MYANMAR

Assessment of Capacities using SEA Region Benchmarks for Emergency Preparedness and Response

KOFIH
Korea Foundation for International Healthcare
한국국제보건의료재단

World Health Organization
Regional Office for South-East Asia

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Background and Vulnerability to Disasters

Myanmar has a long coastline of 2 400 km, which covers almost the entire east coast of the Bay of Bengal. It is situated on the highly active fault line called the Sagaing fault. This leaves Myanmar a very short lead time for warning. Most of the coastal areas of Myanmar are within the risk zone. However, deadly tsunamis are rare in Myanmar. Though the country is relatively protected from natural disasters, floods occur in areas traversed by rivers, often after a storm or torrential rain. However, they cannot be predicted.

Other hazards faced include cyclones, storms, earthquakes and landslides. Urban fire in the central areas of the country is common during the hot, dry season and is human induced. The country has a high burden of tuberculosis, with about 1.5% of the population infected each year. Climate change has led to a re-emergence of malaria, which is largely due to multidrug-resistant Plasmodium falciparum, and an insecticide-resistant vector. Avian and human pandemic influenza are other health hazards, though Myanmar is well prepared to tackle these.

Methodology

Myanmar carried out a series of consultative workshops in 2011 at the subnational and national levels with relevant stakeholders in order to assess country progress in implementing the 12 EHA benchmarks. The workshops were jointly conducted by the Myanmar Emergency Preparedness and Response (EPR) Programme of the Department of Health (DOH) and the EHA Programme of the World Health Organization.

Technical working groups met on 22 December 2011, led by the Deputy Director-General (Disease Control). Participants included Directors from the DOH, Departments of Meteorology and Hydrology, Department of General Administration of the Ministry of Home Affairs, Relief and Resettlement, Fire Brigade, Myanmar Maternal and Child Welfare Association, Myanmar Red Cross Society and members from the state and regional rapid response teams (RRTs). Participants were divided into three groups to discuss and make necessary changes and amendments to the tools to suit the country context, and finalize the tools to be used in the assessment.

An EPR assessment workshop using the adopted tools was held at the Disease Control Unit, Department of Health, Nay Pyi Taw on 23–24 December 2011. The assessment was done in three groups. For the team responsible for assessment of the benchmarks, guidelines were included in the matrix to help reach a decision on scoring each item. For each indicator, one or more questions were identified. There was more than one question for some indicators; in such a situation, an overall assessment was made. The assessment of status was based on the response to all the questions that were listed for the indicator. Achievements and gaps were identified and recommendations made for each standard.

A dissemination workshop was organized on 25 December 2011 with participants from all areas of the health sector. Members of the department for national EPR in the health sector attended the workshops, as well as some members of the state and regional disaster preparedness and response departments. Others who attended included RRT members and those from the Ministry of Home Affairs, Ministry of Social Welfare, Release and Resettlement, Fire Brigade, MRCS and Myanmar Maternal and Child Welfare Association (MMCWA).

Findings: Achievements and Gaps

Assessment and review of benchmarks relating to legal framework, rules of engagement, national action plan and resources

BENCHMARK 1:

Legal framework and functioning coordination mechanisms and an organizational structure in place for health EPR at all levels involving all stakeholders.

Achievements

- Standing orders and plans/regulations are available and functioning well.
- Laws relating to disaster have been formulated and adopted.
- The National Health Plan (2011–2015) has been prepared and an EPR component has been included.
- SOPs that describe the detailed roles and responsibilities of committees, ministries and other organizations in disaster risk reduction and emergency management are available at the national and subnational levels.
- Coordination mechanisms between the government, UN, civil society and private sector are in place and functioning to a certain extent.
- Organizational structures have been established for all disasters.

Gaps

- The national disaster law has not yet been endorsed.
- The coordination mechanism at the community level needs to be strengthened.
- Health EPR committees have not been developed at the subnational level.
- The coordination committees do not meet regularly.
- Technological handling is difficult at some levels.
- Financial and human resources are inadequate.

