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BANGLADESH APPAREL

FOR

EXPORT INDUSTRY

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Preliminary Report of Field Investigation of the Bangladesh Apparel for Export Industry

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This is a preliminary report, and all conclusions are tentative. Please do not reproduce or quote.

Introduction

On July 20-August 4, 1989, I undertook a mission on behalf of the Harvard Institute for International Development (HIID), funded under a contract let by the U.S. Agency for International Development (USAID), to Dhaka, Bangladesh. This document is meant as an interim report to that mission. It is not meant by any means to be a final product, nor even necessarily to serve as the basis for a final report. A final report will be prepared following a second mission, probably to be undertaken in January, 1990. This report is rather meant to serve to help guide work being undertaken by the HIID project in Dhaka prior to and in preparation for the second mission. This report does incorporate findings of the first mission, but a number of issues are left open, pending the results of ongoing investigations. Also, areas where information is missing are highlighted with the intent of creating a list of additional information that is needed to complete the mission.

The original terms of reference envisaged doing "business school-type" research in three or four nontraditional manufacturing sectors with export potential in Bangladesh. Because research being pursued in graduate business schools in present times is highly heterogenous, ranging from the very abstract (e.g., use of stochastic calculus methods to determine dynamic price trajectories of contingent claims) to very experimental (e.g., use of human subjects to test theories of consumer choice), exactly what was meant by "business school-type" research required some clarification. In the end, it was determined that this meant

detailed field research at the level of the individual firm.

The original terms of reference for the mission were not entirely feasible given resource constraints, and in the course of meetings at HIID during the spring and early summer of 1989, these terms were somewhat modified. In particular, it was decided that the mission should focus on one sector. The sector chosen was the ready-to-wear garments industry, because this has been the most successful non-traditional export industry of Bangladesh.

Although successful in terms of the value of export shipments, the export garment sector has contributed relatively little domestic value-added per dollar of shipments. Virtually all inputs (except labor) are at present imported, including fabric, sewing thread, most capital goods, and many minor items (buttons, packaging material, etc., although in very recent times a certain amount of these have begun to be sourced from domestic sources of supply). It is thus generally accepted that only about 20% of the value of exported output of this industry is accounted for by domestic value-added (i.e., "twenty cents on the dollar").

It was thus decided that the research would be further focussed on the reasons why this ratio of domestic value-added to value of exports is so low, and to explore what are the prospects for raising it. In particular, two possible routes to increasing this ratio are to be explored: (A) raising the unit value per item shipped (this is of special relevance given that exports of many apparel items from Bangladesh are subject to quotas in two major export markets, the United States and Canada; see discussion below), and (B) using domestically woven and finished fabric to

produce garments. As it happens, these two routes are interconnected, as is discussed in the section following.

The remainder of this interim report is divided into four sections. The first section provides some background information and impressions on the export garment sector in Bangldesh and the environment in which it operates. ("Environment" here pertains both to the internal environment within Bangladesh and the export markets which to which the industry markets its products.) The second section examines some of the apparent reasons why the Bangladesh garment sectors do not source fabric from the (quite large) Bangladesh textile industry. The third section describes the research that is ongoing by the on-site HIID research team in Bangladesh and by me in the United States. The fourth section offers some speculation on what the outcome of this research might be. It must be noted that this latter item is indeed somewhat speculative. Any conclusions drawn here are preliminary and subject to revision, based on the outcome of work that has yet to be completed.

The Export Garment Industry in Bangladesh and the Environment in Which it Operates

This industry, as previously noted, has been quite successful in terms of growth of shipments, employment, and (probably) profitability. In a way, it is something of a marvel that the industry exists at all. Research by Gian Sahota and coworkers at the HIID field office in Dhaka and by other researchers in Bangladesh reveal that the overall policy mix of Bangladesh is

biased against exports. [REFERENCES NEEDED]. Direct manifestations of this bias include: (i) high rates of protection on almost all imports, including imported raw materials and intermediate goods, resulting in low or even negative effective rates of protection for exportables; (ii) domestic subsidies that may further discourage exports; and (iii) proliferation of government bureaucracy, resulting in a high degree of difficulty for the entrepreneur to get permission to import needed capital goods or other necessary inputs. (Or indeed to get permission to invest at all.)

Predictably, the bureacracy results in prevalence of side payments that serve to cut the "red tape" but increase the cost of projects. One ongoing study of the political economy of Bangladesh suggests that side payments as a percentage of total project front-end cost is typically significantly higher in Bangladesh than in neighboring India or Pakistan, themselves hardly paragons of virtue in this regard [REFERENCE TO BE SUPPLIED]). This study suggests that side payments as a percent of total costs of an investment undertaking typically are 40% in Bangladesh, as opposed to perhaps 20-25% in neighboring nations.

