Nepal Lessons Learned Report

Executive Summary

On Saturday 25 April 2015, an earthquake measuring 7.8 on the Richter scale was recorded in Nepal, 80 km to the north-west of Kathmandu and 68 km east of Pokhara. The Government of Nepal immediately declared the state of emergency, and called upon the support from the international community. Following the government request, the Logistics Cluster was activated on 27 April to facilitate a well-coordinated and effective humanitarian logistics response.

An estimated 2.8 million people were in need of assistance due to the April earthquake, as well as a second major earthquake (7.3 on the Richter scale) registered on 12 May. A large part of the affected population was located in mountainous, remote and difficult-to-reach areas, putting pressure on the humanitarian community to design a logistics response enabling access to these areas.

As part of the Global Logistics Cluster strategy, the Global Logistics Cluster commissioned a Lessons Learned exercise in September 2015 with the objective of drawing lessons learned from the Logistics Cluster operation and assess the relevance/appropriateness, efficiency, and effectiveness of the Logistics Cluster response. The findings will inform the future development of Logistics Cluster operations and contribute to the development of the post-2015 Global Logistics Cluster strategy.

The Lessons Learned found that the Logistics Cluster response was well executed and in general enabling organisations to deliver lifesaving relief materials to the affected population. The operation was relevant, appropriate, and effective. In terms of efficiency, it was overall efficient, though subparts of the operation were seen as less efficient.

Four major themes were found to permeate all aspects of the Logistics Cluster response and influence the strengths and weaknesses of the response:

Investment in Preparedness: Key to the strong Logistics Cluster performance was the WFP Regional Bureau and Country Office investment in preparedness prior to the emergency, which included the Kathmandu Humanitarian Staging Area and a pre-developed cluster response plan. The speed of the response in establishing a coordination mechanism, launching the operation and setting up the field hubs were all attributed to the existing tangible preparedness investment.

Recommended Action: Strengthen integration of preparedness activities for the Global Logistics Cluster

Further integration of the preparedness activities at the country level within the Global Logistics Cluster Strategy is recommended, in line with the IASC Emergency Response and Preparedness (ERP) approach. Strengthen the Logistics Cluster involvement in the ERP process.

Build and strengthen Partnerships: A highly proactive partnership approach was key to the success of the response and was found to be a best practice. At the same time, there is potential for further strengthening of the partnership approach strategically targeting and engaging relevant organisations.

Recommended Action: Strengthening partnership

This could be done through the establishment of Strategic Advisory Groups facilitating participation in strategic decisions and increasing accountability amongst the organisations. Identify organisations and

possible areas of support, and institutionalise the partnership approach by developing guidance, procedures and methods for quickly engaging them in emergencies.

Addressing the Challenges of the 'service cluster': In Nepal, as in other operations, the continued planning of the Logistics Cluster operation and commitment of its resources was challenged by an incomplete overview of the requirements, including upstream pipeline information, future needs and importance/prioritisation of needs. Though partners were requested to share information in Nepal, the information provided was scarce. This affects planning and use of resources and creates potential accountability issues.

Recommended Action: Proactive communication and engagement of participating organisations

It is recommended to institutionalise a proactive engagement approach. This should include increased participation of the Logistics Cluster Coordinator in other cluster meetings, as well as involvement of the participating organisations (for example through advisory groups) in prioritisation decisions based on the actual capacity of the Logistics Cluster, and possibly also in monitoring of available resources.

Requirements for Leading the Logistics Cluster: The leadership of the Cluster Coordinator and of staff involved in the operation was commended by the respondents, notwithstanding the frequent rotation of staff. The response highlighted the importance of strong leadership and surge capacity, which was made available in the region, and which benefitted from the involvement in the emergency preparedness activities for Nepal.

Nevertheless WFP, as the lead agency of the Logistics Cluster, as well as the other organisations participating to the Logistics Cluster suffered the strain caused by having to respond to several ongoing emergencies. The gap in emergency staff profiles has been identified by WFP and other organisations that could lead large-scale logistics operations in the field.

Recommended Action: Ensuring surge capacity

Ensuring a first surge capacity at the regional level (as context varies enormously across different regions) with strong understanding and experience of the Logistics Cluster role and mandate. A strategy to ensure strong surge capacity may be developed through inter-agency working groups at global or regional level.

1. Introduction

As part of the Global Logistics Cluster (GLC) strategy to ensure the Cluster's accountability to all stakeholders, the GLC commissioned a Lessons Learned Exercise (LLE) for the Logistics Cluster operation in Nepal.[1]

1.1. LESSONS LEARNED EXERCISE OBJECTIVE

The overall objectives of the LLE were twofold:

1) To assess the performance of the Logistics Cluster in Nepal in responding to the earthquake and the activities undertaken by the Logistics Cluster in Nepal in terms of relevance/appropriateness, efficiency and effectiveness of the operation in identifying the gaps and addressing the needs of the humanitarian community,[2] and;

2) To draw lessons and recommendations from the Nepal operation – strong and weak areas in the preparation, design and implementation of the operation – which can help support future Logistics Cluster operations. Furthermore, to use the Lessons Learned to inform the current development of the Global Logistics Cluster post-2015 strategy.

The Nepal operation provides an interesting case for the documentation of a Logistics Cluster operation during the sudden onset of an emergency in a country where the Logistics Cluster was not activated prior to the emergency.

The focus of the LLE is the Logistics Cluster function as a coordination mechanism as designated by the Inter-Agency Standing Committee (IASC). The report therefore includes a review of the sectoral coordination, information management, and the direct common logistics service provision, and the Logistics Cluster facilitating role for humanitarian actors.

1.2. METHODOLOGY

A standard methodology for conducting LLE for the Logistics Cluster was developed in 2014 and has been followed for the Nepal LLE. To allow a greater understanding of the operation and the main issues that influenced it, both quantitative and qualitative research methods were used. The findings are based on a combination of quantitative data on the operation and qualitative data collected from informants, namely their perception of the Logistics Cluster performance. The data was collected through:

a) **A desk review** of key documents and Logistics Cluster staff feedback (see Annex 7 for overview of documents consulted).

b) **43 interviews with key actors:** face-to-face interviews in Nepal (Kathmandu, Deurali, Ghorka, and Dhading Besi), teleconference interviews, and one mailed feedback, with key users of the Logistics Cluster services, i.e. national and international NGOs, representative of the Government of Nepal, Ministry of Home Affairs, donors, NGOs responsible for part of the Logistics Cluster response, private sector, key representatives of the humanitarian set-up in Nepal (OCHA, the Resident Coordinator/Humanitarian Coordinator, Shelter Cluster Lead and Health Cluster Lead),

---

[1] The Nepal operation was chosen for a LLE due to the scale of the response (L3 though it was classified as L2) as well as providing an example of a Logistics Cluster response for a sudden onset emergency.

[2] The evaluation criteria are based on OECD-DAC criteria (Organisation for Economic Cooperation and Development - Development Assistance Committee, and 'Evaluating humanitarian action using the OECD-DAC criteria, An ALNAP guide for humanitarian agencies'

Logistics Cluster staff and WFP staff. See Annex 6 for overview of people and organisations consulted.

c) **User Surveys:** Information from two surveys sent to users of the Logistics Cluster services in Nepal. One survey was conducted during the height of the operation, from 27 May to 9 June, 28 responses received, and another one during the Lessons Learned mission to Nepal, from 17 to 29 September, 34 responses received[3] (see Annex 5 for overview of survey results).

The data collected was used to assess the performance of the operation in terms of:

- **relevance/appropriateness** in responding to the identified and prioritised needs and how well it was adapted to the local requirements;

- **efficiency**: how economically the Logistics Cluster inputs and resources were converted into results;

- **effectiveness:** whether the objectives of the operation were achieved in a timely manner.

The LLE team was composed of three key members:

1) Rie Ishii, Team leader, Logistics Officer, WFP HQ, Rome

2) Dorte Friis, Team member, Logistics Officer, GLC, Rome

3) Mark O'Hora, Team member, Head of Logistics, Save the Children, Nepal

Quality Assurance:

To ensure the validity of findings, the following Quality Assurance measures have been implemented:

a) Presentation of key findings to WFP Country Office and Logistics Cluster key staff at the end of the field mission;

b) Presentation of key findings to GLC, Rome including a 'reality check' on the recommendations;

c) Draft report review and feedback provided by Tom Godfrey (Save the Children, Singapore) and Alexis Ottenwaelter (ACF secondee to the GLC);

d) Feedback on draft report from GLC and the Logistics Cluster and WFP in Nepal.

Logistics Cluster feedback:

a) The report findings will be presented at the GLC second annual meeting in Budapest in November 2015 for discussion.

1.3. LIMITATIONS AND CONSTRAINS

The LLE provides an assessment of the performance based on the perceptions of the key respondents combined with qualitative and quantitative data on the operation. The UNHAS operation is assessed only in terms of the cargo delivery function, as it was linked to the Logistics Cluster operation, other objectives of the UNHAS operation are outside the scope of the LLE.

