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MARITIME TRANSPORT IN CUBA
ITS LINK WITH ECONOMIC PLANNING

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I. Introduction

Economic planning opens great possibilities for nations and entire regions to make use of their resources. Nevertheless in order to realise the advantage of economic and national planning, favourable conditions for this planning are necessary.

The emergence of the socialist society in Cuba allowed for the first time in Latin America for the posing of serious objectives and the ability to count on the involvement of all workers towards achieving these objectives. The fundamental objective of social production within socialism is the full satisfaction of the growing material and spiritual needs of man. In trying to achieve this general goal, different intermediate tasks have emerged.

The nature of these tasks has been determined by the level of development of the productive forces in each given period and by the objective economic conditions, but all these tasks ought to be used to achieve the fundamental objective - and that is to increase peoples' well-being and to develop the productive forces within the society.

On preparing their plans, the developing countries pay great attention to the development of production for export and also to foreign trade. The economy of almost every liberated country depends, to a great extent, on the world market. One of the most difficult problems of this group of countries is the lack of qualified personnel to man the modern sections of the economy, for that reason the liberated countries make great efforts to train their key personnel.

It will be necessary to continue the efforts of giving to the national economy the infrastructure in accordance with the needs of the development that is foreseen.

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The economic development of a country demands the increase of transport facilities for freight as well as passengers, with all of these working under principles of proper security, promptness, reduction on the time spent waiting and reliability of the established schedule. All the indices and measures within the plan for the development of transport in Cuba ought to have economic bases, by means of the use of planning methods and economic stimulus according to the principles established by the System of Direction of the Economy. The fundamental task within the area of transport is to ensure interrelated development of all the means of transport, with the aim of fulfilling all the growing needs of the national economy

The transport plan includes the performance indices and also the development of rail, sea, air and motor transport. This plan is based on four fundamental elements:

- (i) The transport demand
- (ii) The efficiency of the transport facilities at our disposal.
- (iii) The circulation capacity of the existing infrastructure (railroads, highways, ports etc.) and also the available modes of transport.
- (iv) Determining the capacity of the modes of transport and infrastructure necessary to satisfy the demand for the future.

Taking into account the importance of foreign trade in our economy, special attention is given to international freight and also to movements within the ports.

Important investments are allocated for the expansion and modernization of port facilities, providing them with techniques of high productivity. Shipyards are built and expanded and the merchant fleet are increased with modern ships for international transport as well as coastal transport.

II. Maritime Transport (Background)

In the years preceeding 1959 maritime activities in Cuba were not directed towards the interest of the country. Freight transport was carried out mostly by regular transnational lines, because there did not exist a truly cuban enterprise which had the necessary experience to negotiate shipping contracts and manage ships of foreign flags.

On the other hand coastal transport with truly cuban characteristics did not exist in the context of freight traffic in the territory.

After 1959 there emerged enterprises which were responsible for promoting and managing a national fleet not only for coastal trade but also for international voyage. In addition, there was the creation of an enterprise wholly in charge of the freight transport of Cuban foreign trade, as well as the hiring and management of ships of foreign flags. Since then the growth of the merchant fleet has been rising at a fast rate.

The new dynamism given to the Cuban economy, made it possible to locate markets for its products in much farther places than before. It also allowed for the growth of the volume of the country's foreign trade to outstrip the growth of our own merchant fleet. This reality has led to the adoption of new measures aimed at avoiding a situation whereby these maritime activities becomes the unequal link limiting the progress of the rest of the economy.

III. General Considerations of the Plan

As its objective, the Transport Plan must satisfy, with as little expense as possible the needs that the national economy and the population has of it as well as the improvement of the quality of services given.

To this end it must guarantee increased efficiency in operations in the use of the means of transport and of basic investments. It must also

accelerate delivery of freight and produce economies in labour, material and fuel expenses.

a) Specifies

The plans for the development of transport must anticipate the subsequent improvement of the use of the basic means, the development and technical reconstruction of all types of transport components of unified transport system for the country, the mechanization of the processes of loading and unloading, repair and other works and measures in order to increase work productivity, reduce the transport cost and increase income and profitability of the different types of transport.

The transportation volume which determine the level of development of the technical means of transport must be internally consistent to freight transport must correspond to the demand resulting from the activities that may develop in the production of goods and services - passenger transport must fulfill the needs that the population has to move from one place to another, taking into account the most economic means of transport and the preferences of the user. The development plan for permanent facilities and of the supply of means of transport must guarantee not only the meeting of incremented demand but also the creation of the necessary reserve capacity in infrastructure and transport mode.