The export garment sector of Bangladesh has gotten around many of these obstacles in ways that will be discussed shortly. Nonetheless, it faces other, less direct obstacles common to all commercial activity, including shortages of skilled and semi-skilled labor, shortages of managerial and technical skills, lack of a tradition of trading (i.e., Bangladesh does not have long-established families engaged in trade, as can be found in

many Asian countries), a poor domestic physical infrastructure (existing deep water port facilities that are generally acknowledged to be inadequate for the present needs of the nation and lack of a regular air freight service from the major airport at Dhaka), and a problem of recurring floods (the nation is basically one large river delta, or more precisely the delta of three large river systems that converge in Bangladesh). The garment sector is probably less affected by many of these problems than are other sectors (e.g., the labor skill requirements for apparel production are modest, and the industry seems to have drawn some of the most capable entrepreneurs in the country). However, certain of the problems certainly do affect it at present, e.g., the lack of adequate physical infrastructure, on which more shortly, and other problems could come to the fore if the industry continues to grow.

In spite of these problems there is little doubt that the performance of the industry has been spectacular. The industry really has existed for only ten years. The total exports of the industry, in value terms, were slightly over $175 million in the period July-June 1985-86. These grew to over $475 million in 1987-88. (NOTE: These figures are from the Bangladesh Bureau of Statistics. They don't always reconcile with figures from the Central Bank of Bangladesh. Persons in the HIID office in Dhaka believe that Central Bank figures are more reliable than those of the Bureau of Statistics. In the final report figures from both sources will be included.) This would suggest a growth rate of over 27% per annum, compounded continuously, over the relevant two

year period. It was reported orally by knowledgable persons in Dhaka that the growth of the industry has slowed considerably during the past twelve months, but hard data were not available at the time of my visit.

The problems with attempting to create a new business in Bangladesh are legion, and most of these have to do with bureaucracy. To get permission to invest in new plant and equipment, the permission of up to six government agencies is required (NOTE: we need to verify this), and numerous signatures may be required in each agency. As is discussed below, the export apparel industry must also import inputs through the bonded warehouse scheme, and this entails additional bureaucracy. Recognizing the potential of the industry, steps were taken in the early 1980's to cut the "red tape" faced by entrepreneurs seeking to operate in the industry. These steps were undertaken as part of a larger program to reform the bureaucratic process (see Mallin [1988].) (NOTE: We need more information on the activities of the Export Promotion Bureau's "one stop shopping" for apparel exporters and impressions of how effective has this program been.)

The United States has been the largest market for Bangladesh apparel exports ever since the export garment sector got its start. According to The Economist Intelligence Unit Report No. 2 for 1989 for Bangladesh, the United States in 1987 accounted for over 80% of apparel exports from Bangladesh by value. However, since that time, exports to markets other than the United States have grown much faster than exports to the U.S. market. Most of the growth has been to European markets, with the United Kingdom

and Italy leading the list, followed by West Germany. This growth was from a low base, and in 1989 it is estimated that the United States still accounts for at least 75% of these exports.

Beginning in 1985 the United States imposed quotas on imports of clothing items from Bangladesh, and the list of items under quota was subsequently expanded. (NOTE: we should get a list of the items under quota, the size of the quotas, and the history of these.) The quotas took the industry by surprise in Bangladesh, and substantial restructuring of the industry ensued, discussed below.

Quotas in Bangladesh are administered under the Export Promotion Bureau, a government agency. Quotas are allocated to firms as "performance quotas" and "free quotas". Allocation of the former is based on previous year's performance; simply put, the better a firm's performance, the higher will be its next year's share of the performance quota. The latter is, as its name implies, open to all comers. In 1989, 90% of all quotas allocations are granted under the "performance" category, and only 10% under the "free" category. According to managers of apparel firms in Bangladesh we interviewed, the administration of quotas is relatively free of corruption. There does exist since 1987 a secondary market for quota allocations, so that a firm holding a quota can sell its rights to another firm. Five percent of the quotas are reserved for firms that use local fabrics in their exports, but these reservations have not been acted upon. Under present rules, if no firm acts upon them during the first six months of the year, the quotas are then reallocated to firms using

imported fabrics. Administration of the quotas is a new activity in Bangladesh, and the rules under which these are allocated are frequently revised. To be authorized to utilize quota rights to manufacture and export clothing made from imported fabric, a firm must receive a back to back letter of credit (L/C) for its output (see below).

In addition to the United States, Canada imposes quotas on imports of clothing items from Bangladesh. Canada is a much smaller market for these items than is the United States or the European Economic Community. In August of 1989, there was much talk of the possibility of the EEC setting quotas on Bangladesh. (NOTE: My impression is that no definite action has been taken with respect to the latter. But we need additional information here.)

It is difficult to get a fix on the industrial structure of the export garment sector of Bangladesh. There are over 700 garment factories (producing units) registered in Bangladesh as of August, 1989, but it is estimated that only between four and five hundred of these are active. Many of the inactive ones went out of business following the imposition on the industry of export quotas for the United States in 1985. Some of these units may have been fictitious, i.e., established as fronts for the shipping of apparel items assembled in countries other than Bangladesh to the United States in order to circumvent quotas on U.S. imports of apparel from these countries. The Garments Directory, a publication published privately but "recommended" by the Bangladesh Garment Manufacturers and Exporters Association (the well

organized trade association) lists somewhat less than 400 factories holding quota rights for the United States. However, because there exist factories that subcontract to quota holders, this list of quota holders almost surely underrepresents the total of producing units. If the current number of active factories is 450, then average annual exports per factory would be about 1.05 million dollars per annum.