---

[3] The two surveys were disseminated through the Nepal Logistics Cluster mailing list, which is open to all humanitarian actors active in the Nepal response. The intention was to give as many organisations as possible an opportunity to provide feedback on the operation. In May, there were 700 recipients and in September 782 recipients. The respective response rates are low approximately 4 percent in both surveys. However, if viewed relative to the total number of organisations who had attended Cluster meetings to date (110 in May, 130 in September), the response rate would be 26 percent.

As the exercise was conducted in September, four months after the first earthquake, key actors from the initial phase of the operation were identified and interviewed (often by phone), which combined with the feedback from the first survey ensures that the whole operation period has been covered.[4]

[4] Half the respondents to the second survey were also present in Nepal during the first phase of the response, and one third were in Nepal prior to the earthquake and throughout the response.

2. BACKGROUND INFORMATION

2.1. HUMANITARIAN CONTEXT

On Saturday 25 April 2015, an earthquake measuring 7.8 on the Richter Scale was recorded in Nepal, 80 km to the North West of Kathmandu and 68 km east of Pokhara. In addition to thousands of smaller earthquakes, a second major earthquake measuring 7.3 was recorded on Tuesday 12 May southeast of Kodari (Sindhupalchowk District), 76 km northeast of Kathmandu – an area already affected by the 25 April earthquake. Approximately 9,000 people died and another 100,000 people were injured.[5]

Out of Nepal's 75 districts, 39 were affected and 14 were of those declared severely affected and prioritised in the Flash Appeal (Bhaktapur, Dhading, Dolakha, Gorkha, Kathmandu, Lalitpur, Kabhrepalanchok/Lamjung, Makawanpur, Nuwakot, Okhaldunga, Ramechhap, Rasuwa, Sindhuli, and Sindulpalchowk). Approximately 5.4 million people live in the 14 districts, which are located in Western and Central Region of Nepal. Of these, 2.8 million people were estimated to be in need of assistance in the revised Flash Appeal issued at the end of May.[6]

The Government of Nepal declared a state of emergency in the country on the 25 April and called upon the international humanitarian community for support. The Logistics Cluster was activated on 27 April to support the humanitarian community in their efforts to deliver life-saving relief items across affected areas in Nepal.

2.2. LOGISTICS GAPS

The key logistics gaps identified for reaching the people in need of assistance were:

a) **Coordination:** With a high number of organisations involved in the response (78 organisations were part of the revised Flash Appeal), coordination of response efforts was identified as key to minimise duplication of set-ups and optimise the humanitarian response.

b) **Congestion in the Tribhuvan International Airport (TIA)**: The TIA airport in Kathmandu is the only international airport in Nepal. It has one airstrip and flight size was limited to 190 metric tonnes (mt) during the emergency.[7] Congestion in the airport would delay the delivery of relief supplies to the affected population.

c) **Access:** A large part of the affected population was located in mountainous and/or remote areas, some of which were difficult to reach even prior to the earthquakes. With damages to roads and infrastructure and an increased risk of landslides after the earthquake, access was a major challenge to the response. In May, 230,000 were estimated to live in areas inaccessible by road, thereby requiring air or porter/pack animal transport. [8]

2.3. LOGISTICS CLUSTER RESPONSE

---

[5] UNOCHA, Nepal Flash Appeal Revision, April-September 2015

[6] Ibid.

[7] Logistics Cluster Sitrep number 3, 29 April 2015

[8] UNOCHA, Nepal Flash Appeal Revision, April-September 2015

To meet the abovementioned logistics gaps and support the humanitarian community in their efforts to deliver life-saving relief items across the affected areas in Nepal, the Logistics Cluster set up the following response:[9]

Operation size:

The combined budget for the Logistics Cluster operation and the UNHAS operation was US$ 39.5 million or 9 percent of the total revised Flash Appeal (US$ 422 million). The budget was revised upwards from US$ 31.7 million in the first Flash Appeal (US$ 415 million) in order to address the challenges of reaching the remote and hard-to-reach areas. Within the first 10 days after the earthquake, eleven people (WFP and Standby Partners) were deployed to support the Logistics Cluster and UNHAS operation.[10] Additional people were deployed by WFP to support the WFP operation including the services to be provided to the Logistics Cluster, more staff was hired locally.

Coordination:

To support the overall coordination of the Logistics Cluster operation in Nepal, a central Logistics Cluster Coordination Cell was established in Kathmandu when the Logistics Cluster was activated on 27 April. Three additional coordination cells were established in Sindhupalchock, Ghorka, and Dhading districts, which were among the most affected areas.

Information Management:

An Information Management (IM) unit was set up in Kathmandu and supported the regional hubs with promotion and sharing of logistics information among all organisations conducting response operations. A GIS expert was connected to the IM function to support with GIS services.

Logistics Services:

To support the humanitarian community in reaching the affected areas with the needed relief materials, a number of logistics services were set up:

a) **Storage:** To facilitate receipt of relief items and onwards delivery and intermediate storage, nine storage hubs were established in Kathmandu and the most affected areas. As part of a preparedness activity led by World Food Programme (WFP) and funded by DFID, a Humanitarian Staging Area (HSA) had been established next to the TIA airport in Kathmandu.[11] The HSA had been inaugurated on 27 March 2015, one month prior to the earthquake. The primary objective of the HSA was to alleviate congestion at the TIA airport in an emergency, one of the key identified bottlenecks for a large scale response in Nepal.

b) **Air transport:** As access to the affected population (particularly in remote and hard-to-reach areas) was one of the key logistics gaps identified, the Logistics Cluster made transport by air available with up to four Mi8 helicopters (cargo and passenger transport) and two AS 350 helicopter (suitable for assessments, passenger transport). Liaison with military forces in country for access to military air assets was also provided.

---

[9] More detailed information is available in the Cluster ConOps (see www.logscluster.org/Nepal)

[10] WFP Nepal list of staff deployed for earthquake

[11] WFP Logistics Response Plan – Earthquake in Kathmandu Valley, February 2013

c) **Road transport:** To facilitate access to the affected districts and areas accessible by road, a dedicated truck fleet was made available for deliveries to the affected areas, as well as smaller vehicles and tractors were made available in the field.

d) **Remote Access Operation (RAO):** To facilitate access to areas inaccessible by road transport and by air, transport of relief supplies with porters and pack animals was set-up by the Logistics Cluster. In addition to facilitating transport, rehabilitation of main trails to isolated communities was also carried out. Five districts were covered: Gorkha, Dhading, Rasuwa, Sindhupalchok and Dolakha.
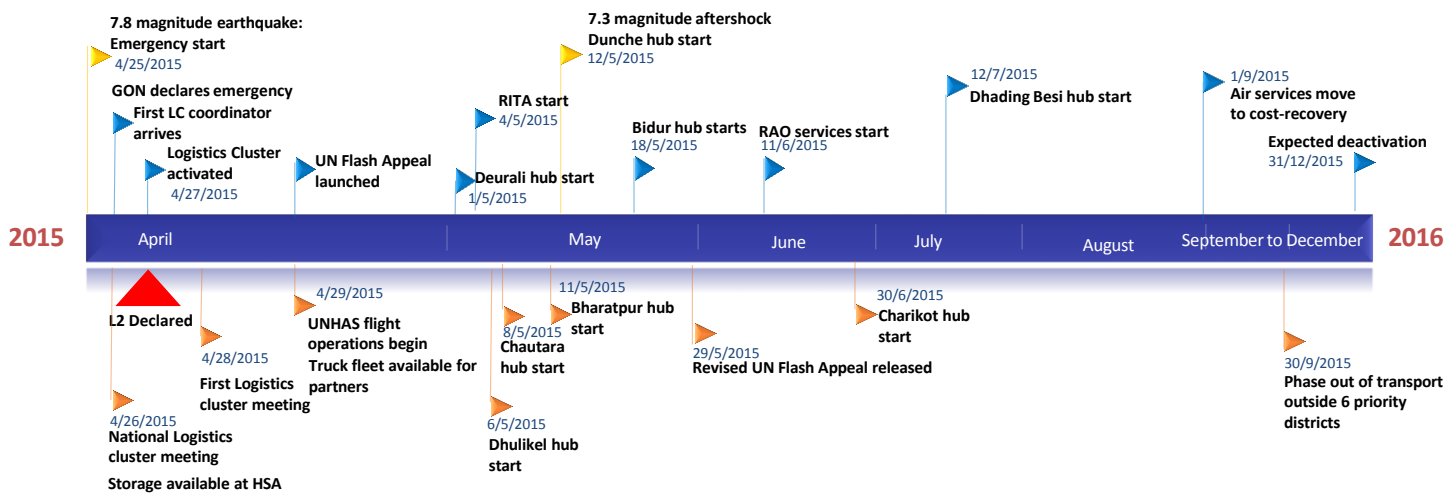
3. LOGISTICS CLUSTER SET-UP

When the Logistics Cluster was activated on 27 April, it did not start in a vacuum. Nepal is a high risk disaster country and has – except for tsunamis – seen it all. Nepal is classified as one of the hotspot disaster countries, according to a study by the World Bank.[12] In terms of humanitarian architecture, national preparedness and response coordination mechanisms, called clusters, have been set up in Nepal. Leadership of the Logistics Cluster was assumed by the Ministry of Home Affairs in 2013, and it is co-led by WFP.[13]

On the day of the earthquake, the Government of Nepal held a meeting through the Central Natural Disaster Relief Committee (CNDRC) and another later that day with the humanitarian community, including representatives from the national emergency clusters.[14] The national clusters first meeting was on 26 April. The Government of Nepal's National Emergency Operation Centre (NEOC) was responsible for leading the response. The WFP-established, DFID-funded, Humanitarian Staging Area acted as a coordination hub from 26 April onwards. When the Logistics Cluster was activated on the 27 April, it built on the already established coordination mechanisms including a co-led structure between the NEOC and WFP. Figure 1, here below, is a timeline of main events and Logistics Cluster services from 25 April to 30 September 2015.