BENCHMARK 2:
Regularly updated disaster preparedness and emergency management plan for the health sector and SOPs (emergency directory, national coordination focal point) in place.

Achievements

- Action plans and SOPs for disaster preparedness and response are regularly updated in most of the states and regions.
- At the central level, simulation exercises for mass casualty management are conducted regularly.
- SOPs have been operationalized at the central level and disaster-affected states, regions and townships.

Gaps

- Some states and regions do not update their SOPs regularly.
- Some states, regions and townships need to be familiar with the SOPs and operationalize them. Many health managers are not aware of the SOPs.
- A proper action plan has to be developed at the subnational level. Current plans have weaknesses.
- Hazard and vulnerability assessments need to be conducted at the subnational level.
- The arrangement with partners and their roles and responsibilities need to be circulated to all key sectors.
- MOUs have not been signed with all partners.
- Township-level coordination mechanisms and organizational structures are weak.
- The contingency plan needs to be updated regularly.
- Procurement and logistics are weak.
- Drills and simulation exercises are not conducted or conducted haphazardly at all levels.

BENCHMARK 3:
Emergency financial (including national budget), physical and regular human resource allocation and accountability procedures established.

Achievements

- A focal point is present at the national level.
- Human resources have been allocated at the national level.
- Emergency funds are available from donors and the central government.
- Partial medical supplies and other non-food items are received from the Central Medical Stores Depot (CMSD).
- Accountability for supply and budget management has been established from the central to the township level.

Gaps

- Focal points are not available at all levels.
- Human resource allocation is limited at the state and regional levels.
- Needs and supplies do not match each other.
- The quality and quantity of supplies required for public health in emergencies are not sufficient.
- Funds are not available immediately. Budget allocation at all levels should be done in

advance before an emergency situation arises.
- There is no budget for EPR at the district and township levels.
- The funding gap has been identified but not addressed properly.
- Disaster management committees need logistics, human resources and financial support for smooth implementation.
- Local donations must be transparent and accountable.
- Coordination and collaboration at the subnational level are weak.

BENCHMARK 4:
Rules of engagement (including conduct) for external humanitarian agencies based on needs established.

Achievements
- A national guideline has been prepared by the focal ministry with support of the concerned ministries and NGOs. Endorsement of the guidelines by the parliament is awaited.
- Key partners (public, private and NGOs) have been identified and participate in the process of EPR to some extent.
- The cluster-level approach is active at the national level.
- Working mechanisms exist and are functioning to some extent.
- Code of conduct, for example, temporary registration by the Myanmar Medical Council (MMC), is needed.
- The direction of the national guidelines has been established and advocacy to national authorities has been conducted.
- Rules of conduct by the tripartite core group (government, WHO and Association of Southeast Asian Nations [ASEAN]) have been laid down and were successfully implemented for the Cyclone Nargis-affected period.

Gaps
- Support from external humanitarian agencies is limited in some of the disaster-affected townships. Overlapping roles and gaps need to be rectified by holding a meeting of the the health cluster, nutrition cluster and WASH cluster.
- There is no specific code of conduct for international humanitarian organizations. Health managers in the government are not aware about the code of conduct for international humanitarian organizations.
- Some of the NGOs who participate in emergency-prone areas need to extend their MoUs with the government and their roles need to be specified in the MoUs.
- Myanmar has more than 100 ethnic groups and some of the activities do not follow their culture, religion and behaviour.
- Emergency assessment before, during and after a disaster needs to be specific. In some areas, this needs to be synchronized with the work of other agencies.

Assessment and review of benchmarks relating to community preparedness, participation and response

BENCHMARK 5:
Community plan for mitigation, preparedness and response developed, based on risk identification and participatory vulnerability assessment and backed by a higher level of capacity.

Achievements
- There is some capacity to identify risks and assess vulnerability.
- Risk and vulnerability analysis by key sectors other than health has been completed in several communities in hazard-prone areas.
- Community plans are present in some areas.

