

PD 48E-007
76792

A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

IDENTIFICATION DATA

A. REPORTING A.I.D. UNIT: <u>USAID/Dhaka</u> <small>(Mission or AID/W Office)</small> (ES# _____)	B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN? yes <input checked="" type="checkbox"/> slipped <input type="checkbox"/> ad hoc <input type="checkbox"/> Eval. Plan Submission Date: FY ___ Q ___	C. EVALUATION TIMING Interim <input type="checkbox"/> final <input checked="" type="checkbox"/> ex post <input type="checkbox"/> other <input type="checkbox"/>			
D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report)					
Project #	Project/Program Title <small>(or title & date of evaluation report)</small>	First PROAG or equivalent <small>(FY)</small>	Most recent PACD <small>(mo/yr)</small>	Planned LOP Cost <small>('000)</small>	Amount Obligated to Date <small>('000)</small>
	Employment and Small Enterprise Policy Project (TRP-II 0074)		(01/90)	16.6	16.1

ACTIONS

E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR <p style="text-align: center;">Action(s) Required</p> <p>The Mission does not anticipate further activity in this area at this time.</p>	Name of officer responsible for Action J.L. Mudge	Date Action to be Completed N/A
(Attach extra sheet if necessary)		

APPROVALS

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: mo <u>03</u> day <u>08</u> yr <u>90</u>			
G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:			
Project/Program Officer Signature <i>[Signature]</i> Typed Name James L. Mudge Date: <u>03/14/91</u>	Representative of Borrower/Grantee Dr. Maqsood Ali Member, GED, PC Date: _____	Evaluation Officer <i>[Signature]</i> Ann Schwartz Date: <u>03/05/91</u>	Mission or AID/W Office Director Frank J. Young Acting Director Date: <u>[Signature]</u>

H. EVALUATION ABSTRACT (do not exceed the space provided)

This project aimed to identify policies that artificially constrict the development of small, labor-intensive non-farm enterprises in Bangladesh. With one senior technical advisor and supporting staff housed at Planning Commission (PC), the Project utilized about \$1.2 million over three years for studies, seminars and training. The Project was implemented by the Bangladesh Planning Commission, the Harvard Institute of International Development (HIID), S & T/AID/W and USAID/Dhaka. The final evaluation was conducted by a three-member team, comprised of an independent consultant, a Bangladeshi economist and a representative from S & T/AID/W. The team reviewed the working papers of the Project and interviewed a large number of officials from the Planning Commission, the Bangladesh Bureau of Statistics and other government agencies; USAID, World Bank and other donor agencies; research institutes and universities; business leaders and entrepreneurs. The evaluation objective was to determine if the Project fulfilled its purpose of identifying policies that thwart small industry growth and recommending policies to stimulate such growth. The evaluation was also intended to provide specific suggestions for the remaining five months of project implementation and options for the future. The evaluation team found that the course of the Project was altered because of a lack of available data on small industries, unusually taxing start-up problems and implementation delays. In response to these problems the Project had to generate its own data on small industries in the terminal year of the Project. As a result a major volume of work went into the analysis of large and medium-scale industries (for which data is more readily available but data quality is still dubious) rather than small industries, as was originally intended. To date, the Project has not identified any employment-reducing differential policy impacts on small and large firms. It has, however, initiated important policy discussions on the impact of recent industrial reforms on large-scale manufacturing.

ABSTRACT

I. EVALUATION COSTS

1. Evaluation Team		Contract Number <u>OR</u> TDY Person Days	Contract Cost <u>OR</u> TDY Cost (US\$)	Source of Funds
Name	Affiliation			
S. Haggblade)		22	13,600	PD&S
S. Jahan)				
R. Young	S&T, AID/W	7	5,100	

2. Mission/Office Professional Staff Person-Days (estimate) 25

3. Borrower/Grantee Professional Staff Person-Days (estimate) 10

COSTS

A.I.D. EVALUATION SUMMARY PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)

Address the following items:

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: USAID/Dhaka

Date this summary prepared: July 1990

Title and Date of Full Evaluation Report: Employment and Small Enterprise Policy in Bangladesh
An Evaluation of the HIID/ESEPP Project

SUMMARY

1. Purpose of the Activity Evaluated: This project aimed to identify policies that artificially constrict employment in small, labor-intensive non-farm enterprises and thereby assist the Bangladesh Government (BDG) to reformulate a variety of small enterprise policies and procedures to foster small industries development and thereby support an increase in productive employment. With one senior technical advisor and supporting staff housed at the Planning Commission (PC), the Project utilized about \$1.2 million over three years for studies, seminars and training. Since small and large firms contest the largest nonfarm markets in Bangladesh - for cloth, sugar, rice milling, oil milling - and since large firms in these industries receive preferential incentives unavailable to the small, the Project seemed well positioned to identify prospects for employment creation through policy reform.
2. Purpose of the Evaluation and Methodology Used: The purposes of the evaluation were to enable the Mission to assess the work accomplished by the Project in relation to the overall Project objectives (in particular, whether Project activities identified the most important policy problems/issues affecting small enterprise development), to examine the methodology as to its appropriateness for analysis of the policy problems being investigated given the available data, to identify priorities for the final five months of the Project, and to discuss possible options for future follow-on activities. The evaluation methodology consisted of a review of the Project Scope of Work, the approved workplan and project outputs consisting of about 30 reports, together with detailed discussions with the HIID resident advisor and interviews with BDG officials, research institutions and universities, private sector business leaders and entrepreneurs, officials from donor agencies like the World Bank/Dhaka, and meetings with USAID Mission staff.
3. Initially, a series of major distractions complicated the launching of substantive analytical work. When the resident advisor arrived, his project affiliation had not yet been formalized at the Planning Commission. So counterparts, office accommodation and furnishings were not readily available. Nor were the primary data on which the project expected to base its analysis. A series of delays in the Economic Census and the subsequent Annual Economic Survey prevented the Bangladesh Bureau of Statistics (BBS) from delivering the anticipated data from these nation-wide surveys of small and large nonfarm firms. The principals subsequently agreed that the HIID project would collect its own data on small firms and, in the meantime, BBS would make available their Census of Manufacturing Industries (CMI) survey data on large-scale manufacturing. Because it took one year to fully resolve the accommodation, institutional affiliation and data access problems, at the end of year one, USAID decided to extend the project from two years to three.

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In spite of these unusually taxing start-up problems, the HIID advisor assembled a competent staff and generated an impressive volume of output. They tackled an ambitious and important research topic - the implications of the 1982 and 1986 policy reforms for large-scale manufacturing. But they did not focus on the topics mandated in the project design. Employment issues are peripheral to the bulk of the analysis. Moreover, the data and analytical techniques used to date effectively preclude identification of differential policy impacts on small and large firms. The project spent its first two years analyzing primarily CMI data, and these mostly exclude small firms. In addition, they adopted statutory effective rates of assistance (ERAs) as the principal analytical tool for summarizing policy impact. Since small firms have unequal access to incentives, review of the statutes rather than actual available assistance fails to identify the differential policy impacts on small and large firms.

In part, this reorientation occurred because of the unanticipated unavailability of small firm data from the Economic Census. But rather than collecting budgets and diagnostic information for a few important subsectors in which small firms operate, the project preferred to begin by making the most out of econometric analysis of the CMI data. Because that work took so long and because of delays in transferring funds for the project's ambitious, nation-wide small enterprise survey, employment and small enterprise never made it to the core of the project agenda. Responsibility for deviation from the project mandate must be shared by the resident advisor, HIID and USAID/Bangladesh.

While, to date, the project has not identified any employment-reducing differential policy impacts on small and large firms, it may generate some evidence from analysis of its own survey data in the remaining five months of the project. Project staff have just completed recording those data in the computer and are now beginning the data cleaning, consistency checks and basic analysis. The evaluation report contains several suggestions for quickly extracting the most pertinent analyses.

The project has however been remarkably effective in capturing the attention of policy makers. Through a steady stream of working papers, seminars, special briefings and newsletters, they have disseminated their findings to a broad audience of informed opinion leaders in government and in the donor, academic and research community. Their staff have become recognized in the local economics community and have provided consistent technical, logistic and analytical support to colleagues.

The project findings, best summarized in Working Paper 16, have highlighted the following two principal themes:

- a. "Policies have failed." According to project analysis, the trade and industrial policy reforms of 1982 and 1986 have inadvertently led to greater protection for domestic industry, not less. They argue that this higher protection is, "the root cause of industrial ills," in Bangladesh. It has led to stagnant output, declining investment and falling productivity in formal manufacturing. Consequently, they suggest that further liberalization is required.

b. "Technology." Since a large proportion of changes in manufacturing output cannot be explained by changes in capital and labor use, the project suggests that Solow's famous "residual" must account, by default, for the rest. Based on their measurement of declining productivity and the existence of substantial technical inefficiency in formal manufacturing, project analysts conclude that primitive industrial technology is to blame. They believe that upgrading technology will be central to reinfusing buoyancy in Bangladesh's industrial performance.

The "policies have failed" theme has understandably generated considerable interest and controversy and a lively policy dialogue is under way. Considering the modest project staff and budget, this is a remarkable achievement.

The project has clearly succeeded in focusing high-level policy makers' attention on the impact of the NIP and RIP. Yet we worry that the conclusions come across too forcefully. Rather than preliminary hypotheses, they emerge as firm scientific findings.

In many cases the analytical techniques push questionable data too hard to generate anything more than tentative hypotheses. Moreover, the link between analysis and conclusions is not inexorable. Although the fundamental conclusions are consistent with project analysis, they do not necessarily follow. A variety of other equally plausible conclusions are also consistent with the project findings.

We believe the project has advanced several provocative initial hypotheses on issues of fundamental importance. Furthermore, they can continue to advance the debate through a slight extension and repackaging of their analysis. Their work to date has shown protection increasing by 30% since the policy reforms, but they have not yet disaggregated, so policy makers are not sure which of their policies went awry. But isolating the effect of individual policies, the project could help policy makers identify the culprits and thereby candidates for further reform.

4. Recommendations: For the remaining five months of project activity, the evaluation recommended five priorities: a) cleaning and preliminary analysis of project survey data (40%); b) project final report (40%); c) identify which individual policies are responsible for the apparent increase in protection (15%); and d) assist planning commission with input-output work (5%).

In terms of future options the evaluation suggested that USAID:

1. Support improvements in data collection, quality control and mainframe-to-personal-computer transfer, and thereby contribute substantially to data quality and facilitate data availability from BBS and other statistical agencies, and it was also indicated that these efforts must move hand-in-hand with efforts to facilitate release of new and improved raw data to local analysts.
2. Endow a local research foundation to provide funding for local academics, research institutions, consultants or government analysts interested in exploring a broad range of economic policy issues.

5. Lessons Learned: See page 7.

K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)

ATTACHMENTS

Employment and Small Enterprise Policy in Bangladesh
An Evaluation of the HIID/ESEPP Project

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

The Mission believes that this evaluation satisfactorily addressed the Scope of Work. The evaluation team were very thorough in their examination of project outputs.

The team conducted their analysis in an objective and professional manner and presented their findings and recommendations clearly and succinctly.

Dr. Maqsood Ali, Member, Planning Commission, declined to sign the document for unstated reasons. It is assumed that Dr. Ali, who was the principal BDG counterpart for the expatriate Project Director, does not want his name on a document that was critical of the project. Dr. Ali feels that the project provided an extremely valuable advisory service to the Planning Commission, whether or not it fulfilled its original terms of reference.

MISSION COMMENTS ON FULL REPORT

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS
(Continued from Page 5.)

Lessons Learned: A. There was approximately a one-year delay by the Mission before the project was delinked from the ongoing Phase I (Enterprise Reform Project). The initial basis of a project, be it institutional considerations (in this case, the institutional "home" of the Project) or other (in this case, the question of secondary data availability), should be firmly established before the resident advisor comes in and the project is initiated. In this case, the delay reduced the effectiveness of the principal researcher and put off the timing of the entire Project. When it is understood that a project requires adjustment, such adjustment should be made as promptly as possible. Implementation delays, if unavoidable, should be followed by quick readjustments such that the project is enabled to address its central objectives with a modified methodology if necessary.