Figure 1 - Timeline of main events and Logistics Cluster services 25 April - 30 September 2015

The overall humanitarian coordination was ensured through Humanitarian Coordination Team (HCT) meetings, Inter-Cluster Coordination Group (ICCG) meetings and specific cluster meetings.

The first Logistics Cluster meeting was held on the 28 April at the HSA in Kathmandu. The first coordination meetings in the field were held in Deurali (for Ghorka district) on 6 May, and Chautara (for

---

[12] Nepal Disaster Management Handbook, by CFE-DM, 2015, and The World Bank Hazard Management Unit, Natural Disaster Hotspots Case Studies, 2006, p.49

[13] National Disaster Response Framework, NDRF, July 2013 (unofficial translation to English) and WFP Nepal Project Proposal: 'Augmentation of Kathmandu Valley Emergency Logistics and Telecommunications Common Services, December 2013.

[14] UN Resident Coordinator Sitrep 1 Nepal Earthquake, 25 April 2015

Sindhupalchok district) on 8 May. Dhading coordination cell was established later in the response and held its first meeting on 3 July. In addition, nine storage hubs were established: four were managed by Handicap International, one was managed by Plan International and the other four directly by the Logistics Cluster.

In the districts, the coordination meetings were held together with the relevant local government authority at district level (the Chief District Officer, or the Local District Officers) as well as coordinated with OCHA where relevant.

In the districts, the coordination meetings were held together with the relevant local government authority at district level (the Chief District Officer or the Local District Officers) as well as coordinated with OCHA where relevant.

The original Flash Appeal outlined a three-month response, later extended to five months with the revised Flash Appeal developed to address needs during the monsoon season. A specific timing for deactivation of the Logistics Cluster was not set. At the end of September, the deactivation process of the Global Logistics Cluster in Nepal was discussed along with a clarification in terms of cold wave/winter needs. The expected end of operation is 31 December 2015, funds allowing. Some services have moved to partial cost-recovery (air), while others are being phased out (primary road transport). Transfer of the roles and responsibilities of the Logistics Cluster is still to be determined.

4. FINDINGS

The Logistics response operation for the earthquake in Nepal was exceptionally challenging, primarily due to the difficulty in reaching affected populations located in remote, mountainous and hard-to-reach areas. Table 1 outlines the requested Logistics Cluster budget, the combined humanitarian response budget and level of funding for Nepal earthquake and two other sudden onset emergencies, namely Typhoon Haiyan in the Philippines (2013) and the Haiti earthquake (2010).

Table 1 - Overview of emergencies, budget and funding level

Emergencies	Logistics Cluster (LC) Budget	Humanitarian Response Plan (HRP)	LC budget in % of total HRP	Funding level (HRP)	Funding level (LC)
Nepal Earthquake Flash Appeal	USD 39.5 million	USD 521.9 million	9.4%	59.2%	58.0%
Philippines Typhoon Haiyan Strategic Response Plan	USD 22.8 million	USD 775.7 million	2.9%	60.5%	115.0%
Haiti Earthquake Flash Appeal	USD 89.8 million	USD 1,502.2 million	6.0%	73.3%	73.6%

Comparing the three emergencies, the percentage of the Logistics Cluster budget out of the total operation is significantly higher, 9.4 percent for Nepal, compared to 2.9 percent for the Philippines and 6.0 percent for Haiti. The main reason was the need for the Logistics Cluster to organise means for reaching the affected population in the many hard-to-reach areas by air and with porter/pack animals.

What stands out clearly from the feedback received from all stakeholders that were consulted for this report is an operation commended **for the strong leadership and a well-executed response, which enabled organisations to reach affected populations with relief items.**

Respondents also highlighted a number of best practices and challenges that impacted the Logistics Cluster activities. Four themes emerged during interviews, which were key in understanding the successes and shortcomings of the response. These are shortly outlined below prior to going into details on the findings on the individual functions of the Logistics Cluster.

Importance of preparedness activity
The WFP Country Office preparedness activity together with the WFP Regional Bureau and the Government of Nepal, including the construction of HSA, meant that:
- A response strategy and operation outline was almost available at the onset of the earthquake – the first draft Concept of Operation (ConOps) was ready on 26 April. The first draft ConOps for Typhoon Haiyan was completed five days into the response;
- A strong surge team could be identified immediately. WFP staff in Nepal and in the region had been involved in the preparedness activities, knew the country, key people, existing operations and were familiar with the Logistics Cluster and what a response would entail; and
- The HSA at the airport was available to meet one of the key initial challenges to the response – alleviate congestion at the TIA airport.

Best practices can be derived from the level of preparedness for this emergency, and how this can be replicated in other settings.

Partnership
Partnerships and relationships created during the preparedness phase through meetings and trainings with the different stakeholders supported the swift launch of the response. The overall Logistics Cluster response capacity was augmented through a proactive engagement of organisations whose existing system and resources in Nepal meant they could take on, or contribute to, a specific part of the response. Partnerships created at the global level with Standby Partners and with private companies (LET and DHL

through OCHA) also contributed to the operation through the support of experts, trained personnel, and with dedicated resources. The strong partnership was essential to the success of the operation, and it is important to further institutionalise and strengthen the partnership approach to ensure success in future operations.

Service Cluster Challenges – Proactively addressing the challenges

In Nepal, as in other operations, the continued planning of the Logistics Cluster operation and commitment of its resources was challenged by an incomplete overview of the requirements – upstream pipeline information, future needs and importance/prioritisation of needs. In operations similar to Nepal, the high number of people attending meetings and organisations needing services causes decision-making and coordination meetings to become briefings. This, combined with the high turnover of staff in the participating organisations, and many newcomers to the Logistics Cluster (often with little prior knowledge or understanding of the cluster approach), means that obtaining relevant information for decision-making and ensuring the involvement of all organisations in strategic decisions can be difficult. The Logistics Cluster requires an institutionalised proactive approach to meet these challenges. At the same time, the cluster needs to be continuously transparent in the use of resources, demonstrating it is servicing all organisations and how the prioritisation set forth by the Humanitarian Country Team and the Inter-Cluster Coordination group is being followed.

The requirements for leading the Logistics Cluster

The support provided for the Logistics Cluster operation in Nepal – staff, access to funds and tools - was instrumental for the success of the operation. The staff were commended for their strong leadership skills and competence, which, to a degree, compensated for the high turnover. Going forward, the challenge is to identify how to replicate staff success in other emergencies – moving from individual to organisational strength. In addition, the Logistics Cluster is often facilitating access to and tailoring a range of services provided by WFP Common Services (UNHAS, WFP Aviation, Shipping, WFP Logistics, WFP Engineering and UNHRD). In view of this, there is an opportunity for optimising the procedures, coherence and quality of service provision in emergencies, internally in WFP, and externally through the Logistics Cluster.

4.1. COORDINATION

The Logistics Cluster coordination role in Nepal was aimed at facilitating a unified response on behalf of the humanitarian community while minimising duplication of logistics activities during the response. It was perceived by organisations to be highly relevant, appropriate, effective, and addressing the identified gaps. In the September survey, the coordination was rated by 37 percent of the respondents to be excellent, and 97 percent to be either good, very good or excellent. [15] Coordination mechanisms were established to minimise duplication of logistics activities and addressing commonly identified needs. The performance of the Logistics Cluster in its coordination function is detailed here below.

A highly proactive engagement of different organisations to augment the Logistics Cluster operation was highlighted as vital to the success of the operation. However, in terms of inter-cluster coordination, it was suggested in the surveys and interviews that it could have been strengthened, for example, through a more frequent participation of the Logistics Cluster members in other cluster meetings. The Logistics

---

[15] In the September user survey, the Cluster coordination performance was found by 37 percent of the respondents to be excellent and 97 percent of the respondents found it good, very good or excellent. In the May survey, less respondents found the coordination to be excellent, but more found it to be very good, and 93 percent found it to be good, very good or excellent.

Cluster participated in Inter-Cluster Coordination meetings and in other coordination meetings, but some organisations felt additional participation in other cluster meetings would have been beneficial.

Some organisations felt that coordination could have been more participatory, some regarded the strategy decision-making as top down controlled and some wished the government, civil society and national actors were more involved. The meetings were characterised by a high number of participants – the first month the number of participants in Logistics Cluster meetings in Kathmandu was close to seventy. Figure 2 illustrates the number of organisations participating in Logistics Cluster meetings in Kathmandu. It should be noted that often several people attended from the same organisation.

