REPRODUCTION/08-82

# UNITED NATIONS AFRICAN INSTITUTE FOR ECONOMIC DEVELOPMENT AND PLANNING

DAKAR

### NINE-MONTH PROGRAMME IN DEVELOPMENT AND PLANNING (October 1981-June 1982)

First Semester: October 1981-March 1982

#### TRANSFER OF INDUSTRIAL LOCATIONS\*

A SURVEY OF FREE PRODUCTION ZONES AND WORLD MARKET
FACTORIES IN AFRICA, ASIA AND LATIN AMERICA

Otto KREYE

MARCH 1982

<sup>\*</sup>Max-Flank Institute for Research on living conditions of the scientific and technical World; Stranberg.

This article is an extract as a report "World-Market-oriented Industrialization of Developing Countries: Free Production Zones and World Market Factories. This report represents the third part of a book, The New International Division of Labour, by Folker FROBEL, JURGEN HEINRICHS et Otto KREYE, Cambridge University Press, 1980, 425 p.

### TRANSFER OF INDUSTRIAL LOCATIONS\*

### A SURVEY OF FREE PRODUCTION ZONES AND WORLD MARKET FACTORIES IN AFRICA, ASIA AND LATIN AMERICA

The subject of this article is the study of a new element of the international division of labour: the existence of zones in Asia, Africa and Latin America where production evades all control and where the use in industry, of available manpower leads to the creation of enterprises producing for the world market. (EPWM) While developing countries, in the traditional international division of labour had essentially the task of supplying raw materials, and in addition, cheap labour to industries located in some industrial countries, for the first time in many centuries, they are becoming increasingly industrialized on a vast scale and this leads to an increasingly vast dissemination of production across the world, as well as a growing fragmentation of the production process into numerous partial operations carried out throughout the world in different places.

The emergence in developing countries of a system of industrialization geared towards satisfying the requirements of the world market. Observable since the mid-sixties, does not correspond to a higher development level, nor to a special orientation due to a development plan or policy.

It is only a re-organization on the world scene of industrial production, demanded by the expansion of capitalism; in a host of cases, production in the traditional places of industrialized countries is no longer profitable as a result of the possibility to produce in new places located in developing countries.

<sup>\*</sup>Max-Plank Institute for Research on living conditions of the scientific and technical World, Stranberg.



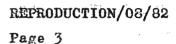
REPRODUCTION/08/82 Page 2.

In the world capitalist system, economic expansion makes it absolutely necessary to resort to the virtually inexhaustible labour force which, for centuries has remained in a state of underdevelopment, and is consequently constrained to sell for a very low salary.

This transfer of location of industrial activities is made possible first, through the progress of technology which partly helps to circumvent the constraints of geographical distances, production and control of production, by means of modern techniques of transport (containers, air cargoes) communication (especially telecommunications), organization (data banks). But this location transfer is also made possible through new production techniques which allow a breakdown of a complex process into elementary tasks, in such a manner that it is ' easily possible to teach even unskilled workers to carry out these tasks. It is this double technological progress, which, while making it possible to draw on their reserve of manpower, has rapidly enhanced industrialization in developing countries.

We wish in this study, to demonstrate first, by means of concrete signs drawn mostly from free production zones, the steady trend towards a new international division of labour made visible by the industrialization of developing countries. This trend becomes increasingly intensified following the existence of a world competition, for the establishment in certain places, of an increasing number of industrial production units. Although this trend towards a new international division of labour is obvious, particularly, when one one considers the industrialization of developing countries, there are no time series to demonstrate it, the first statistics dating only back to 1975. However, given that in the developing countries of Africa, Asia and Latin America there was no industrial export enterprise before 1960, the 1975 figures account for both the level and trend of production.

A Committee of the Comm



### I. New areas of production: the free production zones

The existence at a given place of an available labour force is not a sufficient condition to make possible the the location of a prosperous and competitive industry; the possibility of using at this given place industrial resources in sufficient quantity and an elaborate infrastructure is necessary and is not necessarily found where unused labour force is abundant.

Moreover, industrial production intended for the world market requires that the limitations to which the transfer of funds in the majority of developing countries is subjected to be suspended because of the chronic deficit of their balance of payments, but it is obviously the very function of free production zones to meet this need.

