | MD | G | G | G | G | G | MD | G | MD | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | |
| 3 | Beam-Column Joint | | | | | | | | | | | | | | | | | | |
| | Condition | G | G | LD | G | MD | G | G | G | G | MD | G | G | MD | | | | | |

| | | | | | | | | | | | | | | | | | |
|-------------|-----------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|---|--|--|
| Clean Water | 1 | Resource | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | | | |
| | 2 | Water Reservoir | | | | | | | | | | | | | | | |
| | | Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | 3 | Water Pump | | | | | | | | | | | | | | | |
| Condition | | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| 4 | Water Tap | | | | | | | | | | | | | | | | |
| | Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |

| | | | | | | | | | | | | | | | | | |
|-------------|-------------|-------------|--------|-------------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Waste Water | From Toilet | Septic Tank | Cubluk | Septic Tank | Cubluk | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank | Septic Tank |
| | | 2300 | 450 | 450 | 900 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 900 |

| | | | | | | | | | | | | | | | | | |
|-------------|---------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Electricity | Energy Consumption (watt) | 2300 | 450 | 450 | 900 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 900 |
| | | | | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT |
|---------------------|--------------|--------------------------------|--------------------------------|---|--------------------|---|---|--------------------------------|---|---|---|------------|--|--|-----------------------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 11 | Case 12 | | | | | |
| Physical Adaptation | | Increase the floor up to 80 cm | Increase the floor up to 30 cm | Increase the floor & build masonry at front of door up to 30 cm | Increase the floor | Increase the floor up to 60 cm & build masonry at front of door up to 45 cm | Increase the floor up to 80 cm & build masonry at front of door | Increase the floor up to 80 cm | Increase the floor & build masonry at front of door up to 30 cm | Increase the floor & build masonry at front of door up to 30 cm | Increase the floor & build masonry at front of door up to 30 cm | | | | |

Note

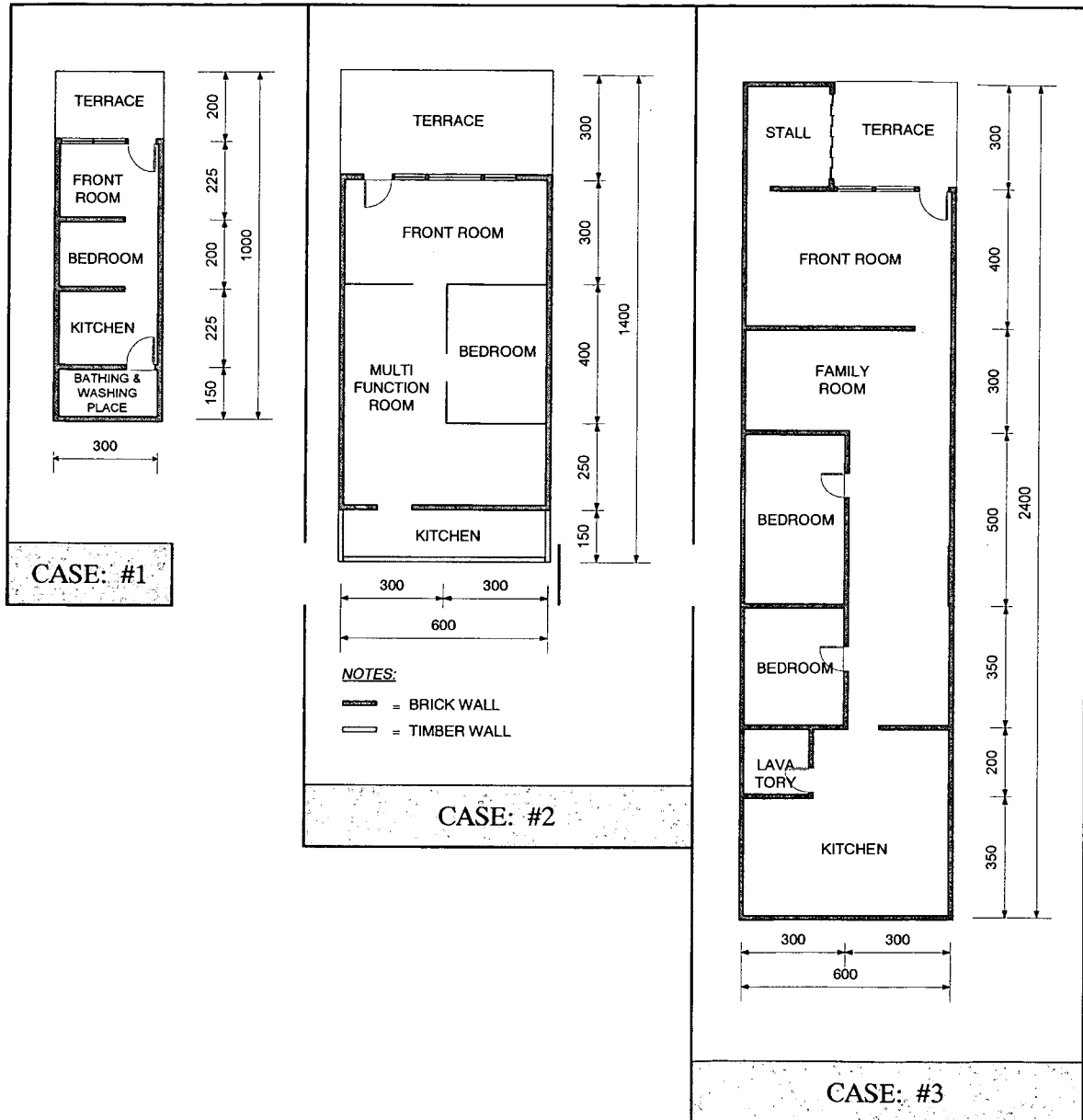
G = Good Condition
 LD = Light Damage
 MD = Moderate Damage
 HD = Heavy Damage

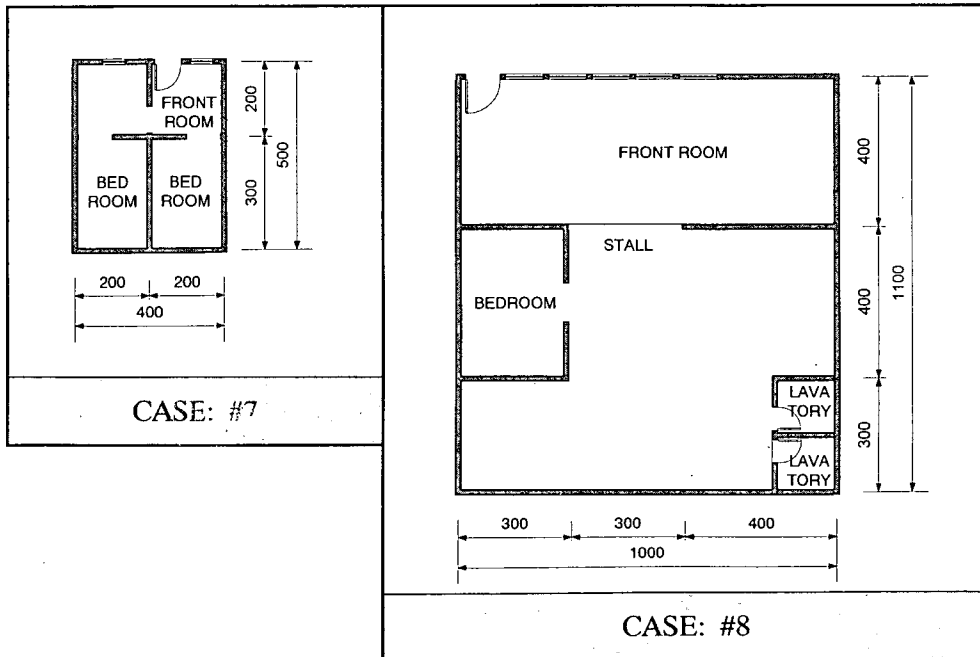
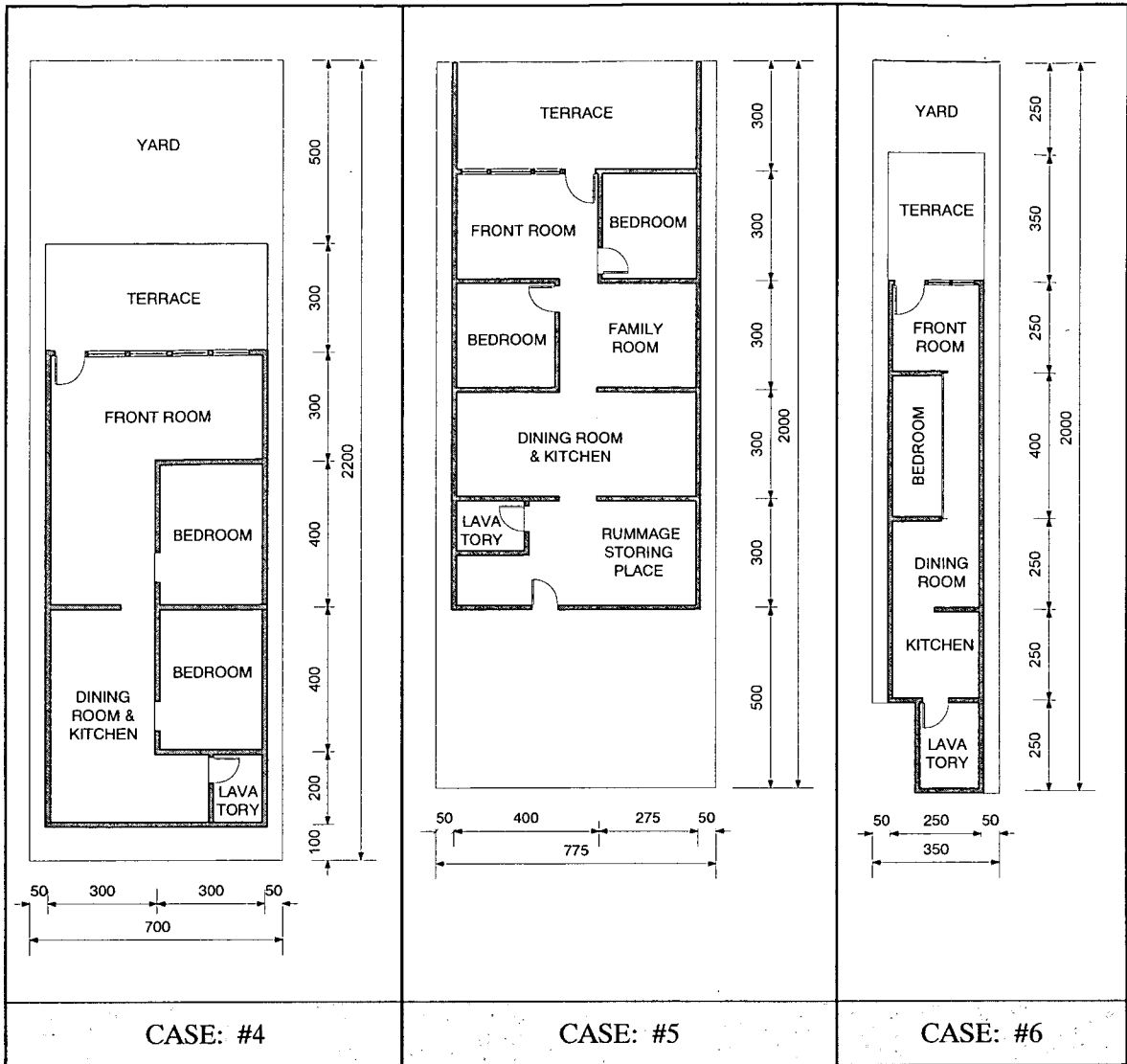
Calculation Method

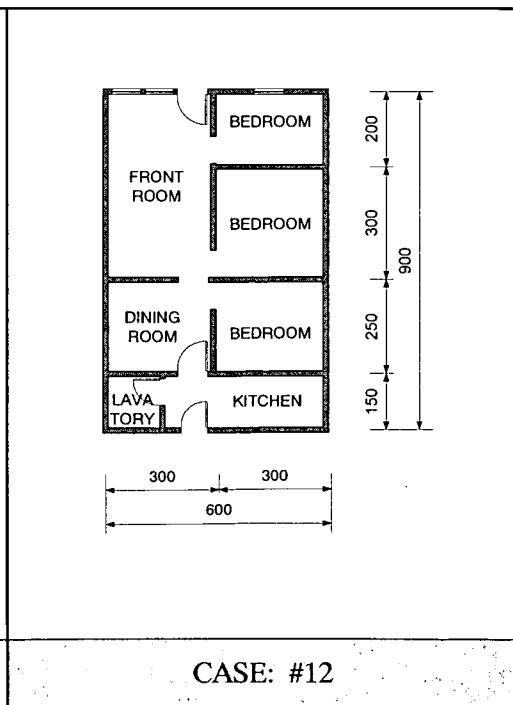
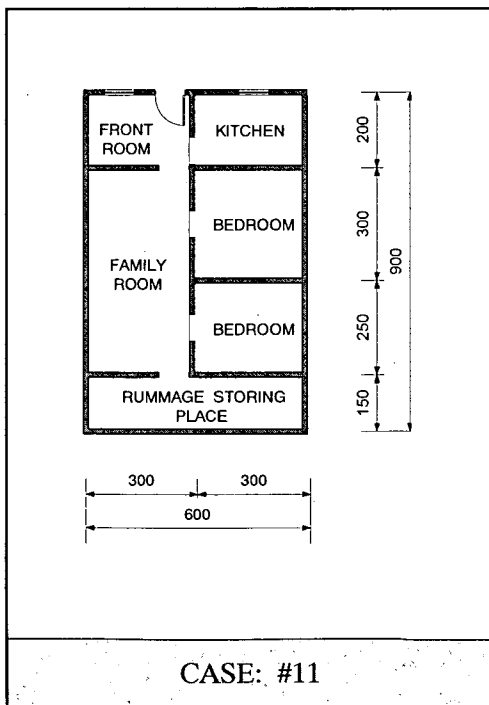
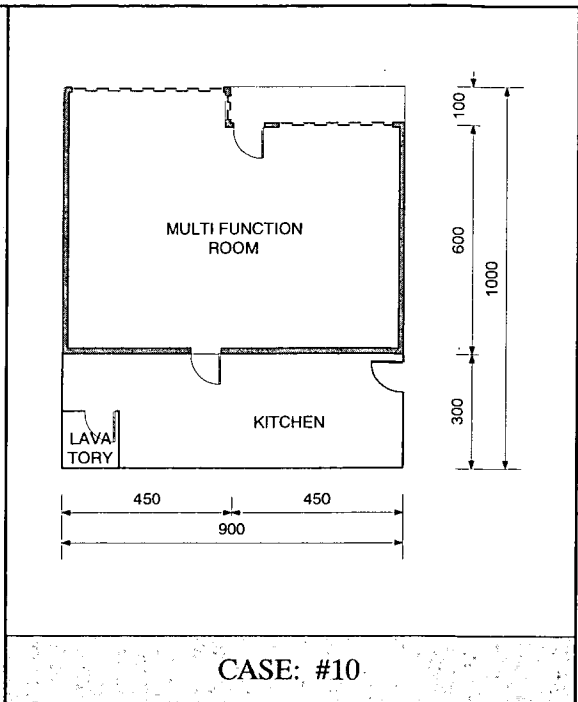
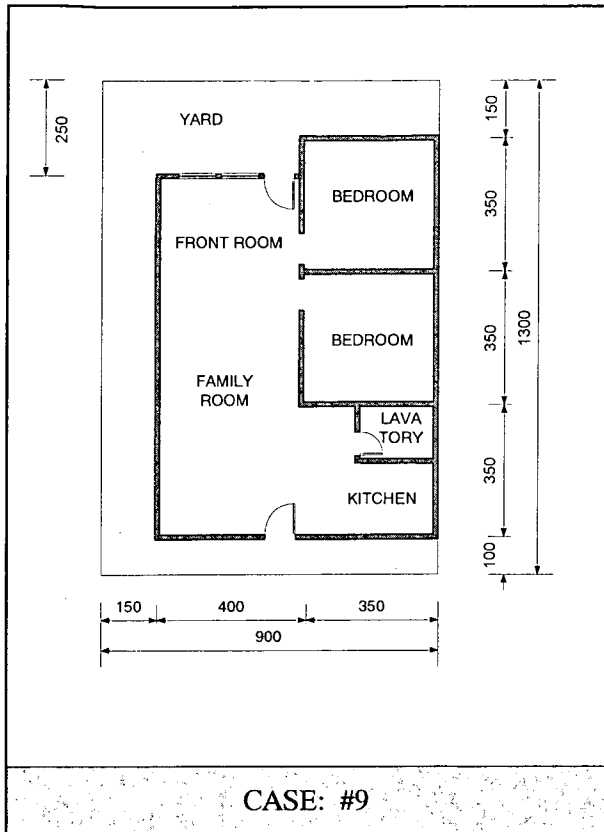
- A. Loss Quantity = Material Quantity x Damage Score
- B. Total Loss = Σ Loss Quantity
- C. Average Loss per Unit = Total Loss / Total Data Number

| <u>Damage Score</u> | | | |
|---------------------|------|------|------|
| G = | 0 | MD = | 25 % |
| LD = | 10 % | HD = | 50 % |