B. When two or more projects are related in a certain way (e.g., one being expected to generate data or other output for the other), the projects should all be managed by the same office within USAID.

C. Special attention should be given by the Mission to projects in which there are multiple layers of management (in this case, the Planning Commission, HIID, S & T/AID/W and AID/Dhaka)

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EMPLOYMENT AND SMALL ENTERPRISE POLICY IN BANGLADESH
AN EVALUATION OF THE HIID/ESEPP PROJECT.

A report prepared for
USAID/Bangladesh

by
Steven Haggblade
Selim Jahan
Robert Young

May 17, 1990

EMPLOYMENT AND SMALL ENTERPRISE POLICY IN BANGLADESH

AN EVALUATION OF THE HIID/ESEPP PROJECT

A report prepared for
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by
Steven Haggblade
Selim Jahan
Robert Young

May 17, 1990

*This evaluation does not necessarily reflect the policy of USAID/Dhaka, the U.S. Government, the Government of Bangladesh or any of its agencies. The evaluation was produced at the request of USAID/Bangladesh to provide guidance for conduct of the project and for the design of future activities. It is standard A.I.D. procedure to conduct evaluations of its projects.

PREFACE

Throughout the evaluation period, we have benefitted from a series of in-depth discussions with the project advisor and his staff. We are grateful to them for their responsiveness, their patience, their willingness to show us raw data and frankly discuss analytical and substantive issues. HIID personnel in both Dhaka and Cambridge cooperated with us in every way, and we thank them for facilitating our work.

Because of the controversial nature of some of the project findings, we have listened carefully to project supporters and critics as well as people we judged to be informed, honest brokers. Since we have sifted through the project data and documentation as carefully as any outsider, we have, in the final analysis, formulated our own judgments.

We, the three members of the evaluation team, wish to emphasize that our conclusions are unanimous. While all statements in this paper reflect our collective best judgment, we believe that the preponderance of informed observers share our views.

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EXECUTIVE SUMMARY

This project aimed to identify policies that artificially constrict employment in small, labor-intensive nonfarm enterprises. With one senior technical advisor and supporting staff housed at the Planning Commission, the project had \$1.6 million at its disposal over three years for studies, seminars and training. Since small and large firms contest the largest nonfarm markets in Bangladesh - for cloth, sugar, rice milling, oil milling - and since large firms in these industries receive preferential incentives unavailable to the small, the project seemed well positioned to identify prospects for employment creation through policy reform.

Initially, a series of major distractions complicated the launching of substantive analytical work. When the resident advisor arrived, his project affiliation had not yet been formalized at the Planning Commission. So counterparts, office accommodation and furnishings were not readily available. Nor were the primary data on which the project expected to base its analysis. A series of delays in the Economic Census and the subsequent Annual Economic Survey prevented the Bangladesh Bureau of Statistics (BBS) from delivering the anticipated data from these nation-wide surveys of small and large nonfarm firms. After a series of discussions, the principals agreed that the HIID project would collect its own data on small firms and, in the mean time, BBS would make available their Census of Manufacturing Industries (CMI) survey data on large-scale manufacturing. Because it took one year to fully resolve the accommodation, institutional affiliation and data access problems, at the end of year one, USAID extended the project from two years to three.

In spite of these unusually taxing start-up problems, the HIID advisor has managed to assemble a competent staff and generate an impressive volume of output. They have tackled an ambitious and important research topic - the implications of the 1982 and 1986 policy reforms for large-scale manufacturing.

1. What the project didn't do.

But they have yet not focused on the topics mandated in the project design. Employment issues are peripheral to the bulk of the analysis. Moreover, the data and analytical techniques used to date effectively preclude identification of differential policy impacts on small and large firms. The project spent its first two years analyzing primarily CMI data, and these exclude small firms. In addition, they adopted statutory effective rates of assistance (ERAs) as the principal analytical tool for summarizing policy impact. Since small firms have unequal access to incentives, review of the statutes rather than actual available assistance fails to identify the differential policy impacts on small and large firms.

In part, this reorientation occurred because of the unanticipated unavailability of small firm data from the Economic Census. But rather than collecting budgets and diagnostic information for a few important subsectors in which small firms operate, the project preferred to begin by making the most out of econometric analysis of the CMI data. Because that work took so long and because of delays in transferring funds for the project's ambitious, nation-wide small enterprise survey, employment and small enterprise never made it to the core of the project agenda. Responsibility for deviation from the project mandate must be shared by the resident advisor, HIID and USAID/Bangladesh.

While, to date, the project has not identified any employment-reducing differential policy impacts on small and large firms, it may generate some evidence from analysis of its own survey data in the remaining months of the project. Project staff have completed recording those data in the computer and are now beginning the data cleaning, consistency checks and basic analysis. This report contains several suggestions for quickly extracting the most pertinent analyses.

2. What the project did do.

The project has been remarkably effective in capturing the attention of policy makers. Through a steady stream of working papers, seminars, special briefings and newsletters, they have disseminated their findings to a broad audience of informed opinion leaders in government, donor and academic and research community. Their staff have become recognized good citizens in the local economics community and have provided consistent technical, logistic and analytical support to colleagues.

The project findings, best summarized in Working Paper 16, have highlighted the following two principal themes:

a. "Policies have failed." According to project analysis, the trade and industrial policy reforms of 1982 and 1986 have inadvertently led to greater protection for domestic industry, not less. They argue that this higher protection is, "the root cause of industrial ills," in Bangladesh. It has led to stagnant output, declining investment and falling productivity in formal manufacturing. Consequently, they suggest that further liberalization is required.

b. "Technology." Since a large proportion of changes in manufacturing output cannot be explained by changes in capital and labor use, the project suggests that Solow's famous "residual" must account, by default, for the rest. Based on their measurement of declining productivity and the existence of substantial technical inefficiency in formal manufacturing, project analysts conclude that primitive industrial technology is to blame. Noting that Bangladesh's research and development expenditures pale in comparison with those of other Asian countries and that manufacturing output is growing much faster in those countries, the project argues that this provides further support for their contention that upgrading technology will be central to reinfusing buoyancy in Bangladesh's industrial performance.

The "policies have failed" theme has understandably generated considerable interest and controversy. Because it calls into question the entire thrust of the economic liberalization undertaken since the current government took power in 1982, high-level policy makers in the Ministries of Finance, Planning, Industry and Commerce have been stirred to action. Some ministries are commissioning parallel studies to see if measured sluggishness is real. Some are requesting lengthy briefings by the ESEPP project advisor. Others are sniping at the project findings by encouraging written commentary that calls into doubt the validity of the data, analytical methods and conclusions of the project.

Although not on the subject intended, a lively policy dialogue is under way. Considering the modest project staff and budget, this is a remarkable achievement.

The project has clearly succeeded in focusing high-level policy makers' attention on the impact of the NIP and RIP. Yet we worry that the conclusions come across too forcefully. Rather than preliminary hypotheses, they emerge as firm scientific findings.

In many cases the analytical techniques push questionable data too hard to generate anything more than tentative hypotheses. Moreover, the link between analysis and conclusions is not inexorable. Although the fundamental conclusions are consistent with project analysis, they do not necessarily follow. A variety of other equally plausible conclusions are also consistent with the project findings.

We believe the project has advanced several provocative initial hypotheses on issues of fundamental importance. Furthermore, they can continue to advance the debate through a slight extension and repackaging of their analysis. Their work to date has shown protection increasing by 30% since the policy reforms, but they have not yet disaggregated to determine which of the policies went awry. By isolating the effect of individual policies, the project could help policy makers identify the culprits and thereby candidates for further reform.

3. What next?

For the remaining few months of project activity, we suggest four priorities: a) cleaning and preliminary analysis of project survey data (40%); b) project final report (40%); c) identify which individual policies are responsible for the apparent increase in protection (15%); and d) assist planning commission with input-output work (5%).

For the future, the project has highlighted several important lessons for policy dialogue. The early problems over data access and the subsequent project difficulties - through no fault of its own - in institutionalizing analytical capacity highlight the two ingredients essential for policy dialogue and for the economic analysis on which it must rest. One is credible and accessible data. The second is capable analysts. AID can assist on both fronts.

First, by supporting improvements in data collection, quality control and mainframe-to-personal-computer transfer, AID can contribute substantially to data quality and availability from BBS and other statistical agencies. These efforts must move hand-in-hand with efforts to facilitate release of new and improved raw to local analysts.

Second, to improve local analytical capacity we start from the unconventional premise that institutionalizing economic analysis will have to take place outside of government, since current incentives make it difficult for the civil service to retain practicing, skilled economists. We suggest that AID endow a local research foundation to provide funding for local academics, research institutions, consultants or government analysts interested in exploring a broad range of economic policy issues. Rather than bidding away top local talent to serve their internal needs, the donors could offer an alternative that would allow local economists to play a role in setting the agenda for policy debate. Given Bangladesh's history of loyal but outspoken academics and researchers, these interventions could well stimulate a vibrant, sustainable indigenous policy dialogue.

I. POINTS OF DEPARTURE

A. Project Objectives

This project aimed to identify policies that artificially constrict employment in small, labor-intensive nonfarm enterprises. With one senior technical advisor and supporting staff housed at the Planning Commission, the project was to undertake studies that would identify prospects for employment creation through policy reform.

Opportunities seemed legion. Small and large firms, with differing technologies, contest the largest nonfarm markets in Bangladesh (Table 1). Hand-loomers compete with semi-automatic and power looms. Household gur manufacturers compete for inputs with large sugar mills. Diesel-powered rice mills are making inroads in markets formerly served by pedal-powered rice mills (dhenki). Likewise, small, pedal-operated oil extractors (ghani) face increasing competition from small- and medium-scale oil presses. In all of these industries, ample evidence suggests that large firms benefit from incentives and preferential treatment unavailable to the small.¹

The timing was opportune. Project activities began in August 1987, closely on the heels a major series of trade and industrial policy studies and after two extensive industrial policy reforms, in 1982 and 1986. From 1986 onwards, the Tariff Commission was meeting regularly to examine prospects for improving efficiency and competitiveness. The reform machinery was well oiled and operating. Policy makers were attuned.

And it was worth doing. Employment policy matters. It matters in a country that will see annual workforce increments at least 500,000 more than agriculture can absorb. It matters in a country where half the population is landless and depends primarily on wage employment for survival. It matters because in this setting employment and wage rates become crucial determinants of per capita income, income distribution and poverty. It matters in a country where meager incomes severely constrain government revenues, because policy change requires few resources. by removing artificial biases, policy reform can create jobs at the stroke of a pen. Where budget resources are painfully tight, opportunities for low-cost job creation cannot be ignored.

The project was small but in proportion to the task at hand. One senior advisor had access to supporting staff and \$1.6 million over 3 years. The resources were sufficient, the timing was favorable and the project well-conceived. It represented an important and rare opportunity for low-cost poverty alleviation.

But did it work?

¹See Bakht (1987), Wasow et.al. (1984) and Chowdhury (1989).

B. Evaluation Methods

Three of us have been asked to find out. Our marching orders mandated that we find answers to the following principal questions:²

- (1) What did the project achieve?
- (2) Did it meet its stated objective of identifying the most important policy constraints affecting small enterprise?
- (3) Were the data and analyses appropriate given that objective?
- (4) What priorities should USAID set for the project's final five months and beyond?

To explore these issues, we convened for four weeks, from mid-February through mid-March.³ Bob Young spent the first two weeks in the field and from then on commented on drafts and followed up loose ends in Washington. Steve Haggblade and Selim Jahan spent the full four weeks in Dhaka.

Given the analytical focus of this project, we began by carefully studying the project methods, findings and data sources. To do so, during the first week we immersed ourselves in the several thousand pages of project working papers, background reports and related documentation. Then, for two weeks, we engaged in substantive discussions with knowledgeable observers in government, the local research and donor communities, and outside. The Planning Commission, HIID staff and USAID all suggested people for us to contact; and with some good fortune, we were able to visit all nominees, with the exception of those who were out of the country. Appendix B includes a complete list of our interlocutors.

