



“THE IFRC REGIONAL LOGISTICS CONCEPT - EFFICIENCY OF RELIEF ITEM DELIVERY FOR THE MYANMAR POPULATION AFFECTED BY CYCLONE NARGIS” CASE STUDY SYNOPSIS



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OBJECTIVE OF STUDY

INTRODUCTION

The International Federation of the Red Cross (IFRC) response to Cyclone Nargis in Myanmar saw further utilisation of the Asia Pacific Regional Logistics Unit based in Kuala Lumpur (KL RLU) – a concept in place since 2006 with the first major operation it responded to being the Yogyakarta earthquake the same year. In order to further determine the added value of the RLU concept, it was agreed to measure the performance of the logistics service in the Myanmar response during 2008 using the same criteria as the past study of the Yogyakarta logistics operation.

Direct comparisons with the Yogyakarta response and other such responses are of course imperfect due to characteristics unique to each operation. These characteristics included restricted access and extensive infrastructure damage in the Myanmar response and the use of nearby pre-existing stocks for a previous disaster in Medan, Indonesia; full staffing; and relatively undamaged infrastructure in the Yogyakarta response. Nevertheless, it should be noted that this study was not looking to measure if the performance of the Myanmar operation was “even better” than that of the Yogyakarta response, but rather if it exhibited similar gains from regionalisation, especially when compared to two operations that took place prior to regionalisation: the Indonesian tsunami and Pakistan earthquake.

OBJECTIVES

This case study evaluates to what extent the IFRC regional logistics unit in Kuala Lumpur achieved the following objectives for the first two months of operations:

1. *For the affected population:* Ensure the delivery of relief items to the identified population for the planned emergency response, and support the transition to recovery activity.
2. *For Myanmar Red Cross:* Ensure the National Society (NS) has the requisite logistics capacity and support to set up and deliver the planned response.
3. *For the Donor:* Provide empirical data for donors of inputs to show that goods and financial inputs were effectively utilised as intended.



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EXECUTIVE SUMMARY

OPERATIONAL SUPPLY CHAIN COMPARISON

As during Yogyakarta, regional stocks and KL RLU procurement activities allowed for a faster, cheaper and more complete response in Myanmar than in Pakistan and Indonesia. Myanmar saw over 45,000 families receive complete relief packages in the first two months, compared with 0 full packages in Pakistan and Indonesia. Supply chain activation took an average of 3 and 5 days respectively for Yogyakarta and Myanmar, while for Pakistan and Indonesia activation took 10 and 18 days. In Pakistan and Indonesia, 38% and 55% of targeted relief items were delivered in the first two months, compared to 74% in Yogyakarta and 68% in Myanmar. Logistics costs per family kit cost CHF 142 for Yogyakarta and CHF 268 for Myanmar compared to CHF 824 for Pakistan, a savings rate between 77% and 83%. Clearly regionalisation continued trends of a better, cheaper, and faster response over two major operations.

INTERNAL SUPPLY CHAIN COMPARISON

Internally to the Myanmar operation, regional pre-positioned stocks exhibited the best performance of all sources of goods in terms of time and cost. On average, KL RLU stocks were delivered almost 64% faster than in-kind donations (IKD) that were procured and transported by donors, while costing almost 28% less. Items procured by the regional logistics unit, benefiting from relationships with local / regional suppliers and transporters, had the lowest transport costs (CHF 1,408 per metric ton compared to CHF 3,840 for IKD), while KL RLU procurement of framework agreement goods allowed for an average cost per kit 21% less than IKD. Regionalisation, as seen in regional pre positioned stocks and procurement, clearly provided a better, cheaper and faster response than more traditional in-kind donations direct from donors.

LOGISTICS COORDINATION AND OPERATIONAL SUPPORT

The KL RLU effectively handled logistics coordination for the Myanmar response and drew significant benefit from being co-located with the Zone and DMU offices. KL RLU-Geneva communications were productive and logistics-operations communications were also praised by stakeholders.

SCOPE OF STUDY

DATA AVAILABILITY

The focus of this work was primarily concentrated on the logistics services of the Myanmar response. Significant data exists for mobilisation, procurement, pre-positioned stock use and donor activity up to the first point of entry into Yangon. As in most responses, Myanmar had unique circumstances that affected operations. Among others, these circumstances included initial restriction of visas to just 21 personnel, restriction of in-country delegate movement outside of Yangon, and extensive infrastructure damage that limited distribution to air for the first month. Nevertheless, almost every operation is defined by unique circumstances and substantial anecdotal evidence exists for in-country operations.

DATES

This study covered the first two months of the Myanmar response. Cyclone Nargis struck Myanmar on May 2nd, 2008, the first appeal was released on May 5th, and the first mobilisation table was published on May 7th. Goods delivery data is taken up to and including July 5th.

