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FOOTWEAR FACTORY

IS/STK/74/016

ST. KITTS-NEVIS-ANGUILLA.

Mission report

Prepared for the Government of St. Kitts-Nevis-Anguilla by the
United Nations Industrial Development Organisation,
executing agency for the
United Nations Development Programme

Based on the work of John W. Parkinson, shoe manufacturing expert

id.76-3608

Explanatory notes

St. Christopher (St. Kitts) is one of the three islands comprising the territory of St. Kitts-Nevis-Anguilla in the Leeward Islands.

The monetary unit in St. Kitts is the East Caribbean dollar (EC).

During the period covered by this report, the value of the EC in relation to the United States dollar was US 1 = EC 2.70.

The following abbreviations of organizations are used in this publication:

CDB Caribbean Development Bank

DFC Development and Finance Corporation

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ABSTRACT

This mission was a follow-up to a three-month project "Footwear Manufacturing" in St. Kitts (IS/STK/74/016) and lasted from 21 March to 20 June 1976 with a further two-week extension.

The report of the first mission, held from July to October 1975, recommended that a factory be established in St. Kitts to manufacture foot-wear for the East Caribbean countries.

The Government of St. Kitts, the Caribbean Investment Corporation, the Caribbean Development Bank and members of the World Bank and of the private sector all considered the study and project procedures suitable and the bank agreed to support the project.

The follow-up mission was requested in order to plan for the commencement of the foot-wear factory. The objectives were:

1. To advise on the building of the factory.
2. To contact and communicate with the manufacturers of foot-wear machinery and assist in obtaining suitable equipment.
3. To assist in obtaining suitable personnel for the management of the factory.
4. To assist in formulating plans for the organization of the factory.
5. To work with the officials of the Development and Finance Corporation and persons from the private sector who are associated with the foot-wear factory.

The expert concluded that providing the study made during the first mission is used as a guideline for financing and training, the manufacture of foot-wear on the scale set out in that study can be a viable enterprise.

He recommended that:

1. Training of supervisory staff be commenced by July 1976.
2. Training of local personnel be started.
3. Orders be placed with machinery firms.

The expert further advised that top personnel be recruited from fully qualified technical applicants with at least twenty years experience in foot-wear factories. These personnel should train local people to eventually take over top management posts..

He also stressed that it is important to have leather of uniform and standardized quality and that until this is available in the Caribbean, it should be obtained from established sources and at competitive prices.

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INTRODUCTION

This mission was a follow-up to a three-month project (IS/STK/74/016) from 9 July to 8 October 1975. It was recommended during that assignment that the Government of St. Kitts through the Development and Finance Corporation (DFC), the Caribbean Investment Corporation and members of St. Kitts private sector should build a factory and commence the manufacture of foot-wear for the East Caribbean countries.

As the study was done with a cash flow analysis to show the feasibility of such a project, the Government of St. Kitts and the other parties involved accepted that recommendation and a company was formed, namely the Caribbean Shoe Manufacturing Company Limited.

In order to carry out the planning for the commencement of the foot-wear factory the Government of St. Kitts requested a further three-month extension of the project, so that the expert could assist DFC and the Caribbean Shoe Manufacturing Company Limited, in which the Government is an equity shareholder. This period of assistance was from 21 March to 20 June 1976. Later, a further extension of two weeks was given.

The objectives were:

1. To advise on the building of the factory.
2. To contact and communicate with the manufacturers of foot-wear machinery and assist in obtaining suitable equipment.
3. To assist in obtaining suitable personnel for the management of the factory.
4. To assist in formulating plans for the organization of the factory.
5. To work with the officials of DFC and persons from the private sector who are associated with the foot-wear factory.

In October 1975, in the interim period between the two assignments, it was agreed that DFC would arrange with building contractors for the erection of the building, the commencement of which, clearing and levelling the ground, was hoped to be in January 1976.

It was also arranged at a meeting of the foot-wear company in September 1975 that on the UNIDO expert's return to the United Kingdom he would, in an unpaid capacity, seek the services of fully qualified personnel

in foot-wear manufacture for management and production, and the St. Kitts company would do likewise in the Caribbean area. The expert also agreed to make contact with shoe machinery manufacturers and firms who supply equipment.