Throughout the evaluation period, we have benefitted from a series of in-depth discussions with the project advisor, his staff and members of the Planning Commission. The project advisor and HIID/Cambridge have supplemented those discussions with written commentary on a number of substantive issues.

Because of controversial nature of some of the HIID project findings, we have listened carefully to project supporters and critics as well as people we judged to be informed, honest brokers. Since we have sifted through the project analysis and documentation as carefully as any outsider, we have, in the end, formulated our own judgments.

²See Appendix A. for our full scope of work.

³Our draft report was submitted on March 12, 1990. In order to allow sufficient time for reactions by interested parties in Washington, Cambridge and Dhaka, we have delayed production of our final report. Consequently, the ensuing discussion describes the state of play as of mid-March.

II. PROJECT CHRONOLOGY (OR THE PERILS OF PAULINE)

A. The Crucial First Year

After at least one year of recruiting difficulties, HIID identified an advisor acceptable to both the Bangladesh Government (BDG) and Cambridge. He arrived in Dhaka in August 1987.

During the first year, especially the first six months, the advisor faced and surmounted a series of unusually daunting start-up problems. Three, in particular - institutional affiliation, physical accommodation and access to data - demanded priority.

Institutionally, project designers had intended that the project be housed at the Planning Commission's General Economics Division (GED). But at the eleventh hour, an unidentified civil servant in BDG unilaterally decided it should be based in the Ministry of Labor, a body with little in-house analytical capacity and concerned largely with mediating industrial labor disputes. So even before the HIID advisor arrived in country, USAID and the Planning Commission began working to relocate the project at the Planning Commission. When the advisor arrived, he began working at the Planning Commission while USAID and the Planning Commission continued their efforts to effect a formal transfer.

In part because they did not have formal responsibility for the project, the Planning Commission was initially able to release only a single office and no furniture to the project staff. The project staff - secretaries, research assistants, project consultants and the advisor - operated for one full year from a single office with three chairs, a wobbly table and printouts piled high across the floor and onto a small veranda. Not until one year later, in July 1988, did they receive a second, adjoining office and a seminar room as well as authority to purchase furniture from the project budget. In addition, within the first few months the project also obtained access to an office at the Bangladesh Bureau of Statistics (BBS), this as a result of a compromise solution to early disagreements over access to data.

The data disputes arose immediately because of the historic design link between the Employment and Small Enterprise Policy Project (ESEPP) and a sister project that provided support for the Economic Census at BBS. The HIID/ESEPP activity had originally been designed as a second phase of the BBS Economic Census data collection project. Because comprehensive and credible employment data are in short supply in Bangladesh, USAID project designers had funded the employment policy activities in two parts. The first, at BBS, was to undertake a first-ever Economic Census (EC) of nonfarm activity. This listing was to serve as a sampling frame for in-depth data collection from a sample of firms in a subsequent Annual Economic Survey (AES). HIID's Employment and Small Enterprise Policy Project (ESEPP) was to follow in a second stage and use the EC and AES data as grist for their analytical work. Unfortunately, the Economic Census and Annual Economic Survey were delayed by about two years. First, local elections pushed back the timing of the field interviewing. Then, snags in delivering optical mark readers delayed the data processing.

So in the early months of the project it became clear that AES would not be available in time for use by the HIID team at the Planning Commission. The HIID resident advisor proposed expanding the initial Economic Census questionnaire to include some of the data he required so it would be available in time to be of use to his project. BBS refused on the grounds that the census questionnaire would become unwieldy, that its role was only to provide an enterprise listing from which samples could be drawn for in-depth economic investigation in the subsequent Annual Economic Survey.

After a series of exchanges, BBS, HIID, the Planning Commission and USAID negotiated the following compromise. Although they would not expand the Economic Census to accommodate HIID's data requests, BBS solicited HIID's suggestions for design of the subsequent Annual Economic Survey questionnaires. In the interim, BBS agreed to release to HIID the raw data from three available data sets: a) a nine-year series of the Census of Manufacturing Industries (CMI) Survey⁴; b) the Household Expenditure Survey; and c) a 5% sample of the Economic Census. They would make BBS programmers available to analyze the data according to HIID instructions, provided HIID would pay for computer and programmer time. On the same terms, they expressed willingness to release the AES data when they became available.⁵

As we discovered in our interviews, granting access to raw data represented a departure from standard BBS practice. BIDS, for example, has been trying for several years to obtain access to the Household Expenditure data tapes, without success.⁴ Several academics also expressed surprise - and admiration - that HIID was able to gain access to the CMI data tapes. Presumably the AID funding at BBS and some sense of responsibility for delays in producing AES data afforded HIID more leverage than normal in negotiating with BBS.

In the face of all these obstacles, the HIID advisor displayed extraordinary energy and resourcefulness. He managed to assemble a staff, explore existing data bases and begin composing a research strategy. By the end of December 1987, he produced a draft Work Plan that largely set the tone for the analysis during the first two years of the project. Substantive comments from Cambridge, unfortunately, did not arrive in Dhaka until January 1988, after the Work Plan had been produced. During the first half of 1988, a series of letters and formal commentaries from

⁴The data covered a twelve-year time span, from 1974-75 to 1985-86, but three years were missing due to a fire at BBS.

⁵In the end, delays in the AES rendered this last agreement moot. The AES field interviews will end in July 1990, at the same time as the ESEPP comes to a close.

⁴BBS indicates that the bone of contention is payment for the programmer and computer time.

Cambridge attempted to reorient the research agenda in several ways. Although we will discuss the substance of their comments in Section III, we note here that several of their concerns were embodied in the Revised Work Plan written in August of 1988.

In April 1988, the Bush-van der Veen report (Bush and van der Veen, 1988) on the BES Economic Census project proposed a formal de-linking of the BBS and HIID activities. They proposed that HIID collect its own data on small enterprises since the CMI data cover only firms employing 10 or more. That suggestion was ultimately agreed to by all parties.

B. The Revised Work Plan

In response to the upheavals of the project's first year, the HIID and AID/Washington project managers, Don Snodgrass and Bob Young, coordinated a field visit in August of 1988. The Snodgrass-Young visit resulted in three important recommendations, all of which were enacted. First, they endorsed the Bush-van der Veen proposal formally disconnecting the HIID project from the BBS Economic Census work. To fill the resulting data gaps, they recommended that the HIID project collect its own economic data on small firms. Second, the project was extended from two years to three because of the initial start-up problems and to allow time for primary data collection. The extension, of course, required additional funding.

Third, they insisted on a revised work plan which differed from the original in several ways. It explicitly included primary data collection from small enterprises in six industries. In addition, it resuscitated the subsector studies, diagnostic, industry-specific appraisals of the type undertaken in business schools and in the agricultural economics marketing literature.⁷ Although included in the original work plan, no action had begun on them during the first project year. Finally, the revised work plan allocated 15-20% of project resources to support Planning Commission requests for assistance in augmenting their input-output table.

USAID negotiated the project extension directly with the Planning Commission, thus regularizing that heretofore informal relationship. Because of protests from the Ministry of Labor, the formal transfer, although agreed to earlier, was not signed by the President until February 1989.

This complicated the survey work because the Planning Commission declined to authorize contracting and advertising for enumerators until the second tranche funds had been released to them. And that release could not take place until the formal project transfer to the Planning Commission. Nonetheless, in March 1989 Cambridge agreed that the resident advisor should begin the survey by drawing on unused line items from the original project funds. That decision prevented a further four-month delay since the transfer was not gazetted until April. Nor was the enabling documentation (the TAPP) issued or funds released until July 1989.

⁷ See Shaffer (1968), Goldberg (1968), Boomgard et.al. (1986) and Holtzman (1986).

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The substantive work in 1988 revolved around CMI data. After cleaning it assiduously, project staff spent all of 1988 computing effective rates of assistance (ERAs)⁹ and trends in total factor productivity. They then moved on to estimate frontier production functions, which they finished in September 1989 (see Table 2). Time-series analysis, interspersed throughout 1988 and 1989, focused on trends in investment, output and productivity. For computing these trends, the project supplemented CMI data with the 5% Economic Census sample and investment aggregates from the Directorate of Industries (DI) and the national accounts. At the request of the Planning Commission, the project inserted a several week survey of flood damage into their schedule in October 1988.⁷

C. The Technology Theme

By January 1989, the production function and total factor productivity calculations had begun to point project staff towards technology as a likely explanation for declining productivity, output and investment in large-scale manufacturing. So in February, when Dr. Choi of the Korean Institute of Science and Technology (KIST) visited Bangladesh at the invitation of the Bangladesh National Committee on Technology Transfer, the HIID advisor solicited a special invitation to Choi's seminar. Both he and the Bangladesh government representatives were impressed. Spurred on by Choi's description of the KIST successes and by the favorable Bangladeshi response, the HIID advisor began to develop the technology theme more fully. He commissioned a dozen short papers by local technology experts and repackaged several of his early working papers into a summary paper, Working Paper 16, focusing on technology and "the residual" as the critical factor in Bangladesh's industrial development.¹⁰

To showcase the HIID work, the Planning Commission proposed convening an eight-day seminar to take place in December 1989. With Working Paper 16 as the keynote paper, the seminar was to examine, "The Residual: Neglected Factor in Industrial Development in Bangladesh."¹¹

⁹Effective rates of assistance are conceptually analogous to effective rates of protection (ERPs) commonly used in the trade literature. Both measure, in a single statistic, the combined protection on value added provided by existing system of tariffs and trade barriers. In addition, ERAs extend the ERP measure by also taking into account the effects of domestic taxes and subsidies.

⁷See Table 3 and Appendix D. for a summary of project resource use and output.

¹⁰In economic circles, "the residual" is well known as that portion of changes in output that cannot be explained by changes in input use. It is most closely associated with Robert Solow (1957), whose work with aggregate production functions first popularized the concept. Denison (1967) has also published a major review.

¹¹Working Paper 16 was originally entitled, "An Assessment of the Impact of Industrial Policies on the Residual Factor of Growth in Bangladesh."

D. The "Policies Have Failed" Theme

But the second major theme of Working Paper 16, the "policies have failed" theme, attracted less favorable scrutiny. This second theme holds that the major policy reform of 1982 has not only failed to stimulate manufacturing investment, output and productivity but have in fact depressed them. The HIID analysis suggests that policy reform has inadvertently led to 30% higher effective protection for domestic manufacturing and that this increase is, "the root cause of industrial ills," in Bangladesh (WP 16, p.36).

The two HIID themes lead to two principal policy prescriptions. The "policies have failed" theme leads them to prescribe more liberalization. According to project analysis, the reforms of 1982 and 1986 did not go far enough. Second, the existence of a growing "residual" and declining productivity lead them to prescribe a KIST-type research and development institute for Bangladesh. They believe that, "the key to the remedy of the malaise of Bangladesh's industry is a leap frog in technological innovations." (WP 16, p.37)

E. The Controversy

The "policies have failed" theme has met an understandably cold reception. It calls into question the entire thrust of economic policy since the current government took power in 1982. The government intended to liberalize. And indeed they had been consistently following recommendations endorsed by the IMF, the World Bank and the HIID Trade and Industrial Policy (TIP) studies. But the HIID/ESEPP analysis suggested that government policies were inadvertently leading to greater protection, not less, and that this protection was resulting in sluggish industrial performance.

In response to Working Paper 16, some government officials have requested special briefings from the HIID advisor. The project steering committee, first convened on February 19, 1990, insisted that the HIID advisor hold a pair of in-house seminars for Government staff. One is to focus on the quality of data used in the HIID analyses. The second is to discuss analytical methods and findings. In the mean time, others in government are contemplating parallel analysis to verify the HIID findings. The Ministry of Industry, for example, has informally asked BIDS to re-examine investment data to determine whether or not aggregate and manufacturing investment have really declined since 1982.