ITEMS

This study focuses on non-food emergency relief items for family kits, excluding medical, water and sanitation and other supplementary goods. While several appeals and mobilisation tables were issued in the first two months as the extent of the damage gradually became apparent, this study took the June 12th mobilisation table, with a target population of 100,000 families as its baseline.



SECTION 1: OPERATIONAL SUPPLY CHAIN COMPARISON

Myanmar Operational Supply Chain Comparison Highlights

- Sourced from region: 10% more than Pakistan, 66% more than Indonesia
- Average family kits made available per day: 84% more than Pakistan
- Time to activate supply chain: 50% less than Pakistan, 73% less than Indonesia
- Cost per family assisted: 67% less than Pakistan
- Percentage relief items available for distribution: 46% greater than Pakistan
- KL RLU Procurement took advantage of close relationships with suppliers and transporters in the region.

ANALYSIS

Distance Travelled

On average the distance travelled by all goods was 4,377km in response to Cyclone Nargis. This distance is substantially longer than that travelled by goods in Yogyakarta and somewhat longer than travelled in Pakistan. While goods travelling from **KL RLU stocks averaged only 1,871 km to beneficiary**, items travelling from outside of region from IKD`s direct from donors, and items travelling long distances from within the large Asia Pacific region carried the total average to over 4,300 km.

Output by Family

The presence of many suppliers in the Asia Pacific region allows for quicker response times. Like the Yogyakarta operation, the Myanmar response took advantage of regional suppliers, sourcing 77% of relief goods from within the Asia Pacific region, compared to just 12% of goods in the tsunami response and 68% in the Pakistan earthquake response.

Again as in Yogyakarta, the Myanmar response reached a much larger population over the first two months than was reached in the previous Pakistan and Indonesia operations. Regional stocks at KL RLU along with KL RLU relationships with suppliers and transporters allowed for a fuller and quicker response. In one instance, while other relief agencies struggled to find charters into Yangon and obtain landing permission, KL RLU was able to secure cargo space on regularly scheduled commercial passenger flights. This proactive move saved critical time and would not have been possible if the KL RLU had not been located in the region. While the Myanmar total average supply chain length was 23 days, the same as Pakistan, KL RLU stocks had an average delivery time of just 10.5 days, 35% shorter than even Yogyakarta.

Average number of families served per day over 1st two months

The global Logistics strategy is to have stocks in each RLU to be able to deliver to port of entry a complete non-food item kit for 5,000 families within 48 hours of ordering and for a further 15,000 families within 14 days of ordering. This was calculated to equal a response rate of 714 families per day. While KL RLU stocking levels did not reach the 20,000 family kit level prior to Cyclone Nargis, the total Myanmar response (KL stocks along with other sources) actually exceeded the daily response goal at 1,022 families per day.

Cost Per Family Assisted

Since cost information for tsunami operations was not obtainable, comparison is limited to the Pakistan response. Myanmar logistics costs per family assisted were 23% of the costs in Pakistan (excluding tents in Pakistan). This corresponds to similar savings in the Yogyakarta operation where logistics costs per family assisted were 17% of Pakistan. Cheaper transport costs and pre-established relationships with suppliers



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meant KL RLU stocks and KL RLU procurement were responsible for significant cost savings in the Myanmar operation.

Supply Chain Activation

Indonesia and Pakistan both experienced significant delays in activation of the supply chain. As in Yogyakarta, these delays were reduced in Myanmar.

Average number of days to activate the supply chain (Mobilisation to PO)

MYANMAR	YOGYAKARTA	PAKISTAN	INDONESIA - TSUNAMI
5	3	10	18

Direct communication with donors based in the same time zone as the KL RLU (notably with the Japanese RC) contributed to reducing activation delays in both operations. However, for the Myanmar operation, supply chain activation was almost a different metric since many goods did not require a purchase order at all.

Procurement

In general Geneva and KL RLU procurement communicated and worked well within their relatively new roles. KL RLU took full responsibility for procurement for Myanmar and Geneva procurement was in place to offer effective support and advice. The temporary assignment of one individual from Geneva procurement to KL RLU also supplemented the very busy staff at the KL RLU.

Speed of Response

The speed of delivery of relief items is critical in the first two months of response. While Myanmar did not deliver 100% of goods identified on the mobilisation table within this time frame, it did continue and improve upon the success shown in Yogyakarta, achieving 84% delivery of mobilisation table, compared to 75% for Yogyakarta and 38% for Pakistan. This response time shows not only quick movement but also appropriate stocking and procurement decisions. It should also be noted that Myanmar data was based on the mobilisation table of June 12th, more than a month into the operation. The original mobilisation table of 7 May for 30,000 families was definitely met 100% within the first two months.