Published quota allocation figures for 1988 suggest that not all factories are of equal size. Indeed, based on the published list of these quotas, the largest factory seems to produce over 21 times the volume of the smallest. It is impossible to tell how many factories might be under common ownership. I was told that the Sunman group is one of the largest groups of firms under common ownership. According to published information, this group holds ten producing units. From the published data I could not determine the combined share of the market held by this or any other group. (The best available source of data for this purpose again is the list of quota allocations for 1988; alas, the published list seems to be very incomplete.) The Garments Directory lists 83 firms or groups that hold two or more producing units, but this list might not be complete.

With respect to management characteristics, my impression is that most producing units in this industry in Bangladesh are basically "one person shows"; that is, one key person in each unit makes most management decisions, supported by a handful of aides. Most producing units sell through selling agents located external to Bangladesh. Indeed, the earliest firms in the

industry were essentially captive subcontractors to firms from Korea and Hong Kong. (See the history of Desh Garments, the first successful exporting firm and still one of the largest, by Rhee [198?].) Desh in 1979 started as a subcontractor for Daewoo Industries of Korea, and the first employees, including the production line workers, were trained by Daewoo in Korea. Daewoo's motivation for helping to start Desh was to obtain sources of supply outside of Korea, given that Korea was subject to increasingly stringent U.S. import quotas for apparel items.) Many producing units in Bangladesh are de facto still subcontractors for external firms, and it was suggested to me that in some cases the Bangladesh unit is under the effective managerial control of the external firm, even though nominally the firm would always be controlled by Bangladesh nationals. Some firms clearly have broken out of this mold, however, and some of these even sell directly to retailers in the U.S. and elsewhere.

What is clear is that few of the producing units, or even the groups, have passed beyond being a "stage II" developing country exporting firm under the taxonomy of Wortzel and Wortzel [1981]. Under this taxonomy, a stage II firm has made a commitment to the export business, has some internal design capabilities, but still needs help from its customers in setting specifications and has no more than a rudimentary sales and marketing organization. A stage I firm under this taxonomy has made no commitment to exportat all; given that firms in the Bangladesh export apparel sector have in principal no business except export business (see discussion following) there would be no stage I firms in this sector in

Bangladesh, strictly speaking. Nonetheless, many of the general characteristics of firms at this stage apply to garment exporters in Bangladesh: The importer makes all design and marketing decisions, does inspection of the finished goods and often even the work in process, and arranges for shipping. The producer is then simply a seller of production capacity. A few garment exporters in Bangladesh might be approaching Wortzel and Wortzel's stage III, firms that can produce and (to some extent) market export quality merchandise with little or no assistance from external agents. However, such firms are surely a tiny minority of Bangladesh garment exporters; an industry insider who spoke with us in Dhaka estimated that at most 10% of these exporters are even beginning to develop stage III characteristics. Most such firms would seem to be between stages II and III.

The power of labor unions in Bangladesh is the stuff of legends. The apparel industry has largely avoided unions, however, by employing mostly women. For cultural and religious reasons, women have historically not held jobs outside the household in Bangladesh. This tradition has clearly been broken by the apparel industry. On-site visits of a number of apparel mills revealed the use of child labor as well as female labor. It was explained that most of the children in the plants were the dependents of older female workers. My observation was that children were employed to perform easy tasks, and that none were used for tasks that could be considered dangerous or arduous. It was also clear that children employed in the plants we visited were better off than their counterparts found virtually everywhere

in Dhaka begging in the streets, although one was led to wonder if the apparel mills might not be able to do somewhat better by them than is evident at present. (Could not the mills, for example, provide for elementary education?)

Wages paid to workers in the apparel industry are extremely low in Bangladesh. The typical worker probably grosses no more than ($US30.00 per month? My impression was that wages in the industry were low even by Bangladesh standards. But we need better information here.) Apparel assembly is, of course, extremely labor intensive, and Bangladesh's source of comparative advantage in this activity is clearly low cost labor, coupled perhaps with a somewhat surprising amount of entrepreneurship on the part of the apparel producing firms.

As indicated above, apparel exporting firms in Bangladesh use imported fabrics almost exclusively in producing their product. The imported fabric enters the country almost exclusively via the bonded warehouse scheme. Other schemes for duty-free import of inputs for manufacture of exportable products (e.g., the duty-drawback scheme) are not used by these firms. (NOTE: We should investigate this further). Under the bonded warehouse scheme, the firm must obtain back-to-back letters of credit. That is, the firm must have in hand a firm order for a given output; a bank (external to Bangladesh) representing the client to whom the order is destined then issues a letter of credit, against which the exporting firm can draw payment when the product is shipped. The exporting firm then uses this letter of credit as collateral for obtaining a letter of credit to be used to finance imports the

needed fabric (and possibly other inputs such as sewing thread, buttons, etc.). The finished fabric typically comes from Korea, Hong Kong, or Taiwan. Fabric from the first two locations is, however, quite often spun and woven in the Peoples' Republic of China, with the finishing done in Korea and Hong Kong. The imported inputs enter "under bond", i.e., they enter duty free but a bond is posted which is forfeitable if product containing the inputs is not shipped out of Bangladesh within a specified period of time. (NOTE: This description is how in principle the bonded warehouse scheme works; we need additional information on the actual practice.)

