



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)



05006

**UNIDO**

Distr.  
LIMITED  
ID/73.1674  
19 Oct. 1973

**United Nations Industrial Development Organization**

ORIGINAL: ENGLISH

---

Seminar in Binational Assistance and Extension Services  
for the Promotion of Small-scale Industries  
in the Caribbean Area

3 - 7 December 1973, Bridgetown, Barbados

THE POTENTIAL OF SMALL INDUSTRY AND EXPERIENCES IN SETTING UP  
INDUSTRIAL LIAISON AND EXTENSION SERVICES  
IN TRINIDAD AND TOBAGO <sup>1/</sup>

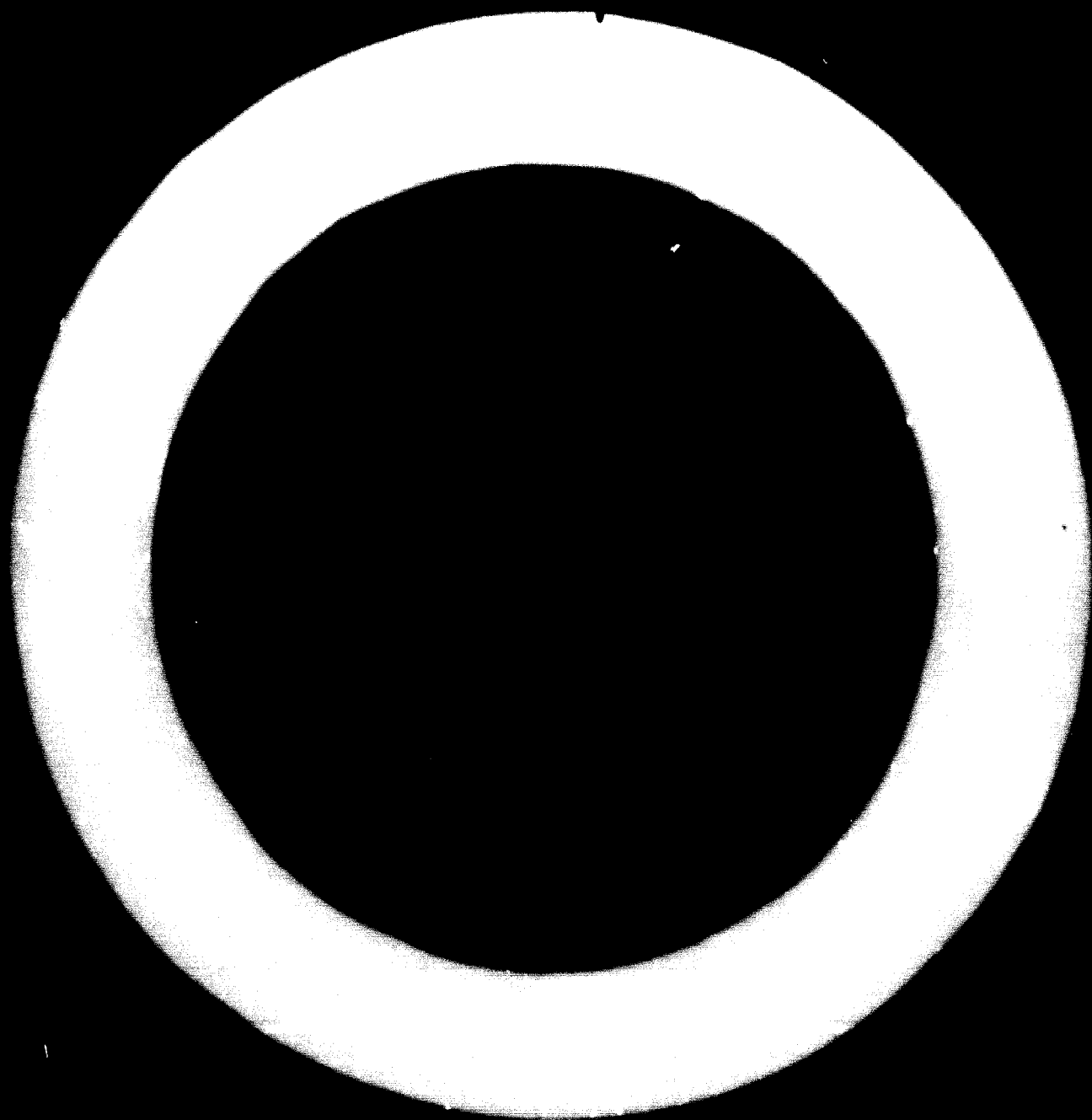
by

K.V.S. Murthi  
UNIDO Small Industry Adviser  
Industrial Development Corporation

