Lecture Note

Course Title: ITM 3303 Logistics for Tourism Management

Credits: 3(3-0-6)

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Program: Tourism Management

Unit 2: Introduction to Logistics Elements and Principles

Topic

- Concept and principles of logistics and supply chain management
- Elements of logistics management

Objectives

After the completion of this unit, students should be able to:

- Explain the concept of logistics management.
- Recall the principles of logistics management.
- Explain the concept of supply chain management.
- Point out common share of the logistics and supply chain concepts.
- State the elements involved in the analysis of supply chain network, and imply this in tourism activity.
- Describe the link or interaction within the elements of logistics management (process of logistics management).
- Demonstrates idea how to apply the elements of logistics management in tourism product production.

1. Concept and principles of logistics and supply chain management

1.1 The concept of logistics management

Logistics is a broad concept. "It is part of the supply chain process that plans, implement, and control the efficient, effective flow and storage of goods, services and related information from the point-of-origin to the point-of-consumption in order to meet consumers' requirement." From this explanation we can see that logistics has its role in every part of business supply chain and those firms/ companies which involve in that supply chain must manage their own logistics with effectiveness and efficiency for the mutual benefits of the whole supply chain.

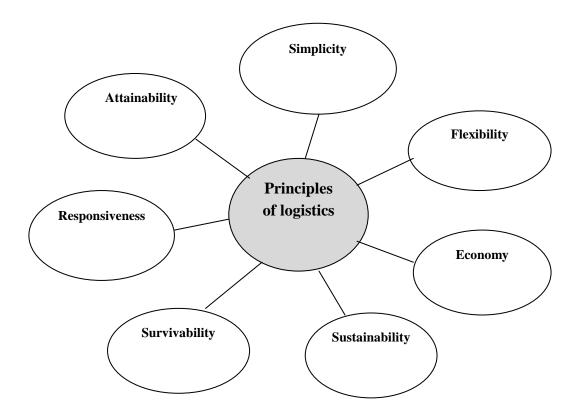
Logistics comprises activities that have interaction. This means that an activity will have effect on another. For example, a reduction of cost of an activity may cause an increase in a cost of another activity (or other activities), and make the whole logistics less effective.

The interaction can be drawn into the figure below that illustrates the elements of logistics management. Elements of logistics management include the following:

- (1) <u>Input factors</u> (natural and production resources, human resource, financial resource, and information resource)
- (2) Operational management (planning, operating, and monitoring)
- (3) <u>Logistics process from producers to consumers</u> (raw materials, materials during production/ manufacturing, and finished products)
- (4) Main logistics activities including inbound logistics and outbound logistics
 - *Inbound logistics* concerns material management. It mainly supports production. Related tasks include forecasting of raw material demands, procurement of raw materials, planning for demands of raw materials, production planning, management of raw materials for production, management for movement of raw materials, management of materials inventory, and packaging.
 - Outbound logistics deals with physical distribution management. It responds needs of selling and marketing. The main duties include management of product inventory, management of moving products in warehouses (dealing with inventory system), packing of products before distributing to points of consumption (point of consumers), product inventory control, planning for product distribution, purchase order processing, transporting products to customers (from distribution centres to wholesalers or retailers), and customer service management.
- (5) <u>Outcomes</u> (competitive advantages in the market, effectiveness of time and space uses, effectiveness of products transportation to end consumers, and assets or values)

1.2 Principles of logistics

Principles of logistics can be demonstrated in the figure below.



- (1) Responsiveness: Right support in the right place at the right time
- (2) <u>Attainability:</u> Ability to provide the minimum essential supplies and services required to begin operating of production
- (3) <u>Simplicity:</u> Avoidance of complexity and enhancement of efficiency in both the planning and implementing or carrying out of logistics operations
- (4) <u>Flexibility:</u> Ability to adapt logistics structures and procedures to changing situations, missions, and concepts of operations. Logistics plans and operations must be flexible to achieve both responsiveness and economy.
- (5) <u>Economy:</u> Provision of support at the least cost
- (6) <u>Sustainability:</u> Ability to maintain and continue logistics support to all suppliers throughout the area of operations for the duration of the mission. Consideration of the most difficult tasks may be done in order to respond the most difficult problems that can occur during logistics support. This will ensure that logistics support to all suppliers can be continued.
- (7) <u>Survivability:</u> Capacity of the organization to overcome when it faces potential destruction. Organization must include a plan for protecting or securing logistic installations (systems/ mechanism) with provisions for reinforcement (back up) and dismiss support.

"Responsiveness" is the primary principle

The five "rights" - - - the simplest definition of "logistics"

Supply the right product at the right place at the right time in the right condition for the right cost to the customer.

