Matching Supply and Demand in Emergency Response

......perspective from a multi-sector, multi-context iNGO

Understanding humanitarian demand

**Demand = Need**

- An average of 650 disaster events per year, affecting tens of millions of people and killing an average of 80,000+ each year
- prompting 60+ international humanitarian responses, mostly in 20+ countries, many simultaneously
- Supply requirements per thematic sector are well understood
- Many events are cyclical/predictable and responses can be planned for – early detection - more manageable events (cyclones, floods, droughts, fragile/chronic states...even earthquakes)

**Humanitarian supply chain models to service this demand include**

1. **Routine (push/pull) Supply Chains**
   (often in complex contexts)
2. **Campaign (push) Supply Chains**
   (often in complex contexts)
3. **Emergency (push) Supply Chains**
   ......many humanitarian organisations support delivery through all 3 supply chains simultaneously to 10s of countries, frequently transitioning from one to the other – Agile Supply Chains (Reliable, Responsive and Flexible)
Challenges in Humanitarian Supply Chains

Some of the challenges in Emergency (push) Supply Chains
- **Insufficient planning** and not being prepared due to funding constraints.
- Competing for products on local and global markets due to **limited product availability**.
- Need for negotiation of rapid production at scale for **new interventions** (Ebola PPE).
- **Access** to the disaster zone due to conflict or natural barriers (rains, landslides, etc).
- Insufficient **supply chain/logistics surge** personnel to deliver in multiple responses simultaneously.
- **Security** related challenges in complex environments (sudden route closure, freight being stolen).
- Ensuring products meet **quality standards** and managing waste/unwanted Gift in kind (do no harm).
- User friendly **technology** enabling good decision making.
- Enabling local systems and markets to return to normal post emergency.

**Routine (push/pull) supply chain challenges**
- Driven by seasonal, epidemiological and consumption data, with significant local sourcing to support market based programming.
- Should be few challenges to on-time delivery and at value-for-money.

However there are regular delays due to:
- Poor supply planning in programme design.
- Stretched procurement/logistics staff with few supply chain qualifications.
- Lack of technology to enable good decision making.
- Access (seasonal) and security (conflict) challenges.

**Campaign (push) supply chain challenges**
- Detailed delivery schedules enable production and pricing negotiations with manufacturers & freight agents.
- Supply should meet demand.

Supply Chain challenges usually involve:
- Sub optimal distribution network design.
- Freight reliability and tracking during mass distributions.
- Need for Subsidies/incentives to create supply and/or demand when bringing new products to market.

Matching supply & demand starts with response planning

- **Category 1**
  - Affecting all levels in a society, including governance systems.
- **Category 2**
  - Affecting all levels in a society, governance systems still functioning.
- **Category 3**
  - Affecting a regional population within a country.
- **Category 4**
  - Affecting a sub-regional population within a country.

**Defining Minimum Operating Levels per country**

**Categorising events** with triggers and resource mobilisation plans.
Matching supply with demand in humanitarian contexts requires

1. Embedding Supply Planning into Program design to support forecasting & costed supply chains

2. Having multi layered supply strategies
   - Access to FWAs for key products
   - Strategically placed Prepositioned stock
   - Negotiated access to Donor Stockpiles
   - Virtual Stock with key vendors
   - Non perishable, regionally relevant
   - Quality Assured GIK from Corporate Partners
   - Defined quality and SLA with partners
   - Positioned for regular use, cost recoverable, speed, with minimum cost (storage, freight)
   - Leverage access by being a first responder

3. Right skills doing the right job
   - Qualified experts to oversee and manage end-to-end supply chains
   - Professional Procurement and Logistics Agents for sourcing and freight
   - Last mile logisticians with experience of delivering in challenging contexts
   - Pharmacists linking health and supply chain data
   - Supported by experienced response logisticians to surge in Emergencies
   - Bringing in new skills & upskilling existing staff

4. Enabled by Business Process Simplification and Technology
   - Forecasting and Demand Planning
   - Procurement and Freight tracking
   - Fleet tracking
   - Inventory and Consumption monitoring

5. Underpinned by Coordination and shared learning

Outsourcing our global procurement to a procurement agent

Reviewing the cost benefit of outsourcing in country procurement

Reviewing business processes and systems to improve delivery and accountability

Operational research related to Malaria and Neglected Tropical Diseases.....and subsequently taking proof of concepts to scale

e.g. supply and demand creation for Seasonal Malaria Chemoprevention (SMC) drugs - 30m treatments of a new drug formulation to 7.5m children in 7 countries in 2015....with an aim of saving 36k+ deaths a year
and mHealth system in Mozambique