1530

It is in the reports of UNIDO that the best description of the technical and legal organization of a free production zone will be found since the main activity of UNIDO is currently to promote the establishment of (EPWM) export industries in developing countries in accordance with a basic text elaborated in 1971 (1). The choice of sites and the setting up of free zones, their equipment, and their privileges depend on the desires and needs of enterprises.

Certainly, the texts begin by studying the problems of capital expansion which became increasingly acute as a result of international competition.

There are five possible fields in which free production zones advantageous, because they make it possible to remove or reduce considerably, manufacturing and distribution costs:

- a) transportation of raw materials.
- b) transportation of finished products.
- c) remuneration of labour force.

TORGET !



- d) availability of abundant and skilled labour;
- e) reduction of initial investment, and hence a reduction in the percentage of what is called capital assets, through fiscal and material advantages and various labour and services facilities which these zones may offer (1, p.9).

UNIDO makes a certain number of recommendations with regard to the technical, financial and commercial equipment of the zone:

- Total exemption from customs duties and taxes for a certain period on all industrial equipment as well as raw materials and everything required for production.
  - Exemption from income tax for a period between five and ten years.
  - A special period of exemption from or reduction in other taxes payable on various grounds by non-established enterprises in a free zone.
  - Non-subjection to exchange control together with the assurance of maintaining this rule in future and of the right to repatriate profits freely, up to a certain stipulated amount or a certain fixed percentage each year.
  - Special financing facilities such as the granting of short, medium and long term loans at advantageous interest rates as they become necessary for the construction of industries in the zone including non-conventional buildings.
  - Preferential tariffs for transport to and from abroad between the free zone and the sea ports or airports as well as for land and building rents or general services etc....
  - The possibility to rent or purchase conventional prefabricated factories, or offices or lands according to the needs of the industries. This saves investors the trouble of immobilizing or locking up their capital for a long time on fixed assets and and hence makes it possible for them to reduce the amount of their idle capital.

The provision of repair workshops, canteens, medico-hospital services, as well as well as banking, postal, oil supply and security services; the services of public stores, transport and forwarding agents, insurance and the organisation of leisure activities, etc. in the free zone, thus alleviating the work and initial financial burdens of investors and stimulating investments (1, p. 16-17).

. 36.3

We shall notice later that infact active free production zones have all these characteristics which distinguish them from other industrial zones, also located in developing countries but having only the labour force without any of the other elements required for a profitable output. This separation of the free zone from its environment, in developing countries, where it derives its labour force shows perfectly well that it constitutes an enclave.

We may refer to texts produced by public authorities intended for potential investors in order to know precisely, the establishment conditions in free zones of Africa, Asia and Latin America. They contain recommendations addressed to local administrations and enumerations of legal, financial and material privileges very similar to one another, irrespective of whether they are free zones situated in South Korea; (6), Mauritius (7, p. 6 to 9, and 20) or in Colombia (8, p. 3 to 10).

The use of abundant and cheap labour however, remains the priority condition with fiscal advantages being only accessories to it.

These new production areas are designated in multiple ways. They are called in turns: free export zones, free industrial zones, free trade areas, free zones, export zones, industrial export zones. We shall use the term free production zones to designate the places in developing countries where the essential function is the use of existing labour in industries where production is geared towards the

### REPRODUCTION/08/82 Page 6

world market. 1

## 2) Transnational Organization of production: factories with worldwide outlets

These factories are of a new design; they were built for the exclusive purpose of using available labour; generally, they are incorporated vertically in multinational enterprise and manufacture, assemble or complete component parts, intermediate products or finished products which is the most profitable way of using labour. Although, in a transnational economy any production related to it is subjected to world market conditions and necessarily intended for it, for practical reasons, we shall only use the term industrial export enterprises for the world market for those whose production is intended for the external market and not for the market of the country which supplies the labour.

A definition of UNCTAD also ignores the importance of the use of labour and merely stresses the customs exemption statute: "A free industrial development zone is an enclave within a protected national territory, usually situated near an airport and/or a kport through which foreign capital goods, component parts of machines and raw materials are imported without being subjected to customs duties. The imported products are transported to the zone and then exported elsewhere. Payment of customs duties are only demanded when these products or finished products whose manufacture was affected by these duties, penetrate the protected national territory of the host country (but this is an exception since normally, all production is exported (9, p. 2). It is also inexact to make comparisons with tax-free zones (free ports etc...) since the customs exemption statute is in this, their essential characteristics.