SECTION 2: INTERNAL SUPPLY CHAIN COMPARISON

Internal Supply Chain Comparison (KL RLU to IKD) Highlights

- Distance traveled: KL RLU stock distance travelled was 65% shorter than direct IKD`s from donors
- Delivery time: KL RLU stock was delivered 65% faster than direct IKD`s from donors
- Transport cost: KL RLU stock 33% cheaper transport than direct IKD`s from donors
- Cost per family kit: 28% cheaper than direct IKD`s from donors
- Framework agreement goods significantly less lead time than non-frame goods



SECTION 3: LOGISTICS COORDINATION & OPERATIONAL SUPPORT

3.1 KL RLU

Procurement and Stock Replenishment

KL RLU stocks were largely exhausted in the first month of operations. Some question remains whether stocks should have been completely depleted versus using some stock and then procuring goods and having them transported to port of entry. In this manner, flexibility to respond to other operations could be maintained. It should be noted however, that the distribution capacity and flow in Myanmar was not readily apparent. Furthermore, majority of stocks are not actually owned by the KL RLU but rather donors, so that the most the KL RLU could do would be to advise donors of best courses of action.

Geneva-KL RLU Communication

Geneva LRMD and KL RLU worked well together during the Myanmar operation. Furthermore, close communication between Geneva and KL RLU allowed for more aggressive actions, such as early tendering for anticipated requisitions. In this respect, the system “worked,” with KL RLU taking the lead, backed up by Geneva.

Staff Availability

In theory, KL RLU staff members were available to assist in-country operations on-site. In reality, visa restrictions kept all but one logistics delegate trainee out of country in the initial response. Even this delegate, however, provided increased visibility for coordination of the logistics response. KL RLU normally attempts to send at least one staff member to assist in-country operations.

Training

Regional Disaster Response Teams (RDRTs) that made it into country had limited logistics training. KL RLU is seeking to continue regional workshops and on the job training programs to develop regional logistics skills among the national societies.

Logistics-Operations Communications

Most operational support personnel had high praise for what one respondent described as KL RLU’s “brilliant” performance. Both operations and logistics benefited from the co-location of KL RLU with DMU and Zone offices. KL RLU definitely crept into areas of responsibility normally assigned to relief or other operations, especially in regards to needs assessments and mobilization table formation.

RECOMMENDATIONS

Regionalisation and Sub-regionalisation

This study shows the clear benefits from regionalisation. On average, KL RLU stocks were cheaper and quicker than goods delivered as IKD, providing faster response to beneficiaries while freeing up more financial resources to meet needs. KL RLU staff members were able to provide a high level of service, benefiting from location and existing relationships with suppliers and transporters. As a sign of satisfaction with KL RLU performance, donors increased their stocks in the KL RLU warehouses after the Myanmar response. As in Yogyakarta, regionalisation made the Myanmar response better, faster, and cheaper.

1. It is recommended that an expansion of KL RLU stock and capacity be explored. Increased donor funding or contribution of stocks at KL RLU should be explored along with the capacity to handle increased stocks.



Strategically located stocks have the potential to complement KL RLU stocks to provide better relief quicker and at less cost.

2. It is recommended that sub-regional warehouses, properly researched for suitable sustainability and location, be established in strategic locations in the Asia Pacific region.

Establishment of Performance Indicators

This study shows benefits of the regional logistics structure, but they are benefits determined only relative to past operations. In order to properly gauge future regional and sub-regional logistics performance, baseline goals and benchmarks should be established. Once done, measurement should take into account not only averages but “outliers” as well, no matter how few, in order to both improve averages and tighten the range of performance. Effective measurement will allow for quicker adaptability, correction, and greater efficiency.

3. It is recommended that effective indicators be established in order to better gauge regional and sub-regional logistics performance in order to continue trends toward better, faster and cheaper.

Establishment of Replenishment Strategy

Regional stocks are only as effective as how many goods are actually available in warehouses at the time of emergencies. Overuse of stocks for one response will reduce the ability to respond to another. Prior arrangements with donors to program use and replenishment will make refilling stocks less variable, making planning easier and maintaining flexibility.

4. It is recommended that use and replenishment strategies be established in coordination with donors and suppliers in order to maintain capacity and flexibility of regional and sub-regional stocks.

Training and Development of Logistics Personnel

The logisticians of today and tomorrow must move beyond their traditional, comfortable skill set and embrace new requirements posed by the regional operating model and the ability to effectively cooperate and coordinate with the many different humanitarian actors in order to improve overall response.

5. It is recommended that a systematic review of training and development of regionally based and national society logisticians to improve skills for regional operating model.

ANNEX 1: TARGET FAMILY KIT (100,000 FAMILIES)

Source: June 12th Mobilisation Table

ITEM	TOTAL QUANTITY	QUANTITY PER FAMILY
Blanket	100,000	1
Hygiene Kit	100,000	1
10 L Jerry Can	200,000	2
Shelter Kit	40,000	0.4
Kitchen Set	100,000	1
Mosquito Net	200,000	2
Tarpaulin	80,000	0.8