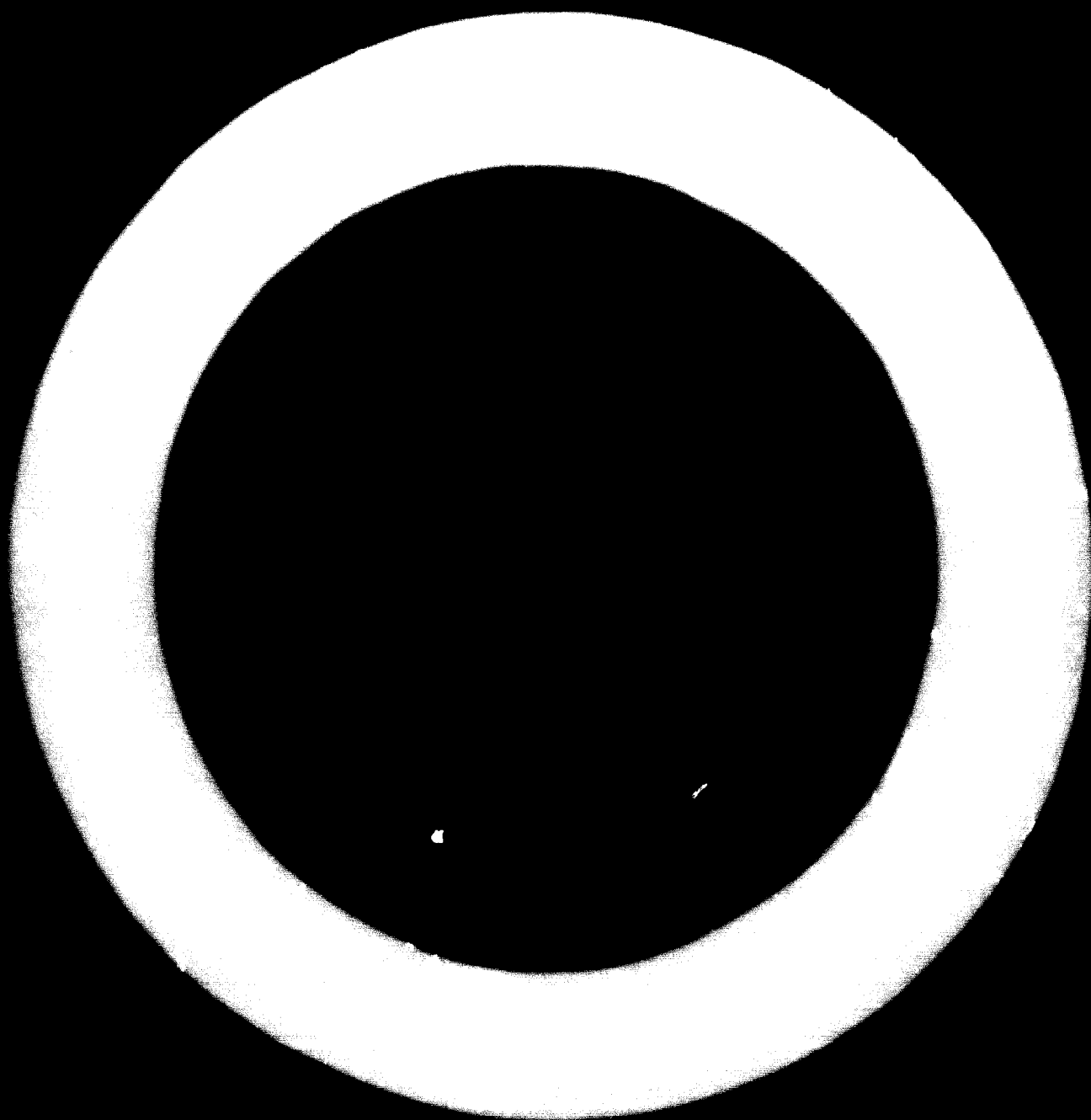
---

<sup>1/</sup> The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO. This document has been reproduced without formal editing.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



<u>Chapter</u>	<u>Page</u>
I. THE POTENTIAL OF SMALL INDUSTRY IN TRINIDAD AND TOBAGO	1
II. EXPERIENCES IN SETTING UP OF INDUSTRIAL LIAISON AND EXTENSION SERVICES IN TRINIDAD AND TOBAGO	8
1. Background	8
2. The Position and Importance of Small Enterprise Sector	9
3. The Establishment and Functions of Industrial Liaison and Extension Services (IL and ES) Division in the IBC	9
4. Qualifications and Experiences needed by the Officers of the IL and ES Division	10
5. Recruitment of Staff and their Proper Orientation of Outlook	11
6. Factory Building and Engine of Development	12
7. Examples of Technical Assistance Rendered	13
8. Identification of New Industries	15
9. Small Business Supervised Credit or the Loan Programme	15
10. Prejudice of Small Business	16
11. Motivating Entrepreneurs is Essential	16
 <u>Appendix</u>  	
I. PROGRESS OF FACTORY BUILDING PROGRAMME	19
1. Buildings Completed and Allocated	19
2. Buildings under Completion	19
3. Type of Industries Occupying the Factory Buildings	20



## I. THE POTENTIAL OF SMALL INDUSTRY IN TRINIDAD AND TOBAGO

Very little is known about small scale industries in Trinidad and Tobago. However almost everyone is prepared, perhaps, intuitively to concede that small industries could play an important role in the economy, more especially now when the country faces an urgent problem of unemployment.

But to chart out a programme of development in any sector or sub-sector of the economy, one must have as much information as possible on the existing situation in that sector or sub-sector. The more information one has the better one can plan.

In order to collect some essential information on the existing small scale industries in the country, a sample survey of small scale industrial establishments was undertaken in 1970 jointly by the National Income Division of the Ministry of Planning and Development and the Industrial Development Corporation.

First, for the purpose of this survey, a small scale establishment was defined as one employing less than 41 persons. Next, a list of small manufacturing establishments was drawn up on the basis of information available with the Central Statistical Office from their continuous sample survey of population and establishments and the Industrial Development Corporation. The list thus drawn added up to 945 establishments. But it had its limitations in terms of geographical coverage of very small firms. Keeping these limitations in mind, it is reasonable to assume that at the beginning of 1970 there were in operation some 1500 small manufacturing establishments in the country employing some 4500 persons. It should be of interest to compare this figure of estimated total employment in the small industries with that in the pioneer industries where employment at the end of 1968 stood at 3923 and in the non-pioneer assisted industries where employment at the end of 1968 stood at 4036. Pioneer establishments, as is generally known, enjoy both income tax exemption as well as duty free concession whereas the non-pioneer assisted concerns enjoy only the duty free concession. The contribution of the small manufacturing sector in employment is at least equal to the Pioneer and Assisted establishments.