<sup>1.</sup> Thus the multiple possible names for free production zones all refer to customs and other privileges, favouring industrial production and exports. Consult UNIDO, Notes on the Training Workshop in Industrial Free Zones as Incentives to Promote Export-Oriental Industries Organized by UNIDO in Cooperation with the Department of Industry and Commerce of the Republic of Ireland, the Irish Industrial Development Authority and the Shangon Free Airport Development Company (SF ADCO), ID/WGA12/21,30 March 1972, p. 6-7.

Some of these factories in developing countries are located outside free zones when the conditions of using labour in a "world oriented" industry do exist. This is what is observed:

- a) in places which were planned and developed by national industries and hence, possess the necessary infrastructure.
- b) in places which already have services required in industry, such as harborys and airports. Giant multinational firms always have a world-oriented production system; but the national organization of production is not linked to the dimensions of the firm and, although most industries producing for the world market are under foreign control, we shall also concern ourselves in this article, with national enterprises with a world-wide vocation even if they are located outside free zones.<sup>2</sup>

## 3) Free production zones and Export industries in 1975: regional distribution and employment.

In 1975, in 39 countries out of the 103 that were studied, there were for purposes of labour use, industrial enterprises producing solely for export.

In 25 of these countries, production was located in free zones and in 9 of these 25 latter countries, there were also export industries located outside free zones. In 14 other countries, export industries were located outside a free production zone; in 7 others, the free production zones were under construction, and in 5 others, export industries were under construction, outside free production zones.

It is not by chance that nomenclatures of export industries in developing countries are quite different; thus in Trinidad and Tebago they are called "landlocked industries". in Mexico "industries maquiladoras" and in Malaysia Bonded Factories.

<sup>2.</sup> In anglo-sexon terminology, export industries are often designated by the terms "off-shore installations". Similarly, in order to disignate the use on the world scale of labour force, and means of production, one talks of "off-shore production" and "off-shore supply" (10, 11, 12).

Thus, in 1975, 51 countries out of 103 were still at the beginning stages of export industrialization: 39 possessed export industries within and outside free zones at full production activity, and 12 possessed export industries under construction. The regional distribution of these 39 countries is produced below:

In Asia 15 out of 33: 11 in free zones: Bahrein, Hong Kong, India, Jordan, South Korea, Lebanon, Malaysia, Philippines, Singapore, Syria and Taiwan; 4 outside free zones: Indonesia, Iran, Thailand, Turkey - and in 4 countries with free zones, export industries were set up outside these zones: India, Malaysia, Philippines and Taiwan. In africa, 5 countries out of 44 have free production zones: Egypt, Mauritius, Togo, Senegal and Tunisia; 3 have export industries without free zones: Ivory Coast, Morocco, Swaziland. In Tunisia, export industries are also established outside the free zone. In Latin America, there are export industries in 16 out of 26 countries: 9 countries with free zones: Brazil, the Dominican Republic, El Slavador, Guatemala, Haīti, Colombia, Mexico, Panama and Puerto Rico. In 7 countries, export industries exist outside free zones: Barbados, Costa Rica, Jamaica, Nicaragua, Dutch Indies, Santa Lucia, Trinidad-Tobago. In 4 countries with a free zone, export industries are also located outside these zones: Brazil, Haiti, Mexico, Puerto Rico. Finally, new free zones are under construction everywhere, even in countries which in 1975, had no free zone and even sometimes, no export industry such as Yemen and West Samoa.

Space will not allow us to produce in detail, all the results which appear clearly on tables published in the initial report and we shall merely point out here rather roughly that in 1975, export industries in or outside free production zones operated or were going to operate in 17 out of 33 countries in Asia, in 13 out of 44 countries in Africa and 21 out of 26 countries in Latin America. Free production zones existed or were to be set up in 36 countries: 15 in Asia, 6 in

Africa, 15 in Latin America. Export industries outside a free zone operated or were going to operate in 8 countries in Asia, 8 in Africa, and 12 in Latin America.