- Community-level focal points for health have access to back-up resources for EPR.
- The roles and responsibilities of governmental organizations and NGOs have been clearly defined.
- A coordination mechanism is present at all levels.
- Local-level decision-making is supported by administrative and resource capabilities.
- The health committee can request for a budget from the national committee.
- An emergency budget for the health sector is reserved by WHO and ASEAN.

Gaps

- The capacity to identify risks and assess vulnerability is not adequate, and all areas have not been mapped.
- Some areas do not have a community plan and in some areas the plan needs to be strengthened.
- Community plans for mitigation, preparedness and response need to be drawn up according to the areas.
- The community plans for mitigation, preparedness and response at all levels need to be coordinated with health and health-related partners at all levels, especially at the community levels.
- Community plans need to be interlinked with national and subnational plans.
- Proper equipment, shelters and health facilities are lacking at the community level.
- There is no specific budget allocated by the government for emergencies, especially for community response.
- Budget allocation for disaster management is inadequate.
- Technical and financial support need to be increased.

BENCHMARK 6:
Community-based response and preparedness capacity developed, supported with training and regular simulation/mock drills.

Achievements

- Capacity building has been well conducted at all levels.
- National-level guidelines are in the local language and need to be translated and produced in English.
- Community-level guidelines have also been developed and distributed.
- Community health workers (CHWs) are trained by the government and supported by agencies (Merlin, Save the children and Population Services International [PSI]).
- Community-based first aid and community-based disaster risk management (CBDRM) training is done by NGOs, e.g. MRCS.
- Regular simulation and mock drills are conducted in some high-risk townships, though not regularly.
- The training schedule is well planned, especially in disaster-prone areas.
- Training is conducted in disaster management and disaster risk reduction (DRR), and has been conducted up to the grass-roots level.

Gaps

- Support and training are irregular, and drills are conducted irregularly.
- There may be overlapping of training to the same person.
- Supportive supervision at the subnational

level is weak, and the supporting system is not standardized.
- More trained health workers and CHWs are needed for emergency activities.
- The training curriculum is not uniform and the process of training needs to be improved.
- Collaboration and cooperation between government sectors and supporting agencies are weak.
- Human resources are lost due to attrition after training.
- Financial support and supplies to vulnerable communities are not adequate, and are not available in a timely manner.
- Training should be provided to CBOs.

BENCHMARK 7:
Local capacity for emergency provision of essential services and supplies (shelters, safe drinking water, food, communication) developed.

Achievements
- The minimum needs for essential health services and supplies at the local level have been determined.
- Local capacity for emergency provision of essential health services and supplies is in place in some areas.

Gaps
- Minimum needs (health services and supplies) have been determined but the availability is inadequate to meet the needs.
- There is a shortage of human resources, funds and logistics in some areas.
- The quantity and quality of supplies, safe shelters, food and water, and communication and transport are poor.
- There is no financial support for EPR at the district and township levels.
- An inventory system is in place at the national level but is not maintained properly. There is no such system at the subnational level.
- Suppliers, distributors and means of transportation have not been identified. A budget must be allocated to train suppliers and distributors to respond in emergencies.

Assessment and review of benchmarks relating to capacity of the system (advocacy, capacity to identify risks, human resource capacity and health facilities)

BENCHMARK 8:
Advocacy and awareness developed through education, information management and communication (pre-, during and post-event).

Achievements
- Advocacy and awareness have been developed through education/media channels and targeted communication.
- EPR awareness activities have been integrated in the curriculum of some schools and medical colleges.
- Systems for gathering, generating and sharing information are in place at the national level.
- A list of key stakeholders has been prepared.

Gaps
- There is a lack of advocacy and awareness on emergency preparedness in most areas, especially at the community level.
- Vulnerable communities have not yet been educated to recognize the simple geophysical and hydrometeorological signals of impending disasters to respond immediately.
- Very few mock drills have been carried out among vulnerable communities.
- Emphasis on EPR awareness activities is poor in the school curriculum.
- Access to timely and correct information through web sites, mail and phone is weak.