1.3 The concept of supply chain management

The concept of supply chain is based upon the integration of business process throughout the supply chain, which needs to be done in order to create (1) product flow; (2) storage; (3) information flow; and (4) fund flow (financial flow) from the origin to the end of consumption with efficiency and effectiveness. The supply chain management concept says that it manages the link of these flows together, while increasing the product value to end consumers and other stakeholders (i.e. suppliers) in the supply chain.

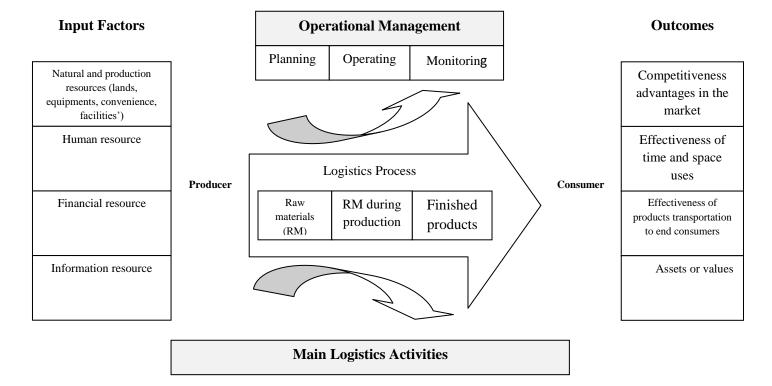
Normally, the analysis of supply chain network covers the analysis of or looking into the following:

- (1) *Plant location*: in tourism, it can be about location of travel companies, location of destination, which is more geographical concern.
- (2) Warehouse network: in manufacturing industry, warehouse network is the point that connects between factory and consumers. It is the place to store finished products that are from factories and they are classified in accordance with customers' inquiries or orders. Warehouse is also the point of transit/ transfer of products to consumers (in manufacturing industry, it is called "cross- docking). This point also provides relevant services such as making products ready for sale or floor- ready merchandise, or final assembly
- (3) Other nodes: node is the point that functions similar to warehouse but it can be other types. It is where products may stop (hours or overnight) there in order to run some process before moving on or transfer to destinations. For example, products may need to be moved from one transport mode to another mode, or there are some official document procedures to do for those products before moving on. These nodes can be, for example, port, railway station, airport, and custom.
- (4) *Supply chain network*: supply chain network involves several firms or companies or organizations in the chain that are important to the focal firm in terms of strategies, production operation and marketing. It is that the management of supply chain network aims

- to create more values and to respond consumers' desires/ to satisfy them. The management of supply chain network is therefore about managing relationship between focal firm and its partners, supply chain process, and link of information chain. Supply chain network includes supplier networks and distribution networks.
- (5) *Products flow*: product flow includes inbound flow and outbound flow. Inbound flow is the flow of raw materials into production and outbound flow is the flow of finished product out to customers (those who order products to be sold again) and end consumers (those who purchase products for use) based on their orders.
- (6) *Informational system and communication*: as market network, demand network and business process today covers areas all around a country or the world. The logistics and supply chain management is therefore complicated. Production and marketing management requires fact, responsive and accuracy. Human labor is not enough, but it needs software (s) to be utilized throughout the process of all linked activities.
- (7) Third party logistics service providers: to design supply chain, it needs analysis, which can be done either by in- house or outsource providers. Many companies decide to manage only activities that are their core competency. For the rest, the company may decide to hire other companies to do, if the company sees that it will be more effective and reduce cost (we call this "outsourcing").

2. Elements of logistics management

The figure below illustrates the elements of logistics management.



Inbound Logistics

- Forecasting of raw material demands
- Procurement of raw materials
- Planning for demands of raw materials
- Production planning
- Management of raw materials for production
- Management for movement of raw materials
- Management of materials inventory
- Packaging

Outbound Logistics

- Management of product inventory
- Management of moving products in warehouses (dealing with inventory system)
- Packing of products before distributing to points of consumption (point of consumers)
- Product inventory control
- Planning for product distribution
- Purchase order processing
- Transporting products to customers (from distribution centres to wholesalers or retailers
- Customer service management

Learning Activities and Medias

- Introducing with some VDOs.
 - (1) Introduction to Supply Chain Management, Transportation https://www.youtube.com/watch?v=Umk3G13aBhY
 - (2) A Behind the Scenes Look at Starbucks Global Supply Chain https://www.youtube.com/watch?v=EIYNhGbOTOQ
 - (3) Coca Cola Supply Chain https://www.youtube.com/watch?v=UBSOiHUctrY
- Lecture and discussion
- <u>Class activity:</u> In group, let's brainstorm to match the concept of supply chain management and the elements of logistics management with the service/ tourism 8 marketing mix.
- <u>Task at home no. 2:</u> group assignment (presentation): In group, you are assigned to work on a type of transport mode: *Road / Rail / Marine / Air / Canal and River*. Then, research and study about its history of development, roles in the past and present to the world, and prepare a power point presentation next class. Pictures are needed.