In all, 79 free zones existed in developing countries, - 48 in Asia, 17 in Africa and 24 in Latin America while 39 were under construction (20 in Asia, 8 in Africa and 11 in Latin America).

The majority of these places, referred to as free production zones, are enclaves, that is, they are autonomous units, isolated from their environment. Some of them functioned as a miniature airport, a miniature maritime port or a miniature free trade area. The dimension of a free zone may vary from less than 10 hectares (for example the Tanjong-Klin free zone in Malacca-Malaysia: 7 hectares, 4 factories, 2,000 wage earners in 1975) up to over 1,000 hectares (for example the Bataan export industry zone Mariveles, Philippines: 1,300 hectares, 23 factories, 800 wage-earners in 1976.

The industrial zones of free ports of Hong-Kong, Singapore and Northern Mexico are special cases. The whole territory somewhat constitutes a free zone and here, we selected only firms which are foreign-controlled but it is possible to find in this territory all the characteristics of free zones.

A survey has shown a growth in the number of workers in these free and export industry zones since 1970: in spite of inadequate statistics, the number of workers in 1975 stood at least at 420,000 in Asia, 40,000 in Africa, and 265,000 in Latin America thus amounting to 725,000 in all out of which over 500,000 were in free zones; 3 in

<sup>3.</sup> For two countries, Tunisia, with 24,000 workers in 1975 and Haiti with 25,000 workers in 1973, it was not possible to distinguish workers employed in export industries within or outside free zones.

some zones, these workers number more than some terms of thousands. These figures represent a minimum evaluation. For 12 countries among the 39 possessing free zones and export industries in operation, it was not possible calculate the number of workers even though it is known that production was very high (18, 19, 20). Examples are Iran, Morocco, Guatemala, Costa Rica and Nicaragua (14, 15, 16, 17). For other countries like India, Brazil, Taiwan, it was only possible to obtain the number of workers employed in free zones althoughs to estimate it at 412,000 (21), considering the size of industries producing for export. Indeed, one was compelled to take account of only the workers employed in international firms, although in Hong-Kong for example (22) and in many countries, national firms produce especially for the world market. We have only selected industrial enterprises which, at a given place, produce only for export by using labour available in this particular place.

Thus, we did not take account of enterprises which produce partly for the local market nor those enterprises which, as in the case of the majority of oil refineries, were established at a given place by virtue of the fact that raw materials could be found there, and not because of the supply of labour. From the examination of all these data, it can be concluded that in the 1970's the development of export industries and free zones was in no way, a phenomenon confined to a few countries, but extends to the whole world and is particularly considerable in South-East Asia and the Caribbean, and much less in North and Southern Africa.

Centre-periphery relations are also very distinct. The control of production capital is in the hands of Japan in South-East Asia, in the hands of Western Europe with regard to Africa, and in the hands of the United States with regard to the Caribbean. The increase in industrial establishments in any particular region is the direct result of

capital competition at the international level. When, at a given place, the establishment of an enterprise is advantageous to a particular firm the others which are engaged in competition with it are compelled to follow them and establish themselves in the same zone. In other words, the existence or strengthening of political guarantees for investments, as in the case of military dictatorships or Governments hostile to Trade Unions, plays a particularly important role and this can be found in regional distribution (see further on the forth part of this article).

The examination of results of the survey shows that in 103 countries, one sees no correlation between the size of the population, the Gross National Product and the establishment of free zones and export industries: a host of such correlations can be found in a country with a large population and a relatively high GNP, such as Mexico, in countries with a large population and low per capita income such as Indonesia, in countries with a low population and a relatively high per capita income, as in the Indies (or Antilles) and in countries with a low population and low GNP such as Haiti. This is quite logical because the pre-conditions for export production do not depend on the level of the economy of a country, but can be established in any corner of the world. It was also observed that before 1960, these industries in developing countries were non-existent; in 1966 there were only four countries in which industrial activity flourished: Hong-Kong, Taiwan together with one of the first free zones Kaohsiung; in South Korea and at the Northern frontier of Mexico.

Among the five greatest exporting companies three refineries are situated in developing countries (one in the Caribbean, one in Western Asia and one in Singapore).

<sup>5.</sup> The free zones of Kandla in India and Mayaguez in Puerto Rico became operational before 1966, but failed to supply any genuine output before 1975.