- The community is not well informed about the different types of hazards resulting from different types of disaster.
- Development of IEC materials and the role of the mass media in combating disasters is very limited.
- The mechanism for information-sharing at the subnational and community levels is poor.

BENCHMARK 9:
Capacity to identify risks and assess vulnerability at all levels established.

Achievements

- The capacity to identify risks and assess vulnerability has been established at the national level and some state and regional levels.
- Training has been conducted for the National Disaster Response Team in all the states and at the regional level.
- Training for emergency response teams has been conducted in high-risk areas.
- Training for the Disaster Assessment and Response Teams has been conducted in all districts and townships.
- Community-based training in DRR and management has been conducted in 79 townships.
- School-based DRR training has been conducted in 20 townships.
- Capacity-building training in water and sanitation (WATSAN) has been conducted in disaster-prone areas by the water, sanitation and hygiene (WASH) cluster and some NGOs.
- The DOH has provided training in PHE in selected townships.
- Tools for training have been developed.
- Capacity for conducting vulnerability assessment has been assessed in some states and regions.
- Capacity has been built for risk and vulnerability assessment and follow-up activities identified.
- The vulnerability and risk assessment is reviewed and revised annually by individual states and regions.
- Mapping for risk assessment is done and updated annually.

Gaps

- Some state- and regional-level personnel do not know how to assess vulnerability and risks.
- The training programme has not covered all townships.
- The terminology for disasters is not known at all levels.
- It is difficult to retain trained persons.
- Risk reduction measures have not been fully assessed.
- The methods and tools for assessment are not known at all levels.
- A repository for documentation and sharing of information on risk and vulnerability assessment and risk reduction in key sectors other than health is not available at all levels.

BENCHMARK 10:
Human resource capabilities continuously updated and maintained.

Achievements

- Training institutions have been identified, training conducted, EPR has been integrated in the public health and medical curricula, and TORs have been developed for all key health system functions.
- Training modules and guidelines have been prepared to address the different training needs for EPR at different levels.
- Managers, nurses and health workers have been trained, and training is conducted at two-monthly intervals.
- Follow-up training is conducted to sustain

the skills of staff at the national and subnational levels.
- Trained experts have been identified and are on call to provide immediate back-up in case of a disaster.
- A national roster of experts has been developed.

Gaps
- The skills of trained personnel are not sustained adequately.
- Some staff is newly appointed or transferred from non-project areas, and they need to be trained.
- EPR needs to be incorporated in the paramedical curriculum, and the EPR component in the medical curriculum strengthened.
- The TORs need to be reviewed and updated to include climate change and variability in disasters.
- With regard to capacity building of human resources, the long-term support of consultants and experts is needed.

BENCHMARK 11:
Health facilities built/modified to withstand the forces of expected events.

Achievements
- A guideline/building code is available.
- Lifeline infrastructure is in place at all levels.
- Risks from existing hazards to health facilities and other infrastructure have been assessed and prioritized at the large hospitals.
- Maintenance staff at the district, state and regional levels has been trained.
- A hospital emergency plan is in place for hospitals with more than 200 beds.

Gaps
- The construction of all health facilities cannot follow the standard guideline and building code because of budgetary constraints and varied situations.
- Unexpected events can affect the existing health infrastructure.
- The building code does not apply to the entire range of key sectors other than health.
- Continuous monitoring of risks from existing hazards needs to be done for proper functioning.
- Vulnerability assessment has not been done for all facilities.
- The hospital emergency plan does not cover hospitals with less than 200 beds, and should be extended to all health facilities.
- Trained persons/staff may be victims, which needs to be considered.
- A budget for maintenance is needed.

Assessment and review of benchmark: Early warning and surveillance systems for identifying health concerns established

BENCHMARK 12
Early warning and surveillance systems for identifying health concerns established.