The bonded warehouse scheme is deemed necessary to prevent imported fabric from entering the highly protected domestic market for textile products. The domestic textile industry in Bangladesh consists of three subindustries: the handloom sector, which is a cottage industry employing a very large number of persons (more detail will be provided here; there are several recent studies of this subindustry which I have not yet read); a state-owned complex of mills, the Bangladesh Textile Mills Corporation (BMTC) which is by the admission of officials within the Ministry of Textiles and even executives of the BMTC itself a badly run and strike prone operation producing products of generally low quality, but an operation that has been targetted for upgrading (at the time of my visit some BMTC facilities were being modernized and new facilities constructed; there was considerable skepticism with respect to how well these would be managed); and about half a dozen privately owned textile mills, at least some of

which seemed to be capable of producing reasonably high quality product but in very limited quantity. At the present time, the total capacity of the textile industry in Bangladesh cannot meet the needs of the country, and even mills producing low quality output have a backlog of orders. Under these circumstances it goes without saying that high quality product commands a price premium, and this raises one of the more fascinating issues we uncovered: To what extent, if any, is there a "leakage" of fabric out of the bonded warehouse scheme and into the local market?

Our impression is that it will be impossible to get a clear fix on this issue. On one hand, it is clear that there are substantial opportunities for "leakage". Given the quantity of fabric that is imported under bond, the prevalence of side payments, and the imbalance between domestic demand and supply of textile products (and keeping in mind that most domestic production of such products is of low quality), it would virtually be impossible for the authorities to prevent "leakage". It was pointed out to us that sales of imported fabric in the domestic market is not the only possible reason for "leakage" of fabric out of the bonded warehouse system. The fabric also commands price premiums in neighboring India, and it was claimed that a substantial amount of smuggling of the fabric from Bangladesh into India occurs. Some parties we contacted (e.g., owners of local textile mills and some officials within the textile ministry) believe that "leakage" is very substantial, and some of these parties suggested that it accounts for the bulk of the profits actually garnered by the export apparel sector. Other parties

(these naturally tended to be the garment factory owners) minimized the matter, claiming that profitability of using the imported fabric to manufacture apparel for exports was greater than opportunities for profit from smuggling.

Whatever the case, one thing is clear: the possiblity of profitable "leakage" complicates the position of the garment producers with respect to usage of locally-produced fabric. Plainly put, if locally-produced fabric were to be substituted for imported fabric, opportunities for profitable smuggling would be reduced. Some Bangladesh textile producers indeed claim that this is the major reason why the apparel industry is reluctant to use locally-made fabric. We doubt that this is in fact true (that is, we believe that other reasons better account for this reluctance; the matter is discussed further in the following section), but nonetheless the "leakage" issue does complicate matters.

As noted above, the quotas placed upon exports of apparel from Bangladesh to the United States and Canada along with the possibility of quotas on exports to the European Common Market limit the ability of the export garment industry to increase further its output in terms of physical volume. Many apparel exporting nations have been able to capitalize on quotas by means of raising unit value of their exports. Can Bangladesh accomplish this? We tend to doubt it, for reasons that we shall enumerate.

To begin, it is important to understand what are the sources of value in this industry. One source clearly is the quality of the product itself. But another source is the ability to produce the product against tight delivery schedules. Higher-priced

garments tend to be subject to seasonality and fashionability. The sellers of high-fashion items require that, say, their fall lines of apparel be in the stores by late July or early August. But the designs for these lines might be completed only six to nine months before they are to go on sale. The manufacturers of the garments typically have a very tight schedule to meet between the time they receive orders and the time they must make delivery.

All of these considerations work against the firms in Bangladesh. Under the bonded warehouse, back-to-back letter of credit scheme, fabric can only be ordered once an order is in hand. Because the fabric is sourced from distant locations such as Korea, Hong Kong, and Taiwan, lead time on fabric orders is rather long, and it can be difficult to find suppliers of the specialty prints that are often demanded at the high-fashion end of the market. Transportation to Bangladesh is slow and subject to uncertainties; many of the uncertainties occur at the port of entry, where it can take considerable time for shipments to be unloaded, move through the customs clearance and bonding procedures, and shipped to the garment factories themselves. Further time and uncertainty is involved in the outshipment phase. Lack of air freight capabilities at Dhaka airport disenables expedited shipment of orders.

A consequence of all of this is that Bangladesh has largely been consigned to the "low end" of the apparel market. Bangladesh's exports are largely of men's and women's shirts and blouses, children's wear, outerwear, and other products destined to be marketed through mass merchandisers such as J.C. Penney and

Sears Roebuck at the relatively high end of the market and K-Mart and other discount chains at the low end. The products themselves tend to be those not greatly affected by changing fashions - if there is a significant probability, say, that shipper will be late in delivering winter clothing, the buyer will want only those items that can be sold next season as easily as this season.

To move "up market" and hence capture higher unit value per item shipped, Bangladesh would at minimum have to be able to meet tighter delivery schedules than can at present be met. This would require all of the following: better transportation to and from the major markets for output and from locations where fabric is sourced, including airfreight services; faster custom clearance times; establishment of close working relations with the buyers from the "upscale" designers, wholesalers, and retailers; and at least some capacity to source finished fabric from within Bangladesh.