It should be quite safe to say on the basis of the comparative figures given above that the small industrial establishments are already making a significant contribution to the total employment generated in the economy.

Nevertheless, when it comes to planning for the future, does not matter how close the future one has in mind, one must be able to answer a few important questions. What would be the capital cost of creating additional employment in small industries? Do the small industrial establishments pay a reasonable wage? Are there enough trained persons available for taking up the additional opportunities should they be created in these establishments? Or would arrangements have to be made for training additional hands in the requisite skills in adequate number and with appropriate training?

The answers to these questions can be culled from the information that was collected in the course of the sample survey of small scale industrial establishments.

This survey covered a sample of some 200 establishments. The selection of the sample was made in a manner as to ensure a representative distribution of firms by members in each sub-category of manufacturing and by size of firm. Although not all the firms selected initially responded (the rate of response was over 75% however), those responding reasonably completely represent 10% of the estimated number of total establishments in the country. This could be considered as a large sample indeed.

\* Another aspect of the sample survey ought also to be mentioned here viz: that for the sake of economy and convenience the sample survey was confined to the ribbon constituting Diego Martin - Port of Spain - Arima area. It was felt that the benefit in terms of more representative geographical coverage was not worth the additional cost associated with data collection in the more remote areas of the country.

Nevertheless, on the basis of the information collected in the course of this sample survey, the complementary capital cost per worker employed in the small scale industries works out between \$4,586 in 'textile and knitting mills' and \$42. in establishments engaged in the 'repair of footwear'. For establishments engaged in the 'repair of motor vehicles' which account for 23% of the total employment in the small scale industries, the capital cost per worker works out to \$901, but in the category of manufacturing accounting for the next highest proportion of total employment, namely, 'wearing apparel except footwear', the capital cost per worker was found to be \$2,462. The average cost per worker for all the small establishments taken together works out at \$1,554. In a separate study made in the IDC, based on the applications received for financial assistance from the Small Business Sector, the cost per each employment created amounted to \$1,825. Table 1 gives the breakdown categorywise on capital cost per employment generated.

Only by comparing the capital cost per worker in small scale industries with the other industrial establishments of larger scale would one get an idea of whether or not to accord preference to small scale industries, on the strength of at least this one yardstick.

From the data given in the Third Five Year Plan, we know that the capital cost per worker in pioneer establishments was as high as



\$40,000 for the period 1964 to 1968. For the period 1966 to 1968, however the corresponding figure was much lower at \$14,000. The capital cost per worker in non-pioneer assisted establishments worked out to be a little below \$9,000 for the period 1964 to 1968 and \$10,000 for the period 1966 to 1968.

Evidently, the capital cost of providing a job in small scale industry is considerably lower than large scale industry. In a country which should economise on capital (a) because it is not generating enough domestic savings or (b) because, if capital goods are mostly imported, the balance of payments considerations so require it or (c) even possibly for both the reasons combined, the capital cost is bound to be an important consideration in deciding what path to follow in creating additional jobs. As should be very clear from the above figures in terms of capital cost alone, the small scale industry is already a winner.

Does the same hold good for capital cost of production? The measure ordinarily used for this purpose is known as the capital output ratio. In fact this is the measure commonly used to determine the capital intensity of various firms and industries. The higher the ratio of capital to output of a firm the greater is the capital intensity of that firm. In generalizing this, one has to be aware of one danger, namely of not confusing a firm's genuine output with its gross output. The former represents the value that is created by the firm whereas the latter includes all the inputs into whose creation this particular firm had no role to play. For the purpose of this article, we have therefore taken the value added within a firm as the measure of its output and have related this value added to its fixed assets.

As can be seen from Table II, the average capital cost of producing a dollar's worth of value added in small scale industries, as a whole, is only one dollar. Taken individually, the range of variations in capital-output ratio between various categories of manufacturing industries is wide. The minimum ratio is 0.21 and the maximum ratio goes up to 1.6. But even the highest capital output ratio in the small scale industry is far below the average that obtains in large scale manufacturing.

There can be little doubt that in so far as there exists a choice between small scale industries and large scale industries, consideration of capital cost alone would argue for the small scale industries. Add to it such considerations as those of local control and decision making and of income redistribution, the case for small scale industries in this country becomes formidable.

But what about the wage level in these small industrial establishments? Would one earn reasonable living wage in such an establishment?

These questions raise an important issue to which there are many facets. What would one regard as a reasonable wage in a context of chronic unemployment, particularly when the choice is between working for some wage and not working at all. Also there is the question whether one would be prepared to accept a lower earning when one is working for oneself or for some one related or living closely. No attempt is made here to answer these questions.

The factual situation as is shown by the sample survey is summed up in Table III. The average daily wage range from 0.20 in 'repair of footwear' to 0.45 in 'textile and knitting mills'. But the categories of manufacturing where the wage is below \$1 a day represent only less than 5% of the total employment in small scale industries. The average for the entire sub-sector works out to \$2.80 which by no means can be said to be low compared to the levels which obtain in the country for various types of employment.

In any case, while considering the question of wage level one has to take into account the fact that employment in small scale manufacturing is, in most cases, a stepping stone for high wage employment in the largest scale manufacturing establishments.

