

NATURE & MODES OF TRANSPORT

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Modes of Transport

- The **modes of transport** describes the way goods are transported.

- There are basically five different modes;
 - * Rail
 - * Road
 - * Air
 - * Water
 - * Pipeline
 - * Multimodal



Rail

- For heavy and large loads over longland journeys

Advantages

- Lowest overall cost per unit weight
- Railway is the safest form of transport
- Can be most effective when linked into multimodal system

Disadvantages

- Routes between fixed terminals
- They cannot stop at intermediary points
- Rail transport cannot provide door to door service



Road

- The most common mode of transport and it is used at least somewhere in almost all supply chains.

Advantages

- Main benefit: flexibility
- Travel speed
- Use extensive road networks
- Large number of carriers working in the same areas
- Easy to monitor location of goods

Disadvantages

- For shorter distances
- Vulnerable to congestion and traffic delays
- Dependence on fuel price



Water

- It is used for big volumes for international traffic

Advantages

- For heavy and bulky goods
- For products with long lead times
- Cheaper traffic means

Disadvantages

- Difficulty in monitoring exact location
- Limited to appropriate ports
- Transfers to ships take time



Air

- Urgent, perishable goods or high value are transported by air.

Advantages

- Speed of delivery

Disadvantages

- It is a costly transport
- Weight limits



Pipeline



- The main uses of pipelines are oil and gas together with the utilities of water and sewage.

Advantages

- Moving large quantities over long distances.
- Cheapest way of moving liquids
- Local networks can add flexibility

Disadvantages

- Being slow
- Inflexible
- Only carrying large volumes of certain types of fluid

MULTIMODAL TRANSPORT



Refers to journeys that involve two or more different modes of transport.

* Choice of mode depends on a variety of factors. The main ones are the nature of materials to move, the *volume and distance*.

| | SPEED | VOLUME | SECURITY | COST | TYPE OF GOODS |
|------------|-----------|-----------|-----------|-------|---|
| HIGHWAY | High | Low | Media | Low | All |
| RAIL | Media | High | High | Media | Commonly for heavy and large loads |
| WATER | Low | Very High | High | Low | Commonly for heavy and large loads |
| AIR | Very High | Low | Very High | High | urgent, perishable goods or of high value |
| MULTIMODAL | High | Media | Media | Media | All |



Thank You