The lattermost item is of greatest relevance to this report. The managers of garment mills we visited all noted that their ability to compete in the markets for higher unit value apparel was hampered by the lack of suitable domestic Bangladesh supplies of fabric. Why local fabric is not used is examined in the next section of this report, and what would be needed to create local supply is explored.

Prospects for Utilization of Locally-made Fabric by Bangladesh Garment Exporters

As noted immediately above, the ability to substitute locally

made fabric for imported fabric is a necessary but by no means sufficient precondition for increasing the unit value of apparel items exported from Bangladesh. Even if this unit value is not greatly increased, use of locally made fabric in export apparel would serve to increase the percentage of value added of local origin. For this to make any sense at all, of course, locally produced fabric would have to be cost competitive (on the basis of domestic resource costs) with imported fabric. But other criteria would have to be met as well.

From the garment exporters' point of view, use of locally sourced fabric would be attractive only if this use would reduce lead times between order and delivery of the fabric and if the fabric met quality standards of the exporters. The lead time issue has been discussed above: the value of apparel exports is dependent not only upon the quality of the garments themselves but upon the ability of the manufacturer to meet delivery schedules, and a major problem faced by manufacturers in Bangladesh is long lead times associated with sourcing of fabric. The quality issue is self-evident: Higher unit value garments simply must meet higher quality standards than lower unit value items, and quality of the garment begins with quality of the fabric itself. Garment exporters we interviewed felt that local textile producers could neither meet delivery schedules nor quality standards.

With respect to delivery schedules, as has already been stated, the Bangladesh textile industry at present is hard-pressed to meet domestic demand and it is little wonder that there are problems with meeting short delivery times. Given the "seller's

market" conditions in Bangladesh, mills tend to gear up for long production runs of standard finished fabrics. The needs of the apparel industry, however, are often for shorter runs of more specialized fabrics. This need becomes greater as one moves from "commodity" apparel items to higher unit-value items. (But, as noted below, the specialization is often concentrated in the finishing end of the fabric production process; that is, the specialized fabrics are made from standard grades of woven greige goods that are are printed or dyed to create a differentiated end product. See discussion below.)

Production of relatively short runs of differentiated finished textile products requires "flexible management" capabilities. In the modern textile mill, this implies sophisticated management information and control systems which are generally not in place in Bangladesh textile mills. This lack is in part one of not having the necessary "hard" technology (e.g., computers and computer networks). But it is equally due to a lack of requisite managerial and technical capabilities. In our plant visits, I noted that several of the more dynamic apparel manufacturers had begun to implement computerized management information systems. There was no evidence of this in any of the textile mills we visited.

A consequence of this lack of "hard" or "soft" technical capabilities is that even if the physical capacity of the Bangladesh textile industry is increased in the sense of adding more spindles, looms, and printing and dying machines, it is not clear that the industry could meet delivery requirements of the

apparel exporters without significant upgrade of managerial capabilities needed to manage a flexible manufacturing process) and accompanying technical requirements (e.g., computer networks and the other accouterments of management information systems.)

With respect to the quality control problem, one specific problem most often mentioned by apparel manufacturers with reference to locally produced textile products was one of shading of fabrics. Shading occurs when the intensity or shade of a color varies along the length of the fabric. It can be caused by faults in the greige fabric itself or by improper techniques in the finising of fabric. (Greige fabric is fabric that has been woven but has not been "finished". "Finishing" consists of chemically treating the greige fabric - dying it, printing it, and/or applying other chemicals to it. Several persons in the apparel business and even some in the textile business interviewed by us believed that Bangladesh textile manufacturers generally lack the technical skills required at the finishing end of the fabric manufacturing process. One private textile manufacturer claimed that his firm could meet quality specifications and delivery schedules, but these claims were met with widespread skepticism among apparel manufacturers when we presented them.

It became fairly clear during the field visit that if the Bangladesh textile industry were ever to be able to meet the needs of the apparel exporters, the finishing mill would be the place to start. Indeed, it seems logical that as a start greige fabric might be imported into Bangladesh to be finished locally. Advantages to starting this way would be legion: (i) there are a

number of sources of high quality greige fabric from which Bangladesh could import its needs; (ii) greige fabric is a standard, commodity-like product (differentiation of the product largely occurs in the finishing stages), and relatively few types of greige fabric figure in the production of apparel fabrics. Thus, inventories of the required types of greige fabrics could be maintained at relatively low cost; (iii) most greige cloth presently produced in Bangladesh would not meet quality standards demanded by the apparel exporters (especially if they were to try to move upmarket), and what sufficiently high quality product there is produced in Bangladesh is in very short supply; (iv) to meet the demands of the export market, the textile industry simply would have to master the finishing stages under any circumstance.

Without capability to finish fabric at export-grade levels, there simply is no way that the Bangladesh textile industry can hope to service the needs of the export apparel industry. Finishing is both the bottleneck to be broken to decrease the lead times associated with fabric acquisition and the stage at which a commodity product is converted into a differentiated product.

To develop this capability, new skills would have to be learned and new capital goods imported. As noted above, to meet the demands of an apparel industry trying to move "up-market", the new finishing mills would have to have flexible manufacturing capability, and this above all else implies knowledge and skills that do not seem to be widely resident at present in Bangladesh. Given that both skills and capital are resources in short supply

in Bangladesh, it would seem reasonable to concentrate allocation of these resources on finishing rather than, say, attempting simultaneously to upgrade the spinning and weaving components of the textile industry.