Location: Tanjung Mas Sub-District, SEMARANG







LOSS MEASUREMENT OF HOUSES IN TANJUNG MAS SUB-DISTRICT, SEMARANG

ONE STOREY HOUSES

| COMP ONE UNIT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | | | | |
|---------------|-----------------------------------|-----------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------|-----------------------|--------------|--------------|-----------------|--------------|--------------|-----------------------|-------|-------|-------|--|--|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | | |
| Land Area | 1 Cover of Land Surface | ECB ⁽¹⁾ | ECB ⁽¹⁾ | ECB ⁽¹⁾ | Filled Soil | ECB ⁽¹⁾ | Concrete Floor | ECB ⁽¹⁾ | Filled Soil | Filled Soil | Filled Soil | Filled Soil | Filled Soil | | | | | | | | |
| | 2 Height of Inundation : (cm) | max. 50 | max. 50 | max. 30 | max. 30 | max. 40 | max. 50 | max. 20 | - | max. 30 | max. 30 | max. 30 | max. 50 | max. 30 | | | | | | | |
| | 3 Duration of Inundation | 1 day | 1-2 hour | 1-2 hour | 1-2 hour | 1-2 hour | 12 times/year ^(IV) | 1 day ^(I) | 1 day ^(II) | - | Whole Day | Every Rainy Day | Whole Day | Every Day | 1 day ^(VI) | | | | | | |
| | 4 Frequency of Inundation | Every day | 12 times/year ^(IV) | 12 times/year ^(IV) | 12 times/year ^(IV) | 12 times/year ^(IV) | 12 times/year ^(IV) | Every Down pour. | - | - | - | - | - | - | Every Down pour | | | | | | |
| Building | 1 Building Age (year) | 50 | 32 | 32 | 32 | 7 | 12 | 12 | 15 | 24 | 10 | - | - | - | | | | | | | |
| | 2 Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | | | | | | | |
| | 3 Floor Area (m ²) | 30.00 | 84.00 | 144.00 | 96.00 | 101.25 | 43.75 | 25.00 | 75.60 | 120.00 | 54.00 | 45.00 | 72.00 | | | | | | | | |
| Foundation | 1 Foundation Type | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | | | | | | | |
| | 2 Material | Brick | Brick | Brick | Brick | Brick | Brick | Stone | Brick | Brick | Brick | Brick | Brick | Brick | Stone | Brick | Brick | Stone | | | |
| | 3 Volume (m ³) | 15.50 | 20.00 | 48.75 | 32.00 | 35.12 | 17.05 | 13.50 | 24.50 | 27.25 | 15.00 | 23.25 | 17.00 | | | | | | | | |
| | 4 Condition | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | LD | | | | | | | |
| | 5 Loss Quantity (m ³) | 3.88 | 5.00 | 12.19 | 8.00 | 8.78 | 4.26 | 3.38 | 6.13 | 6.81 | 3.75 | 5.81 | 1.70 | 66.31 | 3.38 | 5.53 | 0.28 | | | | |
| Floor Area | 30.00 | 84.00 | 144.00 | 96.00 | 101.25 | 43.75 | 25.00 | 75.60 | 120.00 | 54.00 | 45.00 | 72.00 | | | | | | | | | |

| COMP ONE UNIT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | |
|---------------|------------------------------------|-----------------------|-------------------|-------------------|---------|-------------------|-------------------|---------|---------|---------|---------|---------|---------|------------|-------------------|---------|-----------------------|---------|---------|---------|---------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | | |
| | | r | (m ²) | | 0 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| | Floor Cover(II) | | | | | | | | | | | | | | | | | | | | |
| | a. Material | Plaster | Plaster | Plaster & Ceramic | Plaster | Plaster & PC Tile | Plaster & Ceramic | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | PC Tile | Plaster & Ceramic | Plaster | Plaster | Ceramic | PC Tile | Plaster | Ceramic |
| | b. Condition | HD | HD | MD | HD | G | MD | MD | MD | MD | MD | MD | MD | MD | HD | HD | G | | | | |
| | c. Loss Quantity (m ²) | 15.00 | 42.00 | 36.00 | 48.00 | 0.00 | 10.94 | 6.25 | 18.90 | 60.00 | 13.50 | 22.50 | 0.00 | 0.00 | 218.12 | 13.50 | 23.47 | 18.18 | 1.13 | 1.96 | 1.96 |
| | 3 Plaster | | HD | G | HD | G | MD | MD | MD | MD | MD | MD | MD | MD | HD | HD | G | | | | |
| | a. Condition | HD | HD | G | HD | G | MD | MD | MD | MD | MD | MD | MD | MD | HD | HD | G | | | | |
| | b. Loss Quantity (m ²) | 15.00 | 42.00 | 0.00 | 48.00 | 0.00 | 10.94 | 6.25 | 18.90 | 60.00 | 13.50 | 22.50 | 0.00 | 0.00 | 237.09 | | | 19.76 | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|-------------------------|--------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Wall | 1 Material | Bamboo Mat & Wood Plank | 104.00 | 253.50 | 166.40 | 185.80 | 89.00 | 70.20 | 153.40 | 142.00 | 78.00 | 120.90 | 140.40 | | | | | | | | | | | |
| | | Brick | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | | Brick & Plywood | 26.00 | 63.38 | 41.60 | 46.45 | 22.25 | 17.55 | 38.35 | 35.50 | 19.50 | 60.45 | 14.04 | | | | | | | | | | | |
| | | Brick & Plywood | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | | Bamboo Mat | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 | 20.15 |
| | | Wood Plank | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 | 68.52 |
| Door & Windows | 1 Door & Windows Frame a. Area (m ²) | Door & Windows Frame | 19.20 | 17.28 | 21.60 | 17.04 | 10.08 | 8.64 | 17.40 | 12.96 | 11.52 | 12.96 | 12.48 | | | | | | | | | | | |
| | | Wood | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | | Wood | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 | 26.00 |
| | | Wood | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | | Wood | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 | 23.68 |
| | | Wood | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |

| COMP ONE NT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | | | |
|-------------|------------------------------------|------------------------------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | | | | | |
| | | | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | | | |
| | b. Condition | HD | MD | MD | MD | HD | HD | G | G | MD | MD | HD | G | | | | | | | | | | | |
| | c. Loss Quantity (m ²) | 6.25 | 4.80 | 4.32 | 5.40 | 8.52 | 5.04 | 0.00 | 0.00 | 3.24 | 2.88 | 6.48 | 0.00 | 46.93 | | | | 3.91 | | | | | | |
| 2 | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | | | Wood | | | | | | |
| | a. Area (m ²) | 3.20 | 1.60 | 4.80 | 4.80 | 6.40 | 1.60 | 1.60 | 3.20 | 3.20 | 4.80 | 1.60 | 4.80 | | | | | | | | | | | |
| | b. Door (Pcs) | 2 | 1 | 4 | 2 | 5 | 2 | 1 | 3 | 3 | 4 | 1 | 4 | | | | | | | | | | | |
| | c. Windows (Pcs) | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 5 | 2 | 2 | 2 | 3 | | | | | | | | | | | |
| | d. Condition | HD | MD | MD | MD | HD | HD | G | G | MD | MD | HD | G | | | | | | | | | | | |
| | e. Loss Quantity (m ²) | 1.60 | 0.40 | 1.20 | 1.20 | 3.20 | 0.80 | 0.00 | 0.00 | 0.80 | 1.20 | 0.80 | 0.00 | 11.20 | | | | 0.93 | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Ceiling | 1 | Hanging Structure | | | | | | | | | | | | | | | | | | | | | | |
| | | a. Material | | | Wood | | | | | | | | Wood | | | | | | | | Wood | | | |
| | | b. Area (m ²) | | | 144.00 | | 101.25 | | | | | | 45.00 | | | | | | | | | | | |
| | | c. Condition | | | MD | | G | | | | | | HD | | | | | | | | | | | |
| | d. Loss Quantity (m ²) | | | 36.00 | | 0.00 | | | | | | 22.50 | | | | | | | | | 58.50 | | | |
| | 2 | Ceiling | | | | | | | | | | | | | | | | | | | | | | |
| | | | a. Material | | | Plywood & Zink | | Asbestos | | | | | | Plywood | | | | | | | | Plywood | | |
| | | b. Area (m ²) | | | 144.00 | | 101.25 | | | | | | 45.00 | | | | | | | | | | | |
| | | c. Condition | | | HD | | LD | | | | | | HD | | | | | | | | | | | |
| | | d. Loss Quantity (m ²) | | | 72.00 | | 10.13 | | | | | | 22.50 | | | | | | | | | 58.50 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
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| Roof | 1 | Roof Structure Type | Simple Frame | Simple Frame | Shield Frame | Shield Frame | Shield Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame |
| | | | | | | | | | | | | | | | | | | | | | | | | |

| COMP ONE UNIT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | | | | | | | |
|------------------------------------|------------------|-----------------------|----------------------|-----------|-----------|----------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|------------|----------|-----------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | Bamboo | Wood | Asbestos | Zink | Roof Tile | Asbestos | Roof Tile | Zink | Bamboo | Wood | Asbestos | Zink | | | |
| | | a. Material | Bamboo | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| b. Area (m ²) | 51.75 | 124.00 | 204.00 | 122.50 | 127.80 | 70.00 | 32.50 | 158.00 | 108.00 | 92.00 | 84.00 | 120.00 | | | | | | | | | | | | | | | | |
| c. Condition | HD | LD | MD | MD | MD | MD | LD | LD | LD | LD | MD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | |
| d. Loss Quantity (m ²) | 25.88 | 0 | 0 | 30.63 | 31.95 | 17.50 | 3.25 | 15.80 | 10.80 | 9.20 | 21.00 | 12.00 | | | | | | | | | | 25.88 | 215.8 | 53 | 17. | 96 | | |
| 2 Roof Cover | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Material | Roof Tile & Zink | Asbestos | Roof Tile & Asbestos | Roof Tile | Roof Tile | Roof Tile & Asbestos | Roof Tile | Roof Tile | Roof Tile | Asbestos | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Asbestos | Roof Tile | Roof Tile | Asbestos | Roof Tile | Asbestos | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Asbestos | Roof Tile | Asbestos | |
| b. Area (m ²) | 51.75 | 124.00 | 204.00 | 122.50 | 127.80 | 70.00 | 32.50 | 158.00 | 108.00 | 92.00 | 84.00 | 120.00 | | | | | | | | | | | | | | | | |
| c. Condition | HD | LD | MD | MD | MD | MD | MD | MD | MD | LD | MD | LD | LD | LD | MD | MD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | |
| d. Loss Quantity (m ²) | 25.88 | 0 | 0 | 30.63 | 12.78 | 17.50 | 8.13 | 39.50 | 27.00 | 9.20 | 21.00 | 12.00 | | | | | | | | | | 198.22 | 55.85 | 12.94 | 16.52 | 4.65 | 1.08 | |

| Structure System | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | | | | | | | | | |
|------------------------------------|--------------|-----------------------|--------|----------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------------|------|----------|-----------------------|-----------|----------|-----------|------|--------|------|----------|------|------|------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | Bamboo | Wood | Asbestos | Zink | Roof Tile | Asbestos | Roof Tile | Zink | Bamboo | Wood | Asbestos | Zink | | |
| | | 1 Beam | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| b. Volume (m ³) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. Condition | HD | MD | MD | I ^v | LD | LD | LD | LD | MD | LD | HD | LD | LD | MD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | |
| d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 Column | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| b. Volume (m ³) | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. Condition | HD | MD | MD | I ^v | LD | LD | LD | LD | MD | LD | HD | LD | LD | MD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | |
| d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| COMP ONE NT | DESCRIPTORS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|---------------------|---|-----------------------|-------------------|-------------------|-------------------|---------------|-------------------|---------------|-------------------|-------------------|---------------|-------------------|-------------------|-------------------|-----------------------|-------------------|--|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | |
| | Beam-Column Joint | | | | | | | | | | | | | | | | | |
| | 3 Condition | HD | MD | MD | LD | LD | LD | LD | LD | MD | LD | LD | LD | LD | HD | LD | | |
| Clean Water | 1 Source | Public Facilities | Public Facilities | Public Facilities | Public Facilities | Artesian Well | Public Facilities | Artesian Well | Public Facilities | Public Facilities | Artesian Well | Public Facilities | Public Facilities | Public Facilities | Public Facilities | Public Facilities | | |
| | 2 Reservoir Condition | | | | | | | | | | | | | | | | | |
| | 3 Water Pump Condition | | | B | | B | | | | | | | B | | | | | |
| | 4 Water Tap Condition | | | | | | | | | | | | | | | | | |
| Waste Water | 1 From Toilet | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| Electricity | Energy Consumption: (watt) | JNTH | 450 | 900 | 450 | 450 | 450 | 450 | 450 | 450 | 450 | 900 | 450 | 450 | 450 | 450 | | |
| | | | | | | | | | | | | | | | | | | |
| Physical Adaptation | Elevated The Land and Floor Following Water Level | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

| COMP ONE UNIT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|---------------|--------------|-----------------------|--------|----------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------------|-----------------------|--|--|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| | | ht | | The First Floor Open | | Plank | | | | | | | | | | | | |

Note

G = Good Condition
 LD = Light Damage
 MD = Moderate Damage
 HD = Heavy Damage

I) = The entire land was covered with building
 II) = Assumed according to the initial condition
 III) = Joint with neighbor
 IV) = 2 times/month, during the dry season (5 month)

V) = Invisible
 VI) = Stagnated water must ladle out

Respondent:

- | | | |
|------------------|--------------|--------------|
| 1 = Purwati | 5 = Sumarto | 9 = Laode |
| 2 = Achmad Soleh | 6 = Sudarso | 10 = Nanang |
| 3 = Nur Khamim | 7 = Daryanto | 11 = Surtpto |
| 4 = Dul Kholiq | 8 = Kusmono | 12 = Suginem |

Calculation Method


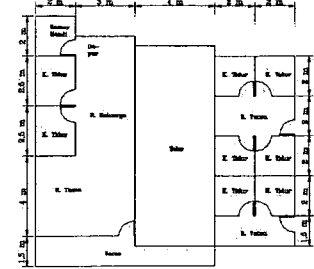

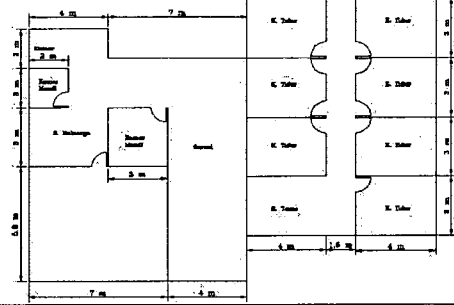

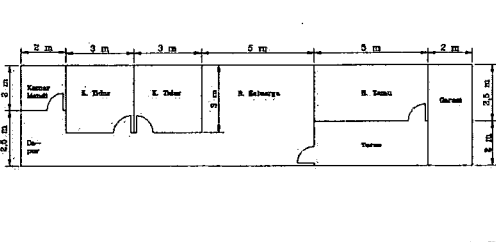

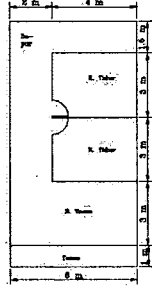

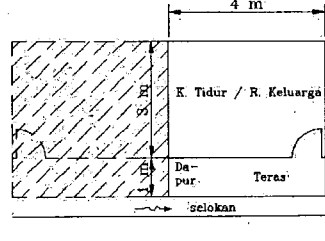

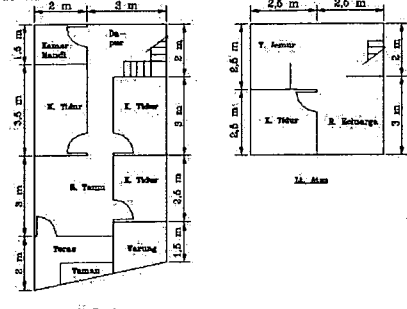
A. Loss Quantity = Material Quantity x Damage


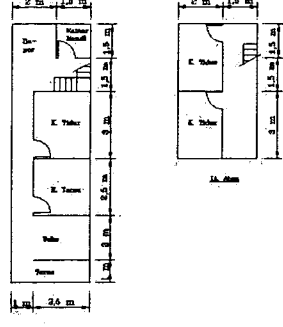

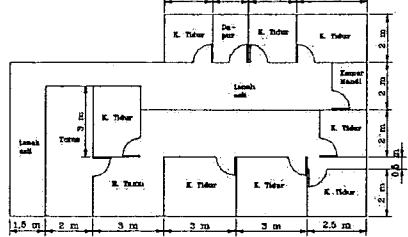

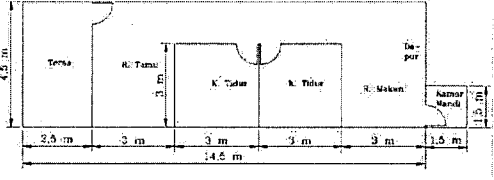

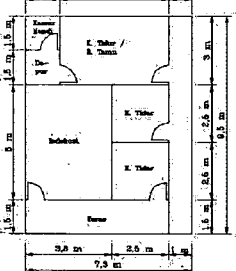

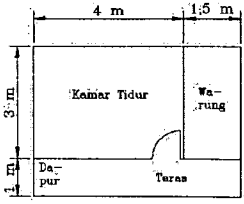

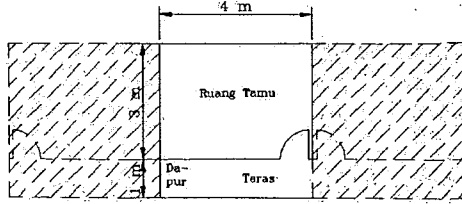
B. Total Loss = Σ Loss Quantity

C. Average Loss per Unit = Total Loss / Total Data

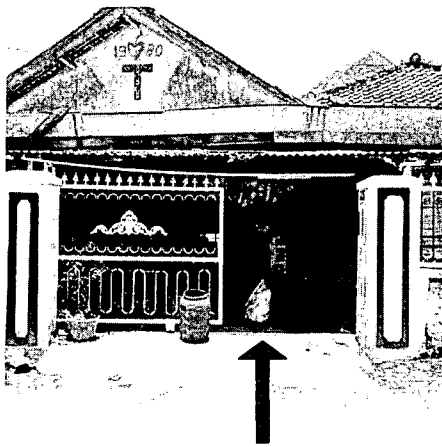
| Damage Score | |
|--------------|-------------|
| G = | 0 MD = 25 |
| LD = | 10 % HD = % |

Location : Rungkut Sub-Disatrick, SURABAYA

| Case | Front view | Building plan |
|---------------------------|---|--|
| R1 Joni |  |  |
| R2 Indarwati dahlan |  |  |
| R3 Julianto |  |  |
| R4 Siti Aisyah |  |  |
| R5 Tin Suswarini |  |  |
| R6 Endang |  |  |

| Case | Front view | Building plan |
|----------------|---|--|
| R7 Emi |  |  |
| R8 Sugeng |  |  |
| R9 Anifah |  |  |
| R10 Fatimah |  |  |
| R11 Sumarni |  |  |
| R12 Kemis |  |  |

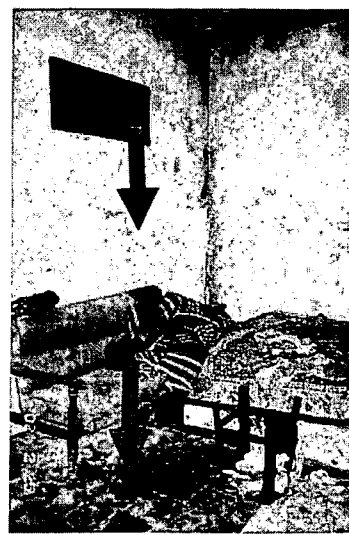
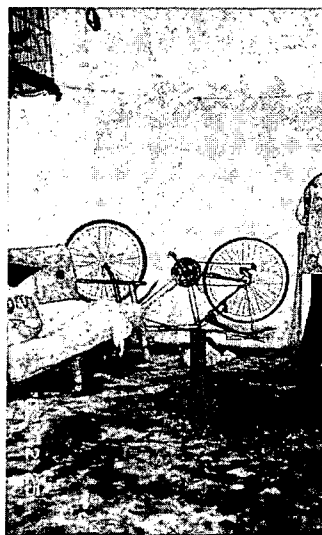
The examples how people adapted their houses to minimize physical loss



Extended floor



Build small embankment in entrance door



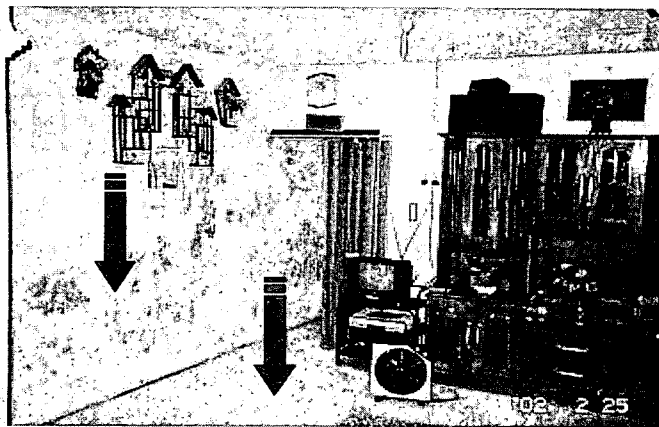
Typically physical loss occur in performance of wall and flooring



Deterioration on ceiling sometime occur in flooded house



Door and windows frame can still damaged by humidity continued by wall crack



Replacing plaster wall and flooring often have been done by people



Less availability of drainage also make worse flood effects as well as low awareness of people enhance loss physical environment



