

### **IFPRI Discussion Paper 00991**

June 2010

# Exploring the Long-term Impact of Development Interventions within Life-History Narratives in Rural Bangladesh

**Peter Davis** 

Poverty, Health, and Nutrition Division

#### INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

The International Food Policy Research Institute (IFPRI) was established in 1975. IFPRI is one of 15 agricultural research centers that receive principal funding from governments, private foundations, and international and regional organizations, most of which are members of the Consultative Group on International Agricultural Research (CGIAR).

#### PARTNERS AND CONTRIBUTORS

IFPRI gratefully acknowledges the generous unrestricted funding from Australia, Canada, China, Denmark, Finland, France, Germany, India, Ireland, Italy, Japan, the Netherlands, Norway, the Philippines, South Africa, Sweden, Switzerland, the United Kingdom, the United States, and the World Bank.

#### **AUTHOR**

**Peter Davis, Social Development Research Initiative**Coordinator and Research Fellow

#### **Notices**

Copyright 2010 International Food Policy Research Institute. All rights reserved. Sections of this material may be reproduced for personal and not-for-profit use without the express written permission of but with acknowledgment to IFPRI. To reproduce the material contained herein for profit or commercial use requires express written permission. To obtain permission, contact the Communications Division at ifpri-copyright@cgiar.org.

<sup>&</sup>lt;sup>1</sup> Effective January 2007, the Discussion Paper series within each division and the Director General's Office of IFPRI were merged into one IFPRI–wide Discussion Paper series. The new series begins with number 00689, reflecting the prior publication of 688 discussion papers within the dispersed series. The earlier series are available on IFPRI's website at www.ifpri.org/pubs/otherpubs.htm#dp.

<sup>&</sup>lt;sup>2</sup> IFPRI Discussion Papers contain preliminary material and research results. They have been peer reviewed, but have not been subject to a formal external review via IFPRI's Publications Review Committee. They are circulated in order to stimulate discussion and critical comment; any opinions expressed are those of the author(s) and do not necessarily reflect the policies or opinions of IFPRI.

# **Contents**

Abstract	V
Acknowledgments	vi
1. Introduction	1
2. Methods	2
3. The Challenge of Identifying Impact	5
4. Evaluating the Significance of the Interventions within Life Histories	8
5. Concluding Remarks	18
Appendix: Supplementary Table	19
References	20

## **List of Tables**

Ι.	Locations of the life-history research	3
2.	Qualitative well-being levels for individuals	4
3.	Forms of data in the life-history research	4
4.	Different approaches to causation in poverty dynamics research	5
5.	Main causes of improvement in people's lives	8
6.	Main causes of decline in people's lives	9
7.	160 life histories (55 percent) reported microfinance being used for production or investment	10
8.	107 life histories (37 percent) reported microfinance used for maintaining consumption or coping in crises	12
9.	Reported benefits of educational transfers	16
A	.1. Interview guide/checklist for the life-history interviews	19
	List of Boxes	
1.	Ofiron—25-year-old woman in Manikganj District	11
2.	Hera—45-year-old woman in Manikganj District	13

#### **ABSTRACT**

This paper explores the long-term effects of a set of development interventions within the life trajectories of people in rural Bangladesh, using findings from 293 life-history interviews and an accompanying set of focus group discussions conducted in 2007. The paper uses various methods to address the challenge of assessing the long-term impact of development interventions. It then goes on to discuss what was learned about the impact of microfinance, educational transfer, and agricultural technology development programs from the life-history narratives. The life-history interviews show that microfinance services are now widespread in rural Bangladesh, with 55 percent of research participants having used these services for some kind of income-generating activity at some time. Microfinance contributed to at least one of the three or four most important causes of well-being improvement within the life trajectories in 18 percent of research participants. However, 37 percent of research participants used microcredit to cope with crises or to maintain consumption, rather than to generate income. Educational transfers, such as food for education and cash for education, were also viewed positively by research participants and were seen as contributing positively in the life histories of 29 percent of participants. However, educational transfers were listed as a *main* cause of life improvement for only 7 percent of participants. The impact of educational transfers was limited by the relatively low monetary value of the benefits received as compared with other, more important contributors of improvement. Most research participants receiving educational transfers reported that the funds were used to help with education expenses, food, and children's clothing, with some participants reporting that without these funds, their children may have had to withdraw from school. The life-history interviews detected little long-term benefit from the agricultural technology programs, and a number of reasons for this fact are discussed in the paper.