But small scale industrial units offer opportunities for not only paid employment, but also for apprenticeship. The sample survey discloses that ratio of paid employees (including working owners) to unpaid assistance in this sub-sector is unusually high at almost 10%.

In conclusion, it appears reasonably safe to claim that small industry is already playing an important role in the country in generating employment at relatively very low cost and there is every reason to believe that given adequate encouragement, it is likely to play a no less significant role in the generation of new employment opportunities in the near future. While comparisons have been made between small scale industry and larger scale industry, these should not be taken to suggest that small scale industry is, in all respects, competitive with larger industries. On the contrary, in several areas of manufacturing the two complement and supplement each other. The important thing is to be constantly on the lookout for opportunities for small scale industry and to grasp them when and where they occur

## Capital Employment Ratio

(The Part-time Employment is not included in the total)

<u>Industry</u>	<u>Capital</u>	<u>Employment</u>	<u>Average Capital Cost of Employ- ment</u>
Repair of Footwear	500	12	42
Repair of Tyres and Inner Tubes	1100	12	92
Light Metal Structures	19121	89	217
Electrical Fixtures	4100	27.5	150
Pottery China & Earthenware	1250	4	312
Cocoa, chocolate, sugar confectionery	4440	8	555
Repair of Machinery	7395	9	827
Repair of Watches & Clocks	1741	2	850
Repair of Motor Vehicles	18300	42.5	431
Wines, Perry, Cider & other Fermented	5460	5	1092
Miscellaneous Food Preparations	43534	35	1271
Concrete Bricks	7600	5.5	1385
Jewellery & other related items	13350	9	1483
Dairy Products	19454	11	1772
Bakery Products	189076	101	1872
Furniture & Fixtures	14935	69.5	2148
Saw Mills, planing & other Wood Mills	122000	51	2392
Wearing apparel except footwear.	248674	100	2487
Textiles - Knitting Mills	48883	13	4836
	<b>964743</b>	<b>608</b>	<b>1554</b>

TABLE 2

## Capital Output Ratio

Industry	Capital	Value Added	Capital Output
Furniture & Fixtures	14,305	20,775	1.6
Textiles - Knitting Mills	48503	33968	1.4
Miscellaneous Food Preparations	13534	48495	1.3
Dairy Products	19494	18353	1.1
Bakery Products	189076	177986	1.1
Wearing Apparel except footwear	248674	254515	0.98
Repair of Motor Vehicles	38280	43615	0.88
Jewellery & Other related items	11350	16665	0.8
Electrical Fixtures	4100	5227	0.78
Saw Mills, Planing & other wood mills	122000	154997	0.79
Repair of Machinery	7305	9432	0.78
Light Metal Structures	19121	32760	0.58
Pottery China & Earthenware	1250	2236	0.56
Repair of Watches & Clocks	1701	3205	0.53
Concrete Bricks	7400	15793	0.47
Cocoa, chocolate, sugar confectionery	6640	14488	0.31
Wines, Perry, Cider & other ferments	5460	18805	0.29
Repair of footwear	500	2004	0.25
Repair of Tyres & Inner Tubes.	1100	5170	0.21
	944743	948458	1.00

TABLE 3

Wages

<u>Industry</u>	<u>Employment</u>	<u>Wages</u>	<u>Average Annual Per Worker Wage</u>	<u>Daily Wage</u>
Wines, Perry, Cider & other Ferments	5	8625	1725	6.30
Textile-Knitting Mills	10	16222	1622	6.49
Saw Mills, Planing & other Wood Mills	51	72163	1415	5.66
Concrete Bricks	5.5	6960	1265	5.06
Wearing apparel except footwear	101	104191	1032	4.13
Dairy Products	11	10183	926	3.70
Repair of Machinery	30	25019	834	3.34
Bakery Products	101	80199	794	3.18
Furniture & Fixtures	69.5	47458	683	2.73
Miscellaneous Food Preparations	50	29103	582	2.33
Pottery China & Earthenware	4	2212	553	2.21
Repair of Motor Vehicles	149	69757	468	1.87
Electrical Fixtures	17.5	6116	349	1.40
Light Metal Structures	88	30173	343	1.37
Jewellery & other related items	20	6100	305	1.22
Repair of Tyres & Inner Tubes	12	2392	199	.80
Repair of Watches & Clocks	4	780	195	.78
Cocoa, chocolate, sugar confectionery	8	800	100	.40
Repair of footwear	12	1200	100	.40
	748.5	519653	694	

II. EXPERIENCES IN SETTING UP OF  
INDUSTRIAL LIAISON & EXTENSION SERVICES  
IN TRINIDAD & TOBAGO

1. Background

- (i) The Industrial Development Corporation (IDC) was established in the year 1959, under the Ordinance of 1958. Its main objective is 'to stimulate, facilitate and undertake the development of industries in Trinidad & Tobago'. Industries were sought to be promoted mainly through the operations of various concessions under:-
- (a) Aid to Pioneer Industries Ordinance - conferring exemptions from Income Tax for specific period, and from Customs Duties on capital goods, building materials and raw materials.
  - (b) Section 49(A) of the Custom's Ordinance - conferring duty free and reduced duty levy on import of raw materials for manufacturing industries and
  - (c) Approved Plant Status under Item 21A of the Custom's Ordinance - conferring duty free import of plant and machinery. Protective measures are also extended through negative listing of manufacture under which a license is needed to import goods manufactured locally. Financial Assistance was also extended to mainly deserving large and medium enterprises for acquisition of fixed assets, capital goods and even for working capital.
- (ii) By and large, the incentive measures were used by multinational corporations, large enterprises foreign or local, to some extent medium enterprises and rarely by small entrepreneur. Although the incentives offered are non discriminatory with regard to size, in actual practice very few small enterprises were attracted by them. The reasons were not far to seek as such incentives were of little benefit to small enterprises. Besides small enterprises were not equipped to undergo