LOSS MEASUREMENT OF HOUSES IN MEDOKAN AYU & KALI RUNGKUT SUB-DISTRICT, SURABAYA

1. One Stroye House

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------------|--|----------------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|--------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| Land Area | 1 Cover of Land Surface | Original land | Plaster | - | - | - | Original land | - | Original land | - | - | - | - | - | - | - | - |
| | 2 Height of Inundation : (cm) | 40 | 60 | 30 | 50 | 30 | - | 50 | 50 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| | 3 Duration of Inundation (day) | 0.5 | 1 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 4 Frequency of Inundation (times / year) | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 | >12 |
| Building | 1 Building Age (year) | 22 | 52 | 6 | 10 | 13 | 23 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| | 2 Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House |
| | 3 Floor Area (m ²) | 142 | 244 | 90 | 69 | 16 | 115 | 67.5 | 69.4 | 22 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Foundation | 1 Foundation Type | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous | Continuous |
| | 2 Material | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone | Stone |
| | 3 Volume (m ³) | 52.5 | 89,25 | 40,5 | 37 | 6,5 | 41 | 30,15 | 17,4 | 13,25 | 9,5 | 9,5 | 9,5 | 9,5 | 9,5 | 9,5 | 9,5 |
| | 4 Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | 5 Loss Quantity (m ³) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|-----------|------------------------------------|-----------------------|----------------|---------|---------|---------|---------------|----------------|---------|---------|---------|---------|---------|------------|-----------------------|---------|---------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| Floor | 1 Floor Area (m ²) | 142.00 | 244.00 | 90.00 | 69.00 | 16.00 | 115.00 | 67.50 | 69.40 | 22.00 | 16.00 | | | | | | |
| | 2 Floor Cover ^{IT}) | | | | Plaster | | | | | | | | | | | | |
| | a. Material | Ceramic | Tile & Plaster | Ceramic | Ceramic | Plaster | Tile, Plaster | Tile & Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | PC Tile | Ceramic | PC Tile | Ceramic |
| | b. Condition | G | LD | G | HD | HD | MD | G | HD | HD | HD | HD | HD | | | | |
| | c. Loss Quantity (m ²) | 0.00 | 24.40 | 0.00 | 34.50 | 8.00 | 28.75 | 0.00 | 34.70 | 11.00 | 8.00 | 105.53 | 26.58 | 17.25 | 10.55 | 2.66 | 1.73 |
| | Plaster | | | | | | | | | | | Plaster | | | Plaster | | |
| | a. Condition | G | LD | G | LD | MD | LD | G | MD | MD | MD | | | | | | |
| | b. Loss Quantity (m ²) | 0.00 | 24.40 | 0.00 | 6.90 | 4.00 | 11.50 | 0.00 | 17.35 | 5.50 | 4.00 | 73.65 | | | 7.37 | | |

| | | | | | | | | | | | | | | | | | |
|------|-----------------------------------|-------|-------|-------|--------------------|-------|-------|-------|--------------|-------|-------|--------|-------|------------|---------|------------|------|
| Wall | 1 Material | Brick | Brick | Brick | Brick & bamboo mat | Brick | Brick | Brick | Brick & wood | Brick | Brick | Brick | Wood | Bamboo Mat | Wood | Bamboo Mat | |
| | 2 Area (m ²) | 269 | 440.7 | 210.6 | 192.4 | 33.8 | 213.2 | 157.3 | 100.9 | 71.5 | 49.4 | | | | | | |
| | 3 Surface Condition | LD | LD | LD | HD | HD | LD | MD | HD | HD | HD | HD | | | | | |
| | 4 Loss Quantity (m ²) | 26.90 | 44.07 | 21.06 | 96.20 | 16.90 | 21.32 | 39.33 | 50.45 | 35.75 | 24.70 | 303.35 | 25.23 | 48.10 | 30.34 | 2.52 | 4.81 |
| | 5 Plaster Condition | G | LD | G | HD | MD | LD | G | | LD | LD | LD | | | Plaster | | |
| | 6 Loss Quantity (m ²) | 0.00 | 44.07 | 0.00 | 48.10 | 8.45 | 21.32 | 0.00 | | 7.15 | 4.94 | 134.03 | | | 13.40 | | |

| | | | | | | | | | | | | | | | | |
|----------------|---------------------------|-------|-------|-------|-------|------|-------|-------|-------|------|------|------|------|------|------|------|
| Door & Windows | 1 Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. Area (m ²) | 24.00 | 34.10 | 22.08 | 11.52 | 2.88 | 18.72 | 11.52 | 10.80 | 8.64 | 7.44 | | | | | |
| | b. Condition | LD | LD | LD | HD | LD | HD | LD | LD | LD | LD | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|-----------------------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|--|-----------------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| 2 | c. Loss Quantity (m ²) | 2.40 | 3.41 | 2.21 | 5.76 | 0.29 | 9.36 | 1.15 | 1.08 | 0.86 | 0.74 | 27.27 | 2.73 | | | |
| | Door & Windows Leaf | plywood | zing & plywood | Plywood | Plywood | plywood | plywood | plywood | plywood | plywood | plywood | Plywood | Plywood | Zink | | |
| | a. Area (m ²) | 17.60 | 19.20 | 4.32 | 3.20 | 1.60 | 16.00 | 4.32 | 8.00 | 1.60 | 1.60 | | | | | |
| | b. Door (Pcs) | 12 | 13 | 5 | 3 | 1 | 11 | 4 | 6 | 1 | 1 | | | | | |
| | c. Windows (Pcs) | | | | | | | | | | | | | | | |
| | d. Condition | LD | LD | LD | HD | LD | HD | LD | LD | LD | LD | | | | | |
| | e. Loss Quantity (m ²) | 1.76 | 1.92 | 0.43 | 1.60 | 0.16 | 8.00 | 0.43 | 0.80 | 0.16 | 0.16 | 14.46 | 1.45 | 0.10 | | |

| | | | | | | | | | | | | | | | | | | | |
|---|------------------------------------|---------------------------|----------|---|-------|----------|-------|---|---------|---------|---------|---------|---------|---------|----------|---------|---------|---------|----------|
| 9 | Ceiling | Hanging Structure | | | | | | | | | | | | | | | | | |
| | | a. Material | Wood | - | - | Wood | - | - | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | | b. Area (m ²) | 142.0 | - | - | 69.00 | 16.00 | - | - | 69.40 | 22.00 | 16.00 | | | | | | | |
| | | c. Condition | LD | - | - | MD | LD | - | - | - | LD | LD | | | | | | | |
| | d. Loss Quantity (m ²) | 14.20 | | | 17.25 | 1.60 | | | | 2.20 | 1.60 | 14.20 | 1.42 | | | | | | |
| 2 | Ceiling | | | | | | | | | | | | | | | | | | |
| | | a. Material | Asbestos | - | - | Asbestos | - | - | Plywood | Plywood | Plywood | Plywood | Plywood | Plywood | Asbestos | Plywood | Plywood | Plywood | Asbestos |
| | | b. Area (m ²) | 142.0 | - | - | 69.00 | 16.00 | - | - | - | 22.00 | 16.00 | | | | | | | |
| | | c. Condition | LD | - | - | LD | MD | - | - | - | MD | MD | | | | | | | |
| | d. Loss Quantity (m ²) | 14.20 | | | 6.90 | 4.00 | | | | 5.50 | 4.00 | 20.25 | 2.03 | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Roof | Roof Structure Type | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame | Simple Frame |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|-----------|------------------------------------|-----------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------------------|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| 1 | a. Material | Wood | Wood | Concrete | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | |
| | b. Area (m ²) | 163.2 | 277.00 | 124.00 | 93.25 | 77.00 | 124.00 | 83.25 | 77.00 | 24.00 | 22.00 | 77.00 | 24.00 | 22.00 | | |
| | c. Condition | G | G | - | LD | LD | MD | MD | HD | LD | LD | HD | LD | LD | | |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | | 9.33 | 7.70 | 31.00 | 20.81 | 38.50 | 2.40 | 2.20 | 111.94 | 2.40 | 2.20 | 11.19 | |
| 2 | Roof Cover | | | | | | | | | | | | | | | |
| | a. Material | Roof Tile | Roof Tile | | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | Roof Tile | |
| | b. Area (m ²) | 163.2 | 277.00 | 124.00 | 93.25 | 77.00 | 124.00 | 83.25 | 77.00 | 24.00 | 22.00 | 77.00 | 24.00 | 22.00 | | |
| | c. Condition | MD | MD | | HD | MD | HD | LD | HD | MD | MD | HD | MD | MD | | |
| | d. Loss Quantity (m ²) | 40.81 | 69.25 | | 46.63 | 19.25 | 62.00 | 8.33 | 38.50 | 6.00 | 5.50 | 296.26 | 6.00 | 5.50 | 29.63 | |

| Structure System | Beam | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------------------|------------------------------------|-----------------------|----------|----------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|------------|-----------------------|----------|----------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| 1 | a. Material | Concrete | Concrete | Concrete | Concrete & Wood | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | |
| | c. Condition | G | G | G | - | G | - | - | - | - | - | - | - | G | G | G | Wood |
| | d. Loss Quantity (m ³) | | | | | | | | | | | | | | | | |
| 2 | Column | | | | | | | | | | | | | | | | |
| | a. Material | Concrete | Concrete | Concrete | Concrete & Wood | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | |
| | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | Wood |
| | d. Loss Quantity (m ³) | | | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|---------------------|--------------------------------------|-----------------------|----------------|----------------------|---------|---|---------------------------------|-------------------|---------|---------|---------|---------|---|---|-----------------------|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| | Beam-Column Joint Condition | 6 | 6 | 6 | - | 6 | - | - | - | 6 | - | - | 6 | | | |
| | 1 Resource Water Reservoir Condition | PDAM | PDAM | PDAM | Well | Public Collection | Well | Public Collection | Well | Well | Well | Well | Well | | | |
| | 2 Water Pump Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Clean Water | 3 Water Tap Condition | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | 4 | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| Waste Water | From Toilet | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | Cubluk | | | |
| Electricity | Energy Consumption: (watt) | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | 450 | 450 | 900 | 900 | 900 | |
| Physical Adaptation | | Elevated floor 30 cm | Elevated floor | Elevated floor 30 cm | Nothing | Construct small embankment 10 cm in entrance and elevated floor | Elevated floor in bedroom 50 cm | Nothing | Nothing | Nothing | Nothing | Nothing | Construct small embankment 10 cm in entrance and elevated floor | Construct small embankment 10 cm in entrance and elevated floor | | |

2. Two Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|--------------|-----------------------|--------|------------|-----------------------|
| | | Case 6 | Case 7 | | |

| Land Area | 1 | Cover of Land Surface | Original land | Plaster | | | | |
|-----------|---|--|---------------|---------|--|--|--|--|
| | 2 | Height of Inundation : (cm) | 70 | - | | | | |
| | 3 | Duration of Inundation (day) | 2 | 2 | | | | |
| | 4 | Frequency of Inundation (times / year) | > 12 | > 12 | | | | |

| Building | 1 | Building Age (year) | 14 | 5 | | | | |
|----------|--------------------------|------------------------------|--------------------------|--------------|-------|--|--|--|
| | 2 | Building Type | Landed House | Landed House | | | | |
| | 3 | Floor Area (m ²) | 72.50 | 61.30 | | | | |
| | | | a. 1 st Floor | 47.50 | 40.30 | | | |
| | b. 2 nd Floor | 25.00 | 21.00 | | | | | |

| Foundation | 1 | Foundation Type | Contingus & | Contingus | | | | |
|------------|---|--------------------------|-------------|-----------|-------|-------|--|--|
| | 2 | Material | Stone | Stone | Stone | Stone | | |
| | 3 | Volume (m ³) | 25.25 | 24.00 | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|---------------------------------|-----------------------|--------|------------|-----------------------|
| | | Case 6 | Case 7 | | |
| 4 | Condition | G | G | | |
| 5 | Loss Quantity (m ³) | 0.00 | 0.00 | 0.00 | 0.00 |

| Floor | A. 1 st Floor | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-------|------------------------------------|-----------------------|------------------|--------------------------|
| | DESCRIPTIONS | DATA OF CASSED HOUSES | | |
| 1 | Floor Area (m ²) | 47.50 | 40.30 | |
| 2 | Floor Cover ^{II} | | | |
| | a. Material | Tile & Plaster | Plaster, Ceramic | Plaster |
| | b. Condition | G | LD | |
| | c. Loss Quantity (m ²) | 0.00 | 4.03 | 2.00 2.00 2.00 1.01 1.01 |
| 3 | Plaster | | | Plaster |
| | a. Condition | LD | G | |
| | b. Loss Quantity (m ²) | 4.75 | 0.00 | 4.75 2.38 |
| | | | | |
| | B. 2 nd Floor | | | |
| 1 | Floor Area (m ²) | 25.00 | 21.00 | |
| 2 | Floor Cover | | | |
| | a. Material | Ceramic | Plaster | Ceramic |
| | b. Condition | G | G | |
| | c. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 0.00 0.00 0.00 |
| 3 | Plaster | | | Plaster |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------------------------------|--------------|----------------------|--------|------------|-----------------------|
| | | Case 6 | Case 7 | | |
| | | a. Condition | G | | |
| b. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | |

| Wall | | A. 1 st Floor | | B. 2 nd Floor | |
|--------------------------|---------------------------------|--------------------------|--------|--------------------------|---------|
| 1 | Material | Brick | Brick | Brick | Brick |
| 2 | Area (m ²) | 131.80 | 124.80 | | |
| 3 | Surface Condition | G | LD | | |
| 4 | Loss Quantity (m ²) | 0.00 | 12.48 | 12.48 | 6.24 |
| 5 | Plaster Condition | G | G | Plaster | Plaster |
| 6 | Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 |
| B. 2 nd Floor | | | | | |
| 1 | Material | Brick | Brick | Brick | Brick |
| 2 | Area (m ²) | 66.30 | 70.20 | | |
| 3 | Surface Condition | | LD | | |
| 4 | Loss Quantity (m ²) | 0.00 | 7.02 | 7.02 | 3.51 |
| 5 | Plaster Condition | | G | Plaster | Plaster |
| 6 | Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | TOTAL LOSS | | AVERAGE LOSS per UNIT | |
|----------------|------------------------------------|------------------------------------|--------|------------|---------|-----------------------|--------------|
| | | Case 6 | Case 7 | Wood | plywood | | |
| | | Case 6 | Case 7 | Wood | plywood | | |
| Door & Windows | 1 Door & Windows Frame | Wood | Wood | Wood | | Wood | |
| | | a. Area (m ²) | 17.30 | 15.60 | | | |
| | | b. Condition | LD | LD | | | |
| | 2 Door & Windows Leaf | c. Loss Quantity (m ²) | 1.73 | 1.56 | 3.29 | | 1.65 plywood |
| | | a. Area (m ²) | 6.40 | 7.20 | | | |
| | | b. Door (Pcs) | 5 | 5 | | | |
| | | c. Windows (Pcs) | | | | | |
| | | d. Condition | LD | LD | | | |
| | e. Loss Quantity (m ²) | 0.64 | 0.72 | 1.36 | | 0.68 | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | TOTAL LOSS | | AVERAGE LOSS per UNIT | |
|-----------|---------------------|------------------------------------|---------|------------|---------|-----------------------|---------|
| | | Case 6 | Case 7 | Wood | plywood | | |
| | | Case 6 | Case 7 | Wood | plywood | | |
| Ceiling | 1 Hanging Structure | Wood | Wood | Wood | | Wood | |
| | | a. Material | 72.50 | 61.30 | | | |
| | | b. Area (m ²) | 72.50 | 61.30 | | | |
| | | c. Condition | G | G | | | |
| | 2 Ceiling | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | | 0.00 |
| | | a. Material | Plywood | Plywood | Plywood | | Plywood |
| | | b. Area (m ²) | 72.50 | 61.30 | | | |
| | | c. Condition | G | G | | | |
| | | d. Loss Quantity | 0.00 | 0.00 | 0.00 | | 0.00 |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|------------------------------------|--------------|--------------|-----------------------|
| | | Case 6 | Case 7 | | |
| | (m ²) | | | 0 | |
| Roof | 1 | Roof Structure Type | Simple Frame | Simple Frame | |
| | | a. Material | Wood | Wood | Wood |
| | | b. Area (m ²) | 98.00 | 82.50 | |
| | | c. Condition | G | G | |
| | | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 |
| | 2 | Roof Cover | Roof Tile | Roof Tile | Roof Tile |
| | | a. Material | Roof Tile | Roof Tile | Roof Tile |
| | | b. Area (m ²) | 98.00 | 82.50 | |
| | c. Condition | LD | LD | | |
| | d. Loss Quantity (m ²) | 9.80 | 8.25 | 18.05 | 9.03 |

| | | | | | |
|------------------|--------|------------------------------------|----------|----------|----------|
| Structure System | 1 | Beam | Concrete | Concrete | Concrete |
| | | a. Material | Concrete | Concrete | Concrete |
| | | b. Volume (m ³) | | | |
| | | c. Condition | G | G | |
| | | d. Loss Quantity (m ²) | | | |
| 2 | Column | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|----------------------|----------|------------|-----------------------|
| | | Case 6 | Case 7 | | |
| | | Concrete | Concrete | | |
| | a. Material | | | Concrete | Concrete |
| | b. Volume (m ³) | | | | |
| | c. Condition | G | G | | |
| | d. Loss Quantity (m ²) | | | | |
| 3 | Beam-Column Joint Condition | G | G | | |

| | | | | | |
|-------------|---|---------------------------|------|-------------------|--|
| Clean Water | 1 | Resource | Well | Public Collection | |
| | 2 | Water Reservoir Condition | - | - | |
| | 3 | Water Pump Condition | - | - | |
| | 4 | Water Tap Condition | - | - | |

| | | | | |
|-------------|-------------|--------|--------|--|
| Waste Water | From Toilet | Cubluk | Cubluk | |
|-------------|-------------|--------|--------|--|

| | | | | |
|-------------|----------------------------|-----|-----|--|
| Electricity | Energy Consumption: (watt) | 900 | 900 | |
|-------------|----------------------------|-----|-----|--|

| | | | | |
|---------------------|--|---------------------|---------|--|
| Physical Adaptation | | Elevated floor 7 cm | Nothing | |
|---------------------|--|---------------------|---------|--|

Note

- G = Good Condition
- LD = Light Damage
- MD = Moderate Damage
- HD = Heavy Damage

Calculation Method

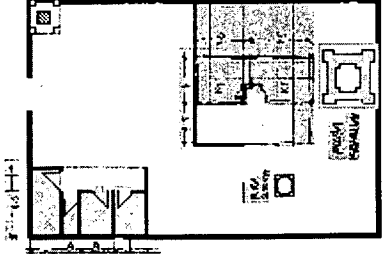

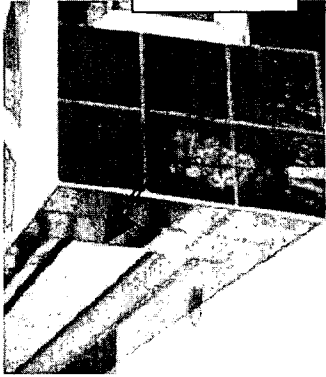
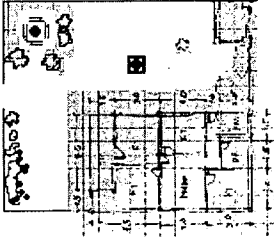

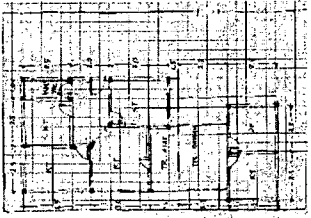
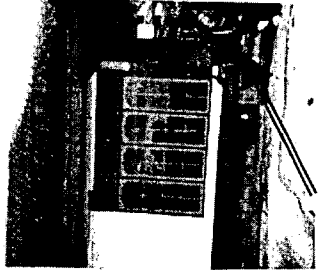
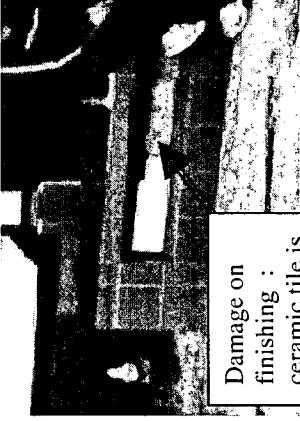
A. Loss Quantity = Material Quantity x Damage Score

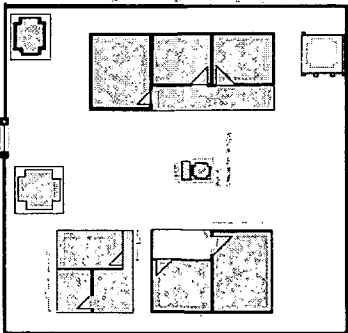
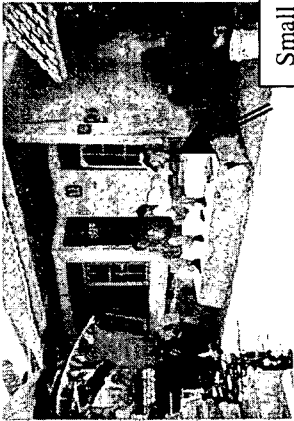