The expert, at the request of DFC and the shoe company's directors, arranged for interviews for management in London, England. Communications and correspondence were exchanged with St. Kitts, and J. Wigley, Chairman of the Caribbean Shoe Manufacturing Company Limited, arranged to be in London to attend interviews on 23-24 March 1976.

I. WORK DONE ON PROJECT

The expert met Mr. Wigley on Monday, 22 March 1976 in London. Also attending the interviews of seven selected applicants was F. Gordon Bailey, a private foot-wear consultant who is well known in world foot-wear manufacturing circles. He has also been on assignment for UNIDO.

The interviews were successful and the post of general manager was offered to T. Moore. A. Nickell was selected as a second person in production. At a further meeting, the two applicants were introduced to each other.

On 25 March the expert and Mr. Wigley visited the British United Shoe Machine Company works in Leioester, England, to discuss the machinery component for the project. Lists of machines and equipment and floor plans of the proposed factory lay out were left with the export director. The service and planning section of this firm gave machine capacities, flow line systems, costs and incidentals as required in a modern foot-wear manufacturing plant before giving quotes for machines.

A visit was also made to the Mobbs-Miller Co. Limited, shoe lasts, insole board and unit sole manufacturers, situated in Kettering, England. The discussion involved future supplies of components as used in foot-wear manufacture. As Mr. Wigley was to remain in England after the expert left, other addresses of firms supplying the foot-wear industry were given to him.

The expert arrived in Georgetown, Guyana, on Sunday 28 March 1976. At the UNIDO office there, he discussed the project with the staff who informed him that the request from the St. Kitts Government for further assistance had been held up owing to UNDP being forced to restrict expenditure during 1976.

Arriving in St. Kitts on 31 March, the expert together with the Industrial Advisor to the St. Kitts Government, who is also the Government representative on the directorate of the Caribbean Shoe Manufacturing Company Limited, visited the Permanent Secretary of the Ministry of Trade, Industry and Tourism and details of the progress made on the shoe factory since October 1975 (when the expert had finished his previous assignment) were given.

The plans for the factory were based on the study of foot-wear manufacturing in St. Kitts on 6 September 1975 which was prepared for the Minister of Trade, Industry and Tourism by the expert and approved by the Cabinet of Ministers of St. Kitts on 12 September 1975. During the discussion

it was pointed out that providing the cost of the building, and therefore the rental, and the commercial bank overdraft were the same as in September 1975, the cash flow section of the report remained the same.

It was found that the erection of the building is behind schedule. Tenders for the steel work had been received and accepted but those for construction work were being processed and due to be opened on 6 May 1976. It was felt that the price for steel framing is excessive. The plans drawn by the architect varied considerably from the first drawings done in September 1975. However, they are to specifications sent out and accepted by the tender committee, and set out by the architect and building consultants.

After tenders were received from the building contractors the total cost far exceeded that allowed for in the study of September 1976. A technical committee comprising the architect, a UNIDO industrial engineer and a civil engineer attached to another government project were appointed to re-examine the specifications which had been drawn up and for which the bids by tender had been received. The findings of this committee, who worked closely with the expert, were that big savings could be made by re-design but still allowing the production area to remain the same. The steel contractors were prepared to co-operate despite having a firm legal contract. All this was arrived at by 25 May 1976. Time spent on this work meant that the project was well behind schedule but it was felt that work on the site would be started before the expert's assignment at St. Kitts ended.

During this period, the following shoe machine companies were contacted:

Fortuna Machine Co.	Federal Republic of Germany
Pfaff Sewing Machine Co.	Federal Republic of Germany
Bombelli Giancarlo	Italy
British United Shoe Machine Co.	United Kingdom
L. Gent & Sons	United Kingdom
Standard Engineering Co.	United Kingdom
Singer Sewing Machine Co.	United States of America (St. Kitts agency)

Information, illustrations, pro-forma invoices etc. for machines planned for productions were obtained from these companies (annexes I, II and III).