Keywords: poverty, development interventions, microfinance, Bangladesh

#### **ACKNOWLEDGMENTS**

This research was funded by the Department for International Development through the Economic and Social Research Council of the United Kingdom. It builds on collaborative work funded by the Chronic Poverty Research Centre, HarvestPlus, and the World Bank. I acknowledge helpful discussions with and comments from Bob Baulch and Agnes Quisumbing. I thank Zahidul Hassan and Md. Zobair of Data Analysis and Technical Assistance, Ltd. (DATA), for managing the fieldwork team so efficiently. I also thank Biswas Akhter, Rafiqul Haque (Shawpon), Dilara Hasin, Safia Satter (Sonia), Md. Abdul Aziz, and Anowara Begum (Nupur) for their excellent research assistance.

#### 1. INTRODUCTION

This paper draws from mixed-methods research into poverty dynamics in rural Bangladesh in order to report on the impact of a set of development interventions, using findings from the more qualitative life-history phase of the research. This paper forms part of a set of papers reporting on these interventions from both quantitative and qualitative data in "What Development Interventions Work? The Long-Term Impact of Antipoverty Interventions in Bangladesh." This project is funded by the Department for International Development (DFID) and the Economic and Social Research Council (ESRC); is led by the International Food Policy Research Institute (IFPRI); and has been undertaken by researchers from the Chronic Poverty Research Centre, IFPRI, and Data Analysis and Technical Assistance, Ltd. (DATA).

A total of 293 life-history interviews, as well as a number of focus group discussions, were conducted across a subsample of a larger longitudinal panel survey that focused on the causes of improvement or decline in people's well-being. The development interventions of interest were divided into three categories: microfinance, educational transfers, and new agricultural technologies, with the latter consisting of a mix of improved vegetable and fish polyculture projects.<sup>1</sup>

The aim of this paper is to complement quantitative analysis of the long-term impact of development interventions by drawing from research participants' perspectives and by exploring the causal mechanisms that were observed to be contributing to improvement or decline in people's life circumstances.

The life-history interviews show that microfinance services are now widespread in rural Bangladesh, with 55 percent of research participants having used these services for some kind of incomegenerating activity at some time in their lives. Microfinance contributed to at least one of the most important causes of well-being improvement or opportunity within the life trajectories in 18 percent of research participants. However, 37 percent of research participants used microcredit to cope with crises or to maintain consumption, rather than to generate income.

Educational transfers, such as food and cash for education, were also viewed positively by research participants, with 29 percent of participants saying these transfers contributed positively to their life histories. However, only 7 percent of participants said that educational transfers were a *main* cause of life improvement or opportunity. The impact of educational transfers was limited by the relatively low monetary value of the benefits received as compared with other contributors of improvement in people's lives. However, most research participants receiving these educational transfers reported that the funds were used to help with education expenses, food, and children's clothing. Some participants reported that children may have withdrawn from attending school without the benefits. The life-history interviews detected little long-term impact from the agricultural technology programs, and a number of reasons for this fact are discussed later in the paper.

The next section outlines the methods used in this paper. Section 3 considers the considerable challenge of assessing the long-term impact of development interventions, while Section 4 discusses what was learned about the impact of the microfinance, educational transfer, and agricultural technology development programs.

<sup>&</sup>lt;sup>1</sup> Analysis of findings from the quantitative data from this study, up until 2007, can be found in Baulch (2010), Quisumbing (2008), Quisumbing and Baulch (2009), and Kumar and Quisumbing (2009; 2010). Findings from earlier rounds of these studies are reported in Hallman, Lewis, and Begum (2007); Quisumbing (2007); and Zeller et al. (2001).

#### 2. METHODS

Between April and October 2007, the author led a team of researchers from Data Analysis and Technical Assistance, Ltd. (DATA), Bangladesh, in conducting 293 life-history interviews in eight districts (see Table 1). The households were selected as a subsample of a Chronic Poverty Research Centre (CPRC)/IFPRI/DATA longitudinal study of poverty dynamics in rural Bangladesh, which covered 2,152 households (1,907 original households) from 14 districts, with available data going back to 1994, 1996, and 2000 for the microfinance households, agricultural technology households, and educational transfer households, respectively.