detailed examination by the IDC with regard to feasibility, viability and economic benefit to the country as a result of the functioning of the enterprise. Added to this was the fact that, originally, the IDC, originally, was endowed only with a staff which could analyse a project when presented, under set economic parameters, but could not normally undertake initiatives to assist the prospectors in the very preparation of the project, feasibility of markets, suggestions on choice of machines and equipment and render practical assistance in the germination and later the fruition of the project. This type of assistance and liberalised financial credit were needed by small industries and therefore, their case went by default. If small enterprises were to be developed, a new path had to be cut through the thicket by evolving a different set of incentives and occlusion of industrial extension oriented personnel into the IDC.

## 2. The Position and Importance of Small Enterprise Sector:

The Industrial Sector in the country can be broadly divided into three strata: on the top are the giants like petroleum, refining and mining, fertiliser manufacture, sugar manufacture, storage of minerals and fish for export and assembly of automobiles and at the bottom village and handicraft industries using little power and machinery. In the middle are few small industries which play a vital role in industrial development, using as they do technologies akin to large enterprises and with a scope to grow into vibrant modern industries. This Sector of the industry is important to the economy of T&T as they are effective instruments for mobilisation of resources and capital; raw materials and labour they help to reduce disparity of income between urban and rural areas; they serve as excellent ground for entrepreneurship, management and labour and more importantly as a means of greater employment. Small Industries are invariably local enterprises. To encourage small industries means encouraging local enterprise. Given adequate encouragement, this indigenous sector has great potential of growth with spin off benefits yielding technical, technological and managerial persons at vital decision making levels to the benefit of the industry and the country as a whole. The economic arguments alone are powerful enough to establish the necessity for an active small firm sector and there is no need for anyone to attempt to quantify the non-economic contribution. An investment in small enterprise is almost synonymous with investment in human capital which is more precious than material capital.

## 3. The Establishment and Functions of Industrial Liaison and Extension Services (IL and ES) Division in the IDC:

The establishment of IL&ES Division and the Small Business Unit (SBU) in the years 1969-1970 were the first initiatives taken by the IDC to extend and administer a new set of incentives designed to promote and develop the Small Business Sector. Concerted efforts began in the IL&ES Division which was joined later by the SBU as a means of supervised credit. A report submitted by a UNIDO Advisor formed the basis for the establishment of the IL&ES Division, who also served as Advisor to the committee on the formation and establishment of the SBU Division. The functions of the IL&ES Division were defined even at the outset, but based on the experience of few years they were redefined recently to suit the needs.

The functions as finalised and in operation at present are as follows:-

- (i) To help small manufacturers with their problems by identifying their needs and offering advice aimed at making improvement in their operations; such advice may be from production methods (regarding industrial processes, equipment and products) to systems of financial control.
- (ii) To identify parts, components and services needed by large enterprises and assist in organising production and attendant management devices.
- (iii) To undertake investigations into specific problems in an industry, either at the request of the manufacturer himself, or arising from complaints received and make recommendations for solution or amelioration.
- (iv) To assist parties in plant layout, industrial and financial organisations and other similar problems in the establishment of industries.
- (v) To act as technical liaison between industry, IDC and the Government;
- (vi) To collaborate with Industrial Estates Committee on choice of sites for Industrial Estates and to recommend enterprises for allocation of factory buildings;
- (vii) To assist in evaluation of applications submitted to the Corporation for technical and financial assistance by making an appraisal of performance of plant and machinery in use or to be purchased.
- (viii) To identify opportunities for manufacture of products and to prepare feasibility studies and project reports on such products; and
- (ix) To deal with matters relative to evolution of policies and implementation thereof concerning industrial development.

4. Qualifications and Experiences Needed by the Officers of the TECHNICAL DIVISION

- (1) Being a Technical Division and front line contact agency the qualifications and experience required of the Officers are prescribed as "Higher National Certificate or degree in the discipline concerned: four (4) years shop floor or managerial experience for certificate holders or two (2) years for degree holders. Academic qualifications are relaxable in case of very experienced candidates from industry and ability to undertake field consultancy work in identifying problems, suggesting and implementing solutions and in helping integrated plant study to increase productivity."



(ii) Similarly for the officers in the SPU Division the following qualifications and experiences were prescribed: Degree in Economics, Business Administration or Accounting with experience in project evaluation, preparation and business analysis.

Recruitment of Staff and their Proper Orientation of Outlook:

(i) Any dynamic organisation should have adequate injection of new personnel with fresh outlook. Since job opportunities are few and qualified personnel are difficult to obtain, recruitment of personnel bristled with difficulties. Other factors also intervene. I can do no better than 'quote' from the report of my Counterpart Mr. Lewis: 'Quote' -

"As an added factor post and salary are of great importance in our Society and love of these twin blessings are pursued by most for its own sake, in varying degrees quite apart from the planned function of either of them. For any given organisation see this procedure multiplied by the number of posts and add a few transfers who are seldom interviewed, but who simply see an opportunity for promotion (or continuation) and you begin to have some idea of the odds against success of the plan intended to reflect policy." 'Unquote'