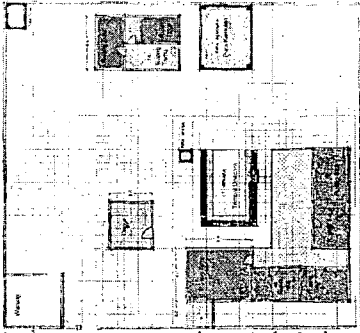


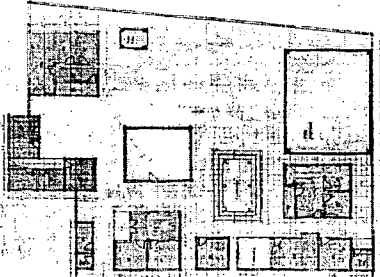
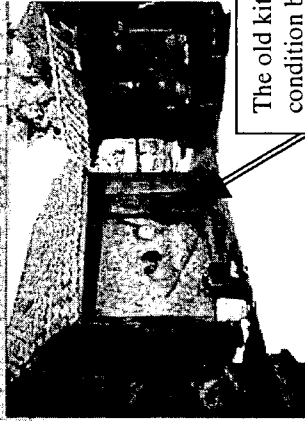
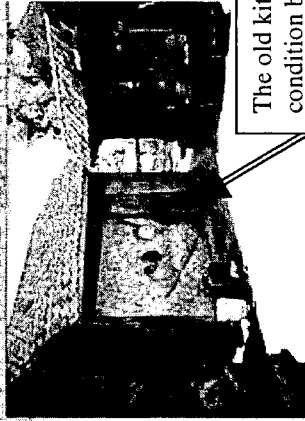
B. Total Loss = Σ Loss Quantity

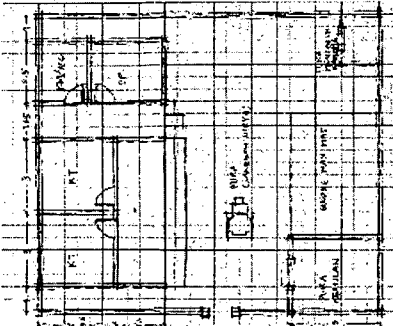
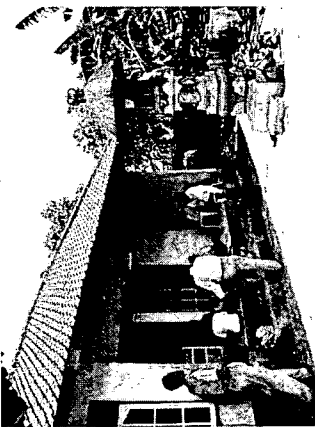
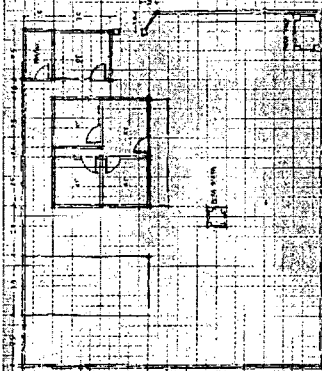

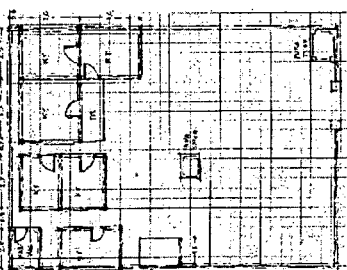
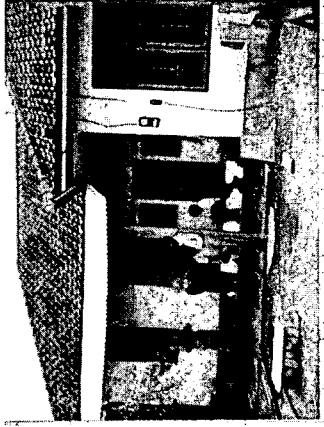
C. Average Loss per Unit = Total Loss / Total Data Number

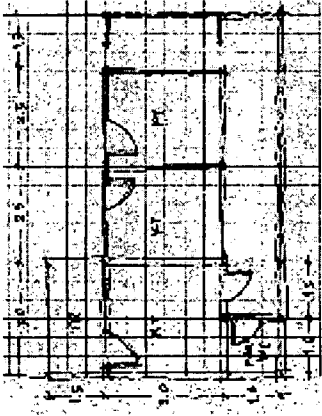
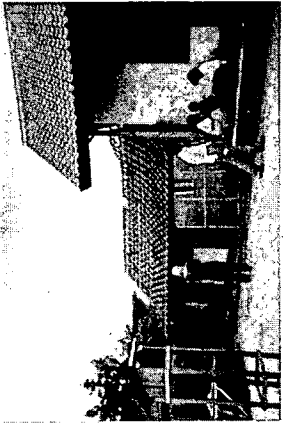
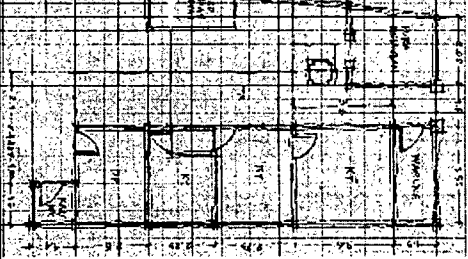
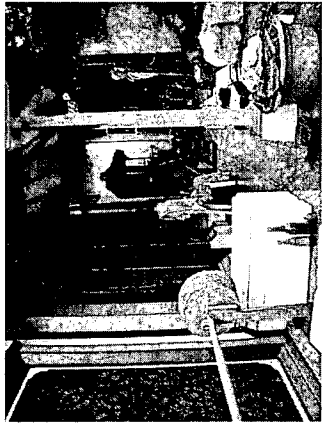
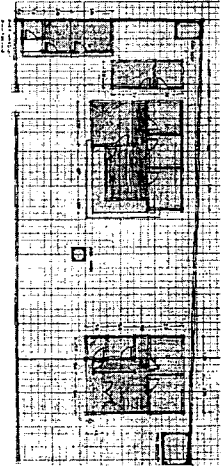
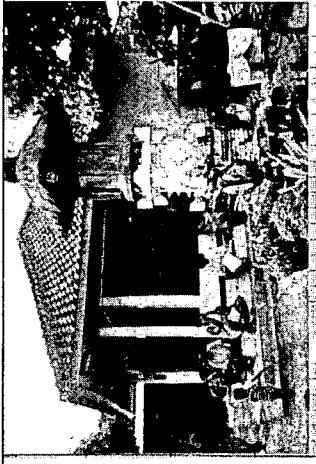
| Damage Score | |
|--------------|-----------|
| G | = 0 MD 25 |
| LD | = 10 % |

Location : Serangan Sub-District, DENPASAR

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|--|--|
| 1. | I Nyoman Tande |  |  |  <p data-bbox="451 165 619 344">Damage on finishing : ceramic tile is come loose.</p> |
| 2. | I Made Pugig |  |  | |
| 3 | I Made Muje |  |  |  <p data-bbox="1307 517 1470 703">Damage on finishing : ceramic tile is come loose.</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|---|--|
| 4. | I Wayan Lotreng |  |  <p data-bbox="529 768 649 913">Small damage of wall</p> |  |
| 5. | I Wayan Suplag |  |  <p data-bbox="914 297 981 837">Damage floor caused by humid condition</p> |  |
| 6. | I Wayan Tampe |  |  <p data-bbox="1323 723 1436 954">The old kitchen condition because of material quality</p> |  |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|--|--------------------------------------|
| 1 | 2 | 3 | 4 | 5 |
| 7. | I Wayan Kasimun |  |  | The new house renovation / no damage |
| 8. | I Made Wydia |  |  | |
| 9. | I Wayan Gesyah |  |  | |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|-----|--------------------|---|--|-----------------------------------|
| 10. | I Wayan Suryani |  |  | The old and new house renovation. |
| 11. | I Wayan Riben |  |  | |
| 12. | I Wayan Roge |  |  | The new house renovation. |

LOSS MEASUREMENT OF HOUSES IN SERANGAN SUB-DISTRICT, DENPASAR

1. ONE STOREY HOUSE

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|------------|--------------|--------------------------------------|--------------|--------------|--------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|--|--|
| | | Case1 | Case2 | Case3 | Case4 | Case5 | Case6 | Case7 | Case8 | Case9 | Case10 | Case11 | Case12 | | | | | |
| Land Area | 1 | Cover of Land Surface | Sand | Sand | Sand | Sand | Sand, coral rock | Sand | Sand | Sand | Sand | Sand | Sand | Coral rock | Sand | | | |
| | 2 | Height of Inundation : (cm) | 10 - 50 | 10 - 50 | | | | | | | | | | | 10 - 50 | | | |
| | 3 | Duration of Inundation | 1 - 12 day | | | | | | | | | | | | 1 - 12 hours | | | |
| | 4 | Frequency of Inundation (times/year) | 1 - 3 | | | | | | | | | | | | 1 - 3 | | | |
| Building | 1 | Building Age (year) | 22 | 11 | 11 | 23 | 28 | 22 | 8 | 10 | 4 | 2 | 13 | 15 | Landed House | Landed House | | |
| | 2 | Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | | |
| | 3 | Floor Area (m ²) | 197.00 | 90.00 | 85.00 | 67.50 | 65.00 | 204.00 | 30.00 | 25.00 | 54.00 | 21.00 | 125.00 | 104.36 | | | | |
| Foundation | 1 | Foundation Type | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | Foot | | |
| | 2 | Material | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | Coral rock | | |
| | 3 | Volume (m ³) | 14.50 | 14.10 | 8.00 | 19.23 | 27.60 | 41.70 | 6 | 11.40 | 13.50 | 8.64 | 13.95 | 29.80 | | | | |
| | 4 | Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | | |
| | 5 | Loss Quantity (m ³) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| Floor | 1 | Floor Area (m ²) | 197.00 | 90.00 | 85.00 | 67.50 | 65.00 | 204.00 | 30.00 | 25.00 | 54.00 | 21.00 | 125.00 | 104.36 | | | | |
| | 2 | Floor Cover ^{II)} | | | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|----------------|------------------------------------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|---------------|--------|----------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| | | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | | | | | |
| 3 | a. Material | G | G | G | G | G | G | G | G | G | G | G | G | Concrete | Concrete | Concrete | 0.00 | Concrete |
| | b. Condition | | | | | | | | | | | | | | | | | |
| | c. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Plaster | | | | | | | | | | | | | | | | | Plaster |
| | a. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | |
| | b. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wall | 1 Material | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | Brick Masonry | 128.40 | Brick |
| | 2 Area (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 103.80 |
| | 3 Surface Condition | G | G | G | MD | G | G | G | G | G | G | G | G | G | G | G | G | LD |
| | 4 Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 64.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 80 |
| | 5 Plaster Condition | G | G | G | LD | G | G | G | G | G | G | G | G | G | G | G | G | Plaster |
| | 6 Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 6.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 |
| Door & Windows | 1 Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | 11.52 | Wood |
| | a. Area (m ²) | G | G | G | LD | G | G | G | G | G | G | G | G | G | G | G | 11.52 | 18.60 |
| | b. Condition | | | | | | | | | | | | | | | | | |
| | c. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 1.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 |
| | 2 Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | 9.60 | Wood |
| | a. Area (m ²) | 7 | 8 | 8 | 8 | 11 | 22 | 6.40 | 8.00 | 8.00 | 7 | 7 | 6 | 5 | 6 | 1 | 19.20 | |
| | b. Door (Pcs) | 5 | 6 | 6 | 8 | 7 | 16 | 7 | 6 | 6 | 6 | 6 | 3 | 5 | 3 | 5 | 5 | |
| | c. Windows (Pcs) | G | G | G | LD | G | G | G | G | G | G | G | G | G | G | G | G | |
| | d. Condition | | | | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|--------------|------------------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|--------------|-----------|------------|--------------|-----------------------|
| | | Case1 | Case2 | Case3 | Case4 | Case5 | Case6 | Case7 | Case8 | Case9 | Case10 | Case11 | Case12 | | |
| | e. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.64 | 0.05 |
| Ceiling | 1 Hanging Structure | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. Material | 197.00 | 90.00 | 85.00 | 67.50 | 204.00 | 65.00 | 30.00 | 25.00 | 54.00 | 21.00 | 125.00 | 104.36 | | |
| | b. Area (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | c. Condition | G | G | G | LD | G | G | G | G | G | G | G | G | G | G |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 6.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.75 | 0.56 |
| 2 Ceiling | a. Material | Plywood | Plywood | Plywood | Plywood | Bamboo Mat | Plywood | Plywood | Plywood | Plywood | Plywood | Plywood | Bamboo Mat | Plywood | Bamboo Mat |
| | b. Area (m ²) | 197.00 | 90.00 | 85.00 | 67.50 | 204.00 | 65.00 | 30.00 | 25.00 | 54.00 | 21.00 | 125.00 | 104.36 | | |
| | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | | | | |
| Roof | 1 Roof Structure Type | Shield Frame | Simple Frame | Shield Frame | Simple Frame | Shield Frame | Simple Frame | Shield Frame | Simple Frame | Tilt Roof | Simple Frame | Tilt Roof | Tilt Roof | Simple Frame | Tilt Roof |
| | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | b. Area (m ²) | 114.75 | 96.00 | 109.25 | 171.50 | 220.00 | 72.75 | 72.00 | 72.75 | 76.50 | 55.00 | 74.25 | 172.00 | | |
| | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 Roof Cover | | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|-----------|------------------------------------|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|--------------|--------------|--------------|
| | | Case1 | Case2 | Case3 | Case4 | Case5 | Case6 | Case7 | Case8 | Case9 | Case10 | Case11 | Case12 | | | | | |
| | a. Material | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile | Ceramic Tile |
| | b. Area (m ²) | 114.75 | 96.00 | 109.25 | 171.50 | 220.00 | 72.75 | 72.00 | 72.75 | 76.50 | 55.00 | 74.25 | 172.00 | | | | | |
| | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|------------------|---|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Structure System | 1 | Beam | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | a. Material | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | b. Volume (m ³) | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | 2 | Column | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | a. Material | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | b. Volume (m ³) | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | 3 | Beam-Column Joint | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | a. Material | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete | Concrete |
| | | b. Volume (m ³) | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |
| | | c. Condition | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G | G |

| | | | | | | | | | | | | | | | | | | |
|-------------|---|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Clean Water | 1 | Source | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM | PDAM |
| | | Water Reservoir | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Water Pump Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Water Tap Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | | | | | | | |
|-------|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Waste | 1 | From Toilet | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
|-------|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|---------------------|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | Case1 | Case2 | Case3 | Case4 | Case5 | Case6 | Case7 | Case8 | Case9 | Case 10 | Case 11 | Case 12 | | | | |
| Water | | | | | | | | | | | | | | | | | |
| Electricity | Energy Consumption: (watt) | 1300 | 450 | 450 | 450 | 450 | 450/900 | 450 | 450 | 450 | 450/450 | 450 | 450 | 450/1300 | 450/1300 | 1300 | |
| Physical Adaptation | | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | Add the level of house and cover the site by sand | |

Note:

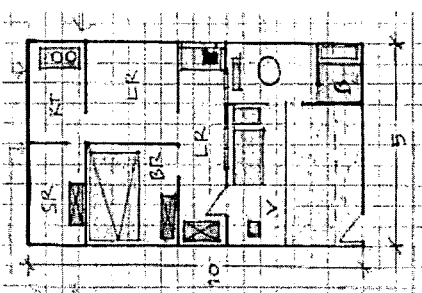

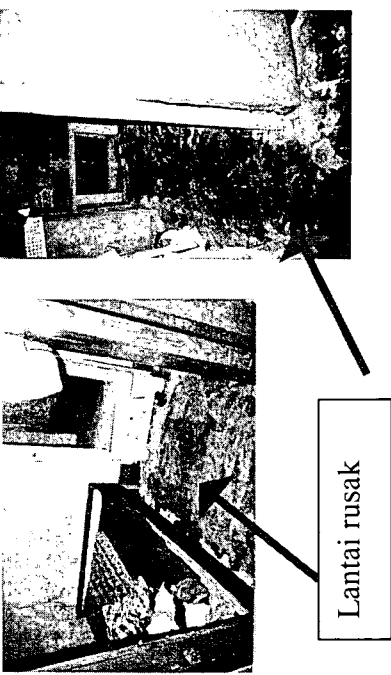
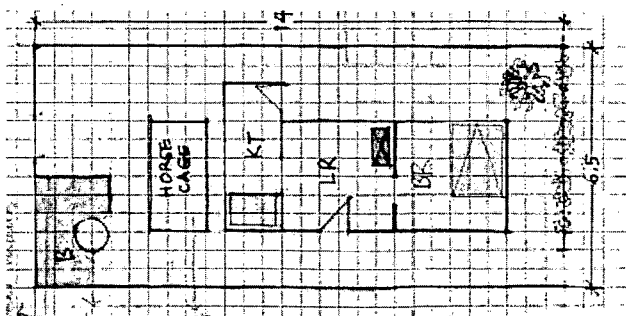
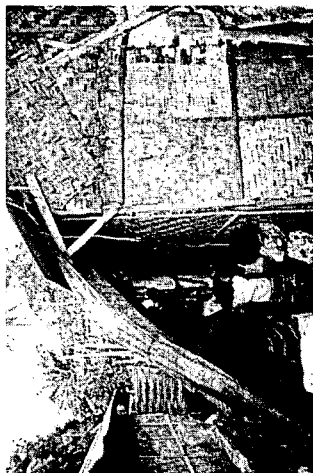

- G = Good Condition
- LD = Light Damage
- MD = Moderate Damage
- HD = Heavy Damage

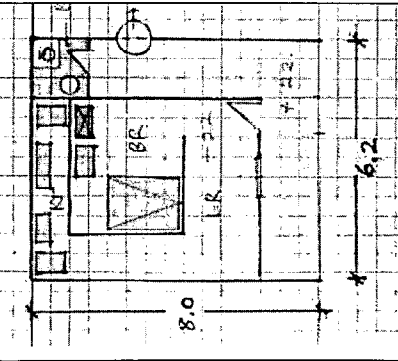
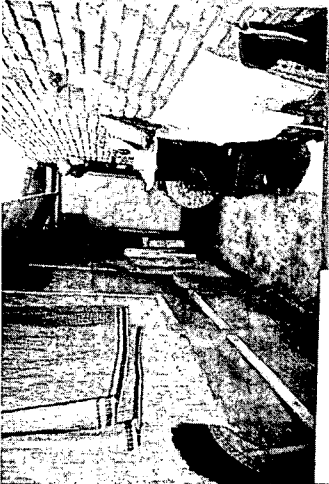
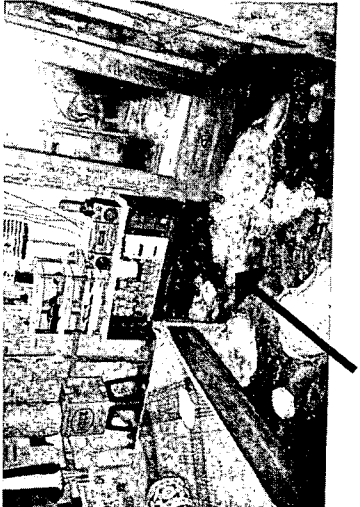
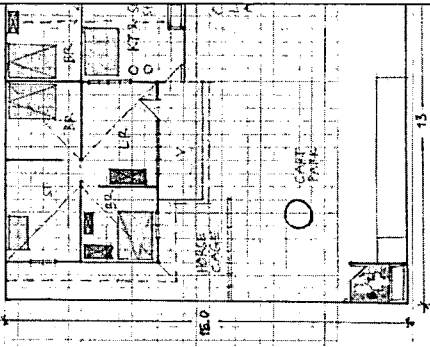
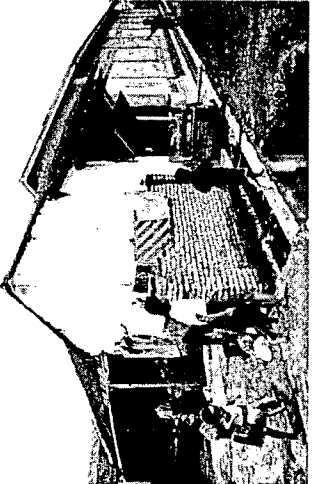
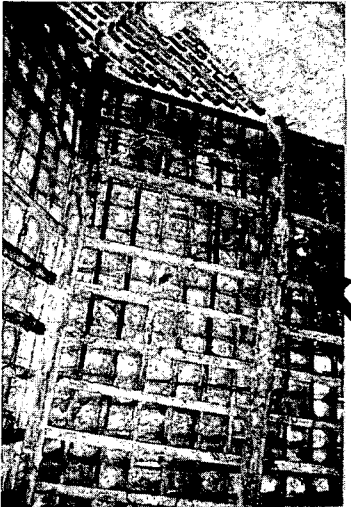
Calculation Method

