



SUPPLY CHAIN PLANNING

Using advanced analytics to anticipate issues and identify solutions

Humanitarian operations are becoming increasingly complex to manage. Staff in the field constantly have to deal with new issues that arise, as well as vast amounts of data that at times can even seem contradictory.

With a strong focus on end-to-end planning, visibility and optimization, the Supply Chain Planning Unit works intensively with colleagues in the field, regional bureaux and headquarters to ensure that all WFP functions have a holistic view of an operation, from logistics to resource management and from nutrition to donor relations. The unit uses analytics to anticipate issues that may arise, and support country offices to develop comprehensive supply chain plans and “what-if” scenarios to address them.

Through this proactive approach, country offices

can make more integrated, evidence-based decisions that improve the overall efficiency and effectiveness of their operations.

The planning approach is rooted in cross-functional collaboration, and supported by a range of advanced analytical tools. For years, this planning support was provided by a team in headquarters, but the unit has increasingly started to deploy its planning expertise to the field, with several planning officers already deployed to complex and large operations (Ethiopia, Syrian Arab Republic and Yemen) and regional bureaux based in Kenya, Panama and Senegal. Additionally, the Planning Unit has started offering their planning expertise as a bilateral service to NGOs and governments, with a lot of work being done in the health sector in particular.

Beneficiaries prefer beans over lentils,
should we adjust our food basket?

During rainy season we are
unable to move food, **how
should we pre-position?**

We are already buying from
smallholder farmers, **should we
scale-up?**



WFP will be receiving 70% of
the funds needed, **how can
we maximize outcomes?**

Local markets are functioning,
**should we favour cash
transfers to beneficiaries?**

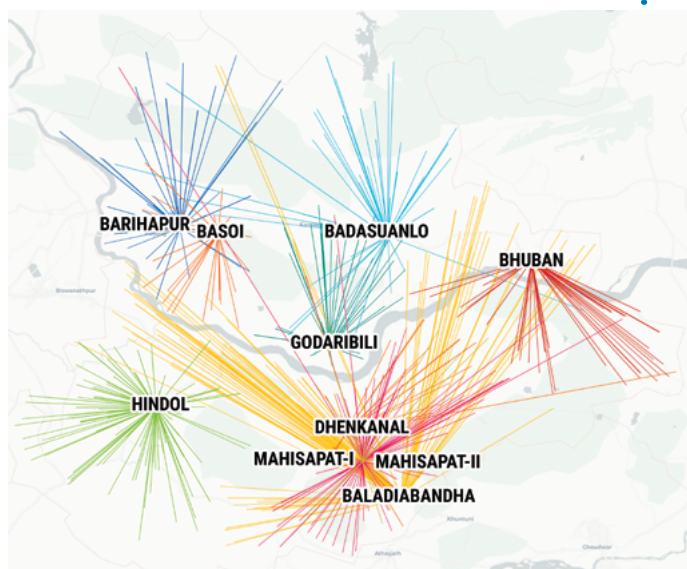
Prices of rice have gone down recently,
from which sources should we purchase?

SUPPLY CHAIN PLANNING AS A SERVICE FOR PARTNERS

In 2018, WFP was asked to optimize the supply chain of India's Public Distribution System, a national safety net that reaches more than 800 million Indians with a monthly allowance of cereals.

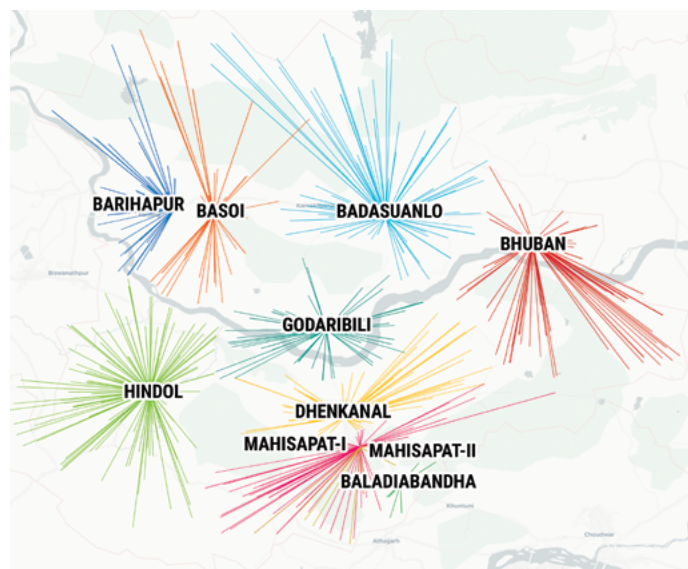
A proof of concept was developed for Dhenkanal district, in Odisha state, where the Public Distribution System assists 928,000 beneficiaries.

This is what the network currently looks like, with several delivery points supplied by multiple warehouses that are not necessarily even the nearest ones



WFP reviewed the various parts of the supply chain to identify inefficiencies and suggest alternative setups. One of the identified issues is that most of the cereal allocations are made based on administrative boundaries, which means that a warehouse in a specific suburb will be connected by default to all the mills and the delivery points in that suburb, even if other locations are physically closer. This results in higher transport costs and a less efficient supply chain.

And this is how the network will look with an optimized allocation that would reduce the average distance travelled between warehouse and delivery point by **21 percent**



“Supply Chain Planning is a magic ball which ensures a cost-effective and efficient operation in the country. Whilst we have had to deliver more food assistance than before, we have been able to make substantial reductions in both the delivery costs and lead times, ensuring help gets to the maximum number of people in need.”

Adham Effendi, Head of Logistics, South Sudan

