HAITI Earthquake Response

Bulletin 6, 28-04-10: The Logistics of Transitional Shelter

Additional information on the Haiti Earthquake Response is available on the Logistics Cluster website: http://www.logcluster.org/ops/hti10a

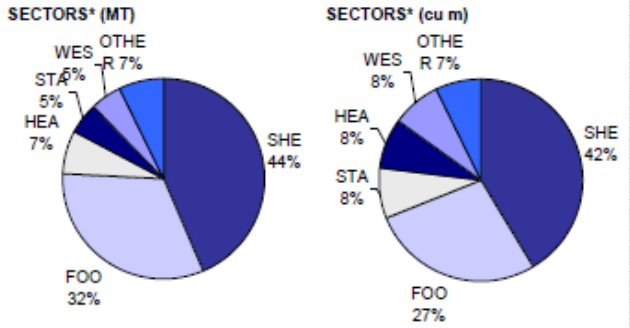
For all cargo movement and temporary storage requests: Haiti.cargo@logcluster.org

For all non-cargo related requests for PAP please contact: Haiti@logcluster.org

For all non-cargo related requests for Santo Domingo please contact: Logcluster.sdq@wfp.org

Context and Background: As the earthquake response phases into recovery, and transitional shelter becomes a priority, organizations need to have a clear understanding of the beneficiary's rights over land sites intended for Transitional Shelters (TSs). This process must be expedited to ensure that the process itself does not cause a bottleneck for the construction of the TS's. In addition to this issue, all parties have stressed that a National Building Code be developed and adopted by organisations and the Government of Haiti (GoH). According to Shelter Cluster, approximately 160,000 transitional shelters have been planned by 40 organisations within the Shelter Cluster umbrella: some of these have already begun pilot TS project sites on lands that have been cleared for the purpose by the GoH.

Dispatches



DISPATCHES, TOTAL

2,530 MT / 10,130 cu m

28 March 2010

All Figures in this Bulletin are taken from The LC Dashboard of items moved through the Logistics Cluster's Common Cargo Movement Service since the January 12 earthquake.

IFRC as lead on Shelter, together with its many partners, have assessed a need for 160,000 TS's, and are planning a completion timeline of 18 months beginning May 1, 2010. Specifications for the TS's are not fixed; however, minimum standards will be determined based on sphere guidelines. IFRC, itself, has programmed 30,000 and will institute a mass procurement and pipeline for the supply and construction. IFRC, as lead on Shelter, is offering its cluster partners the opportunity to use this procurement and supply pipeline including full logistics to point of construction: construction is then handed back over to the partner organisations.

ALL THE FOLLOWING LOGISTICS CALCULATION ARE BASED ON ASSUMPTIONS:

-10 bags cement per TS = 0.5mt – 1 cubic metre (probably procured locally within Haiti)

-10-15 sheets of CGI per TS = 0.5 cubic metre

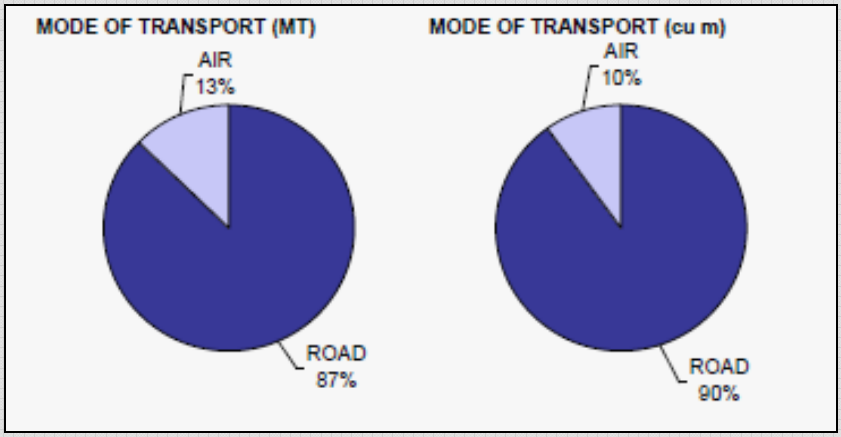
-10 cubic metres of timber sheet / planks / struts / nails / tools / basic household equipment (assume 15 mt =10 cubic metres)