The development of the unified transport network must be co-ordinated with the development and location of the productive forces, as well as with the increase in foreign economic links of the country. The bases for its development is the rational links between the economic regions and the industrial centres as well as the optimum freight transport distances for the different modes of transport.

In the development of the different modes of transport one must make allocations based on the rational distribution of transportation between the modes of transport bearing in mind both the physical capacity of a given mode and also the capacity of the infrastructure. These allocations must also be considered in the development of permanent facilities.

All the indices and measures included in the plan for the development of transport must have economic foundation by means of the use of planning methods and economic stimulus in accordance with the principles established by the system of the Direction of the Economy.

The value of the production (Gross Production) of the transport sector is equal to the value of the transport services, destined for sale, created by specialised transport enterprises, in addition to other income produced by them. Included in the value of transport services are the value of transporting goods and passengers and other operations related to it. Specifically the values reflect the cost to state transport enterprise for the transportation of goods, passengers and mail, the loading and unloading operations carried out with the resources of the enterprises within railway stations, ports and airports, as well as storage. Apart from these it includes the income received from the renting of equipment to other enterprises, as well as rail, port aeronautic and airport services.

- Assessment of Production of the Transport Sector

All the elements that make up the Gross Production of transport will be valued according to the tariffs in force, - they will take into account the criteria relative to economic benefits derived from use of the transport modes, the transport distances and the agreements on international tariffs.

For the elaboration of the Balance of the Overall Social Product, one must take into account while elaborating the transport balances a breakdown of the transport gross production, according to the end use (Industry, agriculture, export and individual consumption).

The transport plan is linked to the remaining sectors of the plan of the national economy, by way of the balances elaborated for the transport activities and by the resource requirements of the different categories of the plan. In elaborating the national transport balance it is necessary to have :-

The Country's Production and Foreign Trade Plans

The value of trade production and the imports of the different sub-sectors of the industrial and agricultural sector, as the physical production in tons and the value of the mercantile production and physical import and the nominal value of products are used to elaborate this balance. This information will permit the elaboration of the transport coefficient and determine the quality of the information given about the transport demand.

The demand for transport is calculated in tons according to origins and destinations.

The Construction Plan

Port facilities are put into operation within planned periods with basic guidelines such as length gage speciality and capacity. These elements will permit analysing of the link between the volume of the freight and the capacity of the transport infrastructure.

The Foreign Trade Plan

The demand by Cuba to transport general as well as specialized cargo, requires that attention be paid to the origin and destination of goods. One

has to make clear distinction between the geographical areas of embarkation^a for imports and the overseas reception areas for its imports in such a way as to define the international transportation plan.

The demand for freight transport facilities for imports and exports within the national ports, is the basis on which the port services are determined. For each section of the plan the resources needed for its successful implementation is identified.

b) Planning of the International Freight Transport Demand and Port Services

The international freight transport plan guarantees the satisfaction of the demands resulting from foreign trade, while aiming for the highest efficiency of external costs, without underestimating the possibility of earning foreign exchange when the operational conditions so permit.

The international service is structured by classifying freights and/or movements according to the direction of the exports or imports, a matter which is governed by the analysis of maritime activities.

In order to calculate the demand of activities two types of analysis should be done :

- (a) The port (services facilities) demand
- (b) The international freight transport for Cuba resulting from foreign trade.

Port Services Demand

It is determined by the services demanded by foreign trade of the total exports and imports as well as the traffic from other countries and also coastal cargo.

The basis of the calculation of each elements is as follows :

- Freights for foreign trade must be defined in terms of ports of destination for imports and ports of embarkation for exports.

All of this is the result of a plan drawn up by the Ministry of Foreign Trade and according to information given to it by the agencies using it as to the place of consumption of the imports and the origin of the exports.

- Passenger transport handled within the national ports are as a result of agreements signed between enterprises of socialist and capitalist countries and from the Ministry of Transport, who will inform of the effects of these on the elaboration of the plan.
- The service given to coastal transport will be a result of the national freight balance for internal transportation.
- International Freight Transport Demand

This is a result of the agreements foreseen by the Ministry of Foreign Trade from the FOB imports and CIF exports. In order to calculate the necessary capacity for its operation, the origin and destination of the cargo at the level of selected geographical areas will be defined, classified as imports and exports. In order to define the possible countries for contract or sale the foreign trade organization will take into consideration the value of transportation services with the aim of achieving the most efficient alternative for the national economy. The allocation between the national fleet and the rented fleet is defined, based on the balance between the demand and the needed capacity.