(ii) In recruiting staff, we have taken particular care to choose those with some years of shop floor experience. No extension officer could be effective unless he has practical experience. It is also necessary to train these officers to have an extension oriented outlook, to go out and meet the entrepreneur, view the problems as an integrated whole, and gain their confidence as a necessary concomitant for acceptance of any advice and in general so enable them to take initiatives. The need for the head of the Division to undergo training, was foreseen and he was deputed to undergo training in an international course on "Small Industries Promotion in Developing Economies" in India followed by Study cum observation tour of Small Industries and promotional organisations in India and Japan. This had enabled him to get an insight in the perspective of development in various countries and how to apply them to suit local conditions. In a report submitted he made the following observations. "Quote";

"I hold the view that the delicate and essential task of industrial development is not one of general stereotype solutions taken from the shelves of libraries. While some solutions and conditions are common to many developing countries one would be stretching one's imagination if one should attempt to believe that the whole package will fit." "Unquote" In keeping with this, some additional work than is normal to extension services, like those involving large industries, training subsidies, work permit etc., had to be undertaken by the Division. In view of the nature of work, this section should be headed by an Engineering Administrator.

(iii) I would like to add that in the Caribbean Countries, as should be the case in all developing countries, an Engineer Administrator should also know something of motivating Industrial Entrepreneur. Some thoughts are given towards the concluding portions of this article on this subject.

As one of the essential tasks of industrial development, lies in the field of motivating entrepreneurs. I would go a step further and suggest that Engineering Administrators must be tried at important positions, as Economists are less likely to respond favourably than Engineers in entrepreneurial skill training. Some Economists may be threatened by the theory that attributes a smaller importance to the effects of the market and the economic environment in general on economic development. The Engineer less interested in economic forces and more familiar with the type of individual who seize opportunity to build a viable enterprise is more likely to accept the hypothesis that such individuals are extremely important to development and all means of increasing their number and quality should be explored.

(iv) It was rather difficult in the beginning stages to obtain suitable persons. Persons who are working abroad will have to be attracted. After an exhaustive search we have been able to recruit suitable persons. At present the IL&ES Division has a Staff of seven (7) Officers as follows:-

Mechanical Engineers	(2)
Electrical "	(1)
Industrial "	(1)
Chemical Engineer/ Chemist	(1)
Financial Management Officer	(1)
Accountant	(1)

Care has been taken to have complementary expertise. Three Officers have more than a dozen years field experience in Trinidad & U.K. and one has Post Graduate Qualification.

6. Factory Building and Engine of Development:

(i) The construction of factory buildings for needy Small Enterprises was used as the engine of developmental measure for the promotion of small industries. This programme has served as a great measure of encouragement, support and long term financial facility for small industries. It paved the way for integration of various assistances and services economically and effectively. All enterprises in the factory buildings of the IDC have received in one way or other assistance in the various other fields like layout of machinery, electrical layout, financial assistance, technical assistance and managerial assistance inclusive of cost control systems. Every factory has deputed one or more of its personnel to the relevant managerial courses conducted by the Management Development Centre. Conscious efforts were made by the Division for integration of these services. The progress made so far in the factory building programme is given in Appendix I.

(iii) The first buildings used single span gabled frame, the second set had a similar structure in a modular fashion and the third set of buildings have double span gabled frame. These changes were made mainly on cost considerations. The total expenses including infra structural facilities and preparation of the site on an average worked out in the vicinity of \$13.50 per square foot of covered area. Small enterprises had to spend \$4 to 5,000 on internal wiring, lighting and infra structural facilities before they could occupy the buildings.

(iii) One of the significant features in the beginning year of construction was the utilisation of small contractors to do the jobs as an attempt to provide them with opportunities to organise and equip themselves to deal with bigger jobs. Thus, even the construction programme was used as a training ground, although the construction work got somewhat delayed. Nevertheless, I believe it served a good purpose.

(iv) As a result of the experience we have gained in the last three years, the Corporation is now thinking in terms of extending the factory building programme assistance to the rural areas. This will enable rural industries in incubatory stages to function in the natural environs and atmosphere of the village and protected also from the run away aesthetic of over zealous town planners and the fierce pressure and spiral of wage level from highly sophisticated industries. Small industries may also receive assistance by way of loans for improving or providing factory accommodation in the village setting where the extreme care and sacrifices demanded by a growing business, from the entrepreneurs would be greatly helped by the presence of the entrepreneurs and their family on round the clock basis. Incidentally this could prevent the drift to the urban areas.

(v) An extension of the factory building idea to the operation of small commercial business, resulted in the Corporation promoting two large shopping complexes to be run on Co-operative basis. A total of 37,200 square feet of space has been provided to the Diamond Vale and Plaisentville shopping plazas containing supermarket, soda fountain, cafeteria, bookshop, pharmacy, bank, boutique, haberdashery, etc., all run on a co-operative basis. Similarly ways and means are being explored to provide space for warehousing and security bond purposes as a means of assisting small industries.