What would it take to create a fabric finishing industry in Bangladesh capable of servicing the apparel industry, besides new human and physical capital? Almost surely it would take further reform of the bureaucratic process. For example, the bonded warehouse program would have to be expanded to allow for duty-free importation of greige fabric. Importantly, the terms on which importation was allowed would have to be relaxed significantly. It would not, for instance, be practical to require that greige fabric be imported only against back-to-back letters of credit; reduction of lead times would rather dictate that finishing mills filled orders for finished product from inventories of greige fabrics already on hand. One possibility might be that stocks of greige goods be maintained in government warehouses and that the product be released only against orders for finished goods. But this would create yet one more possibility for red tape and graft. Another possibility would be for a workable duty-drawback scheme to be implemented to apply to the importation of greige fabric destined for the export apparel industry. The existing duty-drawback facility in Bangladesh does not work well and would not be suitable for these purposes.

Because a finishing industry would have to maintain inventories of raw materials - these would include chemicals as well as greige fabric - means to finance working capital needs of

finishing operations would be required. At present, the credit supplying institutions of Bangladesh are in a shambles. This matter is beyond the scope of this investigation, and we only note that workable sources of short term credit would have to be created.

Textile finishing is a relatively capital intensive process, and efficient finishing mills operate on a fairly large scale. Requirements for an efficient sector thus include a means to raise the necessary capital needed for long term financing of the industry. The bureaucratic process for approval of the necessary capital investment would require reforming, and the magnitude of side payments that inevitably seem to be required for approval would have to be reduced. When we asked managers of apparel mills about these these side payments, we tended to be told that they were "managable". But apparel mills are neither large scale nor capital intensive. From what we were able to glean about side payments typically associated with other large scale, capital intensive operations in Bangladesh, we question if these payments likely would be "managable" for a large finishing mill if the mill were to entertain any hope of being internationally price competitive.

From what we could glean, it appears that technical assistance would be required if a textile finishing industry in Bangladesh were to be able to produce internationally competitive product. This assistance would, as already noted, be required to meet quality control requirements. But further assistance might be needed in the areas of pattern design and in other departments as

well. Bangladesh makes it exceedingly difficult for expatriates to live and work in the country. But needed technical assistance might necessitate that foreign technical personnel spend extended time on site in Bangladesh.

Is it realistic to expect that the reforms needed to enable establishment of an export-grade textile finishing industry can be implemented in Bangladesh? Experience in the export apparel industry suggests that reform is not out of the question. (See Malin report, op. cit.) Here, the combination of success of the sector and a fairly widespread realization that the success would not continue in the absence of reform led to a number of necessary steps being taken to ensure that the garment exporting firms could survive and the industry continue to grow.

On the other hand, the apparel industry, as previously noted, is characterized by numerous small operations, none of which has significant capital import requirements. Opportunities for extracting side payments from these operations are fairly limited. The number of entrepreneurs operating in the industry is fairly large, and they are well organized as a political pressure group. A textile finishing industry would by contrast consist of a relatively small number of comparatively large operations. Capital import requirements would be large. Opportunities for collection of side payments would be substantially greater in a textile finishing sector than in the apparel sector. Unlike the apparel industry, which succeeded in gaining exceptional treatment from the bureaucratic process after it had successfully demonstrated that it could generate exports, the finishing sector

would have to receive exceptional treatment even before it commenced production. Whether or not the needed reforms could be implemented under current conditions in Bangladesh must therefore remain a questionable proposition.

Work to be Accomplished by the HIID Project in Bangladesh (and by the Consultant in the United States)

As indicated in the introduction of this report, any conclusions drawn here are preliminary and are based on limited field research. Additional work is needed in the field. The needed work is as follows:

(i) We need a clearer fix on exactly why the apparel exporting firms of Bangladesh refuse to use locally produced fabric. The July-August field mission provided substantial evidence that we are on the right track by emphasizing delivery and quality problems. This evidence was based on interviews of a number of heads of exporting firms as well as interviews with senior officials at the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). Nonetheless, further corroboration is necessary. To this end, the HIID Project Office in Dhaka, headed by Dr. Gian Sahota, is preparing a questionaire that will be submitted to a number of firms through the BGMEA. Each firm participating in the survey will be visited by HIID field personnel.

(ii) We need a clearer fix on the capacities and capabilities of the textile industry in Bangladesh. Also, we need to know what plans there are for expansion of this industry. During the

July-August field visit, we learned that there are substantial investments being made in plant expansion and modernization by BTMC and some of the private firms. Originally I had envisaged a survey of these firms to gather further information. However, Robert Young of AID, who arrived in Bangladesh shortly before my departure, has reported to me meeting the Minister of Textiles. This minister indicated that his agency has been doing a census of the industry and that he and his agency would be willing to cooperate with us. I plan to revisit Bangladesh in early 1990 and I shall initiate contact with this Minister at that time.

(iii) We need to know more about the operations of the Export Promotion Bureau (EPB) and the Bonded Warehouse Scheme. In principle, the EPB is supposed to spearhead the effort to remove bureaucratic barriers faced by nontraditional export industries. During the July-August field trip, reports from the apparel exporters regarding the effectiveness of the EPB were mixed. During my second visit I want to learn more about this organization and how it operates. In the meantime, the gathering of additional information on the effectiveness of the EPB and the bonded warehouse scheme from the perspective of the apparel exporters will be accomplished via the interviews noted just above in (ii).

