

The background of the slide features three glass vials and a syringe. The vials are arranged in a row, with the one on the right being the tallest and the one on the left being the shortest. The syringe is positioned in the foreground, angled from the bottom left towards the center. The entire scene is set against a light blue background with soft shadows.

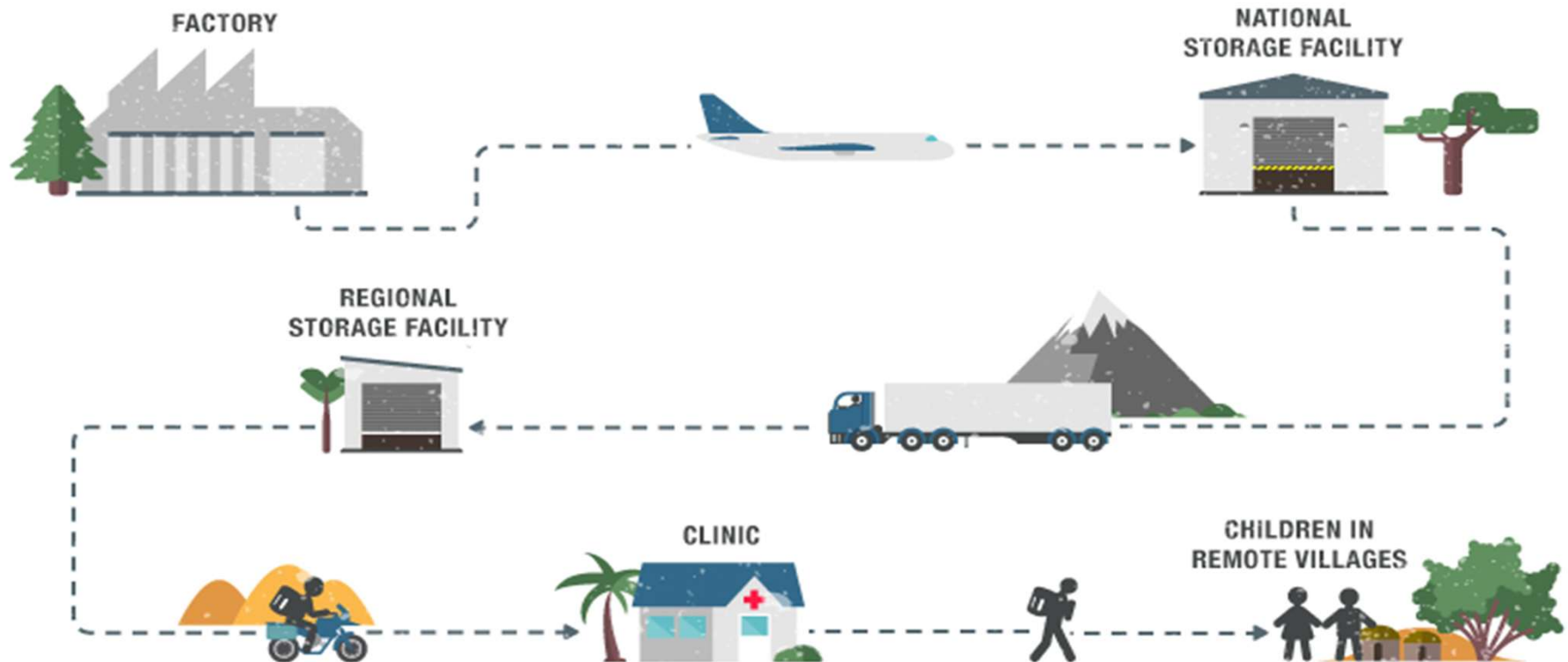
# **Vaccine Supply Chain Working Group Session 1: Decisions to date**

**Steve Jarrett, Gracious International Inc.  
WG Meeting, 18 June 2020**

# Why should we worry about the vaccine supply chain?

## The long road to vaccination

Vaccines must be kept between 2-8°C all the way from the factory to some of the most remote places on earth.