### REPRODUCTION/08/82

Page 12.

The first free production zone in Colombia, Barraguilla, was established at the same time, and in 1967 in Singapore (24) on a large scale, 6 and so on.

In 1971, there were nine countries with free zones and their increase was extraordinarily rapid from 1972 to 1976, hence, in very few years, to become a world phenomenon which has since then, not ceased to increase.

### 4) Investment conditions and stimulus to invest.

All Free zones present more or less an infrastructure that falls in line with that recommended by UNIDO - whether with regard to technical equipment, trade, monetary, fiscal or other conditions favouring investment. Almost all the zones have access to ports or airports, have enough water and energy, communications facilities by rail, land, or water, telephones and telex, - industrial premises, maintenance and repair workshops and, for the workers, - training and dress-making (or tailoring) centres, beds and even housing without mentioning specific services demanded by each firm.

Everything that may, in addition, be required for production such as machines, tools, intermediate products, raw materials is imported locally by the firm which does not necessarily address itself to local suppliers or to other already established firms in the sone even if these firms can provide it with its needs.

All these advantages granted in most zones are in general, enshrined in a particular code governing the status of free zones and firms established there. These codes offer striking similarities in all countries and with the model recommended by UNIDO.

<sup>6.</sup> Thanks to the establishment of multinational electronic firms, followed by many others.



It is however, necessary to distinguish the clauses which lay down the obligations related to production, and those which concern the privileges granted to investments, for which the financial benefits are considerable. The only genuine obligation to the firm is to export the goods that it will have manufactured in the zone, that might have been wholly produced there, only assembled or finished, with the prohibition, except in very few cases, to sell them on the local market. Now, this obligation is in line with its scheme. Other obligations, as for example, the demand of a certain type of product exist at times.

The most important privilege granted to investments is the suppression of all limitation with regard to the amount of invested capital and with regard to its transfer abroad; and this is the very rule in free zones located in countries witch in addition impose severe control on foreign capital.

In general, the following conditions are admitted everywhere:
(a) unlimited transfer of profits right from the first year of production; (b) the repatriation of all initial investment, generally authorized only after three years.

All inputs required for production (raw materials, intermediate products, etc.) are admitted duty-and-quota free, even when they could be supplied locally.

Exemption from all customs tax, from taxes on incomes or profits, professional tax, sales taxes etc...as local and regional taxes is the rule.

<sup>7.</sup> In South Korea for example, an initial investment of 50,000 U.S. dollars is demanded.

In Bakar, to be admitted into a free zone, an employment figure for at least 150 persons is required. In some zones, measures intended for protection of the environment are imposed.



REPRODUCTION/08/82
Page 14

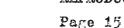
It may vary according to all possibilities (22, p. 27) from a low taxation rate for a limited time, (25 p. 93-94) to a total and ultimate exemption (26). Besides, subsidies may be granted in the form of preferential credits (27), or specific interest rates very often for energy and water supplies (28), for transport (29), rents and building works (30). etc.... Sometimes subsidies are granted to help in the payment of salaries, in Chile (37), or to train workers, in Singapore (38, p. 17).

Finally, political stimulus consists in limiting sometimes as far as to the total suppression of every right, the political and social rights of labour in these zones. Labour laws are waived, such as minimum wages, social security contributions, Union rights which exist in the rest of the country (31, p. 48 and 50). Industrial enterprises with a world export vocation, located outside free zones, may also derive a lot from these exceptional advantages; particularly, exemption from customs duties; the "Draw back system", in which, the paid import taxes of firms are paid back at the time of exporting the products, and the "manufacturing-in-bond system" which authorizes imports tax-free, are the most frequent systems (32, p. 6).

They may also derive a lot and frequently so from other financial advantages. It is more difficult to grant them political advantages to which firms attach a great price, and which, outside free zones, depend on the general political and social situation of countries. Examples may be cited inter-alia in Nicaragua (33) the "Off-Shore Assembly Laws" (Banco Central de Nicaragua i.e. the Nicaragua Central Bank), in the Philippines (34), the report of the Asia/Pacific Business International"

In Hong-Kong, a rate of 15% tax on profits; in Malaysia, exemption for ten years; in Egypt total definite exemption.