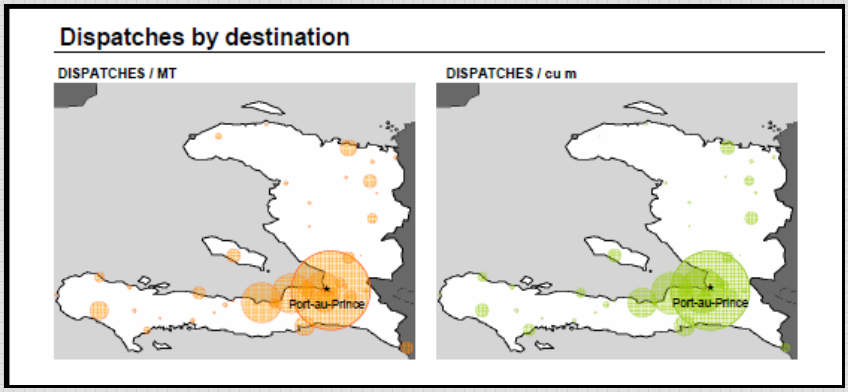
-Hence assume each TS Total volume will be equivalent to 15 cubic metres / 20mt.

-Total cubic = 160,000 TS x 15 cubic metres = 2,400,000 cubic metres therefore cumulative total storage required for 18 months at 3m stacking = 800,000 square metres

-Therefore per month required storage will be equivalent to 50,000 square metres per month (30,000 square metres in PAP, 8,000-10,000 square metres per 5 most affected department / towns, and 4,000 square metres per 10 less affected areas / towns).

Regardless of the number of partners that opt for the IFRC supply pipeline, this bulletin is looking at the logistics of the whole TS programme. The transport and storage of materials for approximately 160,000 TS will require logistics support by either the organisations themselves that are implementing the construction of TS; and / or a significant portion of these will use common transport services provided by the logistics cluster. This equates to about 8,800 TS per month although the programme may not roll-out in an even distribution.





Primary inbound movement of TS items from shipment/seaport

Assuming at least 15 cubic metres of TS items per shelter are brought in by sea and then on-ward shipped within country if feasible; a likely disaggregation of the incoming TS items could probably be broken down as follows:

- PAP (60-70%)
- Jacmel (10%)
- Gonaive (5%)
- Cap Haitien (15%)
- Offload in Dominican Republic -Caucedo (10%)

Grand total for this primary shipping component once landed will equate to 160,000 flat bed trucks over 18 months, therefore 8,900 truck movements per month – i.e. 290-430 trucks required per day

Secondary movement to TS site (assuming only one movement is required):

The 15 cubic metres per TS of approximately 20mt means that two 10mt trucks per TS will be required if ONLY one movement from transit hub is necessary. Therefore 160,000 TS will require 2 trucks, or a total of 320,000 truck trips in 18 months: 18,000 truck trips per month or about 750 truck trips per day based on 24 day month. As the fragile road network is likely to present new challenges in the coming 18 months, the LC and WFP are chartering a barge capable of calling at regional ports/wharfs to resupply regional relief operations. This interagency service should provide a viable alternative to road transport for the TS programmes.

The geography of TS logistics provides some interesting challenges in Haiti. The LC common cargo movement and tracking historical dispatch data illustrated above in geographic spread of destinations gives an indication of the likely future capacity requirements for road and air to the TS sites. For example, as of 28 March, 42 percent of cubic metres moved were shelter items and 10 percent of the shelter items were moved by air to 15 isolated locations. The conclusion can be drawn that if TS is to be provided in the same destinations, then it could possibly require airlift. As of May 2010, the LC / UNHAS are maintaining a reduced fleet of helicopters and fixed wing aircraft: 2 Caravans (10-12 pax), one Mi171 (3mt) and one Bell (1mt / 9 pax). These aircraft service remote areas for cargo dispatches as well as providing passenger services to these areas.

Further information is available at *http://www.logcluster.org/ops/hti10a*