Achievements
- Early warning and surveillance systems are well established (by phone, telegraph) and include the following:
- Health Management Information System (HMIS)
- Diseases under national surveillance (DUNS)
- Surveillance for acute flaccid paralysis (AFP)
- EWARS on communicable disease outbreak prevention and control supported by local authorities and NGOs

Gaps
- Timely support with funds and logistics is not available.
- Laboratory capacity at the district and

township levels needs to improve.
- The reliability and validity of data are doubtful.
- EWARS on communicable disease outbreak prevention and control, collaboration and cooperation with NGOs and other health-related departments at township levels are poor and need to be strengthened.
- Assessment tools, methods and materials are inadequate.
- The response mechanism needs to be strengthened at the state and regional levels.
- Facilities to identify the cause of a new disease are inadequate.
- SOPs should be developed to address the needs and gaps in surveillance and public health threats other than communicable diseases.
- The gaps and needs at the subnational level have not been addressed properly.
- Training in risk communication needs to be strengthened.
- More efforts are needed to involve all key stakeholders

SUMMARY OF RESULTS

Benchmark group	No. of indicators	National	
		Cumulative score of indicators	%
Legal	36	44/72	61.1
Community	32	31/64	48.4
Capacity building	33	40/64	60.6
EWARS	12	14/24	58.3

CONCLUSION AND RECOMMENDATIONS

Conclusion

Rapid assessment of EPR in the health sector of Myanmar showed that the country needs to strengthen its capacity and capability to prepare for and respond to disaster situations. Multisectoral coordination needs to be strengthened at the central and district levels. More of the health workforce should be trained in EPR with close supervision, and an adequate budget allocated at the regional, district and local levels based on evidence. Roles, responsibilities and regulations for external agencies working on EPR in the health sector should be clearly defined, and massive awareness-raising undertaken at the community level. The national health contingency plan and emergency logistics plan need to be strengthened, and drills and simulation exercises conducted to test the contingency plan. Public–private partnerships must be strengthened for ongoing funding for EPR, and there needs to be greater involvement of the private sector, academic institutions and others for EPR in Myanmar.

Recommendations

BENCHMARK 1

Legal framework and functioning coordination mechanisms and an organizational structure in place for health EPR at all levels involving all stakeholders.

- The coordination mechanisms at the central, regional and district levels should be strengthened.
- The roles and responsibilities for EPR in all sectors and at all levels should be clarified.
- The process of enactment/enforcement of relevant laws should be accelerated.
- Health EPR committees need to be constituted and activated at the subnational level.
- An adequate budget should be allocated for EPR activities at all levels.
- Dedicated EPR staff should be increased at the subnational level.
- Advocacy for EPR should be conducted with the concerned authorities.
- Regular meetings should be held among the partners.
- TORs and MOUs with stakeholders should be in place down to the township level.
- The duties and responsibilities of key stakeholders should be clearly defined.
- Training should be conducted on advanced technology for those concerned.
- The lessons learnt from previous experiences of disaster should be shared.

BENCHMARK 2

Regularly updated disaster preparedness and emergency management plan for the health sector and SOPs (emergency directory, national coordination focal point) in place.

- The logistics system should be strengthened and inclusion of all relevant sectors ensured.
- Coordination with other sectors should be strengthened.
- MoUs should be signed with all partners.
- Regular monitoring should be done and feedback given on the development of plans at each level.
- Supervision should be provided for developing a proper plan for hazard and vulnerability assessment.
- Advocacy must be conducted with the central and local authorities to gain their commitment.
- A plan should be developed to generate awareness and mobilize resources for

conducting drills and simulation exercises (e.g. human resources, financial, transport, other costs).
- The disaster preparedness and response plan should be updated according to the gaps detected during the drills and simulation exercises.
- SOPs should be distributed, updated every three years and their implementation monitored at each level.
- The health sector contingency plan should be updated every three years.

BENCHMARK 3
Emergency financial (including national budget), physical and regular human resource allocation and accountability procedures established.

