

## Pathein Cyclone Scenario Planning Summary 20 February 2015

### Background Information

Ayeyawaddy is one of the regions in Myanmar, occupying the delta area of the Ayeyarwady River. Ayeyarwady Region is flanked by the Rakhine Yoma range in the west and large areas were cleared for paddy cultivation, the main rice producer in the country. There is a population of 6,175,123<sup>1</sup> people in Ayeyarwady Region, composed of 26 Townships.

It lies in the lowest expanse land just 3 meters above from sea level and the vast area is full of rivers and streams. Moreover, the Region is strongly and frequently affected by cyclones, storms and other climatic hazards according to the historical background. The major disaster is annual floods.

### Cyclones in Ayeyawaddy Region (from 1975 to 2008)<sup>2</sup>

No.	Type of Natural Hazards	Period	Place of Landfall	Loss of human lives and property
1	Cyclone	5 – 7 May 1975	Pathein	303 dead, 10,191 cattle lost, 246,700 houses destroyed, estimated loss of 446.5 million kyat.
2	Cyclone Mala	25 - 29 April 2006	Near Gwa and northern part of Ayayarwaddy	37 people dead and damage cost 428.56 million kyats
3	Cyclone Nargis	2 – 3 May 2008	Ayayarwaddy and Yangon	138,373 people missing or dead, 300,000 cattle killed, houses & over 4,000 schools in more than 6,000 villages destroyed, damage cost 13 trillion kyat

### Impact of Cyclone Nargis (Deaths and Missing people by Townships)<sup>3</sup>

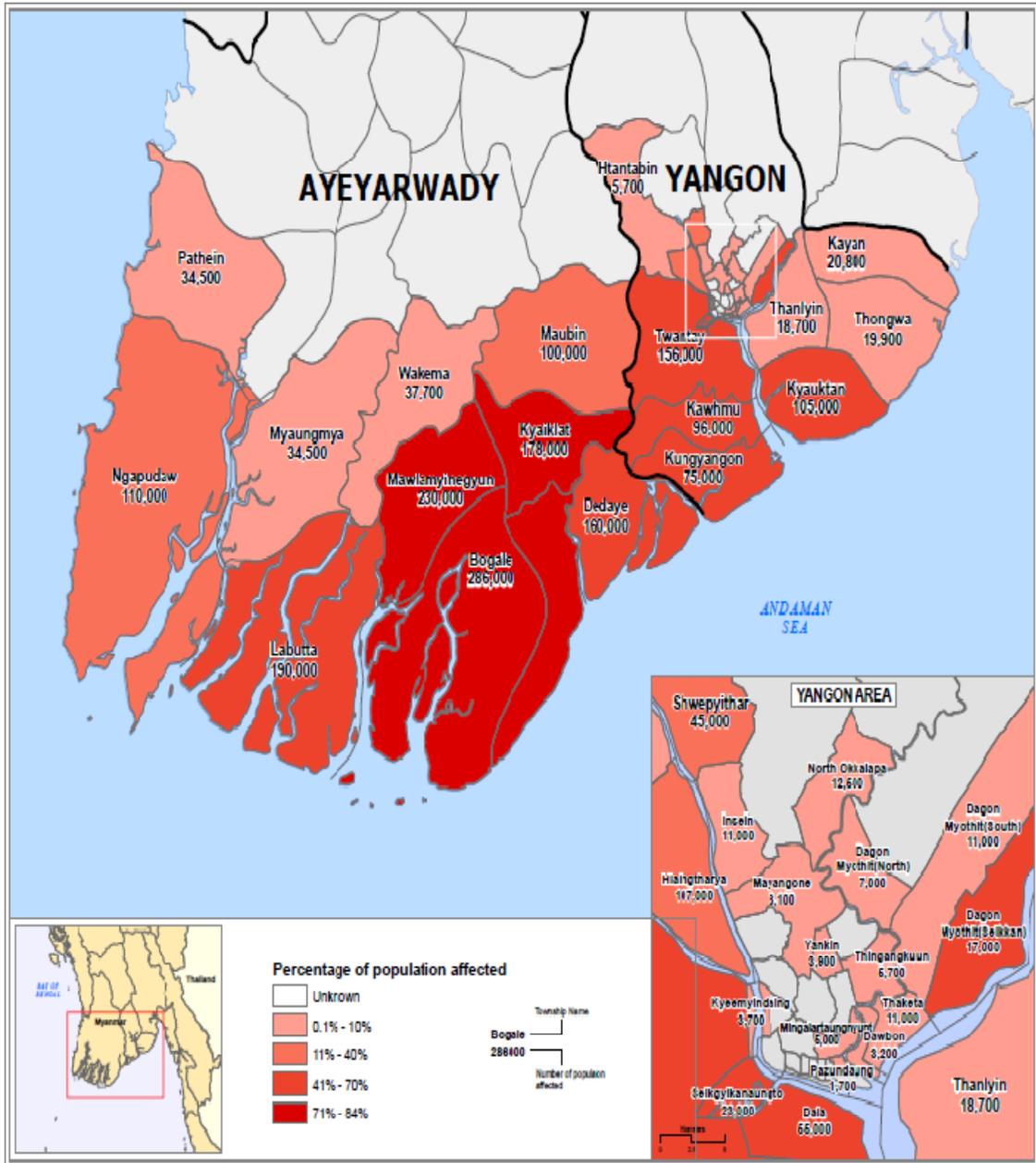
No.	Township	Dead	Missing
1	Labutta	33,344	48,464
2	Bogale	34,744	3,198
3	Mawlamyinegyun	5,250	2,127
4	Ngapudaw	4,178	10
5	Dedaye	4,111	19
6	Pyapon	1,258	10
7	Kyaiklat	12	-