The three intervention types—microfinance, educational transfers, and agricultural technologies—corresponded with initial evaluation studies in the quantitative survey. These studies were initially conducted separately, with baselines in 1994 for the initial microfinance study; in 1996, for the agricultural technology study; and in 2000, for the educational transfers study. The agricultural technology interventions were of three types: a nongovernmental organization (NGO) group-based improved vegetable program (in Manikganj District); an NGO group-based fish production program, which arranged long-term leases of ponds managed by groups of women (in Jessore District); and individual pond owner—based fish production projects (in Mymensingh, and, later, other districts, including Kishoreganj District, where life histories were also conducted). These interventions are described in Zeller et al. (2001); Hallman, Lewis, and Begum (2007); and Ahmed (2005).

For the 2006–2007 research, data from these three sites were combined to allow analysis of the households as if they had been part of the same longitudinal study. This was possible because the three initial studies had used similar surveys, all of which had been administered by DATA, Bangladesh.<sup>2</sup>

Districts for the life-history interviews were selected such that they represented a range of geographic and agricultural conditions typical of rural Bangladesh. Sites were selected across the three initial evaluation studies, and two villages per site<sup>3</sup> were selected in different unions. In each site (two villages), 20 households were selected, with five households randomly chosen from each of four poverty-transition categories based on per capita household expenditure (see Davis and Baulch 2009, 2010).

The life-history fieldwork was undertaken in the eight districts of Bangladesh listed in Table 1. Village names have been changed to protect the anonymity of our research participants.

In the life-history interviews, one man and one woman were interviewed separately in each household. Research participants were often husband and wife; in some cases, however, such as when one partner had died, we interviewed one parent and their son or daughter. When a household member was not available—which was more often a man than a woman, especially during the main April–May rice harvest—or when there was only one adult household member, we conducted only one life-history interview. In the end, we conducted 293 life-history interviews in 161 households in 16 villages and 8 districts (see Table 1). Interviewing two household members allowed immediate cross-checking, gave a gendered perspective and an alternative view of household dynamics, and allowed a mixed-sex team to work most effectively, with men usually interviewing men and women interviewing women.

<sup>&</sup>lt;sup>2</sup> The 2006–2007 study aimed to integrate and sequence quantitative and qualitative methods in three phases: Phase I involved focus group discussions with four groups (of poor and better-off women, plus poor and better-off men) in each village. The focus groups aimed to elicit perceptions of changes, group members' perceptions of the interventions under study, and the degree to which these interventions affected people's lives (compared with other events in the community). Phase II was a quantitative survey of the original households, as well as any new households that had split from the original households but that remained in the same district. The household survey took place from November 2006 to February 2007, the same agricultural season as the original surveys, with multi-topic questionnaires designed to be comparable both across sites and with the original questionnaires from the evaluation studies. Phase III consisted of a qualitative study based on life histories of 293 men and women in 161 selected households in eight of the districts from the original quantitative study. The aim of this phase was to understand the processes and institutional contexts that influence individual and household livelihood trajectories. Fieldwork for this final phase of the study was undertaken between March and October 2007.

<sup>&</sup>lt;sup>3</sup> Sites refer to districts in all cases except for Mymensingh and Kishoreganj, where the site and the two selected villages spanned the district boundary.

Table 1. Locations of the life-history research

Intervention Type	District	Village Name (changed)
Microfinance	Manikganj	Silimpur Narikelbari
	Kurigram	Srirampur Pakgacha
Educational transfers	Nilphamari	Narayanpur Sujanpur
	Tangail	Haringachhi Debinagar
	Cox's Bazar	Phulmati Baligram
Agricultural technology: household-based fish farming	Mymensingh Kishoreganj	Asrafpur Shankaripara
Agricultural technology: group-based fish farming	Jessore	Goalbari Nandigaon
Agricultural technology: improved vegetables	Manikganj	Kachua Teghari

After each life-history interview had been conducted, interviewers wrote up the interview in Bengali on the same day, in a format that had been formulated in the initial workshop and refined in the field during discussions with the author. Interviewers also wrote about what they had learned during the interview in fieldwork diaries (in addition to the more formally agreed-upon write-up structure), including their reflective impressions and lessons learned about methods. These diaries were translated and became a part of the qualitative dataset. When the author was with the team, he sat in on one of the male or female interviews.