Shoe material suppliers were contacted, including leather manufacturers, suppliers of man-made material and components, last manufacturers and other equipment, these included:

Beardmore & Co.	Canada
A.R. Clarke	Canada
BUSMC (materials department)	United Kingdom
Mobbs-Miller Co. Limited	United Kingdom
Fred Reuping Leather Co.	United States of America
Keystone Leather and Fabric Limited	United States of America
Ralph May Organization	United States of America
A. Suarez & Co. Limited	United States of America

While orders will not be given to these firms for another six months, they were all prepared to forward samples with the aim of future business. Prices for material, except leather, were in line with the estimates given in the study of 1975.

Plans and drawings for work-tables, benches, fixtures and equipment which can be made locally by the wood-working establishments in St. Kitts were made. These drawings were given to DFC which knows of the establishments able to compete for such work. It is the policy to use local labour for all possible items.

A visit was made to Jamaica to the largest leather manufacturing company in the Caribbean area and to a company that manufactures 10,000 pairs/week of the same type of foot-wear as proposed for St. Kitts. Arrangements were made with this company that it would accept for six months any St. Kitts nationals who required supervisory training.

The shoe company controls 28 retail stores and would be interested in marketing the St. Kitts products. They emphasized their willingness to co-operate with St. Kitts in any way possible, especially worker-training. The managing director of the leather manufacturing company assured the expert that they too would co-operate fully with St. Kitts. The authorities and the shoe company directors were informed of the facilities which the Jamaican companies offered.

Fellowships for supervisory staff may be obtainable through the Commonwealth Secretariat in London for worker-training, however, arrangements and procedures would have to be started quickly for full advantage to be achieved by St. Kitts.

The general manager who had been appointed could not arrive in St. Kitts until after 14 June 1976. The Government therefore requested from UNDP a two-week extension of the project to allow the expert to brief the general manager on the progress made on the project. This request was agreed to by UNDP.

Because of this delay, it was not possible to brief the general manager in detail, to arrange for small tools and minor equipment such as hand-knives, lasting tools, punches, eyeletting squeezing pliers for bench work and hand-work before the expert left St. Kitts. He will, however, on his arrival in the United Kingdom, arrange with the general manager and the board of directors to contact firms who supply these items.

The Caribbean Development Bank (CDB) although agreeing to loans to the Government for the building of the factory, suggested alternative ways in which funding could be made and it was decided that instead of the Government putting up a building and renting it to the shoe company (as in the study), preference shares to the Government at a 9% interest rate would be issued by the shoe company and be redeemable by it. This would not alter the basic pattern in the cash flow situation and it is considered that, in the long run, this will be more advantageous to the shoe company. It would mean, however, that the board of directors of the shoe company should be altered to include a CDB representative and stronger government representation. The proposal had to have the agreement of the Government which, if it were the majority shareholder, could control the company. The expert's opinion is that once the project becomes operational (in terms of factory building being started etc.) the general manager, on account of his technical and administrative duties and ability should be appointed to the board of directors in an official capacity.

II. MEETINGS

A meeting was held with the Permanent Secretary to the Ministry of Trade, Industry and Tourism and the Industrial Advisor to the Government. A recapitulation of the work done on the previous mission and the situation on arrival of the expert for the second assignment was the basis of the meeting.

A meeting was held with the directors of the Caribbean Shoe Manufacturing Company Limited, at which the chairman and the expert gave details of the interviews held in London. It was explained that as the factory building had not been started, in fact was under review, it was recommended that only the general manager be appointed from 1 June 1976, or soon after. This would enable him to be briefed by the expert and to continue the planning and organizing of the shoe factory and of the training of personnel.

A further meeting with the directors and CDB officials was held to discuss the methods of loans for (a) the building of the factory by the Government; and (b) the loan to the company for machinery. A report made by CDB for the purpose of putting the project in front of the CDB board of directors for approval was discussed in detail. Bank officials felt that the project of manufacturing foot-wear on a regional basis in St. Kitts was technically, financially and economically viable and they would support the project.