And an anonymous civil servant has recently requested that a long-standing project critic express his concerns in writing. As a result, Dr. Rab of the TIP project has written a 16-page commentary documenting his concerns about the data, analytical techniques and conclusions of the HIID/ESEPP work. The resident HIID advisor has riposted with a 20-page rebuttal to which Rab has responded with a further two-page reply.

A lively policy dialogue is under way.

III. RESEARCH FINDINGS

A. Major Themes

The two major project themes, the "policies have failed" theme and the "technology" theme, have been described briefly above. Table 4 elaborates by summarizing the basic arguments, data sources, and analytical techniques.

B. Kudos

Project research has been impressive along a number of dimensions. The staff has produced an astonishing volume of output, especially given their initial cramped quarters and the time-consuming early negotiations over data access and institutional relocation. In spite of these diversions, the project has generated 19 working papers and over 20 background and technical papers. They have held at least 34 formal seminars at the Planning Commission and over 40 outside.

They have effectively disseminated their output to a wide range of interested observers in government, academia and the local research community. Through their monthly newsletter, regular seminars, guest lectures and working paper mailing list, the project has publicized its work with a distinctive marketing flair. Our interviews identified some minor lapses¹². But overall, the project seems to have been remarkably effective in communicating its main themes to key actors in government and outside.

The resident advisor is held in uniformly highly esteem by local economists. He is respected as a skilled technician and as an acknowledged good citizen and colleague. As a member of the informal data-users group, he has played a key role in designing recommended questionnaires for the BBS Annual Economic Survey. Colleagues in and outside the Planning Commission routinely acknowledge his ready willingness to assist fellow economists whenever called upon, whether it be for informal technical advice or formal lectures on project findings or economic principles. During the 1988 flood emergency, the project responded with extraordinary speed in mounting a Planning Commission reconnaissance effort aimed at early assessment of the economic damage caused by the flood.

By serving as a lightning rod in negotiating data rights with BBS, the project has highlighted once again the access problems faced by the local

¹²Although the project advisor clearly intended that all seminars be open to whoever wished to attend, some of our respondents indicate they stopped attending when they did not receive personal invitations, presuming that some topics were confidential. And the Bangladesh Cottage and Small Industries Corporation (BSCIC) seems to have been inadvertently omitted from the project mailing list.

research community. And although many researchers have criticized the CMI data, all observers admire the energy and meticulousness with which the project set about cleaning the CMI series.

On methodological grounds, the project has achieved an econometric innovation. They are among the few, to our knowledge, to have estimated frontier production functions from panel data, that is from time-series data for a common group of firms. The pooling of time-series, cross-section data offer several advantages for econometric analysis.¹³

C. Concerns

1. What the project didn't do.

To date, the project has not focused on its principal mandate. It has not examined differential policy impacts on small and large firms. Nor has it treated employment as a central issue.

To a large extent, the data and analytical techniques preclude exploration of these key project issues. The CMI data, on which the bulk of the analysis rests, do not include evidence from small firms. They include essentially no firms with under ten employees. And in the 10 to 49 employee range, their sample firms account for only 6.5% of manufacturing activity (Table 5). Even these may not be representative of firms in that size category. Because of their incomplete sampling frame and inability update it from year to year, the project indicates that firms in the 10 to 49 employee range may simply be sick and dying, formerly large firms.¹⁴

Statutory ERAs, the project's principal tool for summarizing policy impact, cannot capture differential effects on small and large firms. This blind spot emerges because the project computes statutory rather than actual ERAs. That is, they take a tariff (or tax or subsidy) and add it to a product's import price to compute the domestic price at which an imported good would sell, if it paid the full tariff. Since smugglers operate freely and bribes enable many to elude customs duties, actual prices differ substantially from the statutory rates (Table B). Moreover, since small firms have uneven access to subsidized credit and enjoy differential scrutiny by tax collectors, the statutory rates cannot capture what are

¹³See Schmidt and Lovell (1979) and Little, Mazumdar and Page (1987) for recent reviews of cross-section estimating techniques and Battese, Goelli and Colby (1989) for an application to panel data.

¹⁴As the original version of Working Paper 16 says of its small and large firm efficiency comparisons, "The results are based on the CMI data, which, being addressed to establishments with 10 workers or more are neither representative of very small enterprises nor (sic) whatever observations are generated at the small enterprise level are likely to be very trustworthy. These establishments were probably large in earlier years and are likely to be only transitorily small, perhaps on their way to exit." (WP 16, p.18)

undoubtedly different actual rates of protection available to small and large firms.¹⁰ To use statutory rates is to assume that all firms pay their tax obligations and receive the full measure of subsidies available. But varying policy impact on small and large firms emerges precisely because of differential enforcement. And the project use of statutory rates precludes their identifying these differences.

2. What the project did do.

Instead, the project has examined the impact of government policies on large-scale manufacturing. Although the analysis has succeeded in focusing high-level policy makers' attention on the impact of the NIP and RIP, we worry that the project conclusions come across too forcefully. Rather than preliminary hypotheses, they emerge as firm scientific findings. The careful qualifiers distributed throughout the early working papers disappear in the keynote synthesis paper, Working Paper 16.

We believe the project has advanced several important and provocative initial hypotheses. But after our lengthy review of project working papers, examination of the raw data and detailed discussions with project staff and knowledgeable outsiders, we are not persuaded it has written the final word on any of them. In some cases their analysis has not gone far enough; in others, it has pushed the data and analysis too hard. Our concerns fall into three categories.

a. weak data. The CMI data, on which many of the key analyses depend, are notoriously weak. Mailed questionnaires with varying response rates lead to differing sample sizes and sectoral composition from year to year. This, not surprisingly, results in differing output and investment aggregates over time. For example, the drop in 1985-86 firm numbers in the cleaned CMI data set (Table 6) may well explain the apparent drop in aggregate output in that year (WP 16, p.69). Since our review of the raw data indicates that as few as half a dozen firms can drive major spikes in the series aggregates, the differing firm composition from year to year, likewise, gives us pause.

The investment data from all sources - Directorate of Industries, Board of Investment, Planning Commission, BBS and CMI - are suspect. Investment sanctioned by the Directorate of Industries may bear little relation to actual investment. And of course it omits the small firm investments sanctioned by BSCIC as well as all investment financed out of reinvested profits. The CMI investment data are especially soft. Their survey records the book value of buildings, equipment and land. Since firms use different accounting conventions, since assets have different life spans and since the survey collects no information on the age or replacement cost of assets, it is difficult to convert the book values to either stock values comparable across firms or to an annual user cost of capital. We note that the inability to accurately measure this key input undoubtedly

¹⁰Eleven of the 47 policies studied are applicable only to small firms. But the remaining 36, in theory, apply across the board.

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contributes to the the sizeable "residual" and technical inefficiency measured by the econometric analysis.

The CMI data on output, employment, investment and costs are all unrepresentative because they omit the majority of small manufacturing firms. Even for the largest manufacturers, many observers believe the CMI data are biased. Since one of the major reforms of the New Industrial Policy involved privatization of large parastatals, management has changed in many of the CMI sample firms beginning in 1982. And the newly privatized firms have incentives to understate output and overstate input use. This will diminish apparent profits and increase claims on foreign exchange for imported inputs. To the extent the CMI data depict a dampening of output and investment growth, it may at least in part reflect a reporting bias from the new management. Corroborating the notion that new management in large firms may be less forthcoming than in the past, the evidence in Table 7 indicates the nonresponse rate among CMI firms has jumped considerably since 1982.

We note, finally, that one key series running counter to those presented in Working Paper 16 has been omitted from the project analysis. Using CMI data, the World Bank has produced an index of manufacturing output that shows output rising over the period that HIID suggests it is declining (World Bank, 1986, p.103). The World Bank's analysis of the CMI data may well be flawed, but their divergent conclusion based on the project's own principal data source should at least be discussed.

b. analytical techniques.

(1) statutory ERAs. Although statutory rates are useful indicators of government intent, actual prices provide the economic signals to which entrepreneurs respond. Because of ineffective implementation, smuggling and differential firm access to duty drawbacks and other incentives, statutory rates bear little relation to actual rates of protection. The TIP studies, for example, found that statutory rates were frequently negatively correlated with actuals. And even when the two are positively correlated, they may differ by as much as an order of magnitude (Table 8).

Since small firms have unequal access to incentives, statutory rates effectively preclude learning anything about differential policy impacts on small and large firms. But even for large firms, the statutory rates are not relevant for tracking firm responses. Based on a simultaneous increase in statutory protection rates and apparent sluggishness in large-scale manufacturing activity, WP 16 concludes that "firms have not responded to policy incentives." But the statutory ERAs do not measure the actual price incentives facing the firms. If statutory ERAs were closely correlated with actuals, changes in the statutes could be used to track changes in actual prices facing firms. But they are not consistently or even necessarily positively correlated (Table 8).

The case for using statutory ERAs boils down to arguing that entrepreneurs are fooled into thinking statutory prices will prevail, that they will be able to sell output for the full markup of tariff over import price. In the face of widespread smuggling, it strains credulity to think

that industrialists - most of whom operate large trading companies - would expect domestic prices to rise by the full amount of statutory tariff protection.

The use of statutory rates implicitly assumes that entrepreneurs will be fooled in input markets as well. ERAs depend on input as well as output price protection; this is the distinction between nominal and effective protection. So the use of statutory ERAs assumes that firms measure their cost of production using not actual input prices but rather the costs they would incur if their inputs benefitted from full statutory protection. Even if they could, it is most unlikely that businessmen would be interested in computing the effect of 47 different taxes and subsidies on the price of each of their inputs. Managers respond to actual prices, not to hypothetical, statutory ones.

The HIID survey of industrial leaders acknowledges this. Summarizing the business leaders' comments, they say, "The main result of the analysis ... is that entrepreneurs do not view fiscal, monetary or other assistance (micro or macro) of significance to their investment and production decisions. Their reaction is summed up by the expression, 'Bangladesh policies are good on paper, but bad in implementation.'" (WP 8, p.12) Managers are not fooled by statutes. They respond to actual prices.

(2) TFP and frontier production functions. We have noted that problems in measuring capital account for at least some of the apparent technical inefficiency measured by frontier production functions. It also accounts for some of the "residual."

One further problem with the frontier production functions also leads to an overstatement of technical inefficiency.¹⁴ The problem is that current estimates do not differentiate between skilled and unskilled labor. Tea ladies and chemical engineers each count as one laborer in the frontier production function analysis. Yet each contributes vastly different amounts to firm output. By failing to disaggregate the labor by skill class, the analysis computes large apparent "inefficiency". When inputs are not measured accurately, they do not correlate well with output. Hence the "inefficiency" and apparent wide variation in factor productivity.

(3) growth rates. In Working Papers 4, 8 and 11, the project computes enterprise and employment growth rates for different size classes of firms based on the 1986 Economic Census and the CMI. While this exercise

¹⁴Technical inefficiency is a term economists use to describe business performance relative to best-practice firms in their industry. Say two firms operate, each with a single handloom and two workers and that they consume an identical amount of yarn. One produces 10,000 meters of cloth while the other produces only 9,000. The second firm is said to be "technically inefficient." Analysts normally express inefficiency as an index number. Assigning the best-practice firm an index of 100, the second firm is said to operate at 90% efficiency.

represents an attempt to extract full value from secondary data, in this case it presses the Economic Census data too hard. The well-known "survivor problem" precludes calculation of growth rates from data obtained at a single point in time. Say the Economic Census identified 100 handlooms in 1986. From the date-of-establishment information they also collect, we learn that only 20 existed 10 years before. Have the enterprises grown at a rate of 400% over that 10-year period? Not necessarily, because in 1986 we only interview the survivors. If 200 handlooms had operated in 1976, the actual growth rate would have been negative 50%. If 40 had operated then, the decennial growth rate would be 250%. Since many firms enter a given market and many die each year, it is not possible to compute growth rates from "survivors" interviewed in a single year.