<sup>1</sup> Myanmar National Census (2014)

<sup>2</sup> Hazards Profile of Myanmar (2009)

<sup>3</sup> Ayeyawaddy Regional Disaster Management Plan (2012)

Nargis Cyclone Affected Townships and their population<sup>4</sup>



<sup>4</sup> Myanmar Information Management Unit (MIMU)

## Scenario Definition

The townships along the coastal line are at higher risk for the cyclone and the townships along the river are risky for storm surge. A total of up to 2.5 million people could be affected in case of severe cyclone in Ayeyawaddy Region. The nine townships in the table below are those at risk to be more severely affected. Population directly affected is estimated at 25% of total population in these nine townships, meaning about 630,000 people.

### Townships at high risk of Cyclone in Ayeyawaddy and their population<sup>5</sup>

Township	Total population	Male	Female	Household
Pathein	378,774	184,071	194,703	85,627
Thabaung	154,355	75,674	78,681	37,211
Ngapudaw	323,806	163,044	160,762	76,665
Labutta	315,004	158,957	156,047	75,630
Mawlamyinegyun	310,886	153,198	157,688	74,840
Pyapon	314,059	155,719	158,340	69,497
Bogale	322,082	159,481	162,601	76,006
Kyaiklat	192,676	94,523	98,153	43,751
Dedaye	202,503	99,473	103,030	48,611
<b>Total</b>	<b>2,514,145</b>	<b>1,244,140</b>	<b>1,270,005</b>	<b>587,838</b>

## Planning Assumptions, Main Humanitarian Needs and Population Affected

Planning Assumptions	Key Humanitarian Needs
<ul style="list-style-type: none"> <li>- Storm surge</li> <li>- Destruction of basic infrastructure</li> <li>- Deaths, injuries and missing population</li> <li>- Destruction of livelihood in affected areas</li> <li>- Insufficient emergency stocks</li> <li>- Psychosocial trauma</li> <li>- Insufficient evacuation shelters for all possible affected population</li> <li>- Limited preparedness capacities</li> </ul>	<ul style="list-style-type: none"> <li>- Basic needs (food, water and sanitation, medicines, health care including first-aid and psychosocial support, nutrition, hygienic kit for women, non-food items)</li> <li>- Security,</li> <li>- Communications,</li> <li>- Education</li> <li>- Support for livelihood,</li> <li>- Reconstruction of buildings,</li> <li>- Coordination with aid agencies</li> <li>- Shelter (temporary)</li> <li>- Protection,</li> </ul>

### Population affected – Disaggregated

Communities living in coastal and rural areas will be the most affected (15% of total caseload from urban area and remaining 85% from rural areas)

### Most affected groups

Children, elder, disable, pregnant and lactating - 27.6% of total caseload

<sup>5</sup> Discussion and prioritization from ERPP Workshop in Pathein on 20 February based on Census 2014

## Government capacity

With the support from the national government and civil society in the region, the regional government can cope with up to 50% of total caseload.

