Minutes of Information Management Network Meeting

6th April 2022, online via Zoom

Agenda

1. Organisation-wide data management - an example from MIMU (MIMU)
2. Humanitarian Update (OCHA)
3. Updates on Sector/Cluster/Agency Initiatives
4. AOB

Attendance

Chair: Shon Campbell (MIMU)
Participants: FSC FAO and Mercy Corps, WFP, MCC, OCHA, MIMU (11 participants from 6 organisations)

1. Organisation-wide data management – *Presented by MIMU*

MIMU presented its organisation-wide data management system, designed to avoid data redundancy (storage of the same piece of data in separate places) and limit the risk of human error (possible mistakes when updating multiple datasets). Having a streamlined and centralised system also allows more efficient dissemination and analysis of data, and facilitates its use in dashboards and web-mapping platforms based on multiple spatial and statistical datasets.

MIMU's role is to provide a cross-sectoral, countrywide, common data and information repository supporting humanitarian and development actors in Myanmar – hence it manages and shares multiple large databases in different formats and versions. Like many offices and organisations however, MIMU's activities developed organically over time based on needs and opportunities but with no overall data architecture. This meant we were working with many different databases, collected and updated at different times and maintained in various central drives, archives and individuals' computers. Many of these datasets are very large, for example MIMU Baseline Database holding 270 indicators across all townships over a 12-year period. With no central system it was difficult for multiple people to work on one dataset, to generate reports automatically (some 3W tables), and to track changes made to the data over time (who made what change and when).

After reviewing the problems with the old system, we decided to streamline MIMU systems into one central repository and system for use by all MIMU staff. The process has been a long one over 2 years (longer in part because of work-from-home requirements and delays by the developer). The steps taken have been:

1) Identifying the problem and the risks – done by the MIMU team in groups sessions.
2) Internal inventory of datasets – mapping out the various databases being maintained, their sensitivity, where they were stored, and the existing systems of data management (where the data comes from, who receives it, how they process/store it, what products are developed and how they are disseminated).
3) Conceptual data model – mapping of the existing workflows with the help of an international consultant. This clarified 22 workflows covering all of MIMU products and services, and proposed a new, streamlined ideal data architecture which was discussed extensively with the team to be sure the new system would work for all of MIMU's existing and planned products and services.
4) Logical data model – the same consultant helped us develop tables of the ideal information that would be kept for each data element and how they link together. The Logical Data model comprises 230 tables defining the data and its attributes, relationships, unique identifiers, and constraints between relationships
5) Physical data model – a second consultant (ICT) helped review the current IT system and proposed new technical systems needed to implement the ideal data architecture as an effective, efficient and user-friendly system across the MIMU team. The Physical data model converts the Logical model to a physical database and clarifies how the system will work in practice. Because of the size and sensitivity of the many different databases, it was decided to use PostGreSQL - an open source, object-relational database, and to develop a web application with a user-friendly interface for MIMU staff. This was extensively reviewed by the MIMU

team to ensure it was the most appropriate and cost-effective system for longer term use for MIMU purposes. We sought to keep the solution low cost in terms of infrastructure, software and maintenance, and to ensure it would be manageable by the team members using it on a daily basis.

6) Definition of workflows, policies, rules, standards and standard operating procedures - the MIMU team then worked further on documenting SOPs for each work process to clarify what the system would include and produce to develop the web application. This included special attention to data protection and sensitivity.
7) Development of the MIMU Internal Web Application / MIWA – with limited capacity to develop the PostgreSQL Web Application locally, a Thailand-based developer was contracted to develop the could-based application. This process was very long due to the complexity of the web application and it needed a lot of technical consultation with the MIMU team, especially the Web/ICT team The system was then piloted and fine-tuned to ensure it works as needed for all possible cases of use.
8) Capacity building and consultation within the MIMU team has been a very important aspect of every step of development of the new system - to ensure the system meets the needs of everyone using it and that all have the capacity needed to use it. This requires ongoing capacity building to keep the skills of internal users and administrators up-to-date. The MIMU team is managing most of this internally.
9) Migration of existing data and work processes to the new system – the last step has been to decide which "older" datasets to migrate into the system (this sometimes means a lot of work on the datasets to make them exactly compatible with the new system), and to start using the Web Application unit-by-unit.

The final system has 28 modules for all MIMU products and services, including statistical reporting, and the possibility to generate queries on the data it holds. Each module clarifies who can change or use the data, restriction levels, and information on versions/changes made over time. The final system is synchronised with MIMU external platforms (MIMU website, Geonode, web-mapping and MIMU information sharing with HDX).

Useful lessons for organisations, clusters/sectors and units launching on a process to centralise their data management systems:

- It is never too late to develop systems to bring datasets together, but it can't be done with technical / IT support alone. It needs a marriage of technical and programme capacity to decide what is needed and ensure the new system is based on the programme needs
- Need to decide a cut-off point for data that will be included, and how older data will be archived, maintained and protected.
- Any data management system requires the use of robust data standards. For MIMU, these included codes for location (MIMU Place Codes), for organisation, for datasets, sources and indicators. These systems should be set up carefully to ensure they use, and can continue to use, unique codes for each entity
- Must pay careful attention to data restrictions/sensitivities. MIMU has developed an internal system which codes data based on who can see/use it - these restrictions are built into the system and all work processes.
- Ensure adequate protection of systems holding data – whether you centralise or not!
- Capacity building and consultation are important steps involving staff who will use the system. Review and capacity building need to be ongoing as new staff join, or issues are ironed out in the system.
- A centralized system requires central data storage. Choose the simplest technology depending on the size of what you will be managing. Some ready-made cloud-based systems are Office 365 Suite, Caspio, AirTable
- The process helps to consider what data is really needed – gather only what you will store and use

Discussion: MCC are starting a process to streamline their systems and asked about the budget and time taken to develop the new MIMU architecture and application. In MIMU's case, the overall process has been very long (close to 3 years) because of the complexity of the system and work-from-home limitations. Much of the work was done by the team with a few weeks engagement of technical consultants to develop the data architecture and physical model. Development of the web application took several months for MIMU but would be much simpler for other units/organisations with less focus on providing a central data repository for others. Much of the work was done in-house and with open-source software to keep costs lower.