- A. Loss Quantity = Material Quantity x Damage Score
- B. Total Loss = Σ Loss Quantity
- C. Average Loss per Unit = Total Loss / Total Data Number

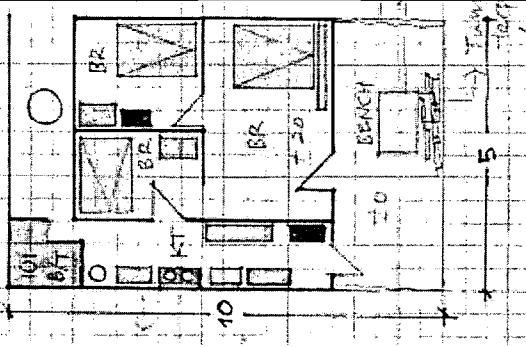


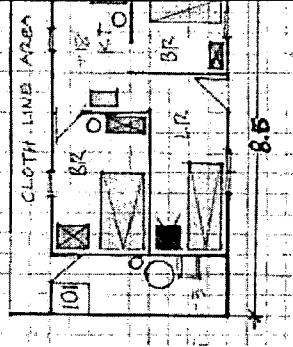


| | |
|---------------------|-----------|
| <u>Damage Score</u> | |
| G = 0 | MD = 25 % |
| LD = 10 % | HD = 50 % |

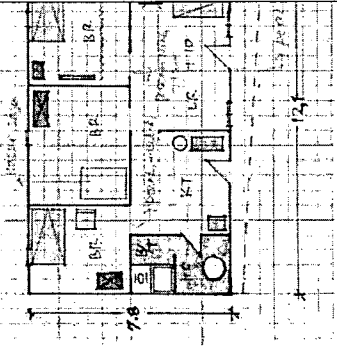
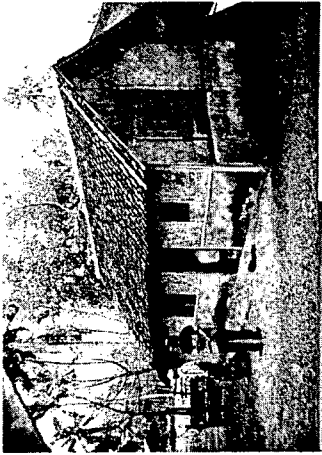
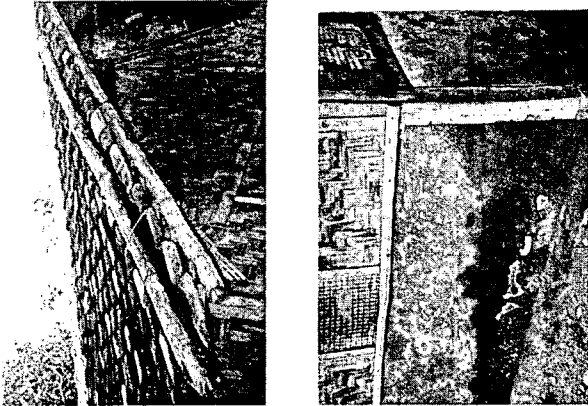
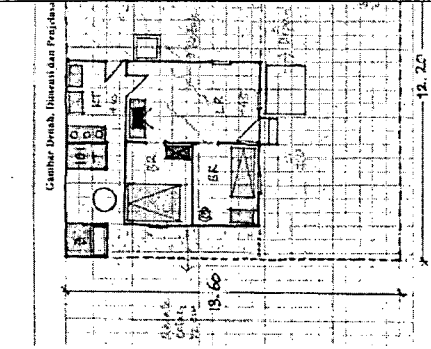

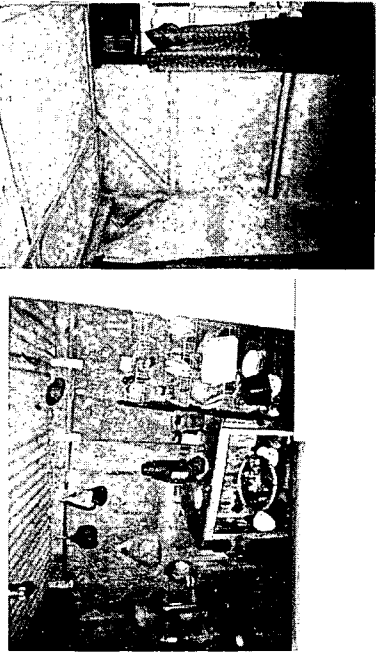
Location : Ampenan Sub-district, Mataram

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|--|
| 1. | Mrs. Nurjijin |  |  |  |
| 2. | Mr. Mohamad Hamid |  |  |  |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|---|
| 3. | Mrs. Ahmad |  |  |  <p data-bbox="749 638 823 878">Lantai rusak</p> |
| 4. | Mr. Jumaher |  |  |  <p data-bbox="1304 582 1378 869">Rangka atap rusak</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|--|
| 5. | Mr. Andi | <p>The house plan for Mr. Andi shows a rectangular layout with several rooms. Dimensions are provided: a main length of 10, a width of 5, and several smaller segments. Rooms include a kitchen (KUC), dining area (MANGROK), living area (MANGROK), and bedrooms (KAMAR).</p> | <p>The exterior view shows a traditional-style house with a stone or brick facade. It features a prominent porch with a railing and a window with a decorative frame.</p> | <p>This section contains two photographs documenting damage. The first photo shows a wall with significant peeling and cracking, labeled 'Dinding rusak' (damaged wall). The second photo shows a damaged concrete floor, labeled 'Lantai rusak' (damaged floor).</p> |
| 6. | Mr. Supardi | <p>The house plan for Mr. Supardi shows a rectangular layout with various rooms. Dimensions include a main length of 10 and a width of 15. Rooms include a kitchen (KUC), dining area (MANGROK), living area (MANGROK), bedrooms (KAMAR), and a bathroom (KAMAR).</p> | <p>The exterior view shows a traditional-style house with a stone or brick facade. It features a prominent porch with a railing and a window with a decorative frame.</p> | <p>This section contains two photographs documenting damage. The first photo shows a wall with significant peeling and cracking, labeled 'Dinding rusak' (damaged wall). The second photo shows a damaged window frame and surrounding wall structure, labeled 'Dinding rusak' (damaged wall).</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|--|
| 7. | Mr. Hadis |  |  |  |
| 8. | Mr. Masun |  |  |  |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|-----|---------------------|--|---|--|
| 9. | Mr. Ishak |  |  |  |
| 10. | Mr. Mohamad Hambali |  |  |  |
| 11. | Mr. Saleh | | | |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|-----|----------------------|------------|---------------|------------------|
| | | | | |
| 12. | Mrs. Hamzah Taher | | | |

LOSS MEASUREMENT OF HOUSES IN AMPENAN SUB-DISTRICT

One Stoyey Houses

| COMPO NENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | | | | | | | | | | | |
|------------|--------------|---------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|-------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | | | | | | | | | |
| Land Area | 1 | Cover of Land Surface | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | Height of Inundation : (cm) | 40 | 30 | 20 | 20 | 10 | 80 | 100 | 50 | 35 | 80 | 45 | 30 | | | | | | | | | | | | | | |
| | 3 | Duration of Inundation | 1-2 day | 1-2 day | 12 hour | 2 day | 7 hour | 1 day | 1 hour | 3-4 hour | 1-3 hour | 2 hour | 2 hour | 2 hour | | | | | | | | | | | | | | |
| | 4 | Frequency of Inundation (d/m) | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | 3-4 | | | | | | | | | | | | | | |
| Building | 1 | Building Age (year) | 6 | 2 | 5 | 17 | 12 | 17 | 8 | 22 | 4 | 4 | 13 | 8 | | | | | | | | | | | | | | |
| | 2 | Building Type | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | Land ed House | | | | | | | | | | | | | | |
| | 3 | Floor Area (m ²) | 30.0 | 24.0 | 28.2 | 73.5 | 43.5 | 90.0 | 27.0 | 38.2 | 93.6 | 42.4 | 24.0 | 22.5 | | | | | | | | | | | | | | |
| Foundation | 1 | Foundation Type | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | Conti nous Brick | | | | | | | | | | | | | | |
| | 2 | Material | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | Brick | | | | | | | | | | | | | | Brick |
| | 3 | Volume (m ³) | 6.30 | 5.70 | 6.10 | 9.10 | 5.55 | 11.50 | 4.75 | 6.30 | 11.50 | 7.10 | 9.00 | 5.90 | | | | | | | | | | | | | | |
| | 4 | Condition | LD | LD | G | G | LD | G | G | G | MD | G | MD | MD | | | | | | | | | | | | | | |
| | 5 | Loss Quantity (m ³) | 0.63 | 0.57 | 0.00 | 0.00 | 0.56 | 0.00 | 0.00 | 0.00 | 2.88 | 0.00 | 2.25 | 1.48 | | | | | | | | | | | | | | 0.70 |
| Floor | 1 | Floor Area (m ²) | 30.0 | 24.0 | 28.2 | 73.5 | 43.5 | 90.0 | 27.0 | 38.2 | 93.6 | 42.4 | 24.0 | 22.5 | | | | | | | | | | | | | | |

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | | | |
|------------|--|-----------------------|---------|---------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|------------|-----------------------|---------|---------|---------|--|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | | |
| 2 | Floor Cover ^{IT} a. Material b. Condition c. Loss Quantity (m ²) | Plaster | Plaster | Plaster | Plaster & Ceramic | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Ceramic | Ceramic | | |
| | | MD | HD | LD | HD | MD | G | LD | MD | G | MD | MD | MD | MD | MD | MD | HD | | | |
| | | 7.50 | 12.0 | 2.82 | 36.7 | 10.8 | 0.00 | 2.70 | 9.56 | 0.00 | 10.6 | 6.00 | 11.2 | 18.3 | 91.6 | 18.3 | 7.64 | 1.53 | | |
| | | | | | | | | | | | | | | | | | | Plaster | | |
| 3 | Plaster a. Condition b. Loss Quantity (m ²) | MD | HD | LD | HD | MD | G | LD | LD | MD | G | LD | LD | LD | LD | LD | LD | LD | | |
| | | 7.50 | 12.0 | 2.82 | 36.7 | 10.8 | 0.00 | 2.70 | 3.83 | 0.00 | 4.24 | 12.0 | 94.9 | 6 | 7.91 | | | | | |
| | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|------|
| Wall | 1 Material 2 Area (m ²) 3 Surface Condition 4 Loss Quantity (m ²) 5 Plaster Condition 6 Loss Quantity (m ²) | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | Brick Mansory | | |
| | | 143.0 | 75.4 | 89.10 | 157.3 | 127.4 | 213.2 | 101.4 | 119.6 | 198.1 | 124.8 | 54.0 | 83.0 | 20.7 | 7.15 | 30.8 | 0.60 | 2.57 | | | |
| | | LD | HD | G | MD | MD | LD | MD | MD | LD | LD | LD | MD | MD | LD | LD | LD | LD | LD | LD | LD |
| | | 14.3 | 37.7 | 0.00 | 39.3 | 31.8 | 21.3 | 25.3 | 29.9 | 19.8 | 12.4 | 5.40 | 20.7 | 30.8 | 7.15 | 30.8 | 0.60 | 2.57 | | | |
| | | G | - | G | HD | MD | LD | - | LD | LD | LD | G | HD | LD | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | |
| | | 0.00 | - | 0.00 | 78.6 | 31.8 | 21.3 | - | 5.98 | 9.91 | 6.24 | 0.00 | 41.5 | 195. | 16.2 | 195. | 16.2 | 16.2 | 16.2 | 16.2 | 16.2 |

| | | | | | | | | | | | | | | | | | | | | |
|----------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| Door & Windows | 1 Door & Windows Frame a. Area (m ²) b. Condition | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | Woo d | | |
| | | 15.80 | 8.64 | 9.60 | 11.52 | 11.04 | 23.0 | 7.20 | 13.60 | 15.60 | 13.90 | 11.44 | 7.20 | 11.44 | 7.20 | 11.44 | 7.20 | 7.20 | 7.20 | 7.20 |
| | | LD | MD | G | LD | G | LD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------------------------------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------------|-----------------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | |
| 2 | c. Loss Quantity (m ²) | 1.58 | 2.16 | 0.00 | 1.15 | 0.00 | 2.30 | 1.80 | 3.40 | 3.90 | 3.48 | 2.86 | 0.72 | 23.35 | 1.95 |
| | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. Area (m ²) | 9.60 | 1.60 | 1.60 | 3.20 | 3.20 | 9.60 | 6.40 | 6.40 | 8.00 | 4.80 | 4.80 | 4.80 | | |
| | b. Door. (Pcs) | 2 | 2 | 2 | 2 | 3 | 8 | 5 | 4 | 5 | 3 | 3 | 4 | | |
| | c. Windows (Pcs) | 4 | - | 2 | 8 | 2 | 9 | - | 5 | 6 | 3 | 2 | 3 | | |
| | d. Condition | LD | MD | G | LD | G | LD | MD | MD | MD | MD | MD | LD | | |
| e. Loss Quantity (m ²) | 0.96 | 0.40 | 0.00 | 0.32 | 0.00 | 0.96 | 1.60 | 1.60 | 2.00 | 1.20 | 1.20 | 0.48 | 10.72 | 0.89 | |

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------------------------------|------------------------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | |
| 9 | 1 Hanging Structure | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. Material | 30.00 | 24.00 | - | - | - | - | 38.25 | - | - | 42.40 | 24.00 | - | 27.56 | 2.30 |
| | b. Area (m ²) | G | HD | - | - | - | - | MD | - | - | G | MD | - | 27.56 | 2.30 |
| | c. Condition | 0.00 | 12.00 | - | - | - | - | 9.56 | - | - | 0.00 | 6.00 | - | 27.56 | 2.30 |
| | d. Loss Quantity (m ²) | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat | Bamb oo Mat |
| | 2 Ceiling | 30.00 | 24.00 | - | - | - | - | 38.25 | - | - | 42.40 | 24.00 | - | 27.56 | 2.30 |
| a. Material | 30.00 | 24.00 | - | - | - | - | 38.25 | - | - | 42.40 | 24.00 | - | 27.56 | 2.30 | |
| b. Area (m ²) | G | HD | - | - | - | - | MD | - | - | G | MD | - | 27.56 | 2.30 | |
| c. Condition | 0.00 | 12.00 | - | - | - | - | 9.56 | - | - | 0.00 | 6.00 | - | 27.56 | 2.30 | |
| d. Loss Quantity (m ²) | 0.00 | 12.00 | - | - | - | - | 9.56 | - | - | 4.24 | 6.00 | - | 25.80 | 2.15 | |

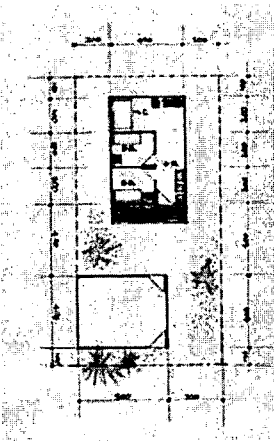


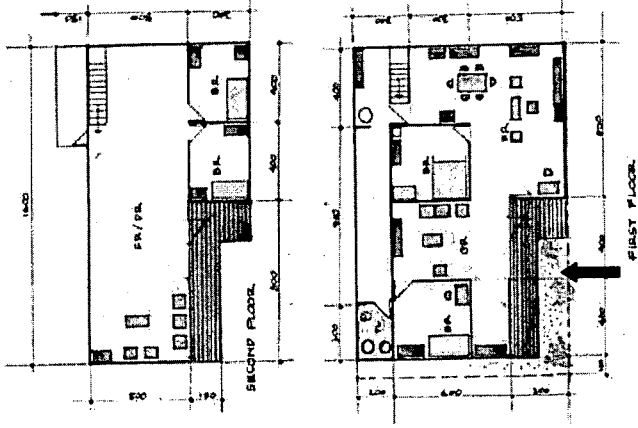

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------|---------------------|-----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | |
| 1 | Roof Structure Type | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Shiel d Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e | Simpl e Fram e |
| | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |

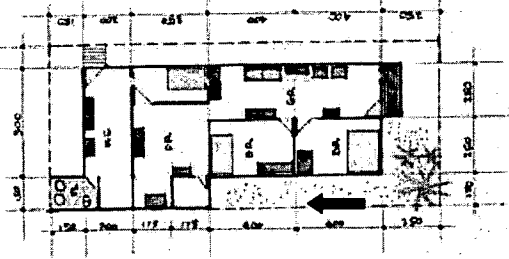
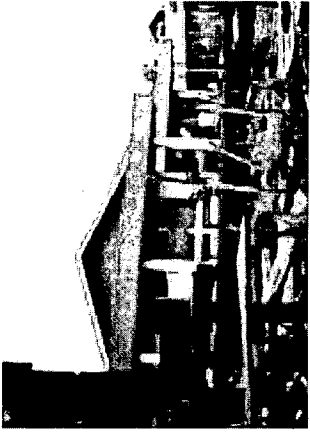

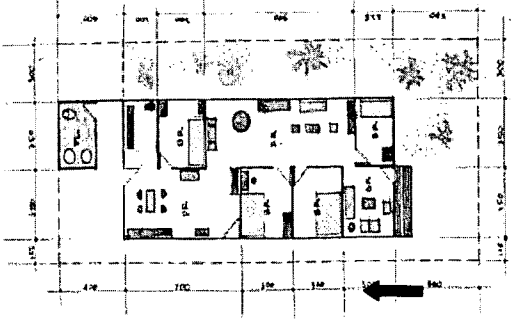
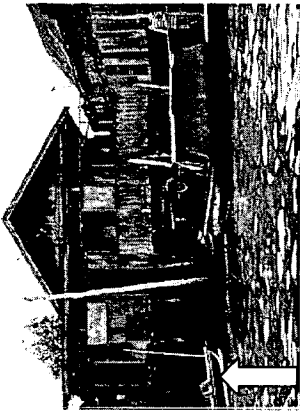

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | | |
|------------------------------------|------------------------------------|-----------------------|--------|-----------------|-----------|--------|------------------|---------|--------|----------|----------|-----------|-----------|------------|-----------------------|-------|------|------|------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| | | Bamb oo | | | | | | Bamb oo | | | | | | | | | | | |
| | b. Area (m ²) | 55.00 | 44.00 | 51.70 | 134.75 | 79.75 | 165.00 | 50.00 | 70.13 | 171.60 | 78.00 | 44.00 | 41.25 | | | | | | |
| | c. Condition | MD | MD | G | LD | G | G | LD | G | G | G | MD | G | | | | | | |
| | d. Loss Quantity (m ²) | 13.75 | 11.00 | 0.00 | 13.48 | 0.00 | 0.00 | 5.00 | 0.00 | 70.13 | 0.00 | 0.00 | 11.00 | 0.00 | 47.35 | 6.88 | 0.57 | 3.95 | |
| 2 | Roof Cover | | | | | | | | | | | | | | | | | | |
| | a. Material | Asbestos & Zink | Zink | Asbestos & Zink | Roof Tile | Zink | Roof Tile & Zink | Zink | Zink | Asbestos | Asbestos | Roof Tile | Roof Tile | | | | | | |
| | b. Area (m ²) | 55.00 | 44.00 | 51.70 | 134.75 | 79.75 | 165.00 | 50.00 | 70.13 | 171.60 | 78.00 | 44.00 | 41.25 | | | | | | |
| | c. Condition | LD | HD | MD | G | MD | LD | MD | MD | G | LD | MD | G | | | | | | |
| d. Loss Quantity (m ²) | 5.50 | 22.00 | 12.93 | 0.00 | 19.94 | 16.50 | 12.50 | 17.53 | 0.00 | 0.00 | 7.80 | 11.00 | 0.00 | 19.25 | 17.03 | 89.43 | 1.60 | 1.42 | 7.45 |