To elaborate the balance between the port capacity and the international maritime transport, a product index has been created, which includes classification at the packing stage. The latter (corresponding to a breakdown of the foreign trade demand) permits

the separation of the nominalized products by type of packaging, facilitating its classification. In order to calculate capacity, it is classified in terms of exports, imports and coastal products, making groupings of basic products.

Taking into account the importance that irregularity of demand of services has on maritime activities, the annual demand must be presented and examined on a quarterly basis, with the idea of maximising service at any given time.

IV. Planning of the Capacity of Different Means of Transportation

On determining the level of transportation for freight and passengers for each mode of transport, the next step is to calculate the capacity needed for each, in order to fulfil the demand of the proposed services. Two basic indicators have to be taken into consideration:

- (a) Performance of the functioning capacities, which the transport production shows (tons or ton/miles) related to each ton operating capacity.
- (b) Operating coefficient of the capacity which expresses the percentage of total functioning capacity.

The calculation is done on relating the transport demand resulting from the capacity yield, determining the capacity that must function, and the latter is divided by the operating coefficient capacity will show the total capacity demand.

Within the area of maritime transport the calculation to determine the needed capacity of ships and port facilities is determined.

For the calculation of the capacity demand of fleet the following is established.

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$$CT = \frac{Ql}{Rce - Tde} + Cr + Ci$$

Where : CT is the total capacity of the fleet in tons per dead weight. (DWT)

Ql is the freight traffic in tons/kilometres.

Rce is the operating capacity (tons - kilometres by ton of dead weight yearly).

Tde is the tons per daily operation of a ship in a year. (Tons per dead weight).

Cr is the capacity of the fleet under repair.

C : is the idle capacity.

In order to calculate the operating capacity the following calculation is done:

$$Rce = a.e.v$$

Where: a is the coefficient of cargo operating capacity

e is the coefficient of the sailing capacity

v is the average speed under operation (weighted by the capacity).

For these capacity calculations the types of ships and where they operate must be taken into account. The following pointers are used as well.

- (a) Coefficient of the operating capacity in (in freight and passenger ships).
- (b) Available tons per day
- (c) Coefficient of dynamic operation of the passengers' capacity
- (d) Average monthly price per ton of dead weight rented.

In order to determine the annual receipt in tons operated by a dock for general cargo the following calculation is made:

$$Q_a = \frac{30 \cdot Q_{ad} \cdot C_m \cdot C_{oc}}{i_m} \cdot N$$

Where: Q_{ad} is the daily receival capacity
 C_m is the meteorological coefficient
 C_{oc} is the dock operation coefficient
 i_m irregularity coefficient (peak month)
 N number of working months in the year

In the calculation of the daily receival capacity the number of daily work shifts and the tons per brigade, will be taken into account, considering the latter, the level of mechanization, the type of ship and the freight.

In the case of docks handling bulk freight the same is used but each indicator will have the value resulting from the technology installed in the docks, thus affecting mainly the daily receival capacity indicator.

For the elaboration of the plan, the following indicators will also be used :

- . utilization of the receival capacity (tons operated/tons capacity).
- , Dock meter in use
- . Tons according to meters in use
- . Gross intensity
- . Net Intensity
- . Average yield per worker.

V. Operation of Ships for Long Voyage

Attending to the need to ensure transportation of Cuban cargo as well as taking into account the volume and the character of trade our country has established a set policy as regards buying and selling with the main countries

of the socialist bloc with developed capitalist countries of Europe and Asia as well as under-developed countries of Asia, Africa and Latin America. It is usually on the basis of C.I.F. (Cost Insurance and Freight) and F.O.B. (Free on Board) for imports and exports respectively.

Cuban Freight Enterprise (Cuflet) has the function of ensuring the shipment of Goods for foreign trade, in those cases where the sea transport is paid by Cuba using the capacity of the fleet for such shipment and using additional capacity from foreign ships within the international freight market or by means of bilateral agreements on sea transport.