<sup>9.</sup> In South Korea, the working week, in the free zone may be sixty hours, and a special protection of enterprises is secured against strikes and labour conflicts.



(27 November 1974); for South Korea (35 p. 1 and 3) the report of the "Deutsche Gesellschaft für Wirtschaftliche Zusammenaebeit" DEG i.e. the German Company for Economic Co-operation), 23 March 1976, and finally, what is noted by Richard W. Moxon (36, p. 16) with regard to the conditions demanded by the Managers of Firms for setting up an enterprise: "We want a place where we can have the American fleet between us and Continental (or main land) China". "We want to create a situation there in which we can allow goods, people and money to enter and leave easily". In some countries in order to do anything whatsoever, one is obliged to seek authorization from thirty different official authorities, we shall not go to these countries." We shall go to these countries only when the Government has set in motion, Trade Union Organizations".

We have examined the working and investment conditions in free zones. I would like, in a subsequent article to show the consequences on the world scale, for example, of low salaries, long working days, intensive work, short term working contracts and the prohibition of Trade Union Organizations; next, I shall examine some effects on the economic and social development of developing countries and of their industrialization geared towards the world market. I intend to establish clearly, that this industrialization, which is determined by the interests and the rationality of capitalist expansion makes the development of developing countries of Asia, Africa and Latin America increasingly dependent and decreasingly specific. These changes in the international division of labour lead to regional and qualificative upheavals of employment with effects on the living and working conditions of the population at the world level; and it is the overall body of these changes which should be studied.

### SOURCES AND REFERENCES

- 1. ONUDI, Industrial Free Zones as I: entives to Promote Export-Oriented Industries, Training Workshop on Industrial Free Zones, ID/WG 112/3, 28 Octobre 1971.
- 2. ONUDI, Technical Assistance Available from UNIDO in Connection with the Planning, Establishment and Operation of Industrial Free Zones as Incentives for the Promotion of Export-Oriented Industries, Training Workshop on Industrial Free Zones, ID/WG 112/4,2 novembre 1971.
- John P. C. LO (UNIDO Consultant), Study on Free Zone Industrial Estates, Training Workshop on Industrial Free Zones, Shannon, 5/6 mars 1972, ID/WG 112/27, 18 mai 1972.
- Theodoro Q. PENA, Export Processing Zone Authority, Philippines, Industrial Free Zone Activities in the Philippines with particular Focus on the Bataan Export Processing Zone. Regional Expert Working Group Meeting on Industrial Free Zones, Barranquilla, 5/11 Octobre 1974, ID/WG 185/8, 4 Octobre 1974.
- 5. ONUDI, UNIDO's Programmes on Development of Export-Oriented Industries, Third Consultation Meeting on Product Adaptation and Development for Export Industries, Tokyo, 20-29 novembre 1974, ID/WG 199/3, 11 novembre 1974.
- 6. Republic of Korea, Office of the Masan Free Export Zone Administration, The Masan Free Export Zone. Korea Invites Foreign Investment and Entrepreneurship.
- 7. Mauritius. Ministry of Commerce and Industry, Mauritius Export Processing Zones, 1972.
- 8. Zona Franca Industrial y Commercial Manuel Carvajal Sinisterra (Palmaseca) Zona Franca Industrial y Commercial de Buenaventura, Two New Free Zones in Colombia, 1973.
- 9. CNUCED, Some aspects of the operation of export-processing, free zones in developing countries, TD/B/C.2/149, 11 avril 1975.
- 10. T.S. CEANG, The Transfer of Technology: Economics of off-shore Assembly. The Case of Semiconductor Industry, UNITAR Research Reports, 11, 1971.

- 11. J.M. FINGER, Tariff Provisions for Offshore Assembly and the Foreign Exchange Earnings of Developing Countries: Discussion Paper Series (Department of The Treasury, Office of the Assistant Secretary for International Affairs, Research Office), Washington, 1971.
- 12. Richard W. MOXON, Offshore Production the Less Developed Countries.

  A Case Study of Multinationality in the Electronics Industry, The
  Bulletin, New York University, Graduate School of Business Administration; Institute of Finance, 98-99, juillet 1974.
- 13. CNUCED, <u>Handbook of International Trade and Development Statistics</u> 1976, New York, 1976.