A continuation of this meeting was held with the Minister of Trade, Industry and Tourism to inform him of the different financing methods in conjunction with the commercial banks who would provide overdraft facilities.

A series of meetings was held with the UNIDO industrial engineer attached to DFC to smooth out problems encountered in the factory-building plans and with the architect to clear queries regarding production and office areas of the factory.

A meeting was held at the Ministry with the tender's board to discuss proposals put forward by the technical sub-committee for reducing the cost of the shoe factory building. These were estimated to reduce the cost by \$EC 252,000 from the building contractors' bids. It was hoped that the contract granted for steel-frame work would also be re-negotiated. This was done, and the steel contractors agreed to use less, and lighter, girders, thereby reducing costs by \$EC 24,000, making an estimated savings of \$EC 276,000 on the contract bid totals of:

\$EC 739,000

\$EC 862,000

\$EC 894,000

\$EC 603,000

At this meeting, held on 15 May 1976, it was planned that tenders rendered according to new specifications would be opened on 19 June 1976.

A further meeting of the tenders board was held at which the technical sub-committee gave details of discussions with the steel framework contractors. They felt that new drawings would be necessary and that the final decision as to cost and building would need to be programmed for 10 July 1976.

III. PROBLEMS ENCOUNTERED

Owing to a change in the board of directors of the Caribbean Shoe Manufacturing Company Limited, a new member, not being fully aware of the background of the shoe project, objected to issues already agreed upon by the board at meetings prior to his appointment, which caused frustration and dissatisfaction. Most of the objections were out of order but they had the effect of slowing progress.

The delay in the building of the factory was due to the architect deviating from the original planning as set out by the expert in September 1975 and it is considered six months have been wasted in this phase.

Travel was approved to visit a new leather tanning complex in Montserrat, however, owing to air flights being restricted, it was not visited. This project, which is being assisted by a leather tanning adviser from the Food and Agriculture Organization of the United Nations (FAO), has been quoted as a possible source of leather for the St. Kitts shoe factory. It must be understood that to manufacture foot-wear to compete against products imported from developed countries, reasonably large quantities of uniform and standardized leather are required. The expert confines his views to reports of the FAO project, and to his knowledge of the St. Kitts, and other Caribbean countries, hides and skins, but he believes that the limited quantity, poor preservation and quality, and difficulty of transportation from the East Caribbean countries to the tannery of raw hides and skins, whether dried or wet salted, will create many problems.

Other minor problems arose but when these were discussed in a technical manner general agreement was arrived at.

IV. CONCLUSIONS

Providing the study is used as a guideline for financing and training, the manufacture of foot-wear on the scale set out can be a viable enterprise. In financing, worked out in \$US, contingencies have been allowed for in almost every item.

Despite the changes in the schedule of building the factory, the re-vamping of the finance in the capitalization, the basic structure and analysed cash flow for the project remain very much the same, providing the cost of the factory does not exceed the estimated \$US 250,000, and the commercial bank allows a \$US 200,000 overdraft limit.

Judging by the quotes received for materials, the costs set out in the study are in line. The possibility of increased costs due to inflationary conditions arises, but the ex factory price for the finished products will keep step with material and labour costs.

The machinery quotations from the Italian manufacturer are competitive and according to specifications. The general manager should decide which type of machine is most suitable and emphasis should be made to CDB that, providing the specifications are met, it should be made possible to purchase from any country, if savings are to be made by so doing.

Owing to the delay in building the factory, the posts of production manager and financial controller, which were scheduled in the study to start at the same time as the general manager, should not be filled until the factory is almost finished early in 1977.

It has been stated at meetings that local or Caribbean top management should be employed even at the start of the operation. The expert dissociates himself from such views. In his experience, and to his knowledge, all large factories in the Caribbean area in the same category as the planned St. Kitts unit have fully qualified technical personnel, with at least twenty years experience in large foot-wear factories, as top management. These personnel must train local people to eventually take over top management posts; in this way progress can be made.

