**Part 2 of the Report- Emergency Telecommunications**

The first input will always be:

* The Area Councils that have been affected by the Cyclone
* The Category of Cyclone for each Area Council
* The tables outlined below show every administrative boundary: National (Vanuatu), Province (Torba, Sanma, Penama, Malampa, Shefa, Tafea), and the Area Councils underneath their Province. However, the report should show the National, and only the Provinces and Area Councils affected by Cyclone.

Analysis:

* The analysis is four steps:

1. Baseline
2. Estimate Damage from Cyclone
3. Resources Needed to be Sent to Those Affected
4. Estimate Financial Damage from Cyclone

* The analysis will be carried out at the Area Council level as the primary unit.

1. Provincial figures will be generated by summing the results of all Area Councils within each province.
2. National figures (Vanuatu) will then be produced by summing the results across all provinces.
3. **BASELINE: Number of Telecommunication Towers**

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| --- | --- | --- |
|  | **Number of Towers** | |
|  | **Digicel** | **Vodafone** |
| Vanuatu |  |  |
| **Torba** |  |  |
| Torres |  |  |
| Ureparapara |  |  |
| Motalava |  |  |
| West Vanualava |  |  |
| East Vanualava |  |  |
| Mota |  |  |
| East Gaua |  |  |
| West Gaua |  |  |
| Merelava |  |  |
| **Sanma** |  |  |
| Luganville |  |  |
| North West Santo |  |  |
| Big Bay Coast |  |  |
| Big Bay Inland |  |  |
| West Santo |  |  |
| South Santo 1 |  |  |
| South Santo 2 |  |  |
| East Santo |  |  |
| South East Santo |  |  |
| Canal - Fanafo |  |  |
| West Malo |  |  |
| East Malo |  |  |
| **Penama** |  |  |
| West Ambae |  |  |
| North Ambae |  |  |
| East Ambae |  |  |
| South Ambae |  |  |
| North Maewo |  |  |
| South Maewo |  |  |
| North Pentecost |  |  |
| Central Pentecost 1 |  |  |
| Central Pentecost 2 |  |  |
| South Pentecost |  |  |
| **Malampa** |  |  |
| North West Malekula |  |  |
| North East Malekula |  |  |
| Central Malekula |  |  |
| South West Malekula |  |  |
| South East Malekula |  |  |
| South Malekula |  |  |
| North Ambrym |  |  |
| West Ambrym |  |  |
| South East Ambrym |  |  |
| Paama |  |  |
| **Shefa** |  |  |
| Port Vila |  |  |
| Vermali |  |  |
| Vermaul |  |  |
| Varisu |  |  |
| South Epi |  |  |
| North Tongoa |  |  |
| Tongariki |  |  |
| Makimae |  |  |
| Nguna |  |  |
| Emau |  |  |
| Malorua |  |  |
| North Efate |  |  |
| Mele |  |  |
| Tanvasoko |  |  |
| Ifira |  |  |
| Pango |  |  |
| Erakor |  |  |
| Eratap |  |  |
| Eton |  |  |
| **Tafea** |  |  |
| North Erromango |  |  |
| South Erromango |  |  |
| Aniwa |  |  |
| North Tanna |  |  |
| West Tanna |  |  |
| Middle Bush Tanna |  |  |
| South West Tanna |  |  |
| Whitesands |  |  |
| South Tanna |  |  |
| Futuna |  |  |
| Aneityum |  |  |

1. **ESTIMATING DAMAGE: Number of Damaged Towers**

* Method:

1. Identify the number of towers by Area Council (AC) and by type (e.g., Digicel, Vodafone).
2. Determine the cyclone category multiplier for each affected Area Council (e.g., Cat 5 = 0.8, Cat 4 = 0.7).
3. Multiply the number of towers of each type by the cyclone category multiplier.
4. The result gives the estimated number of damaged towers by type and AC.

* Example:

1. Cyclone Category 5 hit West Ambae (multiplier = 0.8).
2. Cyclone Category 4 hit North Maewo (multiplier = 0.7).

* West Ambae (1 Digicel tower, 1 Vodafone tower):

1. Damaged Digicel tower = 1 × 0.8 = 0.8
2. Damaged Vodafone tower = 1 × 0.8 = 0.8

* North Maewo (1 Digicel tower, 0 Vodafone towers):