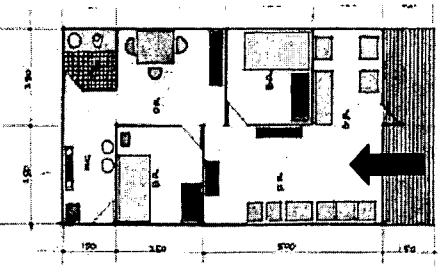


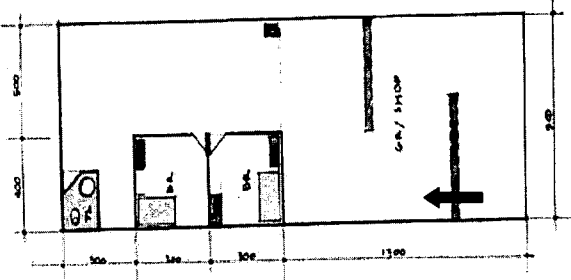
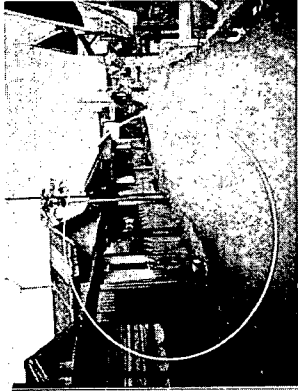

| Structure System | Beam | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | | |
|------------------------------------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|--------|-----------|---------|---------|---------|------------|-----------------------|-------|------|----|-------|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| 1 | a. Material | Brick | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood + RC | Wood | Wood | Wood | Wood | RC | Brick | Wood | RC | Brick |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | | | |
| | c. Condition | G | MD | G | LD | | G | G | LD | LD | LD | HD | G | | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | |
| 2 | Column | | | | | | | | | | | | | | | | | | |
| | a. Material | Brick | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood + RC | Wood | Wood | Wood | Wood | RC | Brick | Wood | RC | Brick |
| | b. Volume (m ³) | | | | | | | | | | | | | | | | | | |
| | c. Condition | | LD | G | G | | G | G | LD | | | HD | | | | | | | |
| d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | | | | |

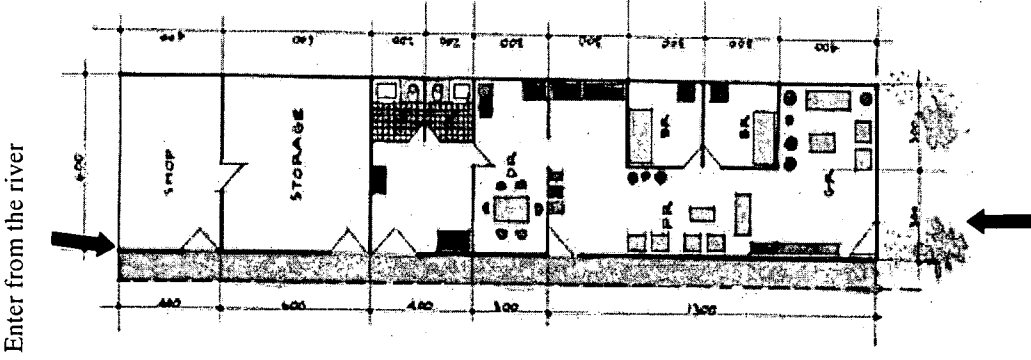
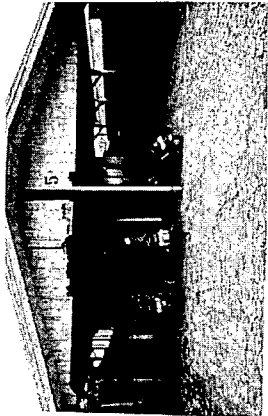
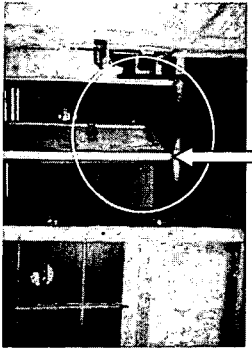


| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|---------------------|-----------------------------|-----------------------|---|-------------------------------|---|-------------------------------|----------------|-------------------------------|-------------------------------|-------------------------------|----------------|----------------|----------------|----------------|-----------------------|--|--|
| | | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | Case 11 | Case 12 | | | | |
| 3 | Beam-Column Joint Condition | | LD | | HD | | | | | | | G | MD | G | | | |
| Clean Water | 1 Resource | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | Shalo w Well + | | |
| | 2 Water Reservoir Condition | Publi c Tap | Publi c Tap | Publi c Tap | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | PDA M | | |
| | 3 Water Pump Condition | | | | | | | | | | | | | | | | |
| | 4 Water Tap Condition | | | | | | | | | | | | | | | | |
| Waste Water | 1 From Toilet | | | | | | | | | | | | | | | | |
| Electricity | Energy Consumption: (watt) | 25 | 15 | 30 | 15 | 25 | 20 | 10 | 45 | 15 | 20 | 10 | 20 | | | | |
| Physical Adaptation | | | Incr ease the veran dah in front of the site entrance | Incr ease the buildi ng floor | Cons truct small dike in the site entrance and prep are sand bags | Incr ease the buildi ng floor | | Incr ease the buildi ng floor | Incr ease the buildi ng floor | Incr ease the buildi ng floor | | | | | | | |

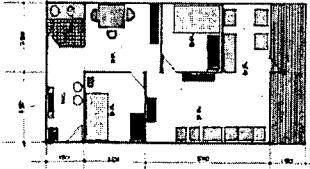
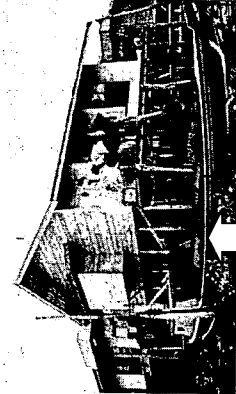

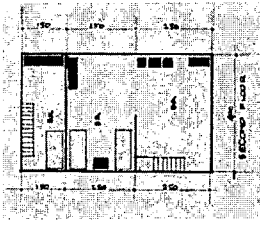

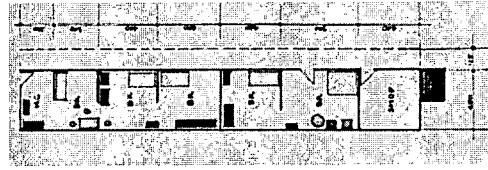
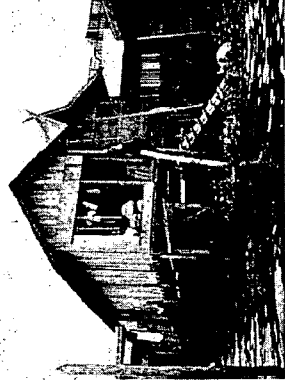
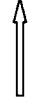
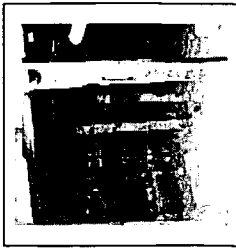
Location : North Kuin Sub-District, BANJARMASIN

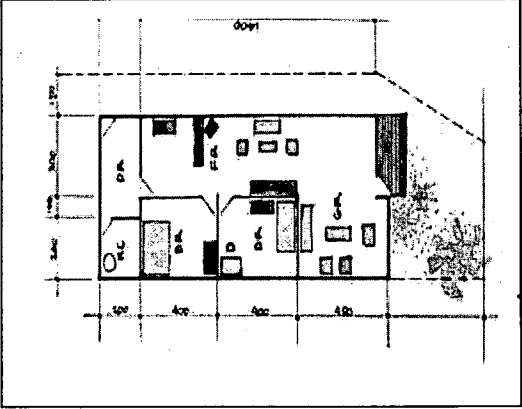
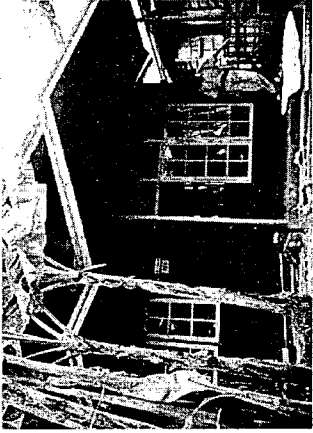
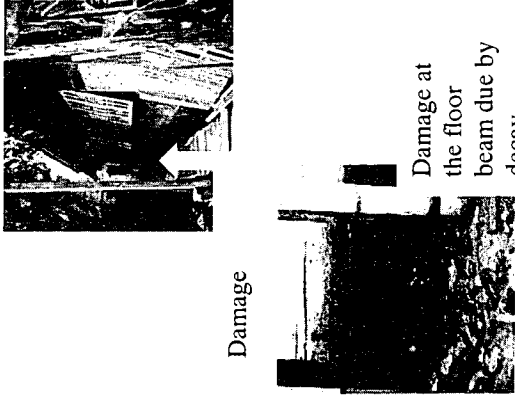
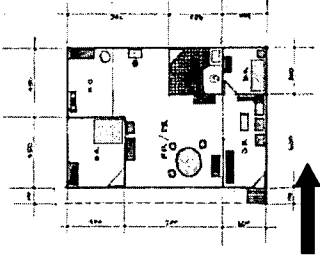
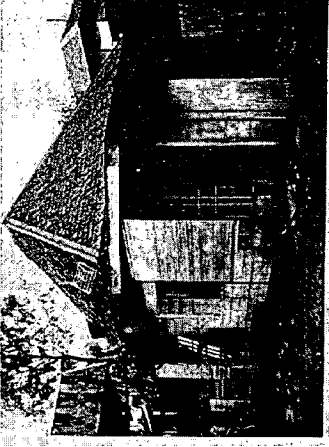
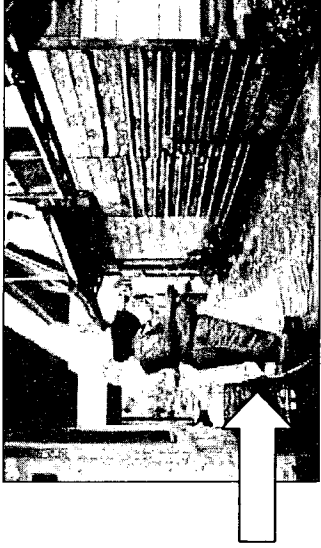
| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|--|--|
| 1 | Mahpud |  |  |  <p data-bbox="647 241 707 689">Medium damage at the bottom beam, pile foundation and floor beam (front house)</p> <div data-bbox="780 226 953 629" style="border: 1px solid black; padding: 5px;"> <p data-bbox="796 248 929 618">Almost of all the components in a good condition because, good quality of wood and building still new (built 4 ago)</p> </div> |
| 2 | Rohana |  |  | |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|--|
| 3 | Sugianoor |  |  |  <p data-bbox="639 257 702 645">Humidity at the bottom part one of cause the wood will become decay</p> |
| 4 | Mariah |  |  <p data-bbox="1329 936 1356 1048">Back view</p> |  <p data-bbox="1255 197 1318 667">The wall cover damage due by decay & age of wood</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|---|
| 5 | Khairul Anwar |  |  |  <p data-bbox="666 313 697 571">Decay at the gutter part</p> |
| 6 | Alamsyah |  |  |  <p data-bbox="1246 280 1309 593">Decay due by garbage were accumulating under building</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|---|--|--|
| 7 | H. Taufik |  <p>Enter from the river</p> <p>Enter from the street</p> |  <p>Front view</p> |  <p>Floor decay because of wood quality</p>  <p>Pile damage cause by the hyacinth (cause of decay etc)</p>  <p>Anticipation of the river tide and small damage at the pier facility</p> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|---|
| 8 | Jahrah |  |  <p data-bbox="572 952 595 1120">Back side view</p> |  <p data-bbox="548 224 603 683">Position of the pile foundation were change because of bad construction</p> |
| 9 | Siti Ukayah |  |  | <div data-bbox="682 190 799 683" style="border: 1px solid black; padding: 5px;"> <p>Damages occurred at the bottom part of construction Such as, pile foundation and bottom beam)</p> </div> |
| 10 | Rasidi |  |  | <div data-bbox="964 470 1034 683" style="display: inline-block; vertical-align: middle;"> <p>Bad construction & humid condition</p> </div> <div data-bbox="1074 436 1105 537" style="display: inline-block; vertical-align: middle; margin: 0 10px;">  </div> <div data-bbox="964 156 1199 403" style="display: inline-block; vertical-align: middle;">  </div> <div data-bbox="1262 302 1356 470" style="display: inline-block; vertical-align: middle; margin-left: 20px;"> <p>Preparation of wood (beam & board)</p> </div> |

| No | NAME OF RESPONDENT | HOUSE PLAN | VIEW OF HOUSE | COMPONENT DAMAGE |
|----|--------------------|--|---|--|
| 11 | H. Iman |  |  |  |
| 12 | Ibu Nurhay |  |  |  |

LOSS MEASUREMENT OF HOUSES IN KUIN UTARA SUB-DISTRICT, BANJARMASIN

One Storey House

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|-------------|--------------|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|-----------------------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| Land Area | 1 | Cover of Land Surface | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | |
| | 2 | Height of Inundation : (cm) | 0 - 10 | 11 - 50 | 11 - 50 | 0 - 10 | 11 - 50 | 11 - 50 | 0 - 10 | 0 - 10 | 0 - 10 | 50 - 75 | 0 - 10 | 0 - 10 | | |
| | 3 | Duration of Inundation (days) | 1 - 12 | 1 | 1 - 12 | 1 - 12 | 1 | 1 - 12 | 1 | 1 - 12 | 1 | 13 - 24 | 1 - 12 | 1 - 12 | | |
| | 4 | Frequency of Inundation (times / year) | 1 - 3 | 1 - 3 | >12 | 1 - 3 | 1 - 3 | 1 - 3 | 1 - 3 | 1 - 3 | 1 - 3 | 12 | 1 - 3 | 1 - 3 | | |
| Buildin g | 1 | Building Age (year) | 33 | 15 | 13 | 17 | 8 | 13 | 72 | 28 | 72 | 25 | 25 | | | |
| | 2 | Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | | | |
| | 3 | Floor Area (m ²) | 24.00 | 90.00 | 42.00 | 282.00 | 78.00 | 180.00 | 48.00 | 70.00 | 74.00 | 112.50 | 112.50 | | | |
| Found ation | 1 | Foundation Type | Pile | Pile | Pile | Pile | Pile | Pile | Pile | Pile | Pile | Pile | Pile | | | |
| | 2 | Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | | Wood |
| | 3 | Volume (m ³) | 1.03 | 1.85 | 3.20 | 5.40 | 5.75 | 5.42 | 1.00 | 3.40 | 2.10 | 3.00 | 3.00 | | | |
| | 4 | Condition | MD | MD | G | LD | MD | LD | MD | MD | G | LD | LD | | | |
| | 5 | Loss Quantity (m ³) | 0.26 | 0.46 | 0.00 | 0.54 | 1.44 | 0.54 | 0.54 | 0.25 | 0.85 | 0.00 | 0.30 | 4.64 | | |
| Floor | 1 | Floor Area (m ²) | 24.00 | 90.00 | 42.00 | 282.00 | 78.00 | 180.00 | 48.00 | 70.00 | 74.00 | 112.50 | 112.50 | | | |
| | 2 | Floor Cover ^{II} | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | | | Wood |
| | 3 | Plaster | | | | | | | | | | | | | | |

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---|---|------------|-----------------------|---|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| | a. Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | b. Loss Quantity (m ²) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|------|---|---------------------------------|-------|-------|--------|--------|--------|--------|-------|--------|--------|--------|--------|---------|------|------|-------|---------|
| Wall | 1 | Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | |
| | 2 | Area (m ²) | 80.40 | 43.25 | 230.10 | 246.00 | 237.10 | 299.00 | 83.20 | 184.80 | 181.20 | 175.50 | | | | | | |
| | 3 | Surface Condition | G | G | G | LD | G | G | G | HD | G | LD | | | | | | |
| | 4 | Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 24.60 | 0.00 | 0.00 | 0.00 | 92.40 | 0.00 | 17.55 | 134.55 | | | | 13.46 | |
| | 5 | Plaster Condition | - | - | - | - | - | - | - | - | - | - | - | Plaster | | | | Plaster |
| | 6 | Loss Quantity (m ²) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| | | | | | | | | | | | | | | | | | |
|----------------|---------------------------------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| Door & Windows | 1 | Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. | Area (m ²) | 14.20 | 13.88 | 18.20 | 19.30 | 31.80 | 17.04 | 27.80 | 84.10 | 15.30 | 12.50 | | | | | |
| | b. | Condition | LD | G | G | G | G | G | G | G | G | G | | | | | |
| | c. | Loss Quantity (m ²) | 1.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.42 | | | | 0.14 |
| 2 | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | a. | Area (m ²) | 4.80 | 12.80 | 9.60 | 11.20 | 25.80 | 5.80 | 4.80 | 4.80 | 8.00 | 4.80 | | | | | |
| | b. | Door (Pcs) | 2 | 14 | 18 | 12 | 18 | 20 | 22 | 16 | 14 | 9 | | | | | |
| | c. | Windows (Pcs) | 3 | 7 | 8 | 8 | 3 | 9 | 5 | 4 | 6 | 4 | | | | | |
| | d. | Condition | LD | G | G | G | G | G | G | G | G | G | | | | | |
| e. | Loss Quantity (m ²) | 0.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | | | | 0.05 | |

| | | | | | | | | | | | | | | | | | |
|---------|-----------|------------------------|--|--|--|--|--|--|--|--|--|--|------|---|-------|--|------|
| Ceiling | 1 | Hanging Structure | | | | | | | | | | | | | | | |
| | a. | Material | | | | | | | | | | | Wood | | | | Wood |
| | b. | Area (m ²) | | | | | | | | | | | | | 74.00 | | |
| c. | Condition | | | | | | | | | | | | | G | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------------------------------------|------------------------------------|----------------------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---|---|------------|-----------------------|--------|---------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| 2 | d. Loss Quantity (m ²) | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | 0.00 | 0.00 | - | - | 0.00 | 11.25 | 11.25 | 1.13 |
| | Ceiling | | | | | | | | | | | | | | | | |
| | a. Material | - | Plywood | Plywood | Plywood | Plywood | Plywood | | | | | | | Plywood | Plywood | | Plywood |
| | b. Area (m ²) | - | 90.00 | 42.00 | 282.00 | 78.00 | 180.00 | | | | | | | | 74.00 | 112.50 | |
| | c. Condition | - | G | G | G | G | G | | | | | | | | G | LD | |
| d. Loss Quantity (m ²) | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | 0.00 | 0.00 | - | - | 0.00 | 11.25 | 11.25 | 1.13 |

| Roof | Roof Structure Type | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------|---------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|-----------------------|------|---|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| 1 | Saddle | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Saddle | Saddle | Wood | |
| | a. Material | 7.2 | 9.75 | 14 | 14 | 52.5 | 54 | 7.2 | 14.8 | 45 | 48 | | | Wood | Wood | - | - |
| | b. Area (m ²) | G | G | G | G | G | G | G | G | G | G | | | G | G | | |
| | c. Condition | - | - | - | - | - | - | - | - | - | - | | | - | - | | |
| 2 | Roof Cover | Corrugated zink+gr ass | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Corrugated zink | Single wood | | | |
| | a. Material | 40 | 85.50 | 166.50 | 75.60 | 140.40 | 324 | 86.40 | 126 | 133 | 202.50 | | | | | | |
| | b. Area (m ²) | LD | G | G | G | LD | G | G | G | G | G | | | G | G | | |
| | c. Condition | 12 | - | - | - | 18 | - | - | - | - | - | | | - | - | | |

| Structure System | Beam | DATA OF CASED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------------------|------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------|------|------------|-----------------------|------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | | |
| 1 | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | b. Volume (m ³) | 1.00 | 1.70 | 1.40 | 1.10 | 2.10 | 1.80 | 0.80 | 1.60 | 1.60 | 1.40 | | | | | | |
| | c. Condition | LD | G | G | G | G | G | G | LD | G | G | | | | | | |
| | d. Loss Quantity (m ²) | 0.1 | - | - | - | - | - | - | 0.4 | - | - | | | | | | |
| 2 | Column | | | | | | | | | | | | | | | | |

| COMPO NENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|------------|------------------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------|------|------------|-----------------------|------|
| | | Case 1 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 | Case 9 | Case 10 | Case 11 | Case 12 | | | | | |
| 3 | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| | b. Volume (m ³) | 0.30 | 0.40 | 0.50 | 0.38 | 0.40 | 0.65 | 0.35 | 0.40 | 0.35 | 0.40 | 0.35 | 0.40 | 0.35 | 0.40 | 0.40 |
| | c. Condition | LD | G | G | G | G | G | G | G | G | MD | G | G | G | G | G |
| | d. Loss Quantity (m ²) | 0.10 | - | - | - | - | - | - | - | - | 0.28 | - | - | - | - | - |
| 3 | Beam-Column Joint Condition | LD | G | G | G | G | G | G | G | G | MD | G | MD | G | G | G |

| | | | | | | | | | | | | | |
|-------------|-----------------------------|------------|------------|------------|------------|------------|-----|------------|------------|------------|------------|------------|------------|
| Clean Water | 1 Resource | Rain water | Rain water | Rain water | Rain water | Rain water | PAM | Rain water | Rain water | Rain water | Rain water | Rain water | Rain water |
| | 2 Water Reservoir Condition | G | G | G | G | G | G | G | G | G | G | G | G |
| | 3 Water Pump Condition | - | - | - | - | - | - | - | - | - | - | - | - |
| | 4 Water Tap Condition | - | - | - | - | - | G | - | - | - | - | - | - |

| | | | | | | | | | | | | | |
|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Waste Water | From Toilet | - | - | - | - | - | - | - | - | - | - | - | - |
|-------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | |
|-------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Electricity | Energy Consumption: (watt) | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 | 1300 |
|-------------|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|