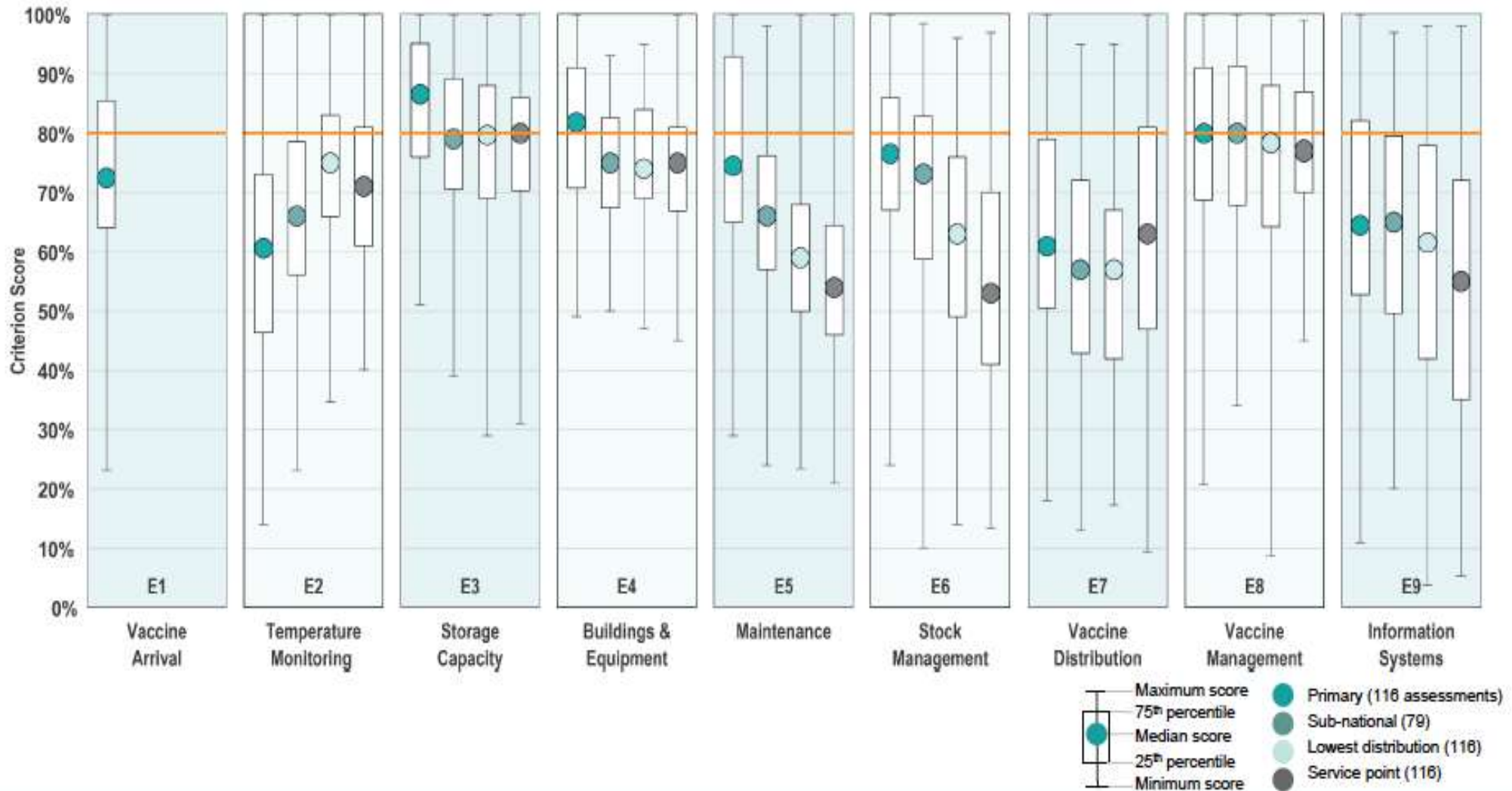


Source: MSF

**Manufacturers' reputation is based on the successful and effective use of their vaccines in vaccination**

# 154 assessments in 89 countries showed poor performance of the supply chain in countries

## Criterion Scores (2009-2016)



# Can innovations by manufacturers improve the performance of the vaccine supply chain?

## Focus:

Innovations where manufacturers can impact positively the vaccine supply chain in countries to make it more responsive and resilient for improved supply security