Figure 2 - Overview of number of organisations participating in Logistics Cluster meetings in Kathmandu[16]
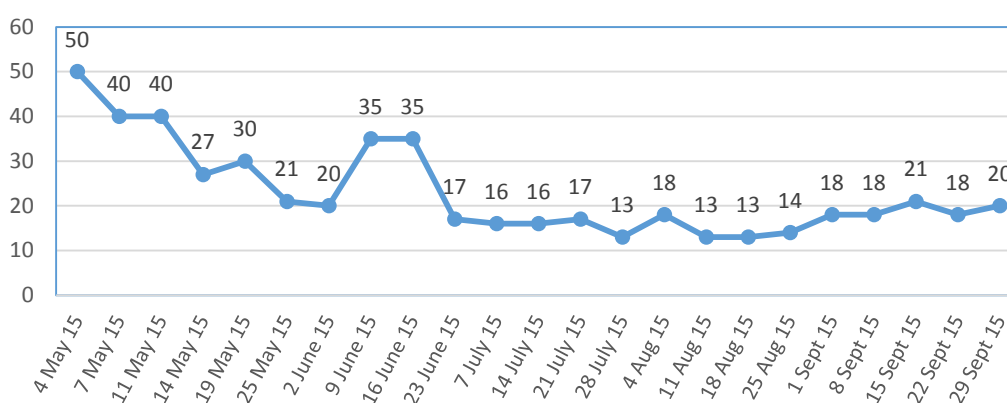
The Concept of Operation (ConOPS) was perceived as appropriate by the majority of the respondents and the key challenges (access to remote areas, air transport, and customs issues) were all addressed by the Logistics Cluster.[17] In terms of the challenges with gaining access, the concept of the Remote Access Operation (RAO) was seen as highly relevant and appropriate for the Nepal setting though it was initiated late (more on RAO in section 4.3).

Some respondents voiced their concern on resource availability, and did not feel fully informed in particular when the air service exhausted funds and shifted to a cost-recovery model from 1 September, affecting their ability to plan activities and raise additional funds at that stage of the emergency.

Preparedness – established relationships and HSA contributing to coordination
The WFP preparedness efforts, which facilitated the relation with the government and other organisations, and the existence of the HSA contributed to a strong coordination performance. The HSA contributed with much more than a physical space to store and transfer incoming relief materials, it was continuously emphasised by respondents as a fixed point in a chaotic setting. Many would have the HSA as their first stop after arriving in country, and people would know where to go to address operational issues.

Prioritisation of cargo a challenge

Due to the challenge of accessing the affected population, strict prioritisation of cargo was required and prioritisation was mentioned by participating organisations, as well as by the Logistics Cluster staff, as an

---

[16] No data is available for meetings 28 April, 30 April and 30 June 2015.

[17] 88 percent rated the ConOps as appropriate in the May survey, 62 percent in September (though in September the remaining respondents chose the 'I don't know' option).

area which could be strengthened. In the first Logistics Cluster meeting, the cluster raised the need for a prioritisation list endorsed by the Humanitarian Country Team, the list was finalised in June. Despite these efforts, some organisations felt that WFP cargo was prioritised even when it was lower on the priority list. In terms of prioritisation, some found that linkage between district and central level priorities could have been stronger. Table 2 below lists some of the key visible coordination results.

Table 2 - Overview of key coordination results

Function	Description	Results: April - September 2015
Coordination	Coordination through Logistics Cluster meetings and *ad hoc* bilateral meetings with organisations in Kathmandu and in the field: (Government representatives, OCHA, HC, HCT, ICCG, Civ/Mil, Private companies (DHL, the LET group (Agility, Maersk Group and UPS), implementing organisations (Handicap International and Plan International) and donors.	Support obtained for the Logistics Cluster members through partnerships: • Government representative in Logistics Cluster meetings (MOHA) • Equipment for hubs (DFID) • DHL support in HSA – movement of cargo • Establishment of 5 additional hubs managed by NGO. In Charikot (Plan International), and in Bidur, Dhading Besi, Dhulikel, and Dunche all by Handicap International. • Use of American Air Force air assets and access to Indian Military Air Force air assets • Raise of issues (customs) (HC, OCHA, donors) • Support at Indian border (Agility through LET) • Support with forklift drivers (UPS through LET) • Container donation (Maersk)

4.2. INFORMATION MANAGEMENT (IM)

The objective of the information management function was to contribute to an efficient and effective response facilitating sharing of logistics information among all organisations conducting response operations. The information management function was found to be relevant, appropriate and effective by respondents of the surveys and of the face-to-face interviews.[18] It was found chaotic by some in the first days, but nevertheless highly appreciated by the majority. The key reasons for the strong performance in the Information Management (IM) function are detailed here below.

Relevant and useful Information Management products and tools, sufficient resources available
Feedback from respondents was that the IM function provided consistent, timely, up-to-date, accessible and useful information, which was relevant for their operation. The website was very user-friendly, accessible and content posted was useful and up to date. The maps, situation reports and meeting minutes were rated as the most useful and relevant IM products available. In terms of maps, more than 90 percent of respondents in the two surveys found the maps useful for their operations, and in interviews the printing service of maps was also highlighted as helpful (see annex 5 for survey results).

The combination of tools used for sharing information worked well – the Nepal website page have had 7,444 visitors since the earthquake till end of September, producing 24,451 page visits – as well as having a dedicated mailing list for Nepal information with almost 800 recipients. While the number of recipients seems high, similar numbers have been reached in recent emergencies (the Haiti earthquake had 1,364 recipients, the Philippines 713, and Yemen currently has 513 recipients). Participation in Logistics Cluster

---

[18] In the September survey, 70 percent of respondents found IM to be very good or excellent.

meetings was substantial (see figure 2 above), with 70 participants in each meeting in the initial weeks. The well-attended meetings provided an excellent venue for facilitation and promotion of information sharing. Having dedicated resources for IM and GIS helped to provide updated, timely and relevant information. Despite substantial preparedness efforts done by the WFP Nepal Country Office and Regional Bureau, the Logistics Capacity Assessment (LCA) was not updated prior to the earthquake – the last update was in 2009. This was mentioned by some organisations as a limiting factor for obtaining logistics information in the first days of the response.

Table 3 lists key outputs produced by the IM function up till end of September.

Table 3 - Key IM outputs

Function	Description	Outputs: April - September 2015
Information Management	Sharing of information through Logistics Cluster meetings, through a mailing list and through the cluster website. IM products include GIS information, minutes, procedures, snapshots, and *ad hoc* situation information.	234 IM products were produced and shared from 26 April till end of September. The products were: Maps (109), Information on situation and minutes (85), and information related to the operation and procedures for the same (39). Besides being shared on the website and in meetings, these were shared with up to 782 recipients on the mailing list. The mail list recipients include staff from NGOs, IOs, government representatives, donors and the UN (the last constituted 24% including Logistics Cluster staff). 7,444 users have visited the website and viewed 24,451 pages.

4.3. COMMON LOGISTICS SERVICES DELIVERY

The objective of the Logistics Cluster services was to support the humanitarian community with services, which could help them effectively and efficiently reach the affected areas. The services are assessed in terms of relevance/appropriateness, efficiency and effectiveness per service area here following.

Figure 3 - Overview of use of Logistics Cluster services in terms of volume transported 2 May - 2 October 2015[19]

Volume transported

---
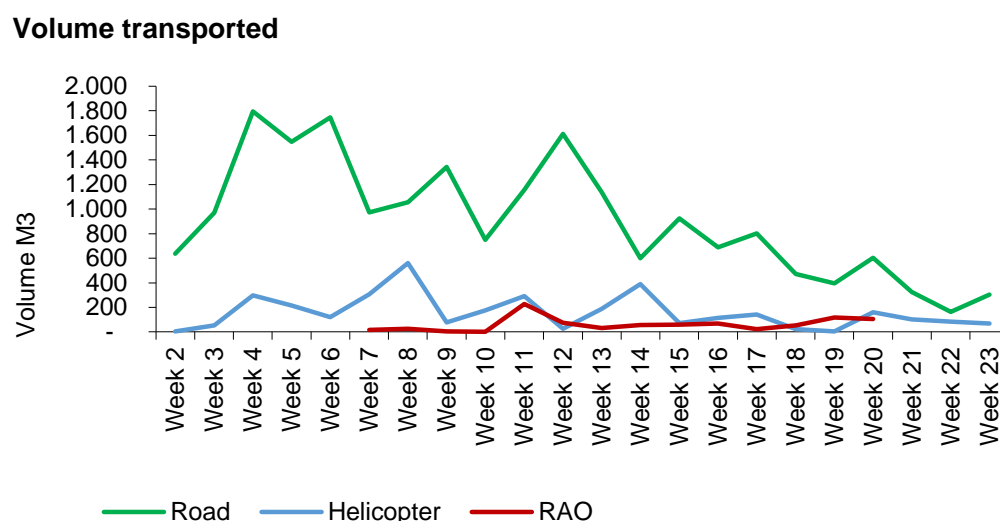
[19] The information is based on data from RITA continuing to the 2 October to allow for week 23 to be completed. Some data may not have been captured in RITA as of the end of the report and is therefore not reflected here.