In addition to this field work, there are tasks that must be performed by the consultant (i.e., the author of this report) prior to returning to Bangladesh. Most important of these is getting a better fix on the economics of textile finishing and on the physical capital and human capital requirements needed to

operate a finishing mill having the capabilities needed to produce finished fabric suited to the needs of the Bangladesh apparel producers. I shall attempt to do this largely by visits to the School of Textiles at North Carolina State University, where appropriate specialists are located.

Some Preliminary Conclusions

The emergence of an apparel export sector in Bangladesh is a new phenomenon, and the sector has been very successful in a short period of time. Early success was driven by (i) U.S. import quotas which hampered the expansion of apparel exporting firms from a number of East Asian countries (e.g., South Korea, Hong Kong, etc.) that found in Bangladesh a quota-free locus from which incremental output could be sourced; (ii) a surprising element of entrepreneurship within Bangladesh itself; (iii) low wages and a reservoir of unemployed workers that could be trained to assemble apparel (hence, Heckscher-Olin reasoning is not a bad approach to explaining the success of this very labor-intensive activity); and (iv) some degree of reform within the bureaucratic process within Bangladesh that reduced somewhat the barriers to entry posed by official policy and practice. But the future of the industry is endangered by (a) import quotas imposed by the United States and other markets for Bangladesh apparel output, which limit the ability of the industry to grow in terms of physical volume and (b) obstacles that prevent the industry from "moving upmarket", which include poor infrastructure, lack of internal sources of inputs (primarily fabric), and lack of marketing expertise on the

part of the apparel producers themselves.

If the industry is to grow further, these latter obstacles must be broken. This research is focussing on breaking the barrier posed by lack of internal sources of fabric. The breaking of this constraint is a necessary (but by no means sufficient) precondition for future growth. Requirements of the industry are that high quality, often highly differentiated product be delivered to the apparel industry on a timely basis. The key to doing this lies in the finishing stage of the fabric manufacturing process. Until this stage is reached, most fabrics are of standard grade, and indeed numerous international sources of greige fabric exist. The assembly of "up market" apparel requires high grade finished fabric of limited quantities delivered against short delivery schedules.

Provision of this fabric in turn requires a finishing industry capable of flexible manufacturing. This suggests an industry that is both physical and human capital intensive. It is not at all clear that Bangladesh has any basis for comparative advantage in activities that are capital intensive, but it is clear that further success in the labor intensive apparel industry will require building capability in these activities. (And, indeed, the examples of national economic success in the Far East all point to the use of labor intensive activities as platforms on which more capital and skill intensive activities are based).

Can a textile finishing industry that can be competitive in meeting the needs of the apparel exporting firms be created in Bangladesh? The present project is aimed at determining much more

about what are the preconditions for success in such an activity. The tentative conclusion is that much will have to change before these preconditions can be met. The probability that the necessary changes will occur seems to this researcher to be rather low. But despite this, it is worth continuing the project to determine exactly what needs changing and where. Indeed, until this latter is known better, one really does not know whether there is any hope for success.

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May 31, 1990

Professor Gian Sahota
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Dear Gian:

I received your letter after returning from a USIA-sponsored trip to Europe, and you reinforced a guilt I already was feeling for not having completed my report for you. Alas, I cannot finish this thing before the end of May, because it is now already the end of May! I'll give it a high priority over the next weeks, but I must in honesty say that I have a number of commitments in June and I cannot honestly guarantee that I will finish it much before the end of the month.

In some self-defense, I was expecting some input for my report from Dr. Ahmed, but this never has come.

The question is what to do now. In the hope that it will help you, let me summarize what are to be the main points of my report. Most of these were contained in my interim report of last October, and indeed one of the reasons I haven't finished a final report is that I was hoping that something would come along and give me some new thoughts for the final report. (Alas, that "something" never came!)

The main points are:

(1) The export ready-to-wear garment sector has continued to grow at rapid rates during the late 1980's, and growth continued into 1990 due largely to European buyers substituting Bangladesh-made product for that formerly sourced from the PRC. The growth of garment exports from Bangladesh to Europe has reduced the dependence of Bangladesh producers on the U.S. market. Exports of garments to the United States from Bangladesh typically are marketed via intermediaries in Hong Kong and Korea, whereas European buyers often place orders directly with Bangladesh firms, so the growth in European exports has also to some degree reduced the dependency of these firms on the large trading houses of the Far Eastern nations. This notwithstanding, the Bangladesh garment exporters are primarily producers of goods with little marketing capabilities. The industry is highly fragmented, and no firm seems to have the scale necessary to integrate forward into international marketing.

The growth of this industry must be juxtaposed against the generally lackluster performance of the Bangladesh economy as a whole during the late 1980's. The new and revised industrial policy reforms of the early and middle 1980's seem to have had little effect in terms of boosting overall economic growth in Bangladesh to date.