1. Damaged Digicel tower = 1 × 0.7 = 0.7
2. Damaged Vodafone tower = 0 × 0.7 = 0

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| **Region** | **Number of damaged towers** | |
|  | **Digicel** | **Vodafone** |
| Vanuatu |  |  |
| **Torba** |  |  |
| Torres |  |  |
| Ureparapara |  |  |
| Motalava |  |  |
| West Vanualava |  |  |
| East Vanualava |  |  |
| Mota |  |  |
| East Gaua |  |  |
| West Gaua |  |  |
| Merelava |  |  |
| **Sanma** |  |  |
| Luganville |  |  |
| North West Santo |  |  |
| Big Bay Coast |  |  |
| Big Bay Inland |  |  |
| West Santo |  |  |
| South Santo 1 |  |  |
| South Santo 2 |  |  |
| East Santo |  |  |
| South East Santo |  |  |
| Canal - Fanafo |  |  |
| West Malo |  |  |
| East Malo |  |  |
| **Penama** |  |  |
| West Ambae |  |  |
| North Ambae |  |  |
| East Ambae |  |  |
| South Ambae |  |  |
| North Maewo |  |  |
| South Maewo |  |  |
| North Pentecost |  |  |
| Central Pentecost 1 |  |  |
| Central Pentecost 2 |  |  |
| South Pentecost |  |  |
| **Malampa** |  |  |
| North West Malekula |  |  |
| North East Malekula |  |  |
| Central Malekula |  |  |
| South West Malekula |  |  |
| South East Malekula |  |  |
| South Malekula |  |  |
| North Ambrym |  |  |
| West Ambrym |  |  |
| South East Ambrym |  |  |
| Paama |  |  |
| **Shefa** |  |  |
| Port Vila |  |  |
| Vermali |  |  |
| Vermaul |  |  |
| Varisu |  |  |
| South Epi |  |  |
| North Tongoa |  |  |
| Tongariki |  |  |
| Makimae |  |  |
| Nguna |  |  |
| Emau |  |  |
| Malorua |  |  |
| North Efate |  |  |
| Mele |  |  |
| Tanvasoko |  |  |
| Ifira |  |  |
| Pango |  |  |
| Erakor |  |  |
| Eratap |  |  |
| Eton |  |  |
| **Tafea** |  |  |
| North Erromango |  |  |
| South Erromango |  |  |
| Aniwa |  |  |
| North Tanna |  |  |
| West Tanna |  |  |
| Middle Bush Tanna |  |  |
| South West Tanna |  |  |
| Whitesands |  |  |
| South Tanna |  |  |
| Futuna |  |  |
| Aneityum |  |  |

1. **NO RESOURCES BEING CALCULATED TO BE SENT (PRIVATE SECTOR RESPONSE)**
2. **ESTIMATED FINANCIAL DAMAGE FROM CYCLONE: Financial recovery**

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| * Method:  1. Identify the number of towers by Area Council (AC) and by type (e.g., Digicel, Vodafone). 2. Determine the cyclone category multiplier for each affected AC (e.g., Cat 5 = 0.8, Cat 4 = 0.7). 3. Use the standard unit cost of reconstruction per tower (e.g., VT 200,000,000 from financial dataset). 4. Multiply: (Number of towers × Unit cost × Cyclone multiplier). 5. Sum results across tower types and Area Councils to obtain total estimated recovery costs.  * Example Scenario:  1. Cyclone Category 5 hit West Ambae (multiplier = 0.8). 2. Cyclone Category 4 hit North Maewo (multiplier = 0.7). 3. Unit reconstruction cost per tower = VT 200,000,000.  * West Ambae (1 Digicel, 1 Vodafone):  1. Digicel = 1 × 200,000,000 × 0.8 = VT 160,000,000 2. Vodafone = 1 × 200,000,000 × 0.8 = VT 160,000,000 3. Total = VT 320,000,000  * North Maewo (1 Digicel, 0 Vodafone):  1. Digicel = 1 × 200,000,000 × 0.7 = VT 140,000,000 2. Vodafone = 0 × 200,000,000 × 0.7 = VT 0 3. Total = VT 140,000,000 |

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| **Region** | **Cost of damaged towers** | |
|  | **Digicel** | **Vodafone** |
| Vanuatu |  |  |
| **Torba** |  |  |
| Torres |  |  |
| Ureparapara |  |  |
| Motalava |  |  |
| West Vanualava |  |  |
| East Vanualava |  |  |
| Mota |  |  |
| East Gaua |  |  |
| West Gaua |  |  |
| Merelava |  |  |
| **Sanma** |  |  |
| Luganville |  |  |
| North West Santo |  |  |
| Big Bay Coast |  |  |
| Big Bay Inland |  |  |
| West Santo |  |  |
| South Santo 1 |  |  |
| South Santo 2 |  |  |
| East Santo |  |  |
| South East Santo |  |  |
| Canal - Fanafo |  |  |
| West Malo |  |  |
| East Malo |  |  |
| **Penama** |  |  |
| West Ambae |  |  |
| North Ambae |  |  |
| East Ambae |  |  |
| South Ambae |  |  |
| North Maewo |  |  |
| South Maewo |  |  |
| North Pentecost |  |  |
| Central Pentecost 1 |  |  |
| Central Pentecost 2 |  |  |
| South Pentecost |  |  |
| **Malampa** |  |  |
| North West Malekula |  |  |
| North East Malekula |  |  |
| Central Malekula |  |  |
| South West Malekula |  |  |
| South East Malekula |  |  |
| South Malekula |  |  |
| North Ambrym |  |  |
| West Ambrym |  |  |
| South East Ambrym |  |  |
| Paama |  |  |
| **Shefa** |  |  |
| Port Vila |  |  |
| Vermali |  |  |
| Vermaul |  |  |
| Varisu |  |  |
| South Epi |  |  |
| North Tongoa |  |  |
| Tongariki |  |  |
| Makimae |  |  |
| Nguna |  |  |
| Emau |  |  |
| Malorua |  |  |
| North Efate |  |  |
| Mele |  |  |
| Tanvasoko |  |  |
| Ifira |  |  |
| Pango |  |  |
| Erakor |  |  |
| Eratap |  |  |
| Eton |  |  |
| **Tafea** |  |  |
| North Erromango |  |  |
| South Erromango |  |  |
| Aniwa |  |  |
| North Tanna |  |  |
| West Tanna |  |  |
| Middle Bush Tanna |  |  |
| South West Tanna |  |  |
| Whitesands |  |  |
| South Tanna |  |  |
| Futuna |  |  |
| Aneityum |  |  |