Storage/Staging facilities

The Humanitarian Staging Area was activated immediately with two storage tents (10x32m) and office spaces. An additional eight storage tents were established at the HSA. In total, nine hubs were established and 117 organisations have used the storage service, a total of 37,227m^3 was stored in the hubs until the end of September. Number of organisations using the hubs range between four in Dunche (183m^3) to 86 in Kathmandu (16,105m^3).

The prepositioned equipment in HSA (including 36 10x32m Mobile Storage Units (MSUs) enabled a very fast and cost-effective set up of hubs in Kathmandu (expansion of HSA capacity) and in the field. Deurali and Chautara hubs were operational in the second week of the emergency, identified on 1 and 8 May respectively. Bharatpur and Dhulikel hubs on 11 and 12 May. In comparison, in the Philippines Typhoon Haiyan operation, storage was available in Tacloban on Day 9.

If the MSUs would have needed to be brought into Nepal after the emergency, they would have arrived, at the earliest, during Week 2 after the emergency (the first inter-agency flight from UNHRD to Sharjah arrived on 2 May, the first from Dubai on 8 May). At the same time, the planes would have taken up the scarce landing slots in the airport from other flights coming in (Search and Rescue in the initial days, and relief materials to the affected populations).

Feedback on storage was that it was relevant, effective, and efficient. 74 percent of respondents from both surveys considered the storage performance to be very good or excellent. The start was characterised as chaotic with a huge amount of relief materials coming in, but organisations appreciated the efforts made by the Logistics Cluster. One organisation mentioned that the Logistics Cluster confirmed the possibility for participating organisations to loan MSUs however that did not eventually materialise.

Feedback on the HSA was that it contributed significantly to diminishing delays in the receipt and onwards delivery of relief materials arriving in country, decongesting the airport, and it also helped the prompt set up of field hubs. DHL who supported ramp management in the TIA airport stated that *'it would have been a complete nightmare in the airport and dangerous if the HSA had not existed'*. Other organisations stated that *'the time for receiving their relief materials would probably have doubled if the HSA had not been in place'*.

Other mitigation measures were explored, including the use of a staging area in India (Birgunj or Lucknow - part of the WFP response plan, in case Tribhuvan International Airport in Kathmandu was heavily damaged), as well as using Pokhara airport in the western part of the country as another international airport. However, in the short term none of these were viable options. Bharatpur hub was established as a transit hub for cargo coming into the country by road with the objective of relieving the pressure on the HSA in Kathmandu.

The identification of organisations with presence and capacity to run logistics hubs in the field allowed the further augmentation of the logistics operation in five additional locations. In terms of surge capacity, the Standby Partners deployed as part of the Logistics Cluster staff, contributed very successfully to the running of logistics bases.

Areas for improvement of the storage service

There were two main challenges in running the hubs; firstly having sufficient and relevant equipment and handling capacity at HSA, and secondly, setting up the agreements with organisations for running field hubs. However, these challenges did not significantly delay or impact operations.

In the HSA, the following support services were provided:

- DFID provided equipment including 2 mt and 7 mt capacity forklifts, a telescopic handler, and a K-loader with a Dolly.
- DHL deployed their Disaster Response Team for four weeks (two weeks initially then extended) to provide support at the airport and at the HSA as required to alleviate congestion.
- Agility and UPS helped with provision of three forklift drivers at the HSA.

It also became apparent that the type of relief material and the packaging (for example the air pallets) used for transport require mechanical handling equipment, particularly in central hubs or at a staging area. Further consideration of mechanical handling equipment, the need of securing spare parts as well as of technical staff for equipment handling and maintenance, could be incorporated into the preparedness plan.

For field hubs, concerns were raised with regard to agreements for managing the hubs, and on briefing of deployed staff. Please refer to the recommendations section for more details.

Table 4 below outlines key results for the storage service (more details in Annex 4).

Table 4 - Key storage related results

Function	Description	Results: April - September 2015
Storage	Nine storage hubs were made available in (number of organisations/m³ stored): Kathmandu (86/16,110m3) Dhulikel (15/4,175m3) Bharatpur (5/1,492m3) Deurali (47/6,278m3) Dhading Besi (12/955m3) Bidur (10/1,700m3) Dunche (4/183m3) Chautara (19/3,511m3) Charikot (8/1,904m3)	117 organisations stored 37,227m³. Shelter accounted for 61% of all cargo stored, food for 21% and health for 5%. **HSA specific results:** • Significantly diminishing time for receipt and onwards delivery of relief items, • Lowered the cost of establishment of hubs significantly. MSUs brought in by sea from the UNHRD in Malaysia saved a minimum of 14,000USD per MSU compared to being flown in, • Shortened the setting up of hubs with a minimum of 2 weeks, land allocation permitting, • Provided a venue which facilitated coordination from day one of the response, • Optimised the response due to location of hub next to TIA airport.

Road transport

To maximise the use of available transport capacity in country, a dedicated fleet of trucks was made available for primary transport and smaller 4W vehicles and tractors for secondary transport. The service was reported to be relevant, effective and efficient and 75 to 89 percent of respondents in the surveys rated it to be good, very good or excellent (see Annex 5 for overview of survey results).

19,996m³ of relief items were transported by road to a total of 95 destinations until the end of September. With the exception of Kathmandu, Chautara, and Deurali were the two top destinations in terms of volume. WFP, Save the Children, and IOM were the top three users of road transport services in terms of volume transported: food and shelter items were listed as priority cargo (see Annex 4 for additional details on use of services). There were no significant issues reported with the performance of road transport. Table 5 below outlines key results.

Table 5 - Key road transport results

Function	Description	Results: April - September 2015
Road transport	Trucks were made available for primary transport to the 14 most affected districts as well as small trucks and tractors were made available for secondary transport.	6,615 truckloads were carried out carrying relief items for 89 organisations (97 organisations if including receivers) primarily within Kathmandu and to Chautara and Deurali. Of these, 4,829 were small trucks with below 11 mt capacity, 1,125 were trucks with above 11 mt capacity, and 662 were tractors.

Air transport – provided by UNHAS

To support movement of the most urgent humanitarian cargo and of passengers to inaccessible and remote areas up to four Mi8 helicopters (cargo transport) and two AS 350 helicopter (suitable for assessments, passenger transport) were made available by UNHAS to the humanitarian community. UNHAS also facilitated Civil-Military liaison with military forces in-country (mainly American and Indian Air Forces) at the onset of the emergency allowing delivery to remote villages. However, it was the overall perception of organisations interviewed and respondents from the surveys that while the operation was relevant and necessary, there was a delay in obtaining sufficient capacity available for the response, as well as it was unclear how cost-effective the air cargo transport was.

There were fears that lack of air asset capacity was creating equity issues in reaching the affected population. In the survey conducted in May 2015, 79 percent of the respondents report the service to be good, very good or excellent, whereas in the September survey only 50 percent report it to be good, very good or excellent (see Annex 5).

Preparedness allowed rapid mobilisation of first air assets

WFP aviation preparedness efforts meant that a local operator could be mobilised immediately after the earthquake and the first air assets (1Mi8 and 1 AS 350) were available to the humanitarian community within four days of the event (operational on 29 April 2015), which was exceptionally fast given the restriction on foreign air operators to operate in Nepal.[20]

Appropriate and flexible service, liaison with organisations with air assets

Also commended were the flexibility of the air service (delivery locations), and the appropriateness of the type of rotary assets (flexible in terms of where they could land due to size), as well as a certain level of liaison with other organisations with rotary air assets (military and NGO).

Late augmentation of capacity creating backlog

The air operation was expected to avail of a total of 5 x Mi8s and 2 x AS350. However, due to lack of availability of required air asset (Mi8) from the operator, combined with the restriction for the foreign air operators in Nepal, the deployment of additional air assets were delayed and another 2 Mi8s and 1 extra AS350 were only operational the last week of May. The delay created a backlog of cargo pending airlift, which continued throughout the operation. By end of September, the backlog amounted to 519 mt (18 organisations/27 SRFs mostly received throughout July). Measures taken to expand air capacity were:

---

[20] The potential bottlenecks for air operations in Nepal had been identified in advance by WFP Aviation, which led to the investment in identification of local operators.

- Liaison with the available military air forces in-country for uplift of cluster cargo. One organisation transported cargo with the American Military Air Force, which was appreciated but which also created substantive additional bureaucratic work on the part of the organisation.

- Liaison with the Indian Military Air Force and the British Air Force. The Indian Air Force had rotary assets operating in Nepal and was open to make them available to the humanitarian community. The British Military Air Force had rotary air assets on route to Nepal, which were to be tasked under the Logistics Cluster, however due to lack of flight permit they were unavailable. [21]

Available air assets were therefore stretched and efforts were made to minimise the backlog. In addition, while cargo was prioritised in accordance with HCT-agreed priority list by the Logistics Cluster at central level and tasked by UNHAS for the delivery, it was perceived by some organisations that WFP cargo was prioritised over other organisations. Other measures were explored, such as seeking a refuelling point outside of Kathmandu to optimise the available air assets, as well as setting up intermediary hubs to maximise rotation.