(2) In spite of this, the domestic value-added of exported ready-to-wear garments from Bangladesh is less than 20% value of shipments, largely because of the need to import inputs of fabric. Locally made fabric does not meet quality standards demanded in the export market, nor are local producers generally able to compete with imports in terms of cost or delivery. (There are some exceptions.)

To increase the domestic value-added as a percentage of value of shipments is a laudable goal. For reasons covered in my interim report, steps taken to increase this percentage would not only increase national product in Bangladesh, they would enable Bangladesh ready-to-wear garment producers move into the production of higher unit value product.

However, any steps taken should be consistent with market-driven incentives. One possibility would be to allow duty-free import of unfinished (greige) fabrics to be finished locally and used by the garment exporters. A problem with this is that such import could not operate under the present back-to-back letter of credit (l/c) mechanism. If it continues to be seen as important to shelter the domestic market for textile and apparel products from imports, a new scheme to isolate imported unfinished fabric for use by the export garment industry would have to be established that does not rely upon back to back l/c's.

Gian, here I must admit that I have no bright ideas about how to set up such a scheme. The back-to-back l/c mechanism simultaneously allows exporters of finished fabric to Bangladesh to be assured of payment while providing a major incentive to producers actually to export, in the form of finished garments, the vast majority of the fabric they import duty free. But the back-to-back l/c mechanism just wouldn't work if unfinished fabric were to be brought in duty-free. The whole idea of bringing in greige fabrics would be to establish a "greige fabric bank", that is, an inventory of cloth that would enable the ordering of fabric to be decoupled from the receipt of export orders. Such a decoupling would shorten lead times necessary between receipt of order and shipment of the goods against the order, and a shortening of lead times is a prerequisite for entering into certain of the higher unit value segments of the apparel market. But without a firm export order back-to-back l/c's cannot be issued.

In a word, the whole idea of creating a local "greige fabric bank" rests upon the "bright idea" that I presently lack. Any thoughts here would be more than welcome.

One thing that certainly should not be encouraged is any local content rule that attempted to force substitution of locally made fabric for imported fabric. Local content rules would lead to what my friend and colleague Michael Aho calls "RIBS" - resentment, inefficiency, bureaucracy, and stupid signals. At the extreme, such rules would serve to eliminate the comparative

advantage that the ready-to-wear export garment industry clearly has demonstrated in Bangladesh.

(3) The export garment industry would be well served by improvements in the transportation infrastructure of Bangladesh and the breaking of bottlenecks in this infrastructure. This would require both addition of new physical facilities (e.g., new ocean port capacity to supplement the badly overstrained port at Chittagong plus transportation links to Dhaka) and better use of existing facilities (e.g., the new Dhaka airport). Much of the improvement would be of a "soft" nature, e.g., streamlining of customs clearance procedures. The garment exporters with whom I spoke indicated unanimously that they can "live with" the existing situation, but that improvements would be most welcome.

(4) Somewhat surprisingly (to me, at least), I found little evidence that the garment exporters are greatly hampered by the U.S. quotas. Most quota categories at present are in fact underworked. In those quota categories where the full allocation is being worked, there seems to exist an informal but nonetheless remarkably efficient internal market for quota rights. The mere existence of this market suggests that Bangladesh is able to capture some rent from these quota categories, which is exactly what a country facing quotas on its exports should do. (Doubtlessly, however, a higher percentage of the total available rent is captured by the trading companies that market Bangladesh's output than is captured by local producers. This is unfortunate, but I am not sure that there is much to be done about it.)

(5) Robert Young asked me to examine to what extent the success of the export garment industry could be replicated in other sectors. I suspect that the key points to developing other nontraditional manufactured exports are:

(a) Bangladesh's major resource is cheap labor. To use this effectively to develop new export sectors, there must be duty free import of inputs (e.g., the fabric used by the garment exporters) plus a mechanism to finance these imports (e.g., the back-to-back l/c mechanism). Without access to inputs meeting international quality standards at international prices, there is little prospect for developing new activities on any significant scale.

(b) Marketing and quality control are of key importance. Both of these services in the export garment sector were initially provided by foreign firms (mostly Far Eastern trading companies), and although some Bangladeshi firms in this sector are now finding themselves able to "wean" themselves of dependence upon these foreign firms, overall the level of dependence is still quite high. In any new activity, participation of foreign firms will be crucial. The lesson to be learned from the export garment sector is that such participation can be of mutual advantage to Bangladesh and to the foreign firm. There is no need to be overly concerned about "exploitation".

(c) Infrastructure and streamlining of customs clearance are again key. The present infrastructure is hard pressed to keep up with existing demands, let alone deal with new ones. Customs clearance is presently slow and awkward, and although the garment

exporters indicate that they can "live with it", it is not clear that other classes of entrepreneurs would be willing to do so. More generally, further reforms in governmental administrative procedures clearly are needed. Surveys of foreign businessmen (including the legendarily patient Japanese) suggest that the sheer difficulty of getting things done in Bangladesh is a major deterrent to establishment of new activities by foreign investors.

This is the essence of my report. I'll get to work on the details, but again, I cannot absolutely guarantee time of delivery. I can guarantee that, absent the "bright idea" alluded to above, there will be no substantive difference between the summary of results presented above and the detailed report.

All the best to you. I hope that your return to the United States goes well, and I further hope that your activities in Bangladesh produce lasting returns.

Sincerely yours,

Monty