Much depends on whether an organisation needs a relational database or could take a simpler approach using software such as MySQL which is free, or paid software such as Office 365. Whichever option is chosen, the human part is still important and staff who may use the system need to be involved throughout the process – it is not an ICT job – it must involve the whole team with enough time to ensure all can understand the questions and consultations.

2. Humanitarian Update – *Presented by OCHA*

Key actions currently are

- Monthly monitoring of the 2022 Humanitarian Response Programme
- Development of the monthly Humanitarian Snapshot which is shared through ReliefWeb and MIMU;
- Quarterly periodic monitoring
- Quarterly Inter-cluster 3W; This is a new 3W (Who/What/Where) exercise planned by OCHA using a global template to gather information from clusters. OCHA noted that it is required due to gaps in data provision by clusters to feed into the periodic monitoring report and not all humanitarian partners reporting to the MIMU 5W. MIMU noted concerns expressed by agencies in another coordination meeting re duplication in 3W exercises between OCHA, MIMU and clusters. OCHA clarified that the term 3W is confusing in this case – the inter-cluster 3W is not the same as the MIMU 3W/5W as it will not collect data from partners but consolidates available information. It was agreed that a separate meeting will be arranged with clusters, OCHA and MIMU to discuss and clarify these issues. The Food Security Cluster suggested the OCHA exercise focus on harmonisation of cluster 5W templates to be able to draw out required data, and not gathering additional data from partners.
- Multi-sector Needs Assessment / MSNA – REACH is undertaking a pilot, longitudinal, countrywide assessment which will provide state/region level data on the priorities of certain population groups to support the cluster/sector evidence-based in the 2023 Humanitarian Needs Overview. Clusters are currently providing inputs to questions that will be included in the 20-minute interviews which will take place in June-August. A final report of results aggregated at state/region level will be available in December. More detailed results are not possible due to limited funding. Clusters continue to collect detailed information at lower administrative levels for operational purposes, however access for information gathering remains a challenge.
- Preparations for the 2023 Humanitarian Programme Cycle include the ongoing MSNA, update of the Humanitarian Needs Overview (May-September), preparation of the Humanitarian Response Plan (October to November), and final release of these products in December 2022.

Discussion centred around complementarity of 3W exercises, and gaps in data on ongoing displacement (from where, to where, for how long).

4. Updates on Sector/Cluster/Agency Initiatives

Food Security cluster – working toward an exercise to gather more holistic information on food security at TS level. Working on a prioritisation tool which considers conflict using ACLED data, updating the MIMU-HARP conflict index using 2021 data. Also considering climate risk. MIMU and FSC will discuss the update of the MIMU-HARP index.

MIMU: The MIMU 3W has been renamed MIMU 5W to reflect the 5x "W"s it includes (Who is doing What, Where, When and for Whom). It continues to be conducted every 6 months. 202 agencies have provided inputs to the MIMU 5W describing their activities and plans as of the end of March, 2022. These include mainly UN, Red Cross, INGO and local NGO contributions. The 5W data will be available in the week of the 28th April and will be shared on request for inter-agency coordination purposes.
MIMU's 2022 Client Survey captured inputs, comments and suggestions from 350 respondents via a survey questionnaire. The results indicate a high level of satisfaction and use of MIMU products and services. We are now following up on the comments and suggestions received.
MIMU has upgraded the search function on the MIMU website which should make information easier to find and can provide support. Users can also ask MIMU directly for anything specific they are looking for.
Two Analytical Briefs providing more information on vulnerability across Myanmar are currently being finalised – the first reviews development in Household Amenities at district level over the period 2014-2019 using data from the 2019 Intercensal Survey and the 2014 Population and Housing Census (i.e. household income, housing quality/materials, transport resources, cooking/lighting fuel, sources of drinking water and sanitation. The second focuses on Environmental degradation, climate and disaster risk, and identifies parts of the country most at risk of drought, floods, storms etc. Each of these will include dashboards and coded datasets to enable users to pursue their own analysis.

A reminder re the MIMU Emergency Preparedness Dashboard which can be found under the Emergencies tab of the MIMU website – this is like the popular township profile dashboard but allows comparison of available data to 2020 between townships. Also to try the MIMU Map Maker which is a resource for agencies/individuals with limited GIS capacity. Users can select different map layers, add your own data/annotation and print/save/share the map. Note that any data you add in this tool will not be saved in the system, however agencies are welcome to share datasets that can be used by others through this platform which is available through the home page of the MIMU website.

5. AOB and other discussions

Please contact MIMU Manager if you have any potential presentations to the group for the next meeting planned for June 1st.

Action Points

No.	Action Points	Responsible	Deadline
1	Arrange a discussion on humanitarian data issues including humanitarian population data, cluster/sector interoperability,	MIMU, OCHA	May
2	Discussion with cluster coordinators + IMOs on the differing 3W/4W/5W exercises to avoid duplication and ensure complementarity	MIMU, OCHA	TBC
3	Arrange a discussion on sources of displacement data	MIMU	April/May
4	Share any suggestions of possible presentations/themes for the June IMN meeting	All IMN members	April/May