- An analysis should be conducted to identify funding and resource gaps at all levels.
- Emergency funds should be provided at the regional and district levels.
- Government-allocated emergency funds should be available at the MOH, state, regional and township levels.
- Emergency funds should be raised by governments at the state and regional levels.
- The flow of funds should be decentralized.
- Allocation of sufficient and trained human resources should be ensured by the MOH and health departments at the state and regional levels.
- Disaster management committees should be supported with adequate funds, human resources and logistics for smooth functioning.
- Collaboration between the government and NGOs should be strengthened at the subnational level.
- Management of donations should be transparent and accountable.
- Supplies should be matched with the local needs.
- Psychosocial support should be given to the victims of disaster.
- Resource allocation should be well planned to avoid overlaps.

BENCHMARK 4
Rules of engagement (including conduct) for external humanitarian agencies based on needs established.

- The public–private partnership approach needs to be strengthened for ongoing funding for EPR.
- Key partners need to be strengthened and coordination improved at all levels.
- A health cluster system should be adopted.
- External humanitarian agencies must be based on needs, and MoUs between and ToRs with them and the MoH and government must be specific and need to follow the government's procedures.
- An advisory board should be constituted for cultural issues.
- Temporary registration should be granted to foreign medical professionals by the MMC.
- A specific code of conduct should be formalized for international humanitarian organizations.
- Rules of engagement for NGOs should specify the need for them to attend all cluster meetings and meet with the health and health-related cluster's focal person. They also need to follow the meeting minutes.
- Guidelines need to be followed strictly.

BENCHMARK 5

Community plan for mitigation, preparedness and response developed, based on risk identification and participatory vulnerability assessment and backed by a higher level of capacity.

- Mechanisms should be established for the immediate release of resources in case of an emergency.
- The capacity of the community to identify risks and vulnerability should be scaled up.
- Community plans should be developed by a participatory approach and communities should be linked to the nearest health facility.
- Inputs of various stakeholders and partners must be considered in plan formulation and implementation.
- Roles and responsibilities of respective organizations should be specified at the community level countrywide.
- The mode of collaboration among different stakeholders should be specified.
- Multisectoral collaboration should be enhanced for budget formulation.
- Community plans should be interlinked with the national and subnational plans.
- A specific budget should be allocated for the health sector.
- Funds for community-based activities should be allocated from the budget for the health sector.
- Standard tools and guidelines should be made available at the local level in user-friendly languages.
- Mapping should be done on the basis of analysis among hazard-prone areas.
- Technical and financial support should be increased.

BENCHMARK 6

Community-based response and preparedness capacity developed, supported with training and regular simulation/mock drills.

- A mechanism for tracking of trained persons should be in place through developing and maintaining a database of trained persons.
- Basic equipment should be provided to community health workers.
- Training should be conducted by the health sector.
- Training needs assessment should be done for health workers and community volunteers.
- Training plans should be implemented at the community level for training of health workers and volunteers according to the community mapping for EPR.
- The training curriculum should be made uniform and Sphere standards followed.
- Periodic training for community volunteers should be conducted to increase their capacity to provide first aid during emergencies.
- Sufficient financial and technical support should be provided for training courses for community volunteers.
- Annual simulation exercises should be carried out at all levels in the country to develop competencies.
- A monitoring system should be developed to avoid misuse of logistics and supplies.

BENCHMARK 7
Local capacity for emergency provision of essential services and supplies (shelters, safe drinking water, food, communication) developed.

- Warehouses should be regularly and frequently assessed.
- Minimum needs should be reviewed and revised according to recent changes and developments, such as an increase in amount, prices, etc.
- Financial support should be provided for EPR at the district and township levels.
- An inventory of supplies should be maintained at the subnational level.
- Resources should be allocated according to the area and availability of essential health services and supplies.
- Health centres and stockpiles should be sited in secure locations.
- Resources that are ready for use need to be stockpiled.
- Smooth communication and transportation should be ensured.
- Capacity of the community to conduct mapping should be scaled up.
- Food safety needs to be strengthened.
- Sphere standards should be maintained as far as possible.

BENCHMARK 8
Advocacy and awareness developed through education, information management and communication (pre-, during and post-event).