### Government Emergency Capacity

- Regional Disaster Management and township level plans are in place
- Disaster Management Committees are formed at the different levels
- Department of Meteorology and Hydrology transmit early warning message
- Immediate distribution of basic needs (RRD has emergency stock at regional (Pathein) and district levels (Hninthada, Pyapon, Myaungmya and Labutta)
- Allocated Emergency fund of 1.8 million MMK under Relief and Resettlement Department
- Evacuation plan
- 54 cyclone proof shelters available in the region (need to build 45 more)
- Regarding awareness-raising, RRD, GAD and other relevant departments, in collaboration with NGO, INGO, UN, organized regional, district and township level disaster management capacity building and community based disaster risk reduction trainings, awareness talks, simulation exercises for tsunami, cyclone and floods and awareness raising at schools. Moreover, pamphlets with details on 9 hazards and exercise books for school students with information on natural disaster were distributed in 2014.

### Existing capacity for health care

- Pathein General Hospital
- Private hospitals

### Main bridges connecting Ayeyawaddy (which might be affected)

- Bo MyatTun Bridge (Nyaungdon)
- Daydalun Bridge (Pyapon)
- Dedaye Bridge (Kungyangon Township in Yangon Region and Dedaye Township in Ayeyawady Region)
- KyaukChaungGyi Bridge (Pathein)
- Labutta Bridge
- Maung Bi Wa Bridge (Pathein)
- Natchaung Bridge (Bogalay)
- Seikma Bridge (Bogalay)

## Operational Constraints

Theme	Constraints/challenges	How to Address
Immediate response	Insufficient decentralization (delays related to Union Government decision)	<ul style="list-style-type: none"> <li>- Request assistance from national government when required</li> <li>- Advocate for more decentralization</li> <li>- Support for functioning of disaster working committee</li> </ul>
Contingency plan for the region for immediate response	Limited resources	<ul style="list-style-type: none"> <li>- Get support from the organizations to develop the contingency plan</li> </ul>
Timely/immediate information sharing to the community	Communication problems, insufficient resources	<ul style="list-style-type: none"> <li>- Identify in advance possible solution for solving communication break down</li> </ul>
Search and rescue	<ul style="list-style-type: none"> <li>- Not enough vehicles</li> <li>- Destruction of basic infrastructure</li> <li>- Weather condition during the disaster</li> </ul>	<ul style="list-style-type: none"> <li>- Identify in advance available vehicles which can be used for emergency and stock fuel</li> </ul>
Relief activities	<ul style="list-style-type: none"> <li>- Shortage of basic items including medicines</li> <li>- Limited contingency fund</li> </ul>	<ul style="list-style-type: none"> <li>- Increase stocks by regional government with the support of local NGOs and private sector</li> </ul>

		<ul style="list-style-type: none"> <li>- Form and train Rapid Response Teams at township levels\</li> <li>- Advocate to regional government for allocation contingency fund</li> </ul>
Rapid Needs Assessment	<ul style="list-style-type: none"> <li>- Limited transportation means</li> <li>- Resources for conducting assessment (human, technical,...)</li> </ul>	<ul style="list-style-type: none"> <li>- Prepare for rapid assessment (form, methodology, training)</li> </ul>
Coordination	<ul style="list-style-type: none"> <li>- Communication gap between government departments and humanitarian communities</li> <li>- Limited coordination between regional government, CSOs and organizations</li> </ul>	<ul style="list-style-type: none"> <li>- Coordination fora, networking among humanitarian community (government departments, civil society, local NGOs and international organizations)</li> </ul>
Community participation during all three phases	<ul style="list-style-type: none"> <li>- Weak participation of local communities</li> <li>- No security for volunteers</li> </ul>	<ul style="list-style-type: none"> <li>- Community mobilization, allow community participation in all steps of the preparation</li> <li>- Train for community-based disaster preparedness and response</li> <li>- Life insurance for volunteers and aid workers</li> </ul>
Awareness raising	Limited public awareness for individual and household level preparedness	Awareness raising through schools, IEC materials and social media