Working Paper 4 attempts to avoid the survivor problem by assuming a constant mortality rate for small firms. It computes an annual mortality rate by examining the dropout rate from the CMI sample. Since nonreporting has increased over time (Table 7), this procedure may not even be accurate for the large firms. And because mortality and entry rates are far higher among small firms, the large firm rate is almost certainly inappropriate for the small. Moreover, entry and dropout rates vary from year to year.¹⁷ The working paper assumption of constant employment since inception is also heroic. These calculations push the data too hard.

c. conclusions don't necessarily follow. Correlation does not prove causality. The "policies have failed" theme rests on the observation that policy reform began in 1982 and so did the apparent sluggishness in formal manufacturing activity. Since other important changes have also occurred since 1982, this correlation provides interesting circumstantial evidence but certainly does not prove causality. The increasing privatization of large manufacturing firms, their incentives to misrepresent output and input use, and their response rate have all changed substantially since 1982 and could well explain some of the measured trends. Because of increasing budget pressure, government investments have grown more slowly since 1982 than they did previously. To the extent that private firms depend on public infrastructure, this may explain a fall-off in private business activity. Floods in 1987 and 1988 depressed agricultural incomes and hence demand for industrial output. With a new government in 1982, large investors may wish to wait and see before plunging ahead with major business expansions. So it is not certain that the policy reforms are "the root cause of industrial ills," in Bangladesh (WF 16, p.37)

Likewise, the technology conclusion is consistent with the evidence presented, but it does not follow necessarily from the analysis presented. We can never measure inputs perfectly. So inevitably when relating inputs and outputs, econometricians have found an unexplained "residual." But it is just that, unexplained. The classic review by Denison (1967) refers to

¹⁷For a discussion of dropout and growth rates for small enterprises, see for example, Liedholm and Chuta (1982) and Middleton (1989).

the residual as "a measure of our ignorance." It could represent technological change or learning by doing or management or even worker motivation or skill differences. It could stem from changes in workers' health or human capital that we cannot measure accurately. It could result from changes in basic supporting infrastructure. We simply don't know.

The supporting argument that Bangladesh invests less in research and development than India or Singapore or Malaysia and that this accounts for differences in industrial performance is hardly persuasive. Other analysts could just as easily note that literacy rates, basic health, infrastructure, worker discipline and management savvy are all less fully developed in Bangladesh, and therefore these other factors might account for the residual. Technology may be the answer, but it is far from certain. The project presents no screening mechanism or justification for identifying technology as the culprit. The leap to the technology conclusion is based largely on faith.

And in an employment policy project, the technology theme seems especially suspect. More often than not, technological change in manufacturing displaces labor. Discussion of relative wage rates and capital costs seems strangely absent from the project assessment of the desirability of technological change.

3. Project supervision.

This project deviated substantially from its employment and small enterprise mandate. In part, the reorientation arose because of an absence of readily available data on small firms. But even the data that will shortly become available from the project survey are not ideally suited to identifying policies that discriminate against labor-intensive nonfarm activities. We conclude that the resident advisor, HIID/Cambridge and USAID/Bangladesh must all share some responsibility for the lapse.

We believe the resident advisor played to his own strengths and interests. As an accomplished econometrician, he was clearly excited by access to panel data from CMI. As an academic, he was intrigued by the prospect for extending trade theory to include domestic price distortions. Hence his keen interest in ERAs. Since neither CMI data nor statutory ERAs allowed him to explore differential policy impacts on small and large firms, these avenues of inquiry landed him substantially wide of the project target. We expect that the CMI data proved dirtier than anticipated and the econometric work took longer than expected. Then the unanticipated delays in the project's small firm survey pushed prospects for a small enterprise or employment focus dangerously close to the precipice.

HIID/Cambridge and AID/Washington recognized and flagged the deviation early on. Cambridge likewise raised two of the concerns echoed by many others about: a) the quality of CMI data (which their TIP project had examined and rejected as untrustworthy); b) the use of statutory as opposed to actual ERAs. In what proved to be a crucial delay, the first substantive comments from Cambridge did not arrive until after the resident

advisor had prepared his draft work plan. In part, the delay arose because customs officials impounded the DHL shipment in which Cambridge had air expressed their comments to Dhaka. And in part, everyone's pre-occupation with start-up logistics, institutional affiliation and data problems diverted attention from substantive issues. In any event, the comments came late. As the Cambridge project supervisor said "your work plan might have been different in some respects if you had received our suggestions earlier. But I do not think that any irreparable harm has been done." (Snodgrass, 1988).

Overall, the large flow of correspondence between Cambridge and Dhaka depicts a regular stream of conscientious, informed commentary by HIID on the project work plan, working papers and activities. But apparently because of their collegial and academic operating style, HIID's input always came in the form of comments and suggestions, never in the form of instructions. As in an academic seminar, the principal analyst was free to incorporate the suggestions he found convincing and to ignore the others. During early 1988, HIID comments continued to reflect concern over the lack of focus on small enterprise and employment issues, the dependence on CMI data and the use of statutory ERAs.¹⁰

Not until one year into the project, in August 1988, did HIID/Cambridge insist on a modification in the work plan. Together with AID/Washington, they orchestrated a revised work plan as an outcome of the Snodgrass-Young visit that summer.

Although HIID recognized the project diversion from its objective, USAID/Bangladesh apparently did not, at least not during the first year. As central actors in resolving the early start-up problems, USAID project managers may simply not have been able to focus on the substantive issues. Their glowing accounts of project activities in the first year probably contributed to the resident advisor's perception that he was, in fact, on the right track. The mission cable in support of project extension indicated that the project was "evolving into a potentially highly significant strategic intervention which will directly influence the shape and substance of the BDG Fourth Five-Year Plan as well as applied employment policy in the short run." They called the project, "a unique institutional opportunity to develop strategic thinking around core employment policy reforms," and suggested, "it's analytical work is explicitly concerned with the impact of policies upon small enterprises. The results of the study activities will guide planners and policy-makers on measures to enhance the policy climate and thereby improve overall economic efficiency and productivity with the ultimate consequence then being an efficient labor-intensive pattern of growth." (USAID, August 19, 1988). In retrospect, these views constitute a considerable overstatement.

¹⁰Lorch, for example in his March 1988 comment to Working Paper 7 states, "The main problem, though is the irrelevance of many statutory effective assistance rates." He continues to say that, "Official tariffs or quotas, interest rates and labor cost are largely irrelevant." The emphasis is his. (See Working Paper No. 7, p.25)

4. Opportunities Foregone.

The cost of the extended project forays into quantitative analysis of the large-firm CMI data were substantial. The data cleaning and analysis demanded more time and resources than anticipated. The project has become embroiled in disputes over the effect of the 1982 policy reform on large-scale manufacturing. The project survey effort proved more time-consuming and slower starting than envisioned. So the project has been unable to reorient its activities sufficiently to explore the many important opportunities for employment-enhancing policy reform in weaving, gur production, rice milling, oil milling and elsewhere.¹⁹

It need not have been so. We believe the project mandate was eminently achievable even without Economic Census or Annual Economic Census data. By focusing modest project resources on a half dozen or so carefully selected nonfarm subsectors it would have been possible to identify prospects for employment creation via policy reform. The TIP and BIDS analysis of the cloth weaving represents a model of how the project could have proceeded.²⁰ In a subsector that accounts for 40% of manufacturing employment, TIP and BIDS investigators easily identified the three standard technologies in use: hand looms, and two categories of power looms. In like fashion in other subsectors, by focusing interviews on a dozen or so firms in each category it is then possible to determine standard input-output relations, input prices, employment and equipment profiles. These stylized budgets are typically more accurate than those obtained from cross-section surveys of a large number of industries, since the cross-industry investigations demand that low-level enumerators with lengthy questionnaires extract one-year recall on outputs and inputs from seasonal businesses without records. Moreover, it is normally possible to track trends in a specific activity by looking at data on the availability of a principal input, wholesaling of output or complementary goods, or the import of key equipment or inputs. Diagnostic interviewing then allows the analyst to identify major dynamics under way, the system bottlenecks and growth nodes. The basic budgets, combined with open-ended interviewing, allows assessment of differential policy impacts on small and large firms as well as measurement of the employment costs of policy distortions.

This project began with favorable prospects for increasing nonfarm employment through policy reform. Unfortunately, that opportunity may now have passed since pressing fiscal and foreign exchange constraints, which have become especially acute since March, now pre-occupy policy makers and since project staff will not be on site to lobby and discuss their findings even if some pearls emerge in final few months.

¹⁹We note that the project might have suggested altering the subsector selection to include some of the strong candidates for employment creation through policy reform.

²⁰See Wasow, Farouque and Gani (1984) and Chowdhury (1989).

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We note that a second cost of dependence on CMI data was an exclusive project focus on manufacturing. Since trade, construction and services account for the majority of nonfarm employment (Table 1), this suggests a broader look at nonfarm activities will be important topic for future investigations.

D. Suggestions

1. Explain why protection increased.

One of the most important, and surprising, themes of the project research to date has been the conclusion that policy liberalization has resulted in more protection rather than less. Since policy makers intended to lessen protection and to diminish biases against export-oriented activity, they are keenly interested to know how their efforts have gone awry. Some simple budgets showing output prices, costs and relative protection before and after the policy reforms would be a powerful illustrative tool. Half a dozen profiles - one major import-substituting activity, an export manufacturer, and a sampling of several major industries - would probably be sufficient.

2. Disaggregate.

The budgets we propose should disaggregate the impact of individual policies. Currently the analysis indicates only that the entire package of 47 policies has resulted in increased protection. Since it is likely that one or two policies drive the results, policy makers will want to know which policy went wrong so they can focus on it. A bar graph showing the portion of value added protection attributable to each policy would be immensely valuable to policy makers. Again, the before and after comparison would enable them to see which policies caused the increased protection.

3. Assess appropriateness of ERAs for future work.

Since effective rates of assistance (ERAs) became the major analytical tool used in the project, and since it represents a more data-intensive extension of the more common ERP analysis, the costs and benefits of this supplemental effort require some ex-post discussion. Did the ERAs rank activities differently than ERPs? Did they move differently over time?²¹

The problem of valuing nontraded goods likewise merits discussion. For trade policies, world prices serve as a valuable "without distortions" barometer. Since supply can be taken as perfectly elastic at world prices, the analyst can assume that taxes and subsidies shift the supply curve, and hence prices, up by exactly the amount of the tax or tariff. But with nontraded goods, supply curves slope upwards and demand curves slope

²¹Figure 1 in Working Paper 16 suggests they did not. See p.68.

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downwards. Hence the analyst needs to know the elasticities of supply and demand to determine what the unassisted price would be. Moreover, even if demand and supply parameters are available, they will be estimated from actual income and prices, all of which would differ in the absence of distortions. Hence in the case of nontraded inputs and outputs, the estimation of the unassisted price poses a set of thorny conceptual and empirical problems.

Buried in the ERA analysis of this project is the implicit assumption that the supply of nontraded inputs and outputs is perfectly elastic, so that taxes and subsidies will shift up the horizontal supply curves and therefore prices by the amount of the tax. This assumption should be laid bare.

Others who wish to consider the ERA methodology will benefit from the project judgment about where and when ERA's are appropriate and when simplifying assumptions are necessary and defensible. Since nontraded activities - construction, trade and services - remain largely unexamined, other analysts interested in the effects of policy distortions on these large nonfarm employers will appreciate guidance from HIID.²²

4. Subsector highlights.

Only one of the six subsector studies remains unfinished. Three have been unenlightening because of initial restrictions on advertising and consequently inexperienced investigators. Of the others, only the garment study remains in press. Given that the field work has been finished, it will be difficult to influence the output much at this stage. Even so, it will probably be worthwhile requesting that the principal authors focus, to the extent they are able, on differential policy impacts on small and large firms and the consequent effect on employment.

²²We are pleased to see that Working Paper 14, revised during our evaluation visit after extensive discussions, reflect many of these suggestions.