All interviews and focus group discussions were recorded with small unobtrusive digital voice recorders, with the permission of the research participants. We did not attempt to write full transcripts; digital recordings were used for checking back on interviews for the initial same-day write-up in Bengali, for later analysis, and for the final anonymized write-up in English. Each life history was written as a chronological account of life events, identifying causal mechanisms and drawing from discussions that encouraged counterfactual thinking. The interviews did not intentionally focus on any particular development interventions; rather, the aim was to produce, as accurately as possible, the participant's perspective on his or her life trajectory, the causes behind improvement or decline in well-being, and how life could have been if the events that emerged—both positive and negative—had not occurred.

Interviewers spent about two weeks in each site during this phase of the research. We also arranged time for "knowledgeable people" to attend a discussion meeting on the last day of our research in the village. Knowledgeable people tended to be older educated people who had a good knowledge of local history. This meeting was usually held in a school building or in a village leader's house, and we tried to have a *Union Parishad* (Union Council) member and a number of elderly people in attendance.<sup>5</sup>

During the life-history interviews, we used historical markers, such as the 1971 war of independence and the 1988 floods, to determine years of events described by the research participants. An interview checklist was developed during an initial training workshop. An English translation of this checklist appears in Appendix Table A.1. As the interviews progressed, the interviewer would build a chronological timeline. At the end of each life-history interview, the researcher who facilitated the

<sup>&</sup>lt;sup>4</sup> Examples of these life histories are provided at http://www.sdri.org.uk/bangladesh.asp.

<sup>&</sup>lt;sup>5</sup> In this paper, focus group discussions refer to these exercises, rather than to a separate set of 116 focus group discussions conducted in 2006 with findings reported in Davis (2007).

interview drew a diagram of the participant's life history from the timeline of events that had been drafted during the interview. With the help of the research participant, these drafts formed the basis of life trajectory diagrams onto which were added levels of well-being at various points in life. In this way, the level of well-being could be reflected across the diagram, with declines or improvements linked to the events described in the life history. Examples of these diagrams are provided in Box 1 and Box 2. The second researcher wrote up the life history based on the notes taken during the interview. Only two interviews were conducted per day to allow time for the diagram to be finalized and the interview to be written up in Bengali on the same day.

Life-history diagrams were then traced, translated, and anonymized by the author and made available with the final anonymized and edited narrative life histories. The level of well-being at different points in the life trajectory was indicated on the diagrams, using a scale of one to five and the categories described in Table 2, which were based on life conditions described by the research participant in the interview. We considered that the line between Level 2 and Level 3 corresponded roughly with the national poverty line used in the quantitative household assessments. These levels were checked during a final village-level discussion with people who knew the households well. They were then written onto the life-history diagrams during a roundtable discussion among the researchers who had carried out the life-history interviews and who had facilitated the village discussion groups. In these roundtable discussions, all information about households and members was used, and levels of well-being were agreed upon by consensus after discussion. These discussions were also digitally recorded and used in the analysis. The data generated was coded and analyzed using NVivo 8 by the author.

The life-history research resulted in the forms of data shown in Table 3.

Table 2. Qualitative well-being levels for individuals

Level	English	Bengali	Guideline
1	Very poor or destitute	khub gorib, na keye chole	Suffering tangible harm to health because of poverty, generally due to insufficient food. Tend to be landless or near landless.
2	Poor	gorib	Very vulnerable, but eating reasonably well. Could easily move into Level 1 due to a common shock. If land is owned, it is usually less than an acre for a medium-sized household.
3	Medium	madhom	A common shock would not result in tangible harm or going without food. Have household assets, or generate household income, equivalent to between 1 and 2 acres of land for a medium-sized household.
4	Rich	dhoni	Hold household assets or generate household income equivalent to that generated by 2–10 acres for a medium-sized household.
5	Very rich	khub dhoni	Hold household assets or generate household income equivalent to that generated by 10 acres or more for a medium-sized household.