UNHAS Move to Cost Recovery

Due lack of funding the air operation provided by UNHAS moved to a cost-recovery basis effective 1 September 2015. The feedback from organisations was that there was not sufficient advance notification, and the decision challenged planning and the possibility for raising additional funds. In addition, eight organisations (seven local NGOs and one UN agency) reported to the Logistics Cluster that they did not have funds available to pay for the cost of air transport.

While the issue of resources is linked to the Logistics Clusters capacity to assess the total requirement for the logistics service, on a practical level it was apparent that there was no agreed processes and *modus operandi* in place for a cost-recovery model and transfer to same.

Table 6 below lists key results for the air services (see Annex 4 for additional details).

Table 6 - Key air services results

Function	Description	Results: April - September 2015
Air transport	UNHAS availed up to 4 Mi8 and 2 AS 350 during the period as well as facilitated access to the American Military Air Force assets. The first Mi8 and AS 350 were operational on day 4 after the earthquake.	The helicopters have transported 3,470m^3 of cargo from 22 origins to 62 different destinations on behalf of 49 organisations (passenger service is not recorded here). Top three destinations were Dhading Besi (505m^3), Simigaun (294m^3) and Gorkha (293m^3).

Remote Access Operation: Trail rehabilitation and porter/pack animal transport

To facilitate access to areas inaccessible by air due to lack of safe landing zones, porter and pack animal transport of relief supplies was provided under the auspices of the Remote Access Operation (RAO) by the Logistics Cluster. In addition to facilitate transport, rehabilitation of main trails to isolated communities were carried out. Five districts were covered: Gorkha, Dhading, Rasuwa, Sindhupalchok and Dolakha.

---

[21] It has not been possible to obtain exact data on how much was transported on the military assets.

Participating organisations perceived the RAO as highly relevant and, for some, also useful for their operation.[22] The service was perceived to be late in starting and it did not cover all areas, therefore some organisations did not make use of it. The main RAO started services in the second week of June, and the reason being that the preparedness efforts in Nepal had not considered a scenario where a large part of the affected population would be located in remote and difficult to reach areas. There was no precedence for moving relief materials to the remote locations in this scale, and it had to be designed from scratch.

In terms of efficiency, some felt the operation was quite expensive but it was also seen as a pertinent instrument to facilitate access to isolated areas through trail rehabilitation and the only way to reach part of the affected population.

Key results are listed in table 7 below (see Annex 4 for additional details).

Table 7 - Key RAO results

Function	Description	Results: April - September 2015
Trail rehabilitated	Trails were rehabilitated in 5 districts: Ghorka, Sindhupalchok, Dolakha, Dhading, and Rasuwa.	177 trails (735km) have been rehabilitated.
Porter/pack animal transport	Transport by porters and pack animals were offered in 5 districts: Ghorka, Sindhupalchok, Dolakha, Dhading, and Rasuwa. This service was started second week of June.	Eight organisations have used the RAO as of end of September to transport 871m³ from 12 origins to 19 destinations.

TRACKING OF SERVICES AND COMMUNICATION

Service Request Forms
The system for requesting services through Service Request Forms (SRFs) was found by 70-74 percent of the respondents of the two surveys to be very good or excellent despite reported challenges in filling in the SRFs. The Logistics Cluster staff also reported to be spending significant amount of time on providing guidance on the use of the SRFs. The system, including tracking of consignments, was generally appreciated, though it was mainly seen as a tool to provide requests to the Logistics Cluster, not for tracking and planning operations.

Tracking system up and running quickly, effective first processing of SRFs
Considering that the Relief Item Tracking System (RITA) was not available or used in-country prior to the emergency, it was operational fairly quickly (from 4 May 2015), thereby allowing registering and tracking of consignments. One unit in Kathmandu would receive the SRFs and analysed which mode of transport would be best for the different destinations according to the newest situation information. This seems to have worked well and the quick processing and acceptance of the SRFs was commended. In terms of numbers, a total of 1,448 SRFs were received from the start of the emergency to the end of September, giving an average of 35 SRFs per day. The road service had the largest number of SRFs, 701, followed by storage, 537, helicopter, 175, and RAO, 35. 54 requests were cancelled. Average period for accepting SRFs was estimated to 2-3 days by the SRF processing unit.

Lack of feedback mechanism impeding planning

---

[22] 60 percent of respondents in the September survey found the RAO services to be 'very relevant and useful for their operation', and 30 percent found it to be 'very relevant though not useful for their operation'.

Nevertheless, it was also reported that while the SRFs were quickly accepted, a feedback mechanism for planning of services afterwards was missing. This was particularly evident for air transport because of the backlog and subsequent delay, at times weeks long, in executing the service. The delay appears to have been due to unclear roles and responsibilities among the service units in the Logistics Cluster, resulting in feedback falling through the cracks.

4.4. GLOBAL LOGISTIC CLUSTER

The role of the Global Logistics Cluster (GLC) in relation to field operations is to support with strategy, policy guidance, and mobilisation of surge capacity.[23] This is in addition to supporting field operations with systems and partnership linkages, which can help facilitate the field operation obligations.

For the Nepal operation, consultations were held between WFP Nepal, WFP Regional Bureau, and the GLC for mobilisation of the first Logistics Cluster team, which was primarily consisting of staff from the region with Logistics Cluster and Nepal preparedness experience. The GLC together with the Standby Partner unit in Rome facilitated Standby Partner deployments. The GLC also contributed with linkages to the private sector including DHL, and the LET (Agility, Maersk and UPS) and with global teleconferences on Nepal for participating organisations. In terms of systems support, the GLC mainly facilitated information management and relief item tracking support.

The strong knowledge of the Logistics Cluster system in the WFP Regional Bureau facilitated the deployment of a team with in-depth local knowledge, updated on the challenges and requirements in Nepal from Day 1.

The use of Standby Partners was highly appreciated by the organisations in Nepal, as they demonstrated to be knowledgeable and dedicated. Their performance was repeatedly commended. Lack of briefing packages for Logistics Cluster staff, WFP and non-WFP alike was reported as an issue.

GLC liaison with the LET led to important support for the operation, though part of the support was delayed because decision makers were located in significantly different time zones. In addition, it was felt that the support could have been leveraged had the LET been part of the preparedness activities identifying their resources and strengths in advance.

---

[23] Logistics Cluster Global Strategy 2013-2015, Rome January 2013

5. RECOMMENDATIONS

Based on the above outlined findings and interviews, a number of recommendations by function are summarised here below, well as in the recommendation matrix in Annex 3.

5.1. COORDINATION

Two areas were highlighted particularly important for the strong performance of the Logistics Cluster in terms of coordination, namely: preparedness activities and a proactive partnership approach. Investment in preparedness helped organisations reach the affected populations faster. Through the strong contribution of WFP Regional Bureau and Country Office in Emergency Preparedness Activities, staff with the right profile and local knowledge could be deployed as the initial surge capacity at the onset of an emergency. It is recommended to try to institutionalise this method by having a roster of people (WFP and other organisations) in each region with strong knowledge and experience of the Logistics Cluster who can be part of the first deployment, and to have them involved in local and regional preparedness activities.

In countries where preparedness activities are taking place, the GLC could establish links with the local coordination mechanisms, facilitate access to relevant trainings and links with strategic actors.

In terms of partnership, it is recommended to identify all relevant stakeholders and proactively engage them to leverage support for the operation – whether these are government representatives, service users, donors, and private local or global organisations, dependent on the specific context of the operation.

One of the main challenge faced in the coordination effort was the cargo prioritisation (challenge identified in other operations as well). **It is recommended to proactively advocate for prioritisation** while informing about the consequences of a lack of prioritisation, which was also done in Nepal. Further, it is recommended to establish a protocol to engage organisations in the prioritisation both in field and in the capital. For example, an advisory group may be established specifically for that purpose. The group could also have a monitoring function and report back on use of assets.

By extension, the use of strategic advisory groups or user groups to facilitate actual participation in strategic areas could be employed to discuss prioritisation but also other issues. As one of the key issue in prioritisation is also linked closely with the understanding of upstream pipeline, increased participation in other cluster meetings by Logistics Cluster representatives (or participating organisations to feed back into Logistics Cluster) is recommended to increase organisations' programming units to understand the potential logistics challenges in addressing their requirements.

5.2. INFORMATION MANAGEMENT

In terms of IM, the main recommendation from respondents was to *'keep up the good work'*. The tools and IM products available, along with dedicated and competent staff, facilitated sharing of information for an effective operation.

Due to the high number of attendants to meetings and high turnover of staff, one recommendation was to **set up regular 'briefing meetings' providing introductory information on the role of the Logistics Cluster, its services, and procedures**.

Some mentioned the development of more high-tech solutions (for example a Logistics Cluster app or SRF app), opportunities for signing up for information on status of consignments (SRF text messages),

maps to illustrate where organisations had logistics set-ups (complementing OCHA's 4W but focused on logistics infrastructure), and real-time show of space available in warehouses.

Information on access constraints was consider crucial in supporting operations. **It was suggested that additional detailed information packages could be developed and these could be used by some actors, such as donors, government and the Humanitarian Coordinator, to help advocate with the right authorities for ways to ease constraints**.

It was further noted that information sharing on constraints including resource constraints and the impact on service provision and/or resources is key. Managing expectations through proactive information management is crucial.