- Information management should be coordinated at all levels.
- Information regarding hazard, vulnerability, risk and health impacts of disasters needs to be disseminated at the community level.
- Advocacy and awareness should be conducted at all levels.
- School curricula need to focus on EPR awareness activities.
- Development of IEC materials and the role of the mass media in combating disasters should be improved.
- A focal point should be identified for dissemination of correct information on hazards and risks, awareness programmes and messages.

BENCHMARK 9
Capacity to identify risks and assess vulnerability at all levels established.

- Risk and vulnerability assessments should be expanded to cover all levels.
- Methods and tools for assessment should be created/expanded, and the community taught how to use them.
- Refresher training should be conducted on vulnerability and risk assessment.
- Risk reduction measures should be incorporated in the health planning process.
- Expertise needs to be developed at the subnational level.
- A repository of information from vulnerability assessments and risk mapping should be maintained at all levels.

BENCHMARK 10
Human resource capabilities continuously updated and maintained.

- Training courses should be accredited.
- Measures should be taken to identify public health interventions on the basis of

effectiveness, efficiency, participation, sustainability and political commitment. These should be incorporated and mainstreamed in the health policy.
- Master trainers should be identified to provide skills training and frequent drills, especially in disaster-prone areas.
- Training on disasters should be scaled up at all levels at specific intervals.
- EPR topics should be extended in the curricula of medical and paramedical courses.
- The list of trained personnel and experts should be reviewed for future demand and supply.
- The existing RRTs should be revitalized, especially for disaster and critical purposes.

BENCHMARK 11
Health facilities built/modified to withstand the forces of expected events.

- Adequate resources should be provided for structural and non-structural retrofitting of health facilities.
- Based on the results of risk and vulnerability assessments, various standard guidelines and building codes should be formulated.
- Construction committee which includes engineering expert, needs to ensure quality audits.
- All health persons must be trained in emergency management.
- Drills should be conducted for priority persons who will use disaster-resilient health facilities and cyclone shelters.
- Resources to implement the building code should be increased.

BENCHMARK 12
Early warning and surveillance systems for identifying health concerns established.

- An effective communication system should be developed to inform the community about health risks.
- Logistics for disease surveillance must be enhanced.
- Response mechanisms should be strengthened at the state and regional levels.
- An early warning system for all hazards and specific hazard surveillance in key sectors other than health should be established at the national and subnational levels.
- A surveillance system for water quality, food safety and security, sanitation, and waste disposal should be established at the national and subnational levels.
- SOPs should address public health threats other than communicable diseases.
- Adequate resources should be mobilized for setting up appropriate public health surveillance, reporting and early warning systems within the first 2–7 days after an event.
- The information system between sectors should be strengthened.
- Private sector health facilities and academic institutes should be integrated with the disease surveillance system.
- Health personnel should be the focal points for verifying rumours.
- Frequent advocacy meetings should be held with local authorities and stakeholders.
- Awareness-raising must be conducted for the community.
- A well-equipped laboratory with skilled personnel should be in place.
- Surveillance for specific hazards should be integrated at all levels.

The WHO South-East Asia Region Benchmarks for Emergency Preparedness and Response Framework with its standards and indicators, are used to assess the existing capacities of countries in emergency risk management with a focus in the public health area. Grouped into four categories (legal, community, capacity building, early warning), the benchmarks provide a comprehensive view of emergency risk management in the area of health in the country. This summary report reflects at a glance the status of the country against the standards and indicators under corresponding benchmarks. Assessments are held in the national context with some adaptation and translation of the tools. This assessment in Myanmar was led by WHO Country Office with the support of Emergency and Humanitarian Action unit of WHO's Regional Office for South East Asia in partnership with Myanmar Emergency Preparedness and Response (EPR) programme of the Department of Health, Ministry of Health, Myanmar with participation of other stakeholders such as UN agencies, NGOs and civil society working in the relevant sectors. The identified gaps in the assessment become the key priority areas for WHO and Ministries of Health and partners to address.

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