VI. Statistical Data before the Triumph of the Revolution Units and Capacity

Before 1959 the Cuban merchant fleet was comprised of 14 ships with 58 thousand D.W.T. (Dead Weight Tonnage), all of which were operated by transnational corporations and enterprises. After 1959 the Revolutionary Government embarked on a wide programme for the development of the Cuban fleet, so that from the beginning of that year state entities emerged destined to promote and manage the national fleet. Shippers enterprises were created with the aim of assuming, on behalf of the state, the monopoly of the maritime transport for goods as well as for passengers.

VII. Sea Transport Enterprises

The organization structure of sea transport is as follows. There are two shipping enterprises which operate the ships of the national fleet and one operator enterprise which is in charge of the use of the capacity of the national fleet as well as those ships which are chartered in order to guarantee the international sea transport.

The forming of the two shipping enterprises is a result of the interest

of the national economy to develop its fleet. The Mambesa Shipping Enterprise operates the biggest ships and these are used for making the longer runs in international waters. The Caribbean Shipping Enterprise has smaller ships and they are responsible for making the coastal runs, and runs within the Caribbean Basin.

On account of our country being an island which corresponds to a country with an open economy, International maritime transportation has exceptional importance to our external relations.

The development of coastal transport is conditioned by the harmonious and proportional growth of the national system of transport. On having a planned economy, it is possible to study the role and area of influence of each type of transport. In the specific case of the Republic of Cuba the situation exists where there is a developed system of public roads, (railways and highways) throughout the country; as such the three basic means of transportation railway, motor and sea transport compete with each other.

After having done some investigation it was suggested that the main to be played by coastal transport should be to make the long journeys between ports moving specialised cargo. This constitutes the basic conditions governing the operations of the coastal fleet.

a) Mambesa Shipping Enterprise

(This makes international journeys)

It has 61 units consisting of general freighters, container-carriers, carriers, refrigerated units, multi-purpose and training ships. Total capacity is 779,000 D.W.T. The average age of the fleet is ten years.

b) Caribbean Shipping Enterprise

This is reserved mainly for making coastal runs. However, it sometimes

extends to the ports of the countries of the Caribbean and occasionally trans-atlantic voyages. It has a total of 23 freight ships with a capacity of 113,634 DWT, including freight tankers, cement-carriers, tankers, and trans-shippers. It has 13 ships of different types and capacity for passenger service.

c) Cuban Freight Enterprise (CUFLET)

As a state entity, this is designed to carry out the operations of its own ships as well as the ships of the national fleet. It must obtain cargoes from third world countries in order to utilize the fleet in moments when there is very little work to be done, this being a result of the seasonal characteristics of transport demand. In addition, a goal is to try to earn foreign exchange.

VIII. Coastal Transport, Port Facilities

a) Coastal Transport

The merchant fleet that deals with coastal cargo, transports general cargo, liquids and dry cargo between the Cuban ports and also to other ports in the Caribbean.

It is important to emphasize the projected development for the merchant fleet responsible for coastal transport.

At the end of the five year plan 1976-1980, almost all our ships will have been replaced with highly specialised ones, ships for transporting bulk cement, ferries and cistern ships for all types of liquid.

With the development foreseen for transport for national traffic, the demand for sea transport within the national economy will be satisfied, and as it is well known at the end of this five years plan, we intend to be able to be able to cover the coastal transport of oil with our ^{own} ships by increasing the capacity and achieving the highest efficiency.

b) Passenger transport between Cuban Ports

At present the main ports for this types of traffic are Batabano' and Gerona in the Isle of Youth, this is due to the steady growth of the student population that come from this region, as well as from other ports in the eastern provinces of the country.

c) Port Facilities

In order to improve the performance of port facilities and to achieve the maximum from the capacity of the fleet, an improved operative planning system was established with the aid of the USSR. In addition investigations were carried out jointly with foreign firms and they came up with immediate measures to solve the most urgent problems.

The operative planning system began with efforts aimed at speeding up the withdrawal of goods from the ports with the help of the other state organizations. The building up of regular lines has contributed to improvement of the freight traffic between national and foreign ports.

Other measures adopted in order to achieve increased efficiency include the development of a standardization of freight; to such an end a National Commission for Freight Standardization was created. In addition, there has been increasing tests in the use of pallets containerization and unslinging elements.

The country has more than 20 ports which handle all types of cargo. Of these the most important ones are those in Habana Santiago de Cuba, Cienfuegos and Nuevitas, since these handle container cargo.