Internal Logistics Cluster information management is also important in particular when several actors (NGOs, private companies and Standby Partners) are part of the Logistics Cluster set-up. Internal staff meetings and briefing packages on how to work in the Logistics Cluster can help alleviate frustration and make the operation more effective and efficient.

5.3. COMMON LOGISTICS SERVICES DELIVERY

For the Logistics services delivery – storage, road, air, RAO and tracking, there are three main recommendations:

Firstly, **the strategy for the service provision portfolio and transfer to other cost modalities need to be clearly and proactively communicated to all stakeholders throughout the operation to facilitate planning.** Funding and funding constraints need to be clearly communicated and organisations must be involved in the decisions concerning the timing for moving to other modalities. An advisory group on funding could be established as a standard procedure at the onset of the operation. This might help to prioritise the scarce funds towards the most important service areas, as well as to strengthen the sense of ownership among the organisation participating in the Logistics Cluster.

Secondly, **in terms of management of the Logistics Cluster operations, roles and responsibilities of the different service delivery units must be well defined. In addition** in-country central-field cooperation can be developed. At field level the focus should be ensuring maximum flexibility, enabling decision-making while ensuring process and accountability. This could include possibilities for further decentralising SRF processes.

Thirdly, and linked to the SRF/tracking of services, while RITA was set-up quite quickly, operations in the first weeks remained without tracking services adding to the chaos of the situation. Therefore, investment into interim tracking measures or into having RITA in place in high-risk countries as part of the preparedness investment could be looked into. Local staff in high-risk countries could be trained on RITA and deployed strategically to ensure their knowledge remains useful.

5.4. GLOBAL LOGISTIC CLUSTER

For the Global Logistics Cluster, the recommendations relate to partnership development, guidance/procedure development, surge capacity (staff/logistics equipment facilitation), and M&E.

The Logistics Cluster could identify all actors who could potentially provide support to the cluster, being these donors, private companies, Logistics Cluster service users, WFP units, or other coordination mechanisms such as clusters, OCHA, HCTs, national coordination mechanisms, **and their specific areas of intervention**. The Logistics Cluster should explore ways to establish quick support this could be by having memoranda of agreement and/or contacts in place to establishing or by coordinating with specific

country preparedness or simulation projects. The goal is to know who can support with what and how, when an emergency occurs.

The Logistics Cluster could develop guidance and procedures, such as a standard Logistics Cluster cooperating partner agreements (through WFP). The standard format agreement could include checklists for types of services (typical roles and responsibilities for different types of services) and for equipment. Equipment was a key issue in the Nepal hubs, having a standard list of equipment for hubs would have ensured a more tailored support. Furthermore, it would be useful to develop guidance on how to work with the Logistics Cluster. An idea, particularly for those partners and deployed staff who have not previously worked with the Logistics Cluster, could be to prepare a USB stick with a briefing package for staff being deployed with general guidance on the Logistics Cluster, templates of key documents and country specific information.

This leads to the next area – **ensuring sufficient and appropriate surge capacity**. Having a strong cluster team on the ground to set up the operation was key to success and highly commended by the respondents. However, the deployments were short, which impacted on continuity and can lead to poorer service provision. In terms of staff profile, the deployed staff were highly appreciated for their local knowledge, knowledge of the cluster approach and strong leadership; this was partly because of a strong capacity at regional level. **The global roaster could be specifically developed ensuring regional knowledge, cluster knowledge and management capabilities, with staff whose profile includes strong partnership and stakeholder management** (donor relations in some locations).

Measuring and documenting the performance of the Logistics Cluster remains an area for development. With the RITA system as well as IM information, there is significant data available but **tracking overall performance of the cluster operations against agreed critical indicators remains to be implemented**. An issue is also measuring impact of the Logistics Cluster operations. **A specific impact survey could be developed to support the documentation of the work of the Logistics Cluster**.

6. MATRIX - OVERVIEW OF KEY RECOMMENDATIONS

KEY RECOMMENDATIONS	
I	Invest in preparedness activities - linkages CO, RB, Cluster
II	Institutionalise partnership approach, build/prepare partnership
III	Addressing challenges of 'service' cluster
IV	Further strengthening WFP Capacity as the lead agency of the Logistics Cluster
LOGISTICS CLUSTER FUNCTIONS	
1. COORDINATION	
1.1	PREPAREDNESS: Involving strategic actors (DHL, LET, NGOs...) in the preparedness planning where they have relevant presence at CO level - GLC to help link CO/organisations.
1.2	PARTNERSHIP: Establish strategic advisory groups/user groups for discussions of key decisions.
1.3	OPERATIONAL: Challenges of Prioritisation - advocacy, active request for HCT prioritisation from day 1.
2. INFORMATION MANAGEMENT	
2.1	COMMUNICATION: High turnover of staff for all Cluster Partners – preparation of a quick briefing for 'new comers' on regular basis or prepare a briefing package (Role of Cluster, basic services provided, use of SRFs, etc.).
2.2	COMMUNICATION: Influencing through donors and participating organisations – e.g. customs and border issues and sharing with key stakeholders.
2.3	INTERNAL COMMUNICATION: All Logistics Meeting at earlier stage with new / old staff, briefings for the new staff including SBPs.
3. LOGISTICS SERVICE DELIVERY	
3.1	OPERATIONS: First wave response by regional staff with local knowledge – ensuring Surge capacity with knowledge of Country (Right staff profiles identified and listed), with Logistics Cluster experience and knowledge.
3.2	OPERATIONS: Clear strategy, transition plan, processes, and responsibilities to be determined for Logistics Services provided by the Cluster in view of funding constraints.
4. GLOBAL LOGISTICS CLUSTER SUPPORT	
4.1	PARTNERSHIP: Identify stakeholders' capacity and interest, and develop relationships with different actors at global level with the aim of facilitating a quick set-up of the support they can provide for an operation.
4.2	GUIDANCE/PROCEDURES: Establish systems, processes, and guidance on 'how to work with Logistics Cluster' package, templates for cooperation, guidance for new staff including USB briefing package.
4.3	SURGE: Ensure surge capacity from the region with local knowledge, Logistics Cluster understanding, and strong management/leadership skills (including training, understanding of the cluster, RITA, funds management).

ANNEX 1 – ACCRONYMS

ACCRONYM	
CGI	Corrugated Galvanised Iron sheeting
CNDRC	Central Natural Disaster Relief Committee
ConOps	Logistics Cluster Concept of Operation
DFID	United Kingdom's Department for International Development
GIS	Geographic Information System
GLC or GLSC	Global Logistics Cluster Support Cell
HC	Humanitarian Coordinator
HCT	Humanitarian Country Team
HRP	Humanitarian Response Plan
has	Humanitarian Staging Area
IASC	Inter-Agency Standing Committee
ICCG	Inter-Cluster Coordination Group
IM	Information Management
LC	Logistics Cluster
LCA	Logistics Capacity Assessment
LET	Logistics Emergency Teams (Agility, UPS, and Maersk)
LLE	Lessons Learned Exercise
M&E	Monitoring and evaluation
Mt	Metric tonnes
MSU	Mobile Storage Unit
NEOC	The Government of Nepal's National Emergency Operation Centre
NGO	Non-Governmental Organisation
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OFDA	Office of U.S. Foreign Disaster Assistance
RAO	Remote Access Operation
RITA	Relief Item Tracking System
SitRep	Situation Report
SOP	Standard Operating Procedures
SRF	Service Request Form
TIA	Tribhuvan International Airport in Kathmandu
UNHAS	United Nations Humanitarian Air Service
UNHRD	United Nations Humanitarian Response Depot
UNICEF	United Nations Children's Fund
WFP	United Nations World Food Programme