#### Coordination Arrangements

No	Sub-committee	Contact	Cluster/Agencies	NGOs/CSOs
1	Emergency telecommunications sub-committee	Myanma Posts and Telecommunications Regional Manager 042 24050 098550031	Emergency Telecommunications (WFP)	NGOs
2	Preparedness and Rehabilitation sub-committee	Department of Development Affairs 042 24340/ 042 24952	Shelter (IFRC)	NGOs, MRCS
			WASH (UNICEF)	
			Protection (UNHCR)	
			Early Recovery (UNDP)	
3	Search and Rescue sub-committee	Fire Service Department Regional officer 042 25296 098627527		MRCS 042 25257
4	Collection of Preliminary damages sub-committee	Planning Department	All clusters/sectors (OCHA)	MRCS 042 25257
		Relief and Resettlement Department U Than Soe (Director) 0949000290 042 21061		
5	Transportation and route clearance sub-committee	Transport Planning Department 042 24485 042 24694	Logistics (WFP)	
6	Health and Education sub-committee	Health Department 042 21173 042 24931/ 042 24938	Health (WHO)	MRCS 042 25257
		Basic Education Department U AungKyawTun	Education in Emergencies	Myittayeik Health Care

		042 25319/ 042 24570	(UNICEF, SCI)	Services 0949717071
7	Dam restoring and repairing in emergency situation	Irrigation Department Director 042 29107/ 042 29004	Early Recovery (UNDP)	NGOs
8	Re-substitute Agriculture sub-committee	Agricultural Department U Myint Thein Director 098552631 042 24114/ 042 24516	Food Security (FAO/WFP)	
9	Repair road, bridge and infrastructure sub-committee	Public Works Chief Engineer 098302804 042 24312/ 042 25082		
10	Receipt of relief items and cash and distribution sub-committee	Internal Revenue Department Director 098553395 042 24529/ 042 24528		
11	Information sub-committee	Information and Public Relation Department 098550587/ 042 25391		
12	Security sub-committee	Police Force Office Police Colonel Aung Naing Thu 042 24652 098553457 042 21280/ 09195191791		