Two Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSE | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|--------------|----------------------|--------|------------|-----------------------|
| | | Case 2 | Case 8 | | |

| | | | | | |
|-----------|--|--------|--------|--|--|
| Land Area | 1 Cover of Land Surface | Wood | Wood | | |
| | 2 Height of Inundation : (cm) | 0 - 10 | 0 - 10 | | |
| | 3 Duration of Inundation (days) | 1 | 1 | | |
| | 4 Frequency of Inundation (times / year) | 1 - 3 | 12 | | |

| | | | | | |
|----------|---------------------|----|----|--|--|
| Building | Building Age (year) | 42 | 72 | | |
|----------|---------------------|----|----|--|--|

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSE | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------|----------------------|--------------|------------|-----------------------|
| | | Case 2 | Case 8 | | |
| 2 | Building Type | Landed House | Landed House | | |
| 3 | Floor Area (m ²) | 90.00 | 52.00 | | |
| | a. 1 st Floor | 45.00 | 26.00 | | |
| | b. 2 nd Floor | 45.00 | 26.00 | | |

| Foundation | 1 | Foundation Type | Pile | Pile | | |
|------------|---|---------------------------------|------|------|------|------|
| | 2 | Material | Wood | Wood | Wood | Wood |
| | 3 | Volume (m ³) | 3.78 | 1.44 | | |
| | 4 | Condition | G | G | | |
| | 5 | Loss Quantity (m ³) | 0.00 | 0.00 | 0.00 | 0.00 |

| Floor | A. 1 st Floor | | | | | |
|-------|------------------------------------|------------------------------------|-------|-------|---------|---------|
| | 1 | Floor Area (m ²) | 45.00 | 26.00 | | |
| | 2 | Floor Cover ¹⁾ | Wood | Wood | Wood | Wood |
| | | a. Material | | | | |
| | | b. Condition | G | G | | |
| | | c. Loss Quantity (m ³) | 2.07 | 3.40 | 5.47 | 2.74 |
| | 3 | Plaster | | | Plaster | Plaster |
| | a. Condition | - | - | | | |
| | b. Loss Quantity (m ²) | - | - | - | - | |

| B. 2 nd Floor | 1 | Floor Area (m ²) | 45.00 <th>26.00 <th></th> <th></th> </th> | 26.00 <th></th> <th></th> | | |
|--------------------------|---------|------------------------------------|---|---------------------------|---------|------|
| | 2 | Floor Cover | Wood | Wood | Wood | Wood |
| | | a. Material | | | | |
| | | b. Condition | G | G | | |
| | | c. Loss Quantity (m ³) | 2.07 | 3.40 | 5.47 | 2.74 |
| 3 | Plaster | | | Plaster | Plaster | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSE | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|----------------------|--------|------------|-----------------------|
| | | Case 2 | Case 8 | | |
| | a. Condition | | - | | |
| | b. Loss Quantity (m ²) | - | - | - | - |

| Wall | | | | | |
|--------------------------|---------------------------------|--------|--------|---------|---------|
| A. 1 st Floor | | | | | |
| 1 | Material | Wood | Wood | Wood | Wood |
| 2 | Area (m ²) | 197.60 | 113.10 | | |
| 3 | Surface Condition | G | G | | |
| 4 | Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | Plaster Condition | - | - | Plaster | Plaster |
| 6 | Loss Quantity (m ²) | - | - | - | - |

| B. 2 nd Floor | | | | | |
|--------------------------|---------------------------------|--------|-------|---------|---------|
| 1 | Material | Wood | Wood | Wood | Wood |
| 2 | Area (m ²) | 174.20 | 70.20 | | |
| 3 | Surface Condition | G | LD | | |
| 4 | Loss Quantity (m ²) | 0.00 | 7.02 | 7.02 | 3.51 |
| 5 | Plaster Condition | - | - | Plaster | Plaster |
| 6 | Loss Quantity (m ²) | - | - | - | - |

| | | | | | |
|---|------------------------------------|-------|-------|------|------|
| 1 | Door & Windows Frame | Wood | Wood | Wood | Wood |
| | a. Area (m ²) | 53.60 | 12.52 | | |
| | b. Condition | G | G | | |
| 2 | Door & Windows Leaf | Wood | Wood | Wood | Wood |
| | a. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 |
| | a. Area (m ²) | 9.60 | 4.80 | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSE | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|----------------------|--------|------------|-----------------------|
| | | Case 2 | Case 8 | | |
| | b. Door (Pcs) | 12 | 12 | | |
| | c. Windows (Pcs) | 9 | 4 | | |
| | d. Condition | G | G | | |
| | e. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | |

| Ceiling | 1 | Hanging Structure | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|---------|---|------------------------------------|---------|------------|-----------------------|--|---------|
| | | a. Material | Wood | | | | |
| | | b. Area (m ²) | 45.00 | | | | |
| | | c. Condition | G | | | | |
| | | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | | |
| | | | | | | | |
| | 2 | Ceiling | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
| | | a. Material | Plywood | | | | Plywood |
| | | b. Area (m ²) | 45.00 | | | | |
| | | c. Condition | G | | | | |
| | | d. Loss Quantity (m ²) | 0.00 | 0.00 | 0.00 | | |

| Roof | 1 | Roof Structure Type | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|------|---|------------------------------------|-----------------|------------|-----------------------|--|--|
| | | a. Material | Saddle | | | | |
| | | b. Area (m ²) | 48 | | | | |
| | | c. Condition | G | | | | |
| | | d. Loss Quantity (m ²) | - | - | - | | |
| | | | | | | | |
| | 2 | Roof Cover | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
| | | a. Material | Corrugated zink | | | | |
| | | b. Area (m ²) | 160 | | | | |
| | | c. Condition | G | | | | |
| | | d. Loss Quantity (m ²) | - | - | - | | |

| Structure System | 1 | Beam | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------------|---|------|------------|-----------------------|
| | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSE | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|----------------------|--------|------------|-----------------------|
| | | Case 2 | Case 8 | | |
| | a. Material | Wood | Wood | Wood | Wood |
| | b. Volume (m ³) | 2.10 | 0.70 | | |
| | c. Condition | G | G | | |
| | d. Loss Quantity (m ²) | - | - | | |
| 2 | Column | | | | |
| | a. Material | Wood | Wood | Wood | Wood |
| | b. Volume (m ³) | 1.06 | 0.40 | | |
| | c. Condition | G | G | | |
| | d. Loss Quantity (m ²) | - | - | | |
| 3 | Beam-Column Joint Condition | G | G | | |

| | | | | | |
|-------------|---|---------------------------|-----|------------|--|
| Clean Water | 1 | Resource | PAM | Rain water | |
| | 2 | Water Reservoir Condition | G | G | |
| | 3 | Water Pump Condition | | - | |
| | 4 | Water Tap Condition | | - | |

| | | | | |
|-------------|-------------|--|--|--|
| Waste Water | From Toilet | | | |
|-------------|-------------|--|--|--|

| | | | | |
|-------------|----------------------------|------|------|--|
| Electricity | Energy Consumption: (watt) | 1300 | 1300 | |
|-------------|----------------------------|------|------|--|

Calculation Method

Note

G = Good Condition
 LD = Light Damage
 MD = Moderate Damage
 HD = Heavy Damage

Damage Score

G = 0 MD = 25 %
 LD = 10 % HD = 50 %

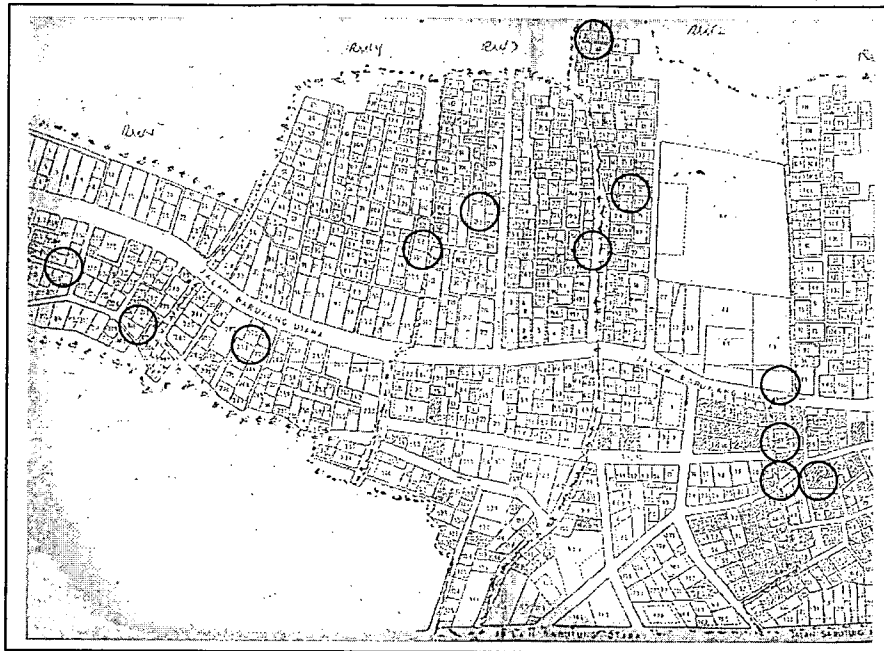
A. Loss Quantity = Material Quantity x Damage Score


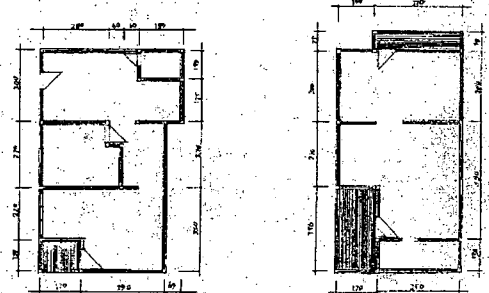

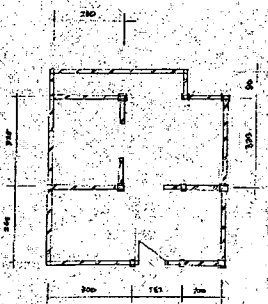
B. Total Loss = Σ Loss Quantity


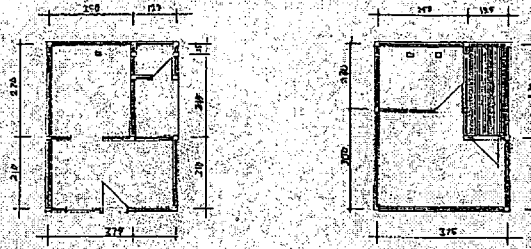
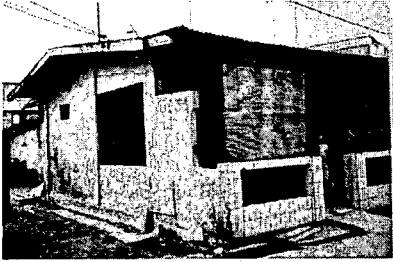
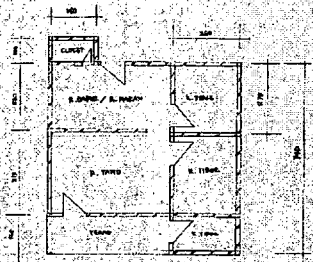

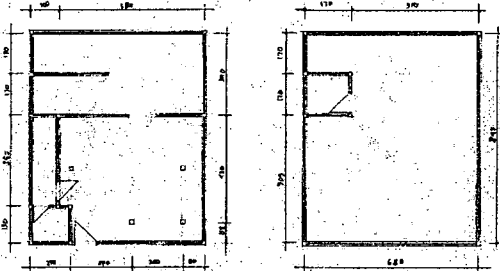

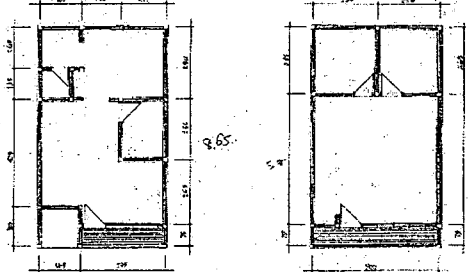
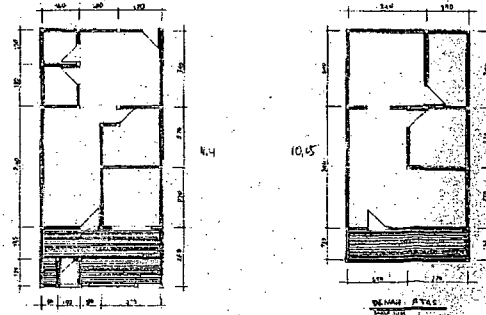
C. Average Loss per Unit = Total Loss / Total Data Number


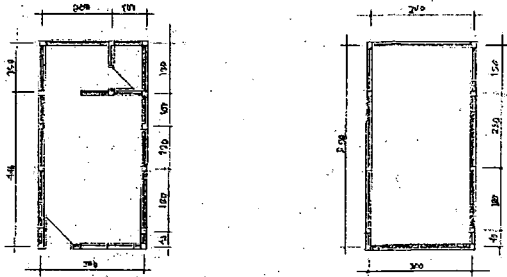

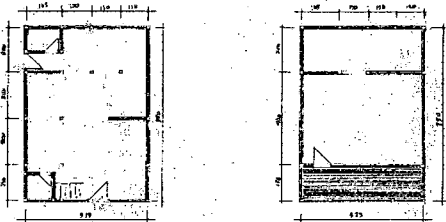
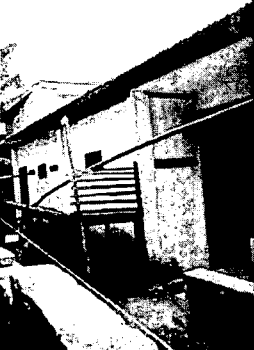
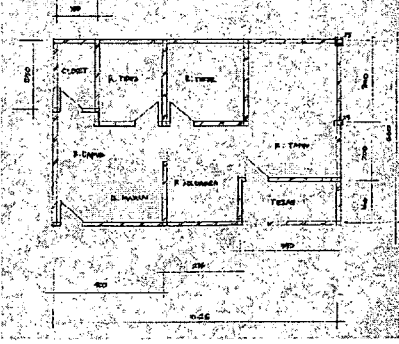
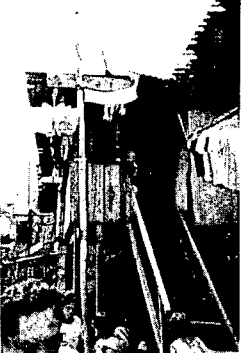
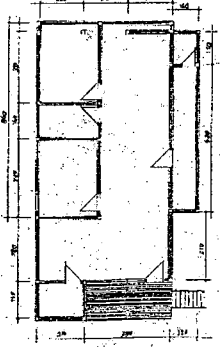
Location: Cambaya Sub District - MAKASSAR

- RW1 : 1. Ms. Puji, 2. Ms. Bahrah, 3. Ms. Hasna, 4. Ms. Fatmawati
- RW2 : 5. Ms. Rahmawati, 6. Ms. Asmawati, 7. Ms. Timang Sido
- RW3 : 8. Ms. Munira Galla, 9. Ms. Ros
- RW4 : 10. Ms. Fajriani
- RW5 : 11. Ms. Darwis, 12. Ms. Aminah



| NAME OF RESPONDENT | FRONT VIEW | HOUSE PLAN |
|--------------------|---|---|
| R1 SRI DARWIS |  |  |
| R2 TIMANG SIDO |  |  |

| NAME OF RESPONDENT | FRONT VIEW | HOUSE PLAN |
|--------------------|---|--|
| R3 HASNA |  |  |
| R4 PUJI |  |  |
| R5 RAHMA |  |  |
| R6 MUNIRA GALLA |  |  |
| R7 FADJRIANI | |  |

| NAME OF RESPONDENT | FRONT VIEW | HOUSE PLAN |
|--------------------|---|---|
| R8 ROSMINI |  |  |
| R9 BAHRAH |  | |
| R10 AMINAH | |  |
| R11 FATMA |  |  |
| R12 ASMAWATI |  |  |