ANNEX 6 – PEOPLE CONSULTED

Organisation	Role	Name and position	Date and location of interview
ADRA	Cluster user	Surendra Bisht, Admin and Program Support Coordinator	22 September 2015, Kathmandu
DFID	Donor	Anissa Toscano, Humanitarian Advisor	22 September 2015, Kathmandu
DFID	Donor	Nicola Murray, Disaster Resilience Manager	22 September 2015, Kathmandu
DHL	WFP Partner	Chris Weeks, Director Humanitarian Affairs	30 September 2015, teleconference
Focus Nepal	Logistics Cluster user	Ishwor Kandel, Logistics Officer	23 September 2015, Dhading Besi
Focus Nepal	Logistics Cluster user	Kamal Shrestha, Project Coordinator	23 September 2015, Dhading Besi
Handicap International	Logistics Cluster user and implementing organisation	Romain Monsieur, Operations Coordinator	16 September 2015, Kathmandu
Handicap International	Logistics Cluster user and implementing organisation	Camille Ameslon	16 September 2015, Kathmandu
Handicap International	Logistics Cluster user and implementing organisation	Naveed Ahmad, Dhading Besi Hub Manager	18 September 2015, Kathmandu
IFRC	Logistics Cluster user	Tendai L. Chabvuta, Logistics Coordinator, Nepal EQ Operation	16 September 2015, Kathmandu
IFRC	Logistics Cluster user	Prashant Khadka, Logistics Officer	16 September 2015, Kathmandu
IFRC	Logistics Cluster user, emergency preparation	Bernd Schell, Nepal Risk Reduction Consortium, Flagship 2 Coordinator	17 September 2015, Kathmandu
IFRC	Logistics Cluster user, emergency preparation	Ibrahim Burki, Procurement Delegate	17 September 2015, Kathmandu
IFRC	Shelter Cluster	Sanjeev Hada, Deputy Shelter Cluster Coordinator	17 September 2015, Kathmandu
IOM	Logistics Cluster user	Nischal Shresta, Logistics Coordinator	22 September 2015, Kathmandu
IOM	Logistics Cluster user	Iben Gejl Valbak, Shelter Support Officer	23 September 2015, Gorkha
LET Partnership (Agility, Maersk, UPS)	LET Partnership	Frank Clary, Chair of LET partnership	30 September 2015, teleconference
MAF	Provider of humanitarian air services	Alan Robinson, Development Director	16 September 2015, Kathmandu
Plan International	Logistics Cluster user and implementing organisation	Paolo Lubrano, ERM Operations	16 September 2015, Kathmandu
Plan International	Logistics Cluster user and implementing organisation	Christopher Togara	16 September 2015, Kathmandu
Plan International	Logistics Cluster user and implementing organisation, first responder	Rebecca Vince, Head of Logistics and Procurement	05 October 2015, teleconference
OCHA	Coordination	Joseph Tabago, Humanitarian Affairs Officer	18 September 2015, Kathmandu
OCHA	Coordination, Inter-cluster coordination	Wojtek Wilk, Inter-Cluster Coordinator	18 September 2015, Kathmandu

OFDA/USAID	Donor	Robert Demeranville, Logistics Team Leader	Feedback from OFDA team on mail October 2015
Oxfam	Logistics Cluster user	Asad Mohammed Asaduzzaman	25 September 2015, Kathmandu
Save the Children	Logistics Cluster user	Zach Zanek, Humanitarian Response Specialist/Humanitarian Surge Team	29 September 2015, teleconference
UNDP	Logistics Coordination, emergency preparedness	Jamie McGoldrick, Humanitarian/Resident Coordinator	18 September 2015, Kathamandu
UNICEF	Logistics Cluster user	Anne Aukwuagu	22 September 2015, Kathmandu
WHO	Health Cluster, Cluster user	Dr. Edwin C. Salvador, Technical Cluster	17 September 2015, Kathmandu
WHO	Health Cluster, Cluster user	Michel Rene Bernard, Logistics Officer	17 September 2015, Kathmandu
WFP	Logistics Cluster	Ratindra Khatri, Focal Point, Emergency Logistics Cluster Co-lead	18 September 2015, Kathmandu
WFP	Logistics Cluster	John Myraunet, LC Coordinator in Nepal	18 September 2015, Kathmandu
WFP	Logistics Cluster	Alessandra Piccolo, LC Information Management Officer	24 September 2015, Kathmandu
Standby Partner to WFP	Logistics Cluster	Peter Donovan, Regional LC Coordinator	23 September 2015, Deurali
WFP	Logistics Cluster, RAO	Dorothy Hector, Responsible for RAO	21 September 2015, Kathmandu
WFP	UNHAS	Bernard De-Wouters, CATO	23 September 2015, Kathmandu
WFP	Engineering	Jonathan Buckingham	15 September 2015, Kathmandu
WFP	WFP	Chris Liswaniso, Transport contracting	22 September 2015, Kathmandu
WFP Nepal	WFP Nepal	Waqar Khattak, Head of Logistics	22 September 2015, Kathmandu
WFP Nepal	WFP and Logistics Cluster	Frank Aynes, Head of Supply Chain, and second LC coordinator	22 September 2015, Kathmandu
WFP	Logistics Cluster	Baptiste Burgaud, First LC Coordinator	21 September 2015, teleconference
WFP	Logistics Cluster	Edmondo Perrone, LC Coordinator	22 September 2015, teleconference
WFP	WFP	Alex Marianelli, First Head of Supply Chain	22 September 2015, teleconference
WFP	Logistics Cluster	Deanna Beaumont, First HSA manager	21 September 2015, teleconference
WFP	WFP Lessons Learned	Anna Young, Coordinator on WFP Lessons Learned exercise on Nepal	Consulted on various occasions

ANNEX 7 – DOCUMENTS CONSULTED

DOCUMENTS CONSULTED
DHL
DHL, Evaluation Survey DHL DRT Nepal, 15 July 2015
DISASTER PREVENTION/MANAGEMENT DOCUMENTS
CFE-DM, Nepal Disaster Management Handbook, by CFE-DM, 2015 available at: https://www.cfe-dmha.org/DMHA-Resources/Disaster-Management-Reference-Handbooks
World Bank, The World Bank Hazard Management Unit, Natural Disaster Hotspots Case Studies, 2006 http://siteresources.worldbank.org/INTDISMGMT/Resources/0821363328.pdf)
Pandey, Ventura, Riofrio, Pummell, Dowling, Development of Response Plan for Airport in Mega-Earthquake in Nepal, July 2014, http://www.flagship2.nrrc.org.np/development-response-plan-airport-mega-earthquakes-nepal
EVALUATION DOCUMENTS
OECD-DAC, OECD-DAC evaluation criteria (Organisation for Economic Cooperation and Development - Development Assistance Committee, http://www.oecd.org/dac/evaluation/2754804.pdf)
ALNAP, Evaluating humanitarian action using the OECD-DAC criteria, An ALNAP guide for humanitarian agencies, (http://www.alnap.org/resource/5253.aspx)
GOVERNMENT OF NEPAL/ PUBLIC INSTITUTIONS IN NEPAL
Civil Aviation Authority of Nepal, Tribhuvan International Airport (TIA), Earthquake Emergency Response Planning Team Recommendations, December 2012
Government of Nepal, Ministry of Home Affairs, Ruling on Customs Exemption of Relief items, 10 June 15
Government of Nepal, Ministry of Finance, Department of Customs 5 June 15, Letter regarding reduction of customs duties on CGI sheeting
Government of Nepal, Ministry of Home Affairs, National Disaster Response Framework, NDRF, July 2013 (unofficial translation to English)
Government of Nepal and partners, Nepal Risk Reduction Consortium - Flagship Programmes, March 2013, http://www.flagship2.nrrc.org.np/nepal-risk-reduction-consortium-flagship-programmes
IASC
IASC, Reference Module for Inter-agency Cluster Coordination at Country Level, revised July 2015
LOGISTICS CLUSTER STRATEGY DOCUMENTS – available at www.logcluster.org
Logistics Cluster Global Strategy 2013-2015, Rome, January 2013
Joint Evaluation of the Global Logistics Cluster, prepared by the KonTerra Group, August 2012 – supported by WFP, UNICEF and the Government of Netherlands
LOGISTICS CLUSTER NEPAL DOCUMENTS – available at www.logcluster.org/Nepal
Logistics Cluster, Concept of Operation, Nepal, 26 April 2015
Logistics Cluster, Concept of Operation, updated, Nepal, 15 May 2015
Logistics Cluster, Concept of Operation, updated, Nepal, 22 September 2015
Logistics Cluster, Standard Operating Procedures, Nepal, 29 April 2015
Logistics Cluster, Standard Operating Procedures, Nepal, 15 May 2015
Logistics Cluster, Standard Operating Procedures, Nepal, 5 August 2015
Logistics Cluster, Cluster guidance Nepal bound cargo entering from India, 25 May 15
Logistics Cluster, Flowchart of customs procedures, 26 May 15
Logistics Cluster, Customs snapshot, 20 July 15
Logistics Cluster, How does humanitarian logistics work in Nepal?, 19 May 2015
Logistics Cluster, Six Infographics from May to end of September 2015
Logistics Cluster, 55 Meeting minutes Kathmandu, Charikot, Chautara, Deurali, Dhading Besi, and Gorkha
Logistics Cluster, 19 Situation Updates from May to end of September 2015
Logistics Cluster, 109 Maps from May to end of September 2015
Logistics Cluster, Eight Operations Overview from May to end of September 2015

Logistics Cluster, Last Mile Transport, 25 May 2015
Logistics Cluster, ICC, Prioritisation for inter-agency cargo transport, 15 July 2015
Logistics Cluster, Survey May – June 2015
Logistics Cluster, Survey September 2015
OCHA AND UN NEPAL DOCUMENTS
Flash Appeal for the response to the Nepal earthquake, April-July, 29 April 2015
Flash Appeal Revision - Nepal earthquake, April-September, 29 May 2015
OCHA, Weekly Situation Updates from April 25 onwards
UN **Resident Coordinator, Situation Reports from 25 April 2015 onwards**
WFP INTERNAL DOCUMENTS
WFP, Special Operation 200848, Narrative and budget
WFP, WFP Management Response to the Recommendations of the Summary Evaluation Report, Global Logistics Cluster, Report for Consideration for WFP Executive Board, Second Regular Session, 12-14 November 2012
WFP, WFP Logistics Response Plan – Earthquake in Kathmandu Valley, February 2013
WFP, List of staff deployed for earthquake, September 2015
WFP, WFP Asia, Emergency Preparedness Strategy