#### Way forward

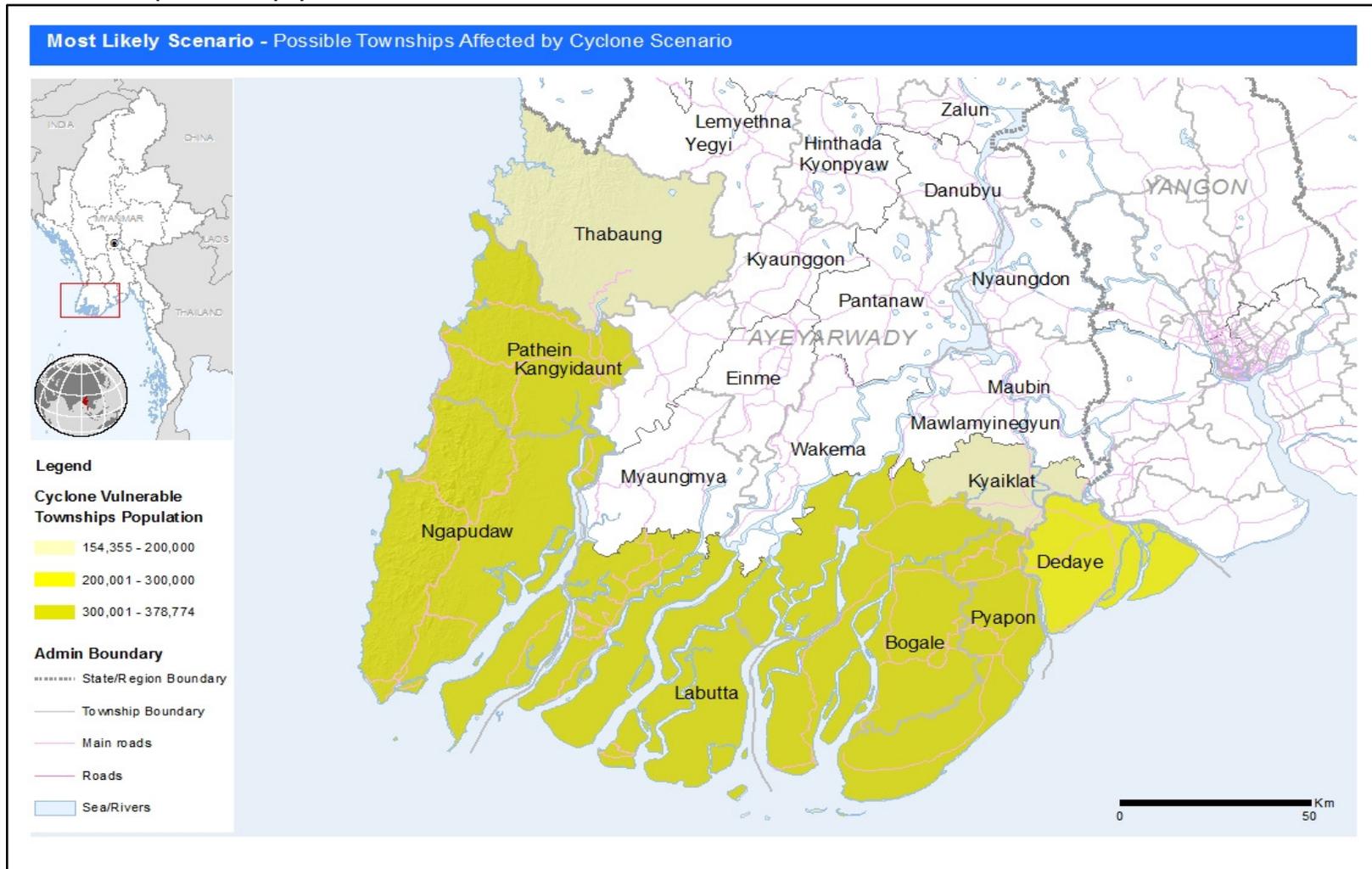
Proposed preparedness activities	Focal (leader)
Awareness raising	Relief and Resettlement Department, Information and Public Relation Department, Department of Meteorology and Hydrology
Emergency stockpiling	Relief and Resettlement Department
Developing regional response plan including identification of evacuation sites (cyclone resistance shelter) and route	Relief and Resettlement Department, regional government and township authorities
Training and simulation exercise for effective response	Relief and Resettlement Department and Ayeyawaddy Regional Government OCHA
Allocating contingency fund	Relief and Resettlement Department and Ayeyawaddy Regional Government
Formation of Disaster Management Committee at different levels in line with Regional committee and working together for disaster preparedness and response	Regional Disaster Management Working Committee
Preparation for Rapid Needs Assessment	Relief and Resettlement Department and OCHA
Improve coordination	Relief and Resettlement Department and OCHA

#### Annexes

1. Possible Townships Affected by Cyclone Scenario \_Map
2. Emergency Response Preparedness Planning Workshop Agenda
3. Emergency Response Preparedness Planning Workshop Attendance List

**Annex 1:**

**Possible Townships Affected by Cyclone Scenario**



**Annex 2:  
Emergency Response Preparedness Planning Workshop Agenda**

Time	Session	Topics covered	Focal Point
08:30-09:00	Arrival of participants	Registration	RRD and OCHA
09:00-09:10	Introduction of the workshop	- Workshop components, - Objectives	OCHA
09:10-09:30	Session 1: Summary of Emergency Response Preparedness Activities	Briefing on CPs, ERPP	OCHA
09:30-09:50	Coffee Break		
09:50-10:30	Session 2: Risk Assessment	- Hazards in Ayeyarwady	RRD
10:30-12:00	Session 3: Scenario definition	- What will happen? - Where will it happen? - Who will be affected? - Which is government existing capacity to cope with this scenario?	OCHA
12:00-13:00	Lunch		
13:00-14:00	Session 4: Planning Assumptions and Humanitarian Consequences	- Which are the anticipated effects of the affected population - Which will be the priority needs? - Which will be the most affected groups?	OCHA
14:00-15:00	Session 5: Operational Constraints and how to address them	- Which actions need to be taken as an immediate response and what may impede this response? - What can be done to address the mentioned constraints?	OCHA
15:00-15:20	Coffee Break		
15:20-16:20	Session 6: Coordination Mechanisms	- How humanitarian organizations will support government efforts?	OCHA
16:20-16:45	Session 7: Identification of main gap	- Which actions are required to enhance preparedness? - Who will lead the actions?	OCHA
16:45-17:00	Way Forward and closing remarks	Wrap up	RRD and OCHA