#### Examples of Technical Assistance Rendered:

Among the various technical assistance rendered mention is being made on the following:-

- (1) Assistance in standardisation of sizes and manufacture of alpacatas for exports, a type of handicraft sandal;
- (2) Location of cupels in a foundry and manufacture of hand operated lime squeezer;
- (3) Selection of machines and equipment for food preservation factory;

- (4) Manufacture of wheel barrows.
- (5) Standardisation, inert gas filling and testing of incandescent bulbs,
- (6) Manufacture of bolts & nuts;
- (7) Trouble shooting in spray painting of automobile bodies.
- (8) Improvement of adhesives and inks used in paper bag manufacture.
- (9) Manufacture of paraffin wax;
- (10) Introduction of salami and other new products in a meat packing factory.
- (11) Choice of equipment & products for a proposed resin and polishes manufacturing firm;
- (12) Improvements to soft drink cases;
- (13) Preparation of hand book on keeping records and accounts;
- (14) Standardisation of training and subsidy;
- (15) Preparation and presentation of loan applications;
- (16) Ways and means for increasing the efficiency of a sugar factory;
- (17) Norms for an incentive wage system in an electronic assembly enterprise;
- (18) Reorganisation proposals for a mechanised handicraft workshop indicating the type of machines, tools & equipment, technical advice on the manufacturing processes, choice of items and deletion of those which bring loss, inspection norms and stations for quality control;
- (19) Discussions and finalisation of proposal for a metal based handicraft shop specialising in carnival embellishments for local and foreign consumption etc.

8. Identification of New Industries:

(i) Any extension service agency should identify promising lines of industrial development and steer prospective and existing industrial entrepreneurs towards them. In advanced countries, there is no need for any special agency to assume such a role since entrepreneurs have sufficient information and can be expected to make a proper decision. In these countries any wrong decision would not affect appreciably economic progress. Unguided development in developing countries may result in wasteful development of scarce resources and in the establishment of weak and inefficient industries which may need to be artificially sustained by concessions and subsidies. Failure may have a disastrous effect in further entrepreneurial initiatives. On the other hand, success in the establishment of small industries may be expected to have positive demonstration effect.

(ii) Having this in background a feasibility report on manufacture of 12,000 bicycles per annum was made which was very eagerly taken up by local entrepreneurs. Two such studies one on agricultural implements and another on tanning establishment is under progress. A selective approach to prospective small industries will yield quicker results. Some articles which have potential for establishment and on which further work need to be initiated are as follows:-

Aluminum domestic hardware, builders hardware, domestic electrical accessories, footwear, footwear repair establishment, ceramic tableware, electronics assembly, automobile ancillary items like leaf springs, alternators, radiators, rubber moulded goods etc., elastic tapes and hooks, insecticide sprayers and dusters, plastic toys, shoe polish, chewing gums, ferro concrete boats for fishing etc.

(iii) As a result of the field work done, we have been able to identify the following industries which have been referred to the Caribbean Industrial Research Institute for standardisation of the processes:-

- (1) Pyrogen free distilled and saline water as injectibles;
- (2) Bagasse concrete manufacture;
- (3) Vinegar from molasses;
- (4) Acrylic sheet from monomer;
- (5) Increasing the shelf life and manufacture of nut meg powder;
- (6) Asbestos cement board.

9. Small Business Supervised Credit or the Loan Programme:

(1) The Small Business loan programme has made very good strides since

it began in May 1970. By the end of August 1973, three hundred and fourteen (314) enterprises have been assisted with commitment of loan to the sum of \$2.8 million. Out of this one hundred and fifty-six (156) belonged to the manufacturing industries. An analysis of the figures indicates the generation of employment as a result at 1,341 and at a cost of \$2,120 per job.

(ii) Loans are extended to the maximum extent of \$50,000 for all enterprises whose total assets do not exceed \$100,000. Feasibility of the proposal, the standing and integrity of the applicant and the ability of the enterprise to pay back the entire loan and interest charges within a maximum period of eight (8) years are the criteria used. Deserving applicants get a grace period for repayment from six (6) months to three (3) years. Loans are secured wherever possible by mortgage on land, buildings, plant and machinery and other assets. Notwithstanding such restrictions, loans are granted liberally for hire purchase of machines. Loans over \$25,000 carry the prime rate of interest and loans for lower amounts carry lesser interest in a graduated manner, the least interest being about 5% per year.

(iii) A close watch is kept on the disbursement of loans and its subsequent amortisation. Quite often, monies are paid direct to the suppliers of goods and services to the loanees firstly to keep a check on proper spending of money and secondly to ensure how effectively the funds are used for the purpose for which it is borrowed. Follow up action is taken by the officers in rendering extension services whether they be in production, accounts or management. As a matter of practice and routine the loanees have been influenced to undergo one or the other management courses conducted by the Management Development Centre specially designed for small business and those which are useful to them. All these methods are utilised to expose the loanees to modern methods of management, production and marketing and to instil in them a sense of purpose and direction. Gradually the objective of the SBU & IL&ES Divisions should be to support every initiative and meet every assistance needed.

#### 10. Prejudice of Small Business:

In spite of the progress that has been made, it is found that people by and large, have little appreciation of what small industries can do and what articles of consumer and consumption goods they produce and to what standards. In fact there is wide spread ignorance that any thing to operate efficiently and economically will have to be done on a large scale basis. In order to remove some of the prejudices a Small Industries Exhibition was mounted and sent round to seven places in the country between June and September this year. Eighty six (86) manufacturers took part in the exhibition and such goods as garments, furniture, food products, metal products, handicrafts, insecticide, silk screen printing, candles, leather goods, plastic items etc., were exhibited. The exhibition aroused satisfactory response and served the purpose of making people aware of the contribution of the small industry sector. Apart from this aspect of influence it created in the minds of people, some orders also resulted from local and abroad.

#### 11. Motivating Entrepreneurs is Essential:

(i) I have explained in brief the experiences in assisting the small enterprise sector. From the narrative and statistics that have been

produced, it will be clear that a well thought out integrated and extensive programme has been initiated and it has followed up over the last three years. Nevertheless, I do believe that further refinement of the programme, more intense work in selected small enterprises, better integration of various departments and last but not least, fresh work in the field of entrepreneurial motivation would need to be initiated in the coming years. While the first three are in the nature of better administering of the programme, the last one needs considerable thought. I briefly explain below why this needs to be done.