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IV. PROJECT IMPACT

A. The Policy Agenda

The project has single-handedly raised a very important policy issue: the efficacy of the New Industrial Policy (NIP) and Revised Industrial Policy (RIP) in promoting large-scale manufacturing. A lively policy dialogue is now under way as policy makers scramble to review the impact of their reform efforts. Some officials have adopted a defensive stance, while others insist they welcome the opportunity to objectively scrutinize the consequences of the policy reforms. At the request of the project steering committee and others in government, a half dozen or more impromptu seminars have been scheduled during the first half of March to disseminate the findings of Working Paper 16. At this stage, several government officials have raised questions about the firmness of the data underlying the project analysis. But since most policy makers have not studied the project analysis carefully, it is not yet clear where the substantive debate will focus.

Because the project has not yet attempted to disaggregate the impact of individual policy changes, it has sounded the alarm but has not yet identified the key suspects. Disaggregation of individual policy impacts would seem to be the most fruitful next step. If policies need to be changed, officials must know which ones.

The Ministry of Industry and BSCIC have asked for informal briefings and further analysis. They, the Planning Commission, and the Ministries of Commerce and Finance seem actively engaged in policy debate.

B. The Fourth Five-Year Plan

The project has contributed to the Fourth Five-Year Plan in two ways. At the request of the Member GED, the project has supported Planning Commission staff who had begun augmenting the national input-output table. By providing personal computer services and analytical advice, they have helped Planning Commission staff include additional rows which disaggregate the total wage bill by skill category. This will allow the Planning Commission to explore the manpower requirements of alternative public investment programs.

By promoting their technology theme, the project has also given a boost to proponents of increased priority for research and development. We have been told that the four-page outline of the Fourth Plan includes one page on "the residual" and productive efficiency. However, the Plan document notes that "the residual" may be explained by many factors, of which technology is only one. While the project analysis did not discover "the residual" or technology, they have expended considerable time, energy, and funds in promoting it and have undoubtedly helped raise its visibility. It is not yet certain whether or not that increased visibility will translate into higher research and development allocations in the upcoming Plan.

C. Government Analytical Capacity

Sustainability was an explicit project objective. Both designers and project staff had hoped that technicians in the Planning Commission and outside would emerge more skilled and versatile as a result of working alongside the HIID team. Through counterparts, seminars, formal training sessions in-country and abroad, the project anticipated upgrading local analytical skills.

Through no fault of the project staff, this upgrading of analytical skills did not occur. The Planning Commission was unable to release a single staff member to work with the project. The pressure to complete the Fourth Five Year Plan by June 1990 and the lack of formal responsibility for the project during the first two years complicated what, in the best of times, is a difficult task of identifying and releasing a suitable candidate.

These difficulties are not new. The Trade and Industrial Policy (TIP) project, with a much larger budget and units at both the Planning Commission and Tariff Commission experienced the same frustrations (TIP, 1987). Low pay scales make it difficult for government to attract qualified economists. And the faster promotion possibilities in the administrative cadre make retention problematic. Moreover, since government economists must normally publish their work as anonymous departmental publications, they receive no professional recognition or personal credit for insightful or creative analysis. This further dissipates incentives to perform. Together, these meager incentives explain why virtually all the practicing economists we found in government were operating there only temporarily, as consultants. Donors, of course, exacerbate government's retention problem by bidding away the best local talent to serve their project design, reporting and analytical requirements.

D. Understanding Policy Dialogue

Although frustrating for project staff, many of the tribulations they experienced have the happy consequence of spotlighting two essential ingredients for a successful policy dialogue: a) access to reliable data; and b) analytical capacity. The early debates over access to BBS data resonate with local researchers, many of whom indicate they have faced similar hurdles. And widespread discussion about the quality of CMI data reflects the general challenges of collecting accurate statistics.

As with data in many countries, both reliability and access could be improved in Bangladesh. Some initiatives are under consideration at BBS to improve enumerator supervision and incentives and to facilitate the mainframe-to-floppy-disk transfer that would open up data analysis to the many with access to personal computers but not to mainframes. Rules of access also merit clarification, since knowledgeable observers at least perceive that inconsistent standards are being applied.

What about local capacity for economic analysis? As HIID, TIP and many others have discovered, the preponderance of analytical talent currently

lies outside government. Local economists operate from universities, research institutes such as BIDS, donor payrolls or the large floating pool of private economic consultants who work periodically for government, donors and FVOs. Like others before them, HIID has run up against the serious difficulties of upgrading government in-house capacity. As we will discuss below, we believe that USAID can translate both these observations into improved local capacity for policy analysis.

E. Summary Interim Appraisal

Overall, project performance has been mixed. Among its liabilities, the project has failed to focus sufficiently on policy constraints confronting small enterprises, its rigor eroded at critical junctures, and it pushed conclusions beyond what the evidence would support. Yet assessment of this performance must consider the circumstances: recruiting difficulties which led to substantial start-up delays; the unavailability of anticipated BBS small enterprise data which were central to conceptualization of the project; the Planning Commission's pressure for other priorities; and USAID/Dhaka's failure to express early concern about the inadequate attention being paid to employment and small enterprise. Given the circumstances, the advisor and his team deserve considerable credit for operating energetically in a difficult environment, for disseminating their findings widely, offering consistent professional support to local colleagues, and stimulating a vibrant policy debate over the effectiveness of the 1982 reforms.

In a nutshell, despite serious problems in the project environment and implementation, when the project is over and its impact may be more adequately assessed, the advisor, his team, their new survey data, their focus on policy and hard work may ultimately have a very positive net effect on policy analysis, reforms and possibly even the future of small enterprises. It is regrettable, nonetheless, that the real impact is likely to be significantly less than its potential.

V. PRIORITIES FOR THE FINAL MONTHS

We proposed four priorities for the remainder of the project. From now until the project ends at the beginning of August 1990, cleaning the project survey data should have highest priority. Considering the large number of variables and the ambitious attempts to obtain a decade of retrospective data, the cleaning and consistency checks will take some time. We doubt the time remaining will permit analysis to move much beyond basic descriptive statistics. Since ERAs and frontier production functions do not directly bear on the project mandate to examine employment-dampening differential policies impact on small and large firms, we suggest they not be estimated from the survey data. The information on access to policy assistance, difficulties with labor legislation and the basic employment profiles seem most pertinent.

Beyond these basic analyses, we suggest the project pay careful attention to documenting the survey data, preparing code books and floppy disk copies of the raw data in ASCII format. They should be given to the Planning Commission, BIDS, USAID and any other interested local researchers.²³ We suggest that approximately 40% of remaining project time and resources be devoted to these survey-related tasks.

We place preparation of the final project report as second priority. The AID/Washington project manager, in consultation with project staff, prepared an outline for the final report in August 1989. Since the project staff have had that structure in view for the past nine months, we see no reason to change from the established format. As an order of magnitude, we suggest an additional 40% be devoted to this activity.

Third, if effective protection has inadvertently increased by 30% since 1982, as the project analysis suggests, policy makers will need to know which individual policies are causing the increase. They will have difficulty correcting course unless they know which of their policy equipment has failed. We suggest selecting half a dozen representative industries, some import-substituting, some export-oriented and for each computing a breakdown of total effective assistance and the share contributed by by each major policy. A simple bar graph could illustrate both the magnitude of the effective assistance before and after the reforms as well as its decomposition. We also believe that illustrative budgets for the selected industries would go a long way in demonstrating to policy makers the source of the unanticipated increase in protection. We propose that 15% of remaining resources be devoted to this repackaging and marketing of the project analysis. We recognize that under this rubric, project staff will need to respond to the growing requests for seminar expositions of their prior work.

²³Very similar data will soon become available from national nonfarm surveys by BSCIC and BBS through its Annual Economic Survey (AES). So local researchers will find the HIID survey a valuable source for comparison with others. We note that access to AES data will be a necessary prerequisite for this further work.

Fourth, the Planning Commission will require modest continued support for completing its input-output disaggregation. We suggest 5% of project resources be allocated for this purpose.

VI. OPPORTUNITIES FOR THE FUTURE

A. Policy Dialogue

We propose a two-pronged intervention aimed at promoting a self-sustaining internal capacity for policy analysis and debate. One part of the effort must focus on data quality and availability. To improve data quality, we endorse the proposal made by the BBS statistical advisor for further assistance to BBS. That proposal focuses in part on improved enumerator supervision and incentives and in part on improved access to data via the modest additional equipment necessary to facilitate transfer of raw data from mainframe to floppy disks. We agree that ensuring access will require commitment by BBS to develop standard criteria, procedures, and fees for releasing raw data to local analysts. We believe it will be relatively easy to ensure their legal responsibility to maintain the confidentiality of respondents. We also believe that data quality can only improve by having numerous analysts work with it, challenge it, and help to clean and make sense of it. Data collection consumes scarce resources, and they will be wasted if the data are not fully exploited.

The second prong of our proposed strategy takes an unconventional approach to improving analytical capacity. It starts from the premise that local capacity for economic analysis lies largely outside of government, in the academic, research, consulting and donor communities. Moreover, under current incentive structures the most skilled practicing economists are likely to remain outside of government.

We propose tapping this pool of talent by endowing a research foundation that would fund a wide range of applied economic research. Local academics, government economists, research institutes or individuals could submit research proposals to a governing board. Institutional location and representation on the board would need to be explored more carefully than we have had time to do. Presumably such an institution would want representation from government, AID, local university and research institutes. Perhaps distinguished, internationally recognized outsiders could be enlisted to support local peer review, thus elevating the stature and profile of the research.

The cost of such a research fund would not be enormous. Although it could be funded primarily with local currency, hard currency provisions

would provide local researchers with resources necessary to tap outside input, as they see fit. Our interviews suggest that a solid core of thoughtful, interested economists currently operates in Bangladesh surrounded by a much larger pool of variable quality. Currently their research agendas are set largely by aid agencies who entice them with attractive consulting fees to fulfill internal reporting requirements or to study issues of interest to the donors. Because of the overwhelming weight of donor financing, this results in policy monologue, not dialogue. Donors set the agenda. We believe that many local economists have research interests they are anxious to pursue but that they are unable to do so because they cannot afford to work without remuneration. If they had alternative funding available from a research foundation, they could buy off at least part of their time to pursue topics of special interest. We expect they will be at least as perceptive as donors in identifying topics of importance to policy makers and to Bangladesh.

Such a strategy could work in Bangladesh because of a long tradition of outspoken, loyal opposition from academics and researchers. Economists at Dhaka University and BIDS gained recognition as vocal exponents of economic separability and hence independence for East Pakistan. And both continue to operate as recognized devil's advocates for policy makers. This pedigree endows local researchers with historical license to air their views frankly. Policy makers are used to seeing provocative economic analysis from local researchers. And our sense is that their views receive a fair hearing.

What we propose is a mechanism for enriching that internal debate. Government and local researchers should have access to funding for economic policy research. Allow them the means to set the agenda for policy debate. We see the risk and the expense as minimal, while the potential gains are enormous. With a modest funding vehicle, it might be possible to nurture an ongoing, internal policy dialogue that would be far more effective than the current system at identifying and modifying economic policy in the pursuit of improved economic welfare for Bangladesh.

B. Action

More traditional, focused options involve supporting direct assistance to small enterprises. The World Bank has proposed a series of studies and pilot activities as part of its Small Scale Industry Credit program. USAID may wish to coordinate with the Bank. They, as usual, are interested in USAID co-financing of the technical assistance portion of their efforts.

Several parties have also suggested further study of the Grameen Bank with tripartite funding by the World Bank, USAID/Dhaka and AID/Washington. They propose an update of the earlier BIDS review along with additional topics such as the extent of subsidy, Grameen's entry into profit-making activities such as tubewells, and a more complete assessment of benefits, including health, literacy and family planning. AID/Washington is further interested in funding an institutional analysis of how Grameen has been able to replicate its activities so extensively.

C. Suggested Priorities

We believe the basic ESEPP premise was correct, that policy distortions currently diminish employment in labor-intensive small enterprises; and if they can be identified, it might well be possible to change them and feast on the economists' famous free lunch. Since the HIID project did not capitalize on this opportunity, the free lunch remains untasted. Unfortunately, we expect it will be difficult to muster the institutional enthusiasm to repeat implementation of a well-conceived project whose potential remains unrealized. Consequently, USAID/Bangladesh will have to see how further work promoting nonfarm employment through policy reform squares with their internal priorities.