**Annex 3:**  
**Emergency Response Preparedness Planning Workshop Attendance List**

No	Name	Designation	Organization	Contact No./email
1	Daw Ni NiMyint	Assistant Director	Central Equipment Statistic and Inspection Department	09-420701062
2	Daw Mar MarWai	Staff Officer	Department of Agriculture	09-317204041
3	U SoeThein	Staff Officer	Department of Fisheries	09-8572897
4	U AungTheinOo	Deputy Director	Department of Religious Affairs	09-47072574
5	U KyawHtay	Staff Officer	Department of Trade Promotion	09-250228443
6	U KyawNaingOo	District Staff Officer	Department of Traditional Medicine	09-794502737
7	DawSweHlaingWintWint	Staff Officer	Directorate of Industrial supervision and inspection	09-73132109, 09-250177286
8	DawNyoNyo Han	Assistant Director	District Budget Department	09-5058410
9	DawKhinThidaAung	Assistant Director	Department of Social Welfare	09-5062108
10	DawMyaMya	Staff Officer	Education Department	09-250729241
11	U Soe Moe Thant	Assistant Engineer	Electricity Department	09-450990984
12	U Chan Aye	Staff Officer	Energy Department	09-254240631
13	U KyawKyaw	Assistant Director	Fire Services Department	09-5194756
14	U Than Hlaing	Staff Officer	Housing Department	09-5060967
15	Daw MyatMyatHtwe Cho	Township Officer	Information and Public Relation Department	09-33692300
16	U Kaung Kin Kyaw	Staff Officer	Land Record Department	09-49256423
17	Dr. Hnin Set PwintAung	Deputy Chief Officer	Livestock Breeding and Veterinary Department	09-425326457
18	U ZawKhaingOo	Staff Officer	Planning Department	09-422459865
19	U Peter SoeHtut	Chief Engineer (Electricity)	Public Works	09-2023201
20	Daw Lay Khin	EE	Regional Development Council	09-451236226
21	Dr. Thet Su Mon	Township Health Officer	Regional Health Department	09-254135734, th.sumon@gmail.com
22	U Nay MyoHlaing	Staff Officer	Regional Immigration Department	09-253830086
23	U Win Myint	Junior Engineer	Regional MPT	09-451244488
24	U MyoMyintAung		Regional Police Force	09-458030561
25	Daw Win Pa PaKyaw	Staff Officer	Relief and Resettlement Department	09-254032743
26	Daw Tint EiEiNaing	Deputy Chief Officer	Rural Development Department	09-798113076, tintei2naing@gmail.com
27	U Tin MaungShwe	M&E Officer	CDN	09-421126795
28	U Thant Zin Win	ERDRR Officer	LWF	09-451244425
29	U HtunHtun Win	Commander	MRCS	09-451238742
30	U Thaug Tin	Deputy Commander	MRCS	09-8554353
31	U MyoZawSai	Wash Technician	WC	09-422546503, myozawsai@gmail.com
32	U AungHlaingOo	Project Manager	Community Development Association	09-5123846
33	U Win HtutThein	Project Manager	Community Development Association	09-43191466

34	U KyiMyint	Executive Officer	Karuna Social Services	042-25141
35	U KyawSwarNyein	Secretary	Mettayeik Health Care Services	09-422464799
36	Mr. Krishna Kumar	Program Manager	PGVS, India	
37	DawNaw Lucy	FA	PMA	09-422467271
38	DawNaw Diamond	Volunteer	YWCA	09-253284377
39	DawNaw Eh ThaKhu	Volunteer	YWCA	09-799947971