Innovations where manufacturers can effectively work together on information exchange and developing case studies

# Initial analysis of the vaccine supply chain identified 8 possible areas of interest

Areas identified that can have an impact on the  
vaccine supply chain:

Traceability

Sharing supplier audits

Vaccine exposure monitoring

Heat stability testing

Stockpiling

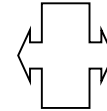
Environmental impact

New packaging and delivery technologies

Direct participation in the distribution chain

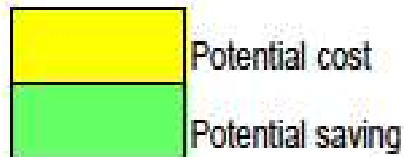
# Most innovations are likely to have a cost but can generate savings in countries

Manufacturer



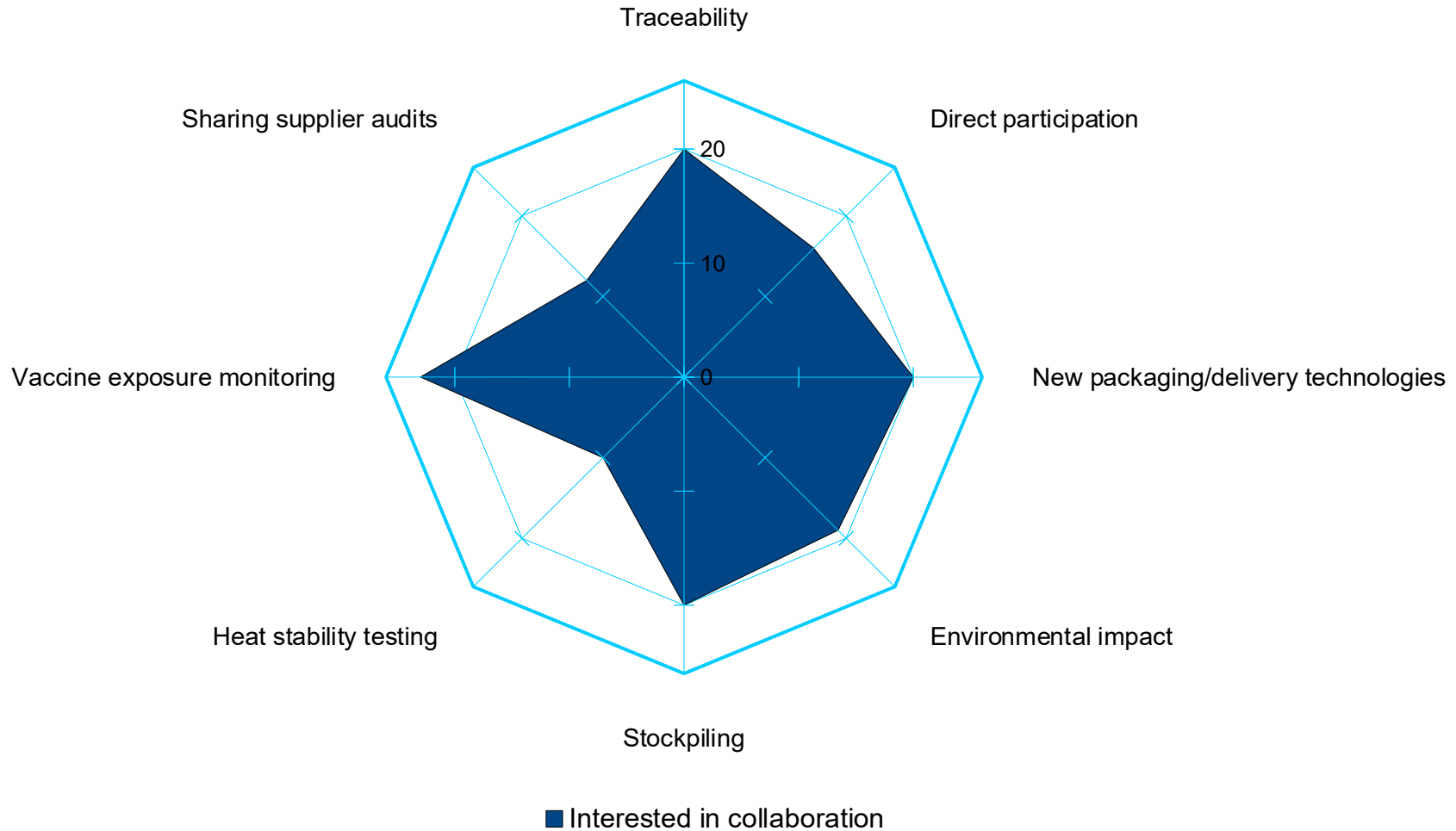
Country

Challenge	Formulation	Filling	Packing	Lot release	Distribution	Storage	Local distribution	Vaccination	Post Marketing Surveillance
Traceability			Yellow		Green	Green	Green	Green	Green
Sharing supplier audits	Green	Green	Green						
Vaccine exposure monitoring			Yellow	Yellow	Green	Green	Green	Green	Green
Heat stability testing	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green
Stockpiling		Yellow	Yellow			Green	Green	Green	
Environmental impact			Yellow						
New technologies	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green
Direct participation					Green	Green	Green		



# Manufacturers' interest in areas for consideration by WG

(Anonymous quantitative survey with 26 respondents)