We who are unconstrained by mandates from Washington and Gramm-Rudman budget ceilings are inclined to take the long view and a consequently indirect route to identification of the free, policy-reform lunch. We believe that by supporting ongoing, internal policy debate, the two-pronged data upgrading and research endowment strategy described above would, in the long run, represent the greatest contribution any donor could make to improved, informed economic decision-making in Bangladesh.

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Table 1

A Profile of Nonfarm Employment in Bangladesh, 1986

Activity	Employment (thousands)	Percent of Total Employment		
		National	Nonfarm	Mftr.
A. <u>Agriculture</u>	17,304	62.3		
B. <u>Nonfarm</u>				
o Commerce				
trade	2,378			
transport	1,170			
total	3,590		34.4	
o Services				
community/personal	1,447			
domestics	1,404			
business	290			
total	3,101		29.7	
o Manufacturing				
textiles	1,564			50.5
(handlooms)	(893)			(28.9)
food and beverages	553			17.9
(rice milling)	(205)			(6.6)
(tobacco)	(122)			(3.9)
(oil milling)	(39)			(1.3)
(sugar and gur)	(39)			(1.3)
wood and paper	369			11.9
nonmetallic minerals	259			8.4
(pottery)	(144)			(4.7)
other	349			11.3
total	3,094		29.6	100%
o Construction	572		5.5	
o Power & other	97		.9	
Total Nonfarm	10,451	37.7	100%	
C. <u>Total</u>	27,755	100%		

Table 1 (continued)

*The Labor Force Survey estimates this figure at 2,649, roughly double the Economic Census figure indicated here.

Source: For manufacturing, community and personal services and trade, figures are taken from: Bangladesh Bureau of Statistics, Bangladesh Census of Nonfarm Economic Activities and Disabled Persons - 1986. Dhaka, November 1989. All others come from the 1984-85 Labor Force Survey, assuming a 3.6% growth rate to 1986. Data as reported in: Bangladesh Bureau of Statistics, 1987 Statistical Yearbook of Bangladesh. Dhaka: July 1988.

Table 2

Project Chronology,
Harvard Institute for International Development (HIID)
Employment and Small Enterprise Policy Project (ESEPP)

1. Start-up Activities

a. change to Planning Commission (agreed) (gazetted) (funds transferred)

b. secure accomodation

c. data battles with BBS

2. Analytical Work

a. clean CMI

b. ERAs

c. frontier prodn. functions

d. flood survey

e. subsector studies

f. industrial leaders survey

g. project small enterprise survey
(1) interviewing
(2) data cleaning
(3) analysis

3. Landmark Dates

a. first work plan X

b. Bush-Van der Veen recommend de-linking X

c. Snodgrass-Young visit & Revised Work Plan X

d. Choi visits from KIST X

e. Working Paper 16 X

A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J
- 1987 - - - - - 1988 - - - - - 1989 - - - - - 1990

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Table 3

Project Resources and Outputs

Workplan Topic	Local Resources				Foreign Resources			Total Cost (\$ '000)	Project Output (NPs) ^a
	Manpower (months)				Cost ('000 taka)	Manpower (months)			
	Govt.	Loc. Cons.	Loc. Staff	Total		Foreign Cons.	HIID advisor		
1. compute ERAs	1	2	30	33	1,400	0	5.0	2	
2. calculate TFP	5	5	15	25	1,100	1	4.7	3	
3. impact of policies from existing data	5	1	12	18	800	1	1.8	6	
4. project surveys									
a. industrial leaders	0	0	24	24	0	0	3.6	1	
b. flood damage	10	1	21	31	0	0	1.4	1	
c. national industrial	1	4	259	264	3,000	1	9.0	1	
5. historical surveys	1	7	6	14	600	0	.8	4	
6. subsectors	5	9	5	19	900	1	.7	2	
7. training	10	3	2	15	700	2	3.6	30 ^b	
								26 ^c	
8. Fourth 5-Year Plan	12	2	20	34	1,400	0	5.4	10 ^d	
Total	50	32	394	476	10,000	5	36	\$757^e	30

^aWorking paper equivalents.

^bMonthly seminars.

^cSpecial seminars.

^dRelatively short.

^eTotal expenditure through December 31, 1989.

Source: HIID/ESEPP and HIID/Cambridge.

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Table 4

Summary of HIID/ESEPPH Analysis Through February 1990

Research Themes	Diagnoses	Analytical Tools	Data	Prescriptions
<u>Major Project Themes</u>				
1. Policies have failed	<ul style="list-style-type: none"> - NIP, RIP lead to increased protection - this results in declining: <ul style="list-style-type: none"> • total factor productivity • investment • output • output per worker 	<ul style="list-style-type: none"> ERA TFP 	<ul style="list-style-type: none"> CMI CMI CMI, BOI, DI natl. accts. CMI CMI 	more liberalization is required
2. Technology	<ul style="list-style-type: none"> - large "residual" - large technical inefficiency 	<ul style="list-style-type: none"> TFP frontier prodn. functions (FPF) 	<ul style="list-style-type: none"> CMI CMI 	increase research and development for manufacturing
<u>Project Mandate</u>				
3. Differential policy impact on small enterprises	<ul style="list-style-type: none"> - small efficient? - small grow faster 	<ul style="list-style-type: none"> FPF growth rates 	<ul style="list-style-type: none"> CMI EC 	none
4. Employment policy	none	none	none	increase aggregate manufacturing output to increase employment

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Table 5

Representativeness of
Cleaned Census of Manufacturing Industries (CMI) Survey Data

	Enterprise Size, Number of Workers per Firm			Total
	0 - 9	10 - 49	50 +	
<u>1. Cleaned CMI Data as a Percent of All National Manufacturing</u>				
a. Number of enterprises ^a	0.03%	6.5%	17.2%	0.3%
b. Employment ^b	0.03%	6.5%	25.5%	8.3%
<u>2. Share of National Manufacturing Employment by Size of Firm</u>				
	60.5%	9.2%	30.3%	100%

^aBecause enterprise totals are not available by size class for 1985-86, these estimates take the 1983-84 totals multiplied by 1.167, the difference between the 1985-86 and the 1983-84 enterprise total.

^bEmployment totals are available for 1985-86 but the disaggregation by size class is not. The estimates take employment per firm in the 0-9 and 10-49 worker categories as equal to the national average. The 50 + employment is then calculated as a residual, from the total employment minus the estimated values in the two smallest size classes.

Source: Economic Census, National Report, pp.18,195; Working Paper 15, p.43; Working Paper 16, p.46.

Table 6
Sample Size
in the Cleaned Census of Manufacturing Industries (CMI) Series

	Number of Firms			
	Old	New	Moribund	Total
1985-86	277	1,419	0	1,696
1984-85	277	1,417	43	1,737
1983-84	277	1,213	58	1,548
1982-83	277	1,075	86	1,438
1981-82	277	887	104	1,268
1980-81	277	709	120	1,106
1979-80	277	185	128	590
1975-76	277	0	138	415

*"Old" firms are those in operating for the entire decade under review.

•"New" firms are those who began operation during the 10-year period.

•"Moribund" firms are those operating in 1975-76 that ceased operation during the decade under review.

Source: HIID/ESEPPA computer printouts.

Table 7

Evolution of Response Rate in the
Census of Manufacturing Industry (CMI) Survey

	Total Number of Firms				(e)
	(a)	(b)	(c)	(d)	
	Total Listed	Closed	Operating but no Response	Total Surveyed	Nonresponse Rate (c/a)
1985-86	5,034	202	359	4,473	7.1%
1984-85	4,608	435	239	3,934	5.2%
1983-84	4,321	399	182	3,740	4.2%
1982-83	4,116	358	175	3,583	4.3%
1981-82	3,676	286	34	3,356	.9%
1980-81	3,487	305	30	3,152	.9%
1979-80	3,296	265	25	3,006	.8%
1978-79	3,536		808	2,728	-
1977-78	3,391		625	2,766	-
1976-77	2,464		407	2,057	-
1975-76	2,855		295	2,560	-
1974-75	2,371		-	1,435	-
1973-74	2,308		-	1,427	-
1972-73	-		-	1,986	-

Source: Census of Manufacturing Industries, Annual Reports, 1972-73 - 1985-86.

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Table 8
Comparison^a of Statutory and Actual Rates of Protection

	Effective Rates of Protection	
	Statutory	Actual
Silk yarn	NVA ^b	NVA
Finished polyester suiting	NVA	54
Cotton yarn, 32 count	NVA	113
Silk fabric	NVA	-61
Cotton yarn, 40 count	NVA	129
Men's trousers, blended fabric	NVA	197
Rayon yarn	NVA	NVA
Cotton vests	NVA	-70
Grey polyester suiting	NVA	213
Nylon yarn	NVA	181
Grey cotton shirting, powerloom	5075	127
Grey cotton shirting, handloom	4813	115
Nylon socks	2136	-13
Cotton yarn, 20 count	1286	27
Finished polyester shirting	1188	196
Men's shirts, cotton fabric	1167	311
Men's shirts, blended fabric	980	318
Grey polyester shirting, powerloom	692	180
Cotton yarn, 60 count	652	513
Grey polyester shirting, handloom	476	150
Cotton yarn, 80 count	321	321

^aThe correlation coefficient is 0.31 for all observations, if NVA's infinity is approximated as 10,000. For only the 11 observations without NVA, the correlation the coefficient is -0.43.

^bNVA = negative value added; implies infinite protection.

Source: Overview of Assistance Policies for the Textile Sector, Management Unit, Trade and Industrial Policy (TIP) Reform Programme, December 1985. Doc.TiP.MU.B., p.18.

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APPENDIX A. SCOPE OF WORK

1. ACTIVITY IDENTIFICATION:

The activity to be evaluated is the Employment and Small Enterprise Policy Planning (ESEPP) Project carried out under the auspices of the Technical Resources Project II. The ESEPP Project was carried out under contract by the Harvard Institute for International Development (HIID).

2. BACKGROUND:

2.A. ESEPP is a \$ 1.7 million sub-project of the Mission's Technical Resources I (388-0027) and II (388-0074) Projects. ESEPP was initiated in July 1987 and is now scheduled to end in July 1990, following the execution of a one-year extension beyond the prior PACD. ESEPP includes a complex, policy-oriented set of activities the purpose of which is to help the Bangladesh government (BDG) reformulate a variety of small enterprise policies and procedures inhibiting rapid attainment of the BDG's goals for increasing productive employment.

2.B. The implementing institution for ESEPP is the Harvard Institute for International Development (HIID) which provides a resident economic advisor to support the efforts of the Planning Commission to conduct macroeconomic, sectoral and other policy studies as they relate to small and medium industries (SME) development.

2.C. Two reviews have been carried out to assess progress of the project, one in March 1988 and a second in July 1988. As a result of these reviews, changes were made to the detailed project workplan and implementation provisions to include eight research subprojects to collect and analyze data at the macro, sector, subsector and enterprise level and to examine the ways in which industrial policies have promoted or inhibited overall and specific SME growth opportunities.

3. STATEMENT OF PURPOSE:

3.A. To enable the Mission to assess the progress of the project in relation to overall project objectives and the project work plan.

3.B. To identify priorities for the final six months of HIID's ESEPP activities.

3.C. To enable the Mission to decide whether the project should lead to a subsequent phase of work after July 1990 and, if the response is affirmative, to suggest and discuss options.

4. STATEMENT OF WORK: The evaluation will examine the progress of project activities with respect to stated objectives, assess the relevance of existing and potential uses of project outputs, and identify activity options for the remainder of the project. The evaluation will also suggest

options for follow-on activities. The evaluation will address the following key questions:

4.A. What are the project accomplishments in relation to the objectives and planned outputs of the eight research activities that were identified in the revised work plan? What relative levels of effort were allocated to each research activity and were they consistent with project purposes?

4.B. Did project activities identify the most important policy problems/issues affecting small enterprise development?

4.C. Were analyses used in the various studies the appropriate ones relative to the policy problems being investigated and were the analytic techniques appropriate given the available data?