V. RECOMMENDATIONS

In reviewing the position and estimating that the building of the factory will be completed by January/February 1977, it is recommended that:

1. The general manager and the two UNIDO experts select and brief local personnel for the proposed fellowships. On return from training, the trainees should have practical training in the St. Kitts shoe factory with the experts for at least three months prior to the latter finishing their assignments.
2. The Caribbean Shoe Manufacturing Company Limited, through its general manager, commence recruiting supervisory staff by the end of July 1976, and arrangements be started with the C.M.P. Footwear Company, 10 Bell Road, Jamaica, for training staff. This should be arranged so that the staff are back in St. Kitts by March 1977 at the latest.
3. The appointment of the proposed production manager does not take place until the end of 1976, but in time to assist with the installation and lay out of the equipment and machinery.
4. The general manager, after reviewing the price quotes for the machinery and equipment, visit the CDB with proforma invoices and specifications for the placing of firm orders with machinery firms for delivery from November 1976 to February 1977.
5. CDB be requested to agree to obtaining specialised items of equipment from any country, if specifications are correct and prices benefit the proposed shoe factory.
6. As materials for the Caribbean Shoe Manufacturing Company Limited will have to be imported, the board of directors should establish an import company to handle this side of the business. By so doing, the shoe company can take advantage of the commission obtainable from the firms abroad. The shoe company as a whole should receive all benefits from import involvements which will amount to a substantial cash saving when the factory is in full production. Such an import company could, eventually, link in with the export and marketing of finished products.

Annex I

MACHINES AND EQUIPMENT SUGGESTED FOR THE
CARIBBEAN SHOE MANUFACTURING COMPANY LIMITED

1. Clickers cutting board
2. Design punches and tools
3. Cutting shears
4. Zinc sheets
5. Pattern grading machine
6. Clicking press
7. Clickers cutting boards
8. Press knives or dies
9. Outsole sewing machine (sandals)
10. Skiving machine
11. Edge folding machine
12. Punch and eyelet hand tools
13. Size stamping machine (linings)
14. Sock stamping machine
15. Benches (5), local source
16. Upper splitting machine
17. Single needle flat sewing machines
18. Twin needle cording machine
19. Cylinder edge binding machine
20. Post under-trim linings machine
21. Zig zag sewing machine
22. Toe puff printing machine
23. Cement holders, scissors, knives etc.
24. Lasts, 1,500, various sizes
25. Racks and fixtures for soles and uppers
26. Insoles, heels etc., local source
27. Sole roughing machine
28. Upper roughing machine (marginal), bench model
29. Counter cement dip grid
30. Duo rail transporter
31. Hot-air dryer and reactivator
32. Heat setting unit
33. Insole tack by hand equipment
34. Forepart lasting

35. Side lasting
36. Heel seat bedding machine (nail bed)
37. Upper roughing machine
38. Shank (hot melt pot)
39. Marginal cement machine or pump brushing
40. Sole reactivator
41. Sole press (attach sole)
42. Last removing machine
43. Heel attacher
44. Hot-air blower (remove wrinkles)
45. Cleaning sponges etc.
46. Cement roller machine (sock linings)
47. Spray cabinet, guns etc.
48. Stapling machine for boxes
49. Stapling machine for shoe ornaments
50. Motor vehicles (car and van)

Annex II

MACHINERY AND EQUIPMENT COSTS

During the mission, prices and proforma invoices were received from firms dealing in shoe machinery. While it will be the general manager's decision to purchase, the expert, having considered the prices on a competitive basis, feels the following would meet specifications. In some cases the lowest prices have not been considered as the quotations do not meet specifications.

<u>No.</u> ^{a/}	<u>Firms making quotations</u>	<u>Price</u> <u>(\$US)</u>
1	Other sources being considered	
5	Bombelli, Italy	2,700
6	BUSMC, United Kingdom (2 machines required)	4,454
10	Bombelli, Italy (2 machines required)	1,380
11	" "	2,160
13	" "	470
14	" "	234
15	BUSMC, United Kingdom	5,586
22	Bombelli, Italy	660
27	Standard Engineering, United Kingdom	1,674
29	" "	129
30 and 31	BUSMC, United Kingdom	13,416
32	" "	5,262
34	Bombelli, Italy	16,638
35	Other sources being considered	
36	Bombelli, Italy	4,345
37	Standard Engineering, United Kingdom	1,674
38	" "	387
39	Bombelli, Italy	926
40	" "	480
41	" "	4,483
42	" "	600
43	" "	6,353
44	" "	422
46	" "	257
47	" "	675

^{a/} These numbers refer to the list given in annex I.