Table 3. Forms of data in the life-history research

Text (in Bengali and	Life histories
translated)	Fieldwork diaries
	Notes from well-being focus groups
	Village histories
Diagrams	Life-history diagrams
	Community and village history diagrams
Audio, photos, and video	Audio recordings of all life histories
	Audio recordings of village focus groups, which included a household ranking exercise
	Audio recordings of the team discussions at which well-being levels were assigned to the households
	Photos of most household members and local places of interest
	Short videos showing household assets and a short discussion with research participants in many of
	the households

#### 3. THE CHALLENGE OF IDENTIFYING IMPACT

Development interventions have varying impacts on the lives of poor people, ranging from the beneficial to the harmful or sometimes with no effect at all. However, it is always a challenge for researchers to assess the true effects of development interventions and to form a balanced view of overall patterns, especially over the long term.

This section outlines four general approaches to exploring cause-and-effect relationships in social research in order to situate the life-history approach within the other approaches used in this research program. In poverty studies, qualitative research is often used to pilot, or provide illustrative examples for, what is seen as the more policy-relevant research, which is based on non-anecdotal quantitative evidence. In this study, we recognized the potential for qualitative and quantitative research to complement each other in evaluating the causes that affect people's life trajectories, including the effect of development programs. However, it is useful to recognize that causation can be explored in diverse ways across both qualitative and quantitative methods. This idea is important in poverty dynamics studies, because we are interested not only in trends (observing movements into or out of poverty) but also in understanding why movements take place—and, ultimately, in making informed decisions about what can be done, in policy terms, to support causes of improvement and protect from causes of decline.

However, identifying the causes of decline or improvement in people's lives is difficult—some would say impossible. Our position is a pragmatic one: it is possible to identify causes, we can draw from different approaches to causation across the social sciences, and we can learn more about the effects of events or interventions on people's lives by using a mix of methods than by using one method alone. Table 4 outlines how the methods used in this study are linked to different views of causation and helps illustrate how the approaches can complement each other.<sup>6</sup>

Table 4. Different approaches to causation in poverty dynamics research

	Experimental	Statistical	Mechanism or Process Tracing	Participatory Counterfactual
Methods with comparative advantage	Quasi or natural experiments examining the effects of particular interventions compared with control cases using significance tests; propensity score matching	Household survey data, statistical analyses (regression, correlation) of relationships of covariance between variables	Analysis of sequences of events that trace primary causes through intermediate causes, or causal combinations, to final effects, including analysis of causal fields, multiple causation, thresholds, and turning points	Counterfactual thought experiments of closest- possible worlds, in which participants are invited to identify causes; case studies, experiments
Predominant view of causation	Probabilistic or deterministic	Probabilistic	Deterministic, but contingent on causal fields	Deterministic
Seminal authors	Fisher, Gasking, von Wright, Stouffer	Hume, Mill, Hempel, Oppenheim	Harre and Madden	?
Focus on causes or effects?	Effects: focus on treatment's effects in experiments	Causes: focus on dependent variable in regressions	Causes: including intermediate sequences or combinations of causes	Effects: would the effect have occurred in a different, closest-possible world without the cause?

<sup>&</sup>lt;sup>6</sup> I draw here from Henry Brady's four theories of causality: neo-Humean regularity theory, manipulation theory, counterfactual theory, and mechanisms and capacities (Brady 2002). For further reading on causation in the social sciences, see Gerring (2005), Holland (1986), Marini and Singer (1988), McKim and Turner (1997), Pearl (2000), Ringer (1989), Sobel (1995), Thompson (2003), Waldner (2002), Wendt (1998), and Winship and Sobel (2004).

In the social sciences, causation usually refers to probabilistic causation. In the natural sciences, a common way of exploring this relation between cause and effect is by controlled experiments. The nearest analogies to this in the social sciences are natural or quasi experiments and randomized control trials (RCTs), in which a treatment or intervention of some kind (such as a conditional cash transfer) is applied to particular cases and withheld from others (controls). Although this is a common approach in studying health or education interventions in developing countries, the contexts in which such experiments are possible, or ethical, are limited, particularly for the study of poverty dynamics and the impact of interventions. In poverty studies, particularly when they are longitudinal, it is rarely possible, or desirable, to have complete control over which treatments are applied to which cases. In these studies, matching techniques (including, but not limited to, propensity score matching) are sometimes used as an alternative to making control and treatment comparisons when a randomized controlled trial is not possible (see Kumar and Quisumbing 2009, 2010).

Our three development intervention types have some features of a quasi experiment. We identified some sites where an intervention had taken place. Other sites where the interventions were absent were initially seen as controls. However, it was difficult to maintain intervention and control sites in this study. In the case of the