4.D. Were data collection exercises well suited to providing the material needed to support policy analyses?

4.E. How are the outputs of the project being used? Are outputs leading to or likely to lead to, the review of, and/or revisions in BDG policies and procedures affecting SMEs?

4.F. Which of the eight research sub-projects and which components within these should be given priority for the remainder of the project? Is any additional/alternative research needed to fulfil project objectives?

4.G. How is the support provided by the HIID economic advisor to the Planning Commission contributing to the formulation of the Fourth Five Year Plan? How will the development of an augmented input - output table help future plan preparation?

4.H. Is the project sustainable? Is there sufficient BDG institutional capability to follow up in terms of using the outputs and continuing key activities beyond the LOP?

4.I. Should Mission effort in this direction end in August 1990? Do the results to date provide the information needed to assess follow-up project options?

5. METHODOLOGY AND DATA SOURCES:

The contractor will be responsible for selection of the evaluation methodology. This Mission suggests that the study approach include the following:

5.A. Review of relevant project documentation to include, inter alia, project plans, project reviews and work plans.

5.B. Detailed discussions with the HIID resident advisor.

5.C. Detailed examination of project outputs in relation to targets specified in the work plan.

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5.D. Interviews and meetings with officials of BDG institutions, including the Planning Commission, Bangladesh Bureau of Statistics and Ministry of Industry.

5.E. Interviews with knowledgeable staff of small scale enterprise organizations, representatives of Dhaka University, the Bangladesh Institute of Development Studies (BIDS) and other organizations concerned with policy research and development.

5.F. Meetings with USAID Mission Management; the Director, Office of Economics and Enterprise; and other relevant USAID staff.

6. TEAM COMPOSITION, SKILLS, AND LEVEL OF EFFORT:

6.A. The evaluation will be carried out by a three person team. The team members should be qualified and experienced in the following skill areas 1) private sector development activity; 2) economic analysis with experience in SME policy; 3) policy formulation and implementation processes.

6.B. Mission suggests the team consist of a) a U.S. team leader; b) a representative from S&T/RD/EED and c) a Bangladeshi economist.

6.C. The team leader should be a recognized, senior economist with extensive experience in policy analysis work in the areas of industry and small scale enterprise development. Experience in working with developing country institutions is essential.

6.D. The representative from S&T/RD/EED will be an economist experienced in small enterprise policy analysis and familiar with ESEPP type projects, in particular the Bangladesh project. His/her services will be obtained separately through a RSSA in AID/W. He/she will coordinate closely with the U.S. team leader.

6.E. The Bangladeshi team member should be a recognized economist experienced in economic policy analysis, industry studies, economic modelling and input-output analysis. He/she should be experienced in working with the Planning Commission and other Bangladeshi institutions. He/she will work under the supervision of the team leader.

6.F. The level of effort required for the team leader and the Bangladeshi economist will be approximately 22 work days, with a six-day work-week. The S&T/RD/EED representative will work approximately 12 days (six-day work-week.)

7. TIME FRAME The evaluation will commence on February 11, 1990. A draft final report is to be submitted to the Office of Economics and Enterprise, USAID/Dhaka by March 01, 1990. The final report shall be completed no later than March 18, 1990.

8. REPORTING REQUIREMENTS

8.A. Report Format: The report should contain the following sections :
Executive summary: Approx. 3 pages, single spaced - Statement of

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findings, conclusions and recommendations: Findings and conclusions should be succinct, with the topic identified by a short sub-heading related to the areas of investigation identified in the statement of work.

Recommendations should correspond to the conclusions; wherever possible, the recommendations should specify who should take the recommended action.

- Body of the report: The report should provide the evidence and analysis to support the findings, conclusions and recommendations.

Appendices: These are to include at least the following: a. The evaluation scope of work b. A description of the methodology used in gathering and analyzing the information c. A bibliography of documents consulted d. A list of persons/agencies interviewed. Completed Section H and J of AID Project Evaluation Summary.

B.B. Team Meetings and Debriefings:

- The ESEPP project officer will arrange a meeting on their second working day in Bangladesh to include the evaluation team, the Director of OEE, the Project Officer, the Mission Program Officer and the Mission Evaluation Specialist. The team leader will present the evaluation workplan for review and revision as required.

- The team leader will meet weekly with the Director of OEE, USAID/Dhaka, and the Evaluation Specialist to review the progress of the evaluation. There will be a formal debriefing for USAID staff at the end of the study period.

- Submission of report: Draft outlines will be submitted for review and comment to USAID staff four working days after the team starts work in Dhaka. The draft report will be reviewed by the Mission and comments provided to the evaluation team on or about the 17th working day for incorporation in the final version of the report. The final report will be due March 18. Mission will require fifteen copies of the final report, and a copy on diskette with specification of the word processing software. 9.

LOGISTICS: Office space is extremely limited at USAID. The evaluation team will arrange for office space separately. Transportation within Dhaka area is available by taxi and local transport. The contractor must also be prepared to hire transport for field trips (if needed) since USAID cannot guarantee the availability of Mission transport. The contractor is responsible for arranging secretarial and other support services.

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APPENDIX B. LIST OF PERSONS INTERVIEWED

- A. Planning Commission
1. Dr. Shaikh Maqsood Ali, Member General Economics Division (GED)
 2. A. H. Shamsul Hoque, Division Chief GED, Director Employment Monitoring Unit
 3. Momdel Hossain, Joint Chief, GED
 4. Dr. Salahuddin, consultant, GED
 5. Mohiuddin Ahmed, Deputy Chief, GED
 6. Dr. M.K. Mujeri, consultant, GED
 7. Mesbahuddin Ahmed, Division Chief Industries and Energy, GED
 8. A.F.M. Alamgir, Joint Chief Division of Science and Technology (used ESEPP studies for technology chapter for the 4th Plan)
 9. Dr. Rab, consultant, Trade and Industrial Promotion Project
 10. Dr. Najmul Hossain, associate advisor ESEPP
 11. K.K. Sanyal, ESEPP staff
- B. Bangladesh Bureau of Statistics
1. A. Salam, Secretary
 2. Bob Torrene, Advisor
 3. Jabdul Hoq, Census of Manufacturing Industries
- C. Ministry of Industries
1. A.K.M. Mosharraff Hossain, Secretary
- D. Ministry of Finance
1. Tawfiq Elahi Chaudhury, Joint Secretary
- E. Ministry of Commerce
1. Md. Aiauddin, Joint Secretary (substitute)
- F. Other Government
1. Ministry of Education: A.N.M. Eusuf, Secretary (former secretary, Division of Science and Technology)
 2. National Productivity Organization: Abu Misir, Director
 3. Bangladesh Small and Cottage Industries Corporation:
A.H. M. Rezaul Karim, Director (Planning, Development and Technology)
M.A. Rahman, General Manager (Technology and Development)
Md. Ruhul Amin, Deputy General Manager (Planning)
Abu Faher Khan, Deputy Manager (Planning)
- G. Bangladesh Institute of Development Studies
1. Dr. Mahabub Hossain, Director-General
 2. Dr. Zaid Bakht, Senior Research Fellow and Director, Industries Division
 3. Dr. Debapriya Battacharya, Research Fellow, Industries Division

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H. Dhaka University

1. Dr. Muzaffar Ahmed, Institute of Business Administration
2. Dr. Momtaz Utin Ahmed, Department of Economics
3. Dr. Wahiduddin Mahmud, Department of Economics

I. Bangladesh University of Engineering and Technology

1. Dr. Iqbal Mahamud, Department of Chemical Engineering
(former State Minister for Science and Technology)
2. Dr. Nurul Islam, Director, Institute for Appropriate Technology

J. International Organizations

1. World Bank: Reazul Islam
2. UNIDO: Albertal W. Leving
3. Asian Development Bank: Nurul Huda
4. UNDP: Terrence Jones, Deputy Resident Representative
Rasheda Selim, Programme Officer
5. ILO: Reuben Dudley, Resident Representative
Clarence Maloney, Director Self-Employment Project

K. Private Sector

1. Bangladesh Employers Association
2. MIDAS: N. Huda, Director
3. National Association of Small and Cottage Industries of Bangladesh:
R.A. Khan
4. U.S./Bangladesh Business Council
5. Ready-to-Wear Garment Manufacturers Association: M. Malek
6. Grameen Bank: Dr. Yunus
7. BRAC: Dr. Salahuddin
8. Proshika: Begum Jahanara
9. Dhaka Chamber of Commerce
10. Federation of Bangladesh Chambers of Commerce
11. Swanirvar: Salahuddin Ahmed

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APPENDIX C. INTERVIEW GUIDELINES

1. Do you know of ESFP?

- a. What do you know of their activities?
- b. How and where have you heard of them?
- c. Do you agree with their main conclusions?
disagree?
Why?
(Does respondent know what the main policy conclusions are?)
- d. Has anyone in your agency reacted to the analyses? How?
- e. Have you found their work useful? How?

2. Nonfarm employment policies (optional, for well-versed respondents only)

Motivation: labor force growing by 750,000 per year;
agriculture can absorb only 250,000;
need 500,000 nonfarm jobs per year

- a. Where do you see opportunities for policy intervention that would result in increased labor absorption outside of agriculture?
- b. What 3 policies have the most important effect on nonfarm employment?
- c. What 3 nonfarm activities face the most substantial policy pressure?

3. Your policy analysis needs.

- a. What economic policy analyses have you commissioned in the past 2 years?
in house?
through consultants?
through donors?
- b. Where do you turn for economic policy analysis? What institutions/individuals produce the economic analysis you find most useful?
- c. If a donor were to place analytical capacity at your disposal, what would be your highest priority?

APPENDIX D. LIST OF PROJECT WORKING PAPERS

Working Papers

1. A Historical Survey of Small Industries in Bangladesh
2. Methodology of Policy Analysis
3. Total Factor Productivity and Efficiency by Size-Class of Manufacturing Enterprises. June 30, 1988
4. Impact of Policies Since 1982: Evidence from the Economic Census. July 5, 1988
- 4.a. Detailed Crosstabulations, Economic Census 1986. June 20, 1988.
5. Suggested First Draft of a Set of Questionnaires for BBS's Forthcoming Economic Survey. February, 1988
6. A Methodological Note on Effective Rate of Assistance by Industries of the I-U Table. July 2, 1988
7. Estimates of Effective Assistance to Textile Products: 1974/75 - 1987/88. February 29, 1988
8. An Analysis of the Impact of Policies by Size-Class of Establishments in Bangladesh. October 26-29, 1988
9. Documentations of Variable Records of Time-Series Micro Data. March, 1989
10. The Extent and the Distribution of the 1988 Flood Damages in Bangladesh. December 14, 1988
11. An Identification of Dynamic Sectors and an Assessment of the Impact of Policies: Further Evidence from the Economic Census, 1986. January 15, 1989
12. An Identification of Dynamic Sectors and an Assessment of the Impact of Policies: Evidence from the DI Data on Investment. February 15, 1989
- 12.a. An Identification of Dynamic Sectors and an Assessment of the Impact of Policies: Evidence from the DI Data on Investment. February 15, 1989
13. Impact of Policies: Evidence from a Survey of Industrial Leaders. March 30, 1989.
13. (revised) A Rendezvous with Industrial Leaders and Entrepreneurs. February, 1990
14. Effective Rates of Assistance. July 4, 1989
14. (revised) Effective Rates of Assistance. February, 1990.
15. Productivity and Economic Development in Bangladesh. February 14, 1990
16. An Assessment of the Impact of Industrial Policies in Bangladesh. also titled: An Assessment of the Impact of Industrial Policies on the Residual Factor of Growth in Bangladesh. December 10, 1989
- 16.b. Employment and Small Enterprises: The Case of Bangladesh. September, 1989
17. An Action Program Pursuant to the National Science and Technology Policy 1986. December, 1989
18. An Analysis of Industrial Disputes in Bangladesh; also titled: The "Residual" and Industrial Disputes in Bangladesh. December 18, 1989
19. Technical Efficiency and Productivity Growth in Bangladesh Manufacturing Industries: Some Preliminary Results. February, 1990.