<u>No. a/</u>	<u>Firms making quotations</u>	<u>Price (\$US)</u>
48	BUSMC, United Kingdom	2,025
49	Bombelli, Italy	<u>1,515</u>
		78,905

Sewing machines

17	Pfaff, Federal Republic of Germany (10 machines required)	6,840
18	" "	1,199
19	" "	1,171
20	" "	1,789
21	" "	<u>1,604</u>
		<u>12,603</u>
		91,508

Added to this figure will be c.i.f. charges.

In the CDB report the amount recommended for the loan is \$US 231,000. If the general manager wishes to get machinery mainly through one source, BUSMC, the United Kingdom, and obtain those types not offered by this firm through the other two firms, the totals, including c.i.f. charges, would be:

	<u>\$US</u>
BUSMC	112,178
Bombelli and Standard Engineering	21,882
Pfaff	<u>13,253</u>
Total	147,313

Internal equipment such as benches, fixtures, compressor, cars, lasts, and injection machines could still be obtained from the balance of the loan.

Annex III

MACHINERY QUOTES, OPERATIONS AND SPECIFICATIONS

Clicking boards: The price quoted by Bombelli, \$US 800, is for section-alized end grain wooden boards, while that of Standard Engineering is for heavy duty plastic. Both are suitable but for start-up and price-wise the Standard quote is recommended.

Design punches and tools: Prices for these have not been quoted. The general manager should decide from which source they should be obtained.

Cutting shears: No quotes received but Bombelli, BUSMC and Standard Engineering do supply. These firms are being contacted.

Pattern grading machine: The quote from Bombelli is suitable. BUSMC did not quote on account of the high cost of their machine.

Clicking press: Two needed for start-up. Suggest BUSMC.

Press knives and dies: To be decided when styles and designs of shoes are decided.

Skiving machine: Two needed. Suggest Bombelli.

Edge folding: The model by Bombelli can use two types of cement thermoplastic or neoprene and has a stand. The BUSMC is a bench model and is not a modern type. Suggest Bombelli.

Punch and eyelet hand tools: Suggest Standard Engineering.

Size stamping (linings): Suggest Bombelli on price.

Shoe stamping: Suggest Bombelli on price.

Upper splitting machine: Both BUSMC and Standard Engineering are suitable but it is known that the Italian splitting machine is superior. Bombelli has been written to for a definite quote. Would advise waiting.

Toe puff printing machine: Suggest Bombelli on price.

Sole roughing machine: Standard Engineering with carborundum roll and wire brush.

Upper marginal roughing machine: No quote for type required; other models available from firms in the United States. Suggest waiting.

Counter dip grid: Standard Engineering.

Duo rail and hot-air dryer: BUSMC.

Heat setting unit: BUSMC.

Forepart lasting and pulling over: This machine is expensive but for price would suggest Bombelli. General manager should be consulted on this.

Side lasting: On price BUSMC, although models like Camborian available cheaper. Can also be done by hand at the beginning.

Heel seat bedding: Bombelli machine very good; on price and specifications Bombelli.

Upper roughing on last: Standard Engineering with roll and wire brush.

Shank (hot melt): Standard Engineering.

Marginal cement: Bombelli.

Sole reactivator: Standard Engineering.

Sole press: While not the cheapest, Bombelli is the most suitable.

Lasting removing: Bombelli.

Cement roller: Bombelli.

Spray cabinet and spray guns: Bombelli.

Stapling machine for ornaments: Bombelli.

Stapling machine for boxes: BUSMC.

Hot-air blower: Bombelli.

Sewing machinery

While the quotes for Pfaff machines are higher in total by \$US 2,300, c.i.f. delivered at St. Kitts, it is considered that the type and quality are more suitable. The quote for 15 machines is \$US 13,253.



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