(ii) No amount of infusion of financial assistance, extension of technical guidance, provision of marketing intelligence and dispensing of managerial guidance will produce an entrepreneur. It is noticed in most developing world that persons of outstanding merit in each individual discipline of business do occur in quantities, but ENTREPRENEURS hardly, if any, in adequate quantities. Entrepreneurship though not a part of any expertise, pervades all of them and provides the strongest viable bonds which makes each one of the expertise flourish achieving higher and higher goals. In fact, it is the integrating force and matrix without which no sustained growth is possible. Even other talents languish and wither away without contributing anything intrinsic to economic growth. There may be excellence in each discipline, but none in the totality of growth. In one of his writings Dr. Joseph E. Stapanek of UNIDO says that:-

"The element of entrepreneurship is no such a part of the culture of modern industrial societies that it is easy to accept this growth factor without realising its importance. One may sense that something is lacking in the developing work without identifying the missing element specifically as entrepreneurship."

The incidence of entrepreneurs in a developing country is scarce. If we can do anything to increase this scarce "commodity", better growth is possible.

(iii) An entrepreneur is defined as one who recognises an opportunity and takes a reasonable risk to exploit it, in the classical sense. He is more concerned with achieving success than avoiding failures. He has a great need of achievement. It is a wrong notion to presume that he is galvanised into activity by the mere prospect of profit. It is people with low achievement need who require money incentive to make them work harder. The person with high need, works hard anyway, provided there is an opportunity to achieve something. He is interested in money rewards and profits primarily because of the feedback they give him as to how well he is doing. Money is not an incentive to effort but rather a measure of its success for the entrepreneur. How true the Harvard University Psychologist David Mc. Clelland is when he said:-

"Business and Government in under developed countries can immediately promote economic development by fostering achievement oriented thinking."

Can we do something in this field of "Industrial Sociology" and "Social Engineering"?

(iv) There is a wide spread belief that entrepreneurship is a God given attribute. It is something you have or you have not. Your success as an entrepreneur is a matter of fixed destiny. Perhaps, this belief is true, to some extent. There are few entrepreneurial qualities which are doubtless in the nature of birth right and without them one can never hope to achieve success as an entrepreneur. With them accomplishment follows naturally. But between these individuals who have these qualities in great measure and those who have none, there lies a vast number of individuals who are gifted in a moderate degree. Can we concern ourselves not with the born entrepreneur, nor with the thorough misfit, but with that category of person who are identifiable as those exhibiting some quality of entrepreneurship and motivate them to become dynamic entrepreneurs? Can we make a selective approach to few working in Banks, Industrial, Commercial, Transport, Building and Business Enterprises, in whom a period of service may have aroused some knowledge of business methods, skills and requirements in whom there may be latent entrepreneurial skill? Can we make an approach to such of those artisans who not being content with executing repairs as they come, fulfilling bespoke orders when they rise, made on their own some articles in lean periods when they had some finance for future sales?

(v) Professor Barlow while speaking in Ireland said:-

"Importing entrepreneurial talent with foreign investment may meet the short term objective of increasing export and gross national product, but it seems to me that it has also its short comings as a developmental strategy. First it strikes me as politically dangerous. The Irish people are notoriously sensitive to foreign domination. What will happen when more and more decisions are made by stockholders, who are not indigenous to Ireland and whose decisions are not based on what is best for Ireland? What has happened in many countries, the examples are too numerous and well known to mention is that the climate becomes decidedly inhospitable to foreign companies and managers. Ultimately foreign Corporations leave, taking their entrepreneurs with them.

It is essential that Ireland work towards making large deposits of Irish entrepreneurs in its human resources bank."

There is some similarity between Ireland and Trinidad. What is good for the pander must be good for the goose.

(vi) I would like to end this narration on my experiences with a strong plea that the Caribbean Countries must, very seriously think of a strategy to motivate entrepreneurs if the aims and objectives of national independence are to be fulfilled.



Appendix I

PROGRESS OF FACTORY BUILDING PROGRAMME

1 Buildings Completed and Allocated

NAME OF INDUSTRIAL ESTATE	NO. OF ENTERPRISES ALLOCATED SPACE	TOTAL COVERED AREA IN SQUARE FEET
East Dry River	5	15,000
Plaisance	4	15,600
Point Fortin	1	5,200
Morvant Phase I	7	32,000
Morvant Phase II	5	22,000
Diego Martin Phase I	10	48,000
Milford	1	10,000
O'Meara	3	16,900
TOTAL	36	169,300
	*****	*****

2 Buildings under Completion

<u>NAME OF INDUSTRIAL ESTATE</u>	NO OF INDUSTRIES TO BE ACCOMMODATED	TOTAL COVERED AREA IN SQUARE FEET
Diego Martin Phase II	12	48,000
Trincity	10	50,000
GRAND TOTAL	58	267,300
	*****	*****

3 Type of Industries Occupying the Factory Buildings

Garments	8
Minor Steel Fabricating	4
Food Industries	3
Electronic Assembly	3
Minor Engineering & Foundry	3
Handicrafts	2
Cosmetics	2
Woodworking	2
Plastic Working	2
Battery	1
Cardboard Boxes	1
Insecticides	1
Screen Printing	1
Chalk	1
Woven Labels	1
Footwear	1

---

36

\*\*\*\*\*



**12. 8. 74**