IX Maritime Trade with Member Countries of the Council for Mutual and Economic Aid (COMECON)

The existence of a council for Mutual and economic Aid as an organization incharge of establishing economic links for the development of the socialist

countries, offers through its organization an example of multinational co-operation within the area of maritime transport. The organization studies the participation of the countries in relation to transportation; it looks into the efficiency of the use of their respective fleet, tariffs, tonnage of port loading and unloading and other aspects of maritime transport.

On account of the present level of development of Maritime Transport in Cuba, it finds itself favourable in its relationship with the other countries of the COMECON in terms of the different issues agreed on in this area.

One concrete way in which this relationship was brought about was with the forming of regular multinational lines, Bulcuba and Cubalco, which links the Cuban ports with the European ports guaranteeing the transportation of the cargo resulting by their trade relationship.

X. The Present problem of Transportation in the Caribbean Basin and Cuba's Trade.

Since 1974 great efforts have been made aimed at promoting our foreign Trade mainly in the Caribbean area and Guyana. Relative advance can be seen in this process since this area holds the greatest possibility for the export of our non-traditional and new products. Export management has been achieved in spite of the fact that the underlying infrastructure has not always been in existence.

For more than one reason there exists the need to develop a transport policy particularly for the area of greatest commercial activity - that is the Caribbean Basin. At present, by virtue of the bilateral trade relations established by Cuba in the region we can identify this geographical zone as one which holds trade possibilities for our country.

In terms of maritime transport, based on the fact that it involves small

ship operations where schooners of 60 MT capacity and even ships of 800 and 1,000 TM can participate, all these capable of transporting dry cargo and/or refrigerated cargo for this early stage. However, for the bulk of our products there is need for regular lines and a small tramper fleet which can withstand eventualities and at the same time ensure its profitability by carrying cargos between the caribbean ports.

On the other hand the Caribbean Shipping Enterprise was formed with the idea that it was needed to operate in an area of the service of foreign trade.

XI. Cuba as a member Country of Namucar

During the last decades several independent movements have emerged in Latin America. Regional and sub-regional mechanisms have been gradually growing with an aim to integrating their economy and have even openly suggested the possibility of the economic integration by means of the forming of Latin American Multi-national Enterprises.

The first step was an attempt to break the established methods, creating an efficient transport mechanism that would serve as an instrument for development of the markets and promote the economic and social sectors that comprises the Caribbean Basin, thereby complementing the services already given by the established Naviera national lines.

It is an obvious fact that the Caribbean Basin has at present, a wide range of products that can be quickly traded. On the other hand much of its economy is not complementary, but concerted efforts must be made aimed at increasing the exchange terms and to decrease the factors of dependency.

In order to increase the volume of intrazonal exchange we need to remove once and for all the obstacle that presents itself. The irregularity and the deficiency of maritime transport, limit the production capacity of the countries .

and hinders trade to a great extent.

Caribbean Naviera Multinational is the response of eight countries, including Cuba, which have resolved to stand up to the test of time and hoist the flag of independence and dignity in the heart of America. The formation of Multinational fleets with state participation offsets the negative effects caused by the prices of export products on having to pay high freight rate to Conferences that impoverishes our economy.

Namucar now receives attacks from those who receive benefits from the Conferences, and who barefacedly try to usurp the rights to carry the trade of the Caribbean countries.

Namucar has three ships of its own with more than 15,000 DW.T. It has an average of two ships leased, with a tonnage between 1500 and 2500 D.W.T. The enterprise's capital is about 30 million dollars and its agreed capital is 14 million dollars, and the contribution made by the following countries amounts to \$10,700,000. (Costa Rica, Cuba, Jamaica, Mexico, Nicaragua, Venezuela and Trinidad Tobago). The cargoes carried by NAMUCAR have represented an annual average of 70,000 tons which constitutes less than the 10% of the cargo available in the area.

NAMUCAR economic management has been below expectation because since it has been in operation it has lost more than \$5,600,000.

Starting with the last councils, measures were taken to modify the situation considering that at present the personnel in charge of the management of the enterprise has the necessary conditions to achieve its goals that is not to obtain a profit but to give service to help trade's development by at least breaking even.

Our country is willing to search for formula and ways to increase the efficiency of our operations as a means of avoiding disbursements which impover-

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ishes our economy. All of this will bring concrete benefits which will allow us to improve the standard of our people and the development of the countries of the Caribbean area.

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