LOSS MEASUREMENT OF HOUSES IN CAMBAYA SUB-DISTRICT, MAKASSAR

One Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | |
|--------------|--|------------------------------------|--------------|--------------------|-----------|------------|-----------------------|---------|---------|
| | | Case 2 | Case 4 | Case 11 | Case 12 | | | | |
| Land Area | 1 Cover of Land Surface | Wood | Ceramic | Terazzo & PC Tiles | - | | | | |
| | 2 Height of Inundation : (cm) | 40 | 0 | 40 | - | | | | |
| | 3 Duration of Inundation (hour) | 1 | 1-2 | 1-2 | - | | | | |
| | 4 Frequency of Inundation (times / year) | 1-6 | 2-6 | 5 | - | | | | |
| Building | 1 Building Age (year) | 22 | 21 | 30 | 20 | | | | |
| | 2 Building Type | Above sea | Landed House | Landed House | Above sea | | | | |
| | 3 Floor Area (m ²) | 41.00 | 57.30 | 67.65 | 71.90 | | | | |
| Foundation | 1 Foundation Type | Pile | Continuous | Continuous | Foot | | | | |
| | 2 Material | Wood | Stone | Stone | Stone | Wood | Stone | | |
| | 3 Volume (m ³) | 35.50 | 51.50 | 58.50 | 71.10 | | | | |
| | 4 Condition | MD | G | G | LD | | | | |
| | 5 Loss Quantity (m ³) | 8.88 | 0.00 | 0.00 | 7.11 | 8.88 | 7.11 | 2.22 | 1.78 |
| Floor | 1 Floor Area (m ²) | 41.00 | 57.30 | 67.65 | 71.90 | | | | |
| | 2 Floor Cover ⁽¹⁾ | a. Material | Wood | Plaster | Plaster | Wood | Plaster | Wood | Plaster |
| | | b. Condition | HD | G | LD | LD | | | |
| | | c. Loss Quantity (m ²) | 20.50 | 0.00 | 6.77 | 7.19 | 27.69 | 6.77 | 6.92 |
| | 3 Plaster | | | | | Plaster | | Plaster | |
| a. Condition | | G | LD | - | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | |
|------------------------------------|------------------------------------|----------------------|---------------|---------------|---------|---------|------------|-------|---------|-----------------------|-------|------|
| | | Case 2 | Case 4 | Case 11 | Case 12 | | Brick | Wood | Brick | Wood | Brick | Wood |
| | b. Loss Quantity (m ²) | - | 0.00 | 6.77 | - | | 6.77 | | | 6.77 | | 1.69 |
| Wall | 1 Material | Wood | Brick Masonry | Brick Masonry | Wood | Wood | Brick | Wood | Brick | Wood | Wood | |
| | 2 Area (m ²) | 92.33 | 134.00 | 152.00 | 184.90 | 16.00 | | | | | | |
| | 3 Surface Condition | LD | LD | MD | LD | G | | | | | | |
| | 4 Loss Quantity (m ²) | 9.23 | 13.40 | 38.00 | 18.49 | 0.00 | 51.40 | 27.72 | 12.85 | 6.93 | | |
| | 5 Plaster Condition | - | LD | - | - | - | Plaster | | | Plaster | | |
| | 6 Loss Quantity (m ²) | - | 13.40 | - | - | - | 13.40 | | | 3.35 | | |
| Door & Windows | 1 Door & Windows Frame | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | |
| | a. Area (m ²) | 7.68 | 15.76 | | 16.00 | | | | | | | |
| | b. Condition | LD | G | G | G | G | | | | | | |
| | c. Loss Quantity (m ²) | 0.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | | 0.19 | | | |
| | 2 Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | |
| | a. Area (m ²) | 1.60 | 9.60 | 8.00 | 9.60 | 9.60 | | | | | | |
| b. Door (Pcs) | 2 | 6 | 5 | 7 | 7 | | | | | | | |
| c. Windows (Pcs) | | | | | | | | | | | | |
| d. Condition | LD | G | G | G | G | | | | | | | |
| e. Loss Quantity (m ²) | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | | | 0.04 | | | |
| Ceiling | 1 Hanging Structure | | | | | | | | | | | |
| | a. Material | - | Wood | Wood | - | Wood | Wood | | | Wood | | |
| | b. Area (m ²) | - | 57.30 | 67.65 | - | 67.65 | | | | | | |
| | c. Condition | - | LD | LD | - | LD | | | | | | |
| | d. Loss Quantity (m ²) | - | 5.73 | 6.77 | - | 6.77 | 12.50 | | 3.12 | | | |
| | 2 Ceiling | | | | | | | | | | | |
| a. Material | - | Plywood | Plywood | - | Plywood | Plywood | | | Plywood | | | |
| b. Area (m ²) | - | 57.30 | 67.65 | - | 67.65 | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|------------------------------------|-----------------------|--------|---------|---------|------------|-----------------------|
| | | Case 2 | Case 4 | Case 11 | Case 12 | | |
| | c. Condition | - | LD | LD | - | | |
| | d. Loss Quantity (m ²) | - | 5.73 | 6.77 | - | 12.50 | 3.12 |

| Roof | Roof Structure Type | Simple Frame | | | | Simple Frame | Wood | Bamboo |
|------|------------------------------------|--------------|-------|--------|--------|--------------|-------|--------|
| | | Wood | 85.50 | 100.00 | 103.20 | | | |
| 1 | a. Material | Wood | Wood | Wood | Wood | Wood | | |
| | b. Area (m ²) | 70.00 | 85.50 | 100.00 | 103.20 | | | |
| | c. Condition | MD | G | G | LD | | | |
| | d. Loss Quantity (m ²) | 17.50 | 0.00 | 0.00 | 10.32 | 27.82 | 6.96 | |
| 2 | Roof Cover | | | | | | | |
| | a. Material | Zink | Zink | Zink | Zink | Zink | | |
| | b. Area (m ²) | 70.00 | 85.50 | 100.00 | 103.20 | | | |
| | c. Condition | HD | LD | G | LD | | | |
| | d. Loss Quantity (m ²) | 35.00 | 8.55 | 0.00 | 10.32 | 53.87 | 13.47 | |

| Structure System | Beam | Simple Frame | | | | Simple Frame | Wood | Brick | RC | Wood | Brick | RC |
|------------------|------------------------------------|--------------|------------|-------|------|--------------|------|-------|----|------|-------|----|
| | | Wood | Brick + RC | Brick | LD | | | | | | | |
| 1 | a. Material | Wood | Brick + RC | Brick | Wood | Wood | | | | | | |
| | b. Volume (m ³) | | | | | | | | | | | |
| | c. Condition | MD | G | LD | LD | | | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | |
| 2 | Column | | | | | | | | | | | |
| | a. Material | Wood | Brick + RC | Brick | Wood | Wood | | | | | | |
| | b. Volume (m ³) | | | | | | | | | | | |
| | c. Condition | LD | G | G | LD | | | | | | | |
| | d. Loss Quantity (m ²) | | | | | | | | | | | |
| 3 | Beam-Column Joint | | | | | | | | | | | |
| | Condition | MD | G | G | LD | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-------------|-----------------------------|-----------------------|---------------------|---------------------|---------------------|--|------------|-----------------------|
| | | Case 2 | Case 4 | Case 11 | Case 12 | | | |
| Clean Water | 1 Resource | Buy | Clean Water Company | Clean Water Company | Clean Water Company | | | |
| | 2 Water Reservoir Condition | - | G | - | G | | | |
| | 3 Water Pump Condition | - | G | G | G | | | |
| | 4 Water Tap Condition | - | G | G | G | | | |

| | | | | | | |
|-------------|-------------|---------------|-------|------------------|--|--|
| Waste Water | From Toilet | Direct to sea | Squat | Through Directly | | |
|-------------|-------------|---------------|-------|------------------|--|--|

| | | | | | | |
|-------------|----------------------------|-----|-----|-----|-----|--|
| Electricity | Energy Consumption: (watt) | 450 | 450 | 450 | 450 | |
|-------------|----------------------------|-----|-----|-----|-----|--|

Two Storey House

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|--|-----------------------|---------|---------|---------|----------|----------|---------|---------|------------|-----------------------|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | |
| Land Area | 1 Cover of Land Surface | Ceramic | Plaster | Terazzo | Ceramic | PC Tiles | PC Tiles | Plaster | Plaster | | |
| | 2 Inundation : (cm) | 30 | 30 | 35 | 40 | 40 | 45 | 25 | 30 | | |
| | 3 Inundation (hour) | 1 | 1-2 | 1-2 | 2 | 1-2 | 1-2 | 1-2 | 1 | | |
| | 4 Frequency of Inundation (times / year) | 1-6 | 3-6 | 2-5 | 2-5 | 2-5 | 2-5 | 2-5 | 3-5 | > 10 | |

| | | | | | | | | | | | |
|----------|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
| Building | 1 Building Age (year) | 30 | 12 | 22 | 24 | 22 | 20 | 23 | 22 | | |
| | 2 Building Type | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | Landed House | | |
| | 3 Floor Area (m ²) | 99.58 | 36.00 | 114.92 | 86.50 | 112.06 | 35.40 | 98.92 | 78.76 | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | TOTAL LOSS | | AVERAGE LOSS per UNIT |
|--------------------------|--------------|--------------------------|--------|--------|--------|--------|--------|--------|---------|-------|--|------------|--|-----------------------|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | | | | |
| | | a. 1 st Floor | 49.79 | 18.00 | 57.46 | 43.25 | 59.28 | 17.70 | 49.46 | 39.38 | | | | |
| b. 2 nd Floor | 49.79 | 18.00 | 57.46 | 43.25 | 52.78 | 17.70 | 49.46 | 39.38 | | | | | | |

| Foundation | 1 | Foundation Type | Contino us | | Contino us | | Contino us | | Contino us | | Indepen dent | Stone | RC | Stone | RC | Stone | RC |
|------------|---------------------------------|-----------------|------------|-------|------------|-------|------------|-------|------------|-------|--------------|-------|------|-------|------|-------|------|
| | | | us | us | us | us | us | us | us | us | | | | | | | |
| 2 | Material | Stone | Stone | Stone | Stone & RC | Stone | Stone | Stone | Stone | Stone | Stone | Stone | RC | Stone | RC | Stone | RC |
| 3 | Volume (m ³) | 46.40 | 23.45 | 77.30 | 43.25 | 60.20 | 21.30 | 32.70 | 33.85 | 33.85 | 33.85 | | | | | | |
| 4 | Condition | G | HD | MD | G | MD | HD | MD | MD | MD | MD | | | | | | |
| 5 | Loss Quantity (m ³) | 0.00 | 11.73 | 19.33 | 0.00 | 15.05 | 10.65 | 8.18 | 8.46 | 8.46 | 8.46 | 73.39 | 0.00 | 9.17 | 0.00 | 0.00 | 0.00 |

| Floor | A. 1 st Floor | Floor Area (m ²) | | Ceramic | | Plaster | | PC Tile | | PC Tile | | Ceramic | | Plaster | | PC Tile | | Ceramic | | Vinyl | |
|-------|------------------------------------|------------------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| 1 | Floor Area (m ²) | 49.79 | 18.00 | 57.46 | 43.25 | 59.28 | 17.70 | 49.46 | 39.38 | 39.38 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 |
| 2 | Floor Cover ^{II} | Ceramic | Plaster & Vinyl | Plaster | Ceramic | PC Tile | PC Tile | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster | Plaster |
| | a. Material | G | HD | MD | G | MD | HD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | b. Condition | G | HD | MD | G | MD | HD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | c. Loss Quantity (m ²) | 0.00 | 9.00 | 14.37 | 0.00 | 14.82 | 8.85 | 12.37 | 9.85 | 9.85 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 |
| 3 | Plaster | G | HD | MD | G | MD | HD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | a. Condition | G | HD | MD | G | MD | HD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD | MD |
| | b. Loss Quantity (m ²) | 0.00 | 2.25 | 14.37 | 0.00 | 14.82 | 8.85 | 12.37 | 9.85 | 9.85 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 | 12.37 | 9.85 |

| Floor | B. 2 nd Floor | Floor Area (m ²) | | Wood & Vinyl | | Wood & Vinyl | | Wood & Vinyl | | Wood & Vinyl | | Wood & Vinyl | | Wood & Vinyl | | Wood & Vinyl | |
|-------|------------------------------|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| 1 | Floor Area (m ²) | 49.79 | 18.00 | 57.46 | 43.25 | 52.78 | 17.70 | 49.46 | 39.38 | 39.38 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 | 49.46 | 39.38 |
| 2 | Floor Cover | Wood Board | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl | Wood & Vinyl |
| | a. Material | LD | LD | G | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| | b. Condition | LD | LD | G | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | TOTAL LOSS | | | AVERAGE LOSS per UNIT | | |
|------------------------------------|--------------|------------------------------------|--------|--------|--------|--------|--------|--------|---------|------|-------|------------|------|------|-----------------------|--|--|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | | | | | | | |
| | | c. Loss Quantity (m ²) | 4.98 | 1.80 | 0.00 | 4.33 | 5.28 | 1.77 | 4.95 | 0.00 | 14.04 | 9.06 | 1.75 | 1.13 | | | |
| 3 Plaster | | | | | | | | | Plaster | | | | | | | | |
| a. Condition | - | HD | MD | G | MD | HD | MD | MD | | | | | | | | | |
| b. Loss Quantity (m ²) | - | 4.50 | 7.18 | 0.00 | 6.60 | 4.43 | 6.18 | 4.92 | 33.81 | | 4.23 | | | | | | |

| Wall | A. 1 st Floor | | | | | | Wood & Zink | Brick | Brick & Wood | Brick | Brick | Brick | Zink | Brick | Wood | Zink | Wood | Zink |
|-----------------------------------|--------------------------|--------|-------|--------|--------|--------|-------------|-------|--------------|-------|-------|-------|------|-------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | | | | | | | | | | | | |
| 1 Material | Brick | 120.40 | 61.00 | 201.00 | 112.45 | 156.52 | 55.40 | 85.00 | 88.00 | | | | | | | | | |
| 2 Area (m ²) | LD | MD | MD | MD | LD | LD | LD | LD | HD | | | | | | | | | |
| 3 Surface Condition | LD | MD | MD | MD | LD | LD | LD | LD | HD | | | | | | | | | |
| 4 Loss Quantity (m ²) | 12.04 | 15.25 | 50.25 | 28.11 | 15.65 | 5.54 | 8.50 | 44.00 | 51.63 | | | | | | | | | |
| 5 Plaster Condition | LD | - | MD | LD | LD | MD | MD | - | Plaster | | | | | | | | | |
| 6 Loss Quantity (m ²) | 12.04 | 6.10 | 50.25 | 11.25 | 7.83 | 5.54 | 8.50 | - | 33.11 | | | | | | | | | |

| B. 2 nd Floor | 1 | Material | Plywood & Zink | 120.40 | 61.00 | 201.00 | 112.45 | 156.52 | 55.40 | 85.00 | 88.00 | Plywood & Zink | 88.00 | Plywood | Zink | Plywood | Zink | Plywood | Zink | |
|-----------------------------------|-------|----------|----------------|--------|-------|--------|--------|--------|-------|-------|-------|----------------|-------|---------|------|---------|------|---------|------|----|
| | | | | | | | | | | | | | | | | | | | | 2 |
| 2 Area (m ²) | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| 3 Surface Condition | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| 4 Loss Quantity (m ²) | 12.04 | 6.10 | 0.00 | 28.11 | 15.65 | 5.54 | 0.00 | 8.80 | 48.72 | | | | | | | | | | | |
| 5 Plaster Condition | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 Loss Quantity (m ²) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

| Door & Windows | 1 | Door & Windows Frame | Wood | 17.76 | 12.88 | 12.88 | Wood | 15.60 | 21.76 | 4.32 | Wood | 14.76 | Wood | 6.09 |
|---------------------------|---|----------------------|------|-------|-------|-------|------|-------|-------|------|------|-------|------|------|
| | | | | | | | | | | | | | | |
| a. Area (m ²) | | | | | | | | | | | | | | |

| COMPONENT | DESCRIPTIONS | DATA OF CASED HOUSES | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT |
|------------------------------------|------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|---------|------|------|------------|-----------------------|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | | | |
| | | LD | LD | G | LD | G | LD | G | MD | | | | |
| 2 | b. Condition | LD | LD | G | LD | G | LD | G | MD | | | | |
| | c. Loss Quantity (m ²) | 1.78 | 1.29 | 0.00 | 1.56 | 0.00 | 0.43 | 0.00 | 3.69 | 8.75 | 0.97 | | |
| | Door & Windows Leaf | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | |
| | a. Area (m ²) | 4.80 | 4.80 | 6.40 | 6.40 | 12.80 | 1.60 | 1.60 | 8.00 | 8.00 | 8.00 | | |
| | b. Door (Pcs) | 4 | 4 | 4 | 6 | 9 | 2 | 1 | 6 | | | | |
| c. Windows (Pcs) | | | | | | | | | | | | | |
| d. Condition | LD | LD | G | LD | G | LD | G | MD | | | | | |
| e. Loss Quantity (m ²) | 0.48 | 0.48 | 0.00 | 0.64 | 0.00 | 0.16 | 0.00 | 2.00 | 3.76 | 0.47 | | | |

| COMPONENT | DESCRIPTIONS | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|--------------|--------|--------|--------|--------|--------|--------|--------|---------|------------|-----------------------|
| | | LD | LD | G | LD | G | LD | G | MD | | |
| | | 1 | LD | LD | G | LD | G | LD | G | MD | 8.75 |
| 2 | LD | LD | G | LD | G | LD | G | MD | 3.76 | 0.47 | |

| COMPONENT | DESCRIPTIONS | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | TOTAL LOSS | AVERAGE LOSS per UNIT |
|-----------|--------------|--------|--------|--------|--------|--------|--------|--------|---------|------------|-----------------------|
| | | LD | LD | G | LD | G | LD | G | MD | | |
| | | 1 | LD | LD | G | LD | G | LD | G | MD | 8.75 |
| 2 | LD | LD | G | LD | G | LD | G | MD | 3.76 | 0.47 | |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | | | |
|------------------------------------|---------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|-------|------|------------|-----------------------|------|------|------|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | | | | | | |
| | | | | | | | | | | | | | | | | |
| 2 | (m ²) | | | | | | | | | | | | | | | |
| | Roof Cover | | | | | | | | | | | | | | | |
| | a. Material | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink | Zink |
| | b. Area (m ²) | 77.60 | 35.00 | 86.00 | 77.19 | 94.20 | 45.00 | 69.80 | 56.00 | | | | | | | |
| c. Condition | LD | G | G | LD | LD | LD | G | G | G | G | G | G | G | G | G | G |
| d. Loss Quantity (m ²) | 7.76 | 0.00 | 0.00 | 7.72 | 9.42 | 4.50 | 0.00 | 0.00 | 0.00 | 29.40 | 3.67 | | | | | |

| Structure System | 1 | Beam | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
|------------------------------------|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | a. Material | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood | Wood |
| b. Volume (m ³) | LD | LD | LD | G | G | G | G | G | G | G | G | G | G | G | G | G |
| c. Condition | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | |
| 2 | Column | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick |
| | a. Material | Wood & Brick | Wood | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick | Wood & Brick |
| | b. Volume (m ³) | | | | | | | | | | | | | | | |
| | c. Condition | MD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| d. Loss Quantity (m ²) | | | | | | | | | | | | | | | | |
| 3 | Beam-Column Joint | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |
| | Condition | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD | LD |

| Clean Water | 1 | Resource | Clean Wtr Comp. | Buy (hourly) | Clean Wtr Comp. | Buy (hourly) | Clean Wtr Comp. | Buy (hourly) | Clean Wtr Comp. | Buy (hourly) | Buy from seller |
|-------------|----------------------|---------------------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|
| | | Water Reservoir Condition | - | - | - | - | - | - | - | - | - |
| 2 | Water Pump Condition | - | - | - | - | - | - | - | - | - | - |
| | | - | - | - | - | - | - | - | - | - | - |
| 3 | Water Tap Condition | - | - | - | - | - | - | - | - | - | - |
| | | - | - | - | - | - | - | - | - | - | - |

| COMPONENT | DESCRIPTIONS | DATA OF CASSED HOUSES | | | | | | | | | | TOTAL LOSS | AVERAGE LOSS per UNIT | |
|-------------|----------------------------|-----------------------|--------|--------|--------|--------|--------|--------|---------|-------|-------|------------|-----------------------|--|
| | | Case 1 | Case 3 | Case 5 | Case 6 | Case 7 | Case 8 | Case 9 | Case 10 | | | | | |
| Waste Water | From Toilet | Squat | Squat | Squat | Squat | Squat | Squat | Squat | Squat | Squat | Squat | Squat | | |
| Electricity | Energy Consumption: (watt) | 450 | 450 | 450 | 900 | 1300 | 450 | 450 | 450 | 450 | 450 | 450 | | |

Note

- G = Good Condition
- LD = Light Damage
- MD = Moderate Damage
- HD = Heavy Damage

Calculation Method

- A. Loss Quantity = Material Quantity x Damage Score
- B. Total Loss = Σ Loss Quantity
- C. Average Loss per Unit = Total Loss / Total Data

| <u>Damage Score</u> | |
|---------------------|------|
| G = | 0 |
| LD = | 10 % |
| MD = | 25 % |
| HD = | 50 % |