## Phone interviews provide qualitative insights into the areas identified (9 respondents):

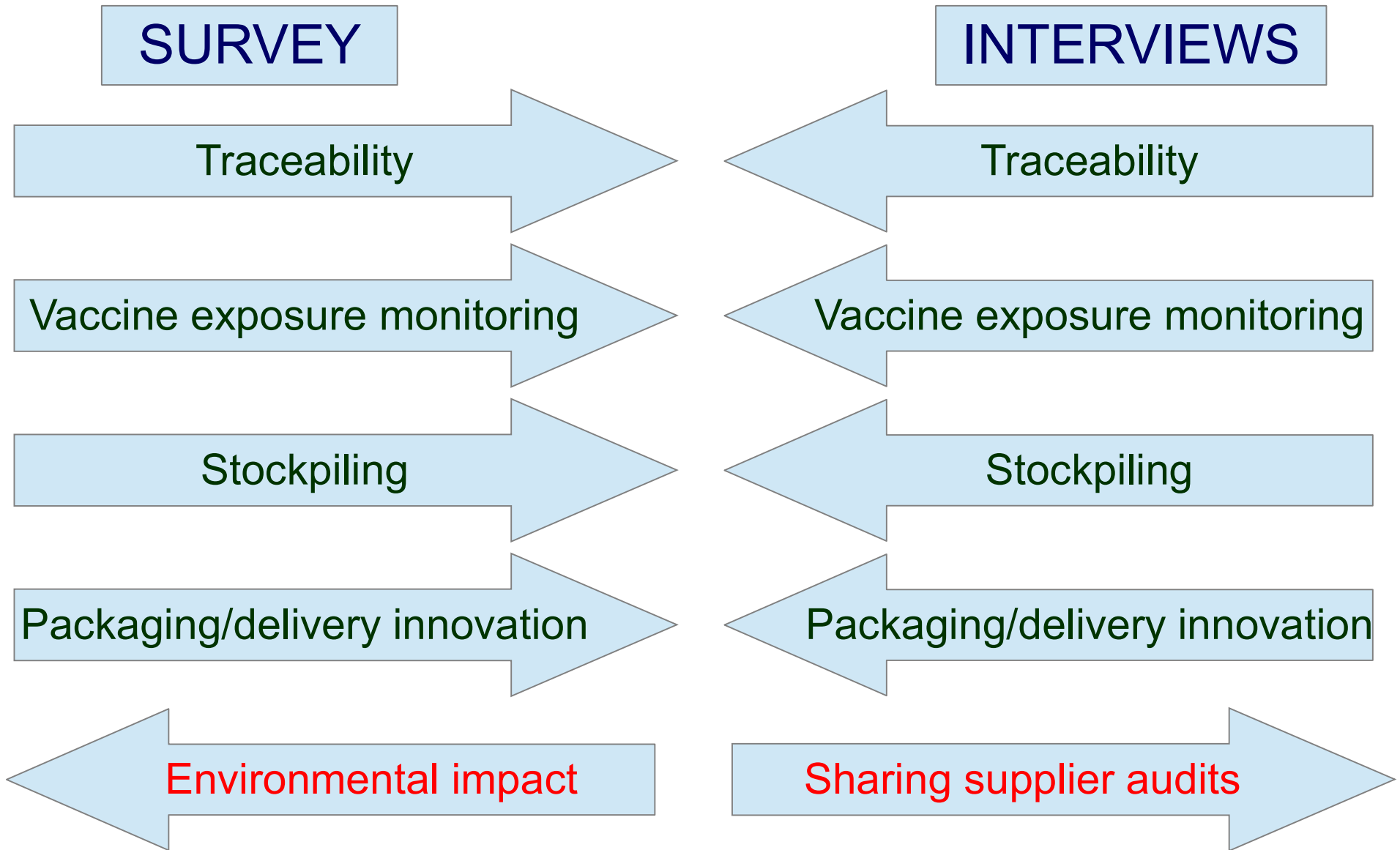
1. Effectively tracking vaccines is increasingly important, but bar coding on primary packaging complex and costly
2. Sharing supplier audits could reduce costs but agreement between suppliers and manufacturer across different regions may be too complex
3. Temperature monitoring devices provide some security in distribution but depend on customer demand
4. Different heat stability testing requirements would require protocols from regulators (countries or WHO); CTC is one example for stable vaccines - a wider range of heat stability data on each vaccine could be positive for marketing



## Phone interviews provide more insights into the challenges:

5. Stockpiling poses potential financial risk; manufacturers expect a financial incentive to hold stock and acceptance of lower remaining shelf life for stocked vaccines
6. Environmental impact is seen to be in the hands of customers receiving vaccines with secondary and tertiary carton packaging able to be recycled
7. DCVMN should be more active in evaluating delivery and packaging innovations being developed to review their cost and relevance to developing countries
8. Direct participation in the supply chain is mostly relevant in the case of national shipments in producing countries

# Comparison of top-5 ratings between survey and telephone interviews were similar



# Final decision on priorities was made by a meeting of selected manufacturers based on the survey and interviews

## WG Agenda:

The three areas selected for a more prominent role of DCVMN in the assessment and development of ideas and concepts:

1. Traceability – directly linked to data quality
2. Stockpiling – for current and epidemic prevention vaccines
3. New packaging technologies – relevance to developing countries

# Terms of Reference for the supply chain WG

## Objective:

The objective of the WG is to share best practices in areas of common interest and find common solutions for actions companies can take to make the vaccine supply chain more effective.

## Focus:

The WG will develop information exchanges, case studies and position papers that can inform DCVMN members and the global immunization community on the specific actions DCVMN members could undertake to improve the vaccine supply chain, including any resource implications.

## Authority:

WG participants from DCVMN members act on a voluntary basis on behalf of the corporate member, declaring any conflicts of interest they may have regarding any work undertaken. The DCVMN Executive Board will have the authority of determining the usefulness of any work undertaken and approving its dissemination.

## Operations:

A specific annual work plan will be agreed upon, including the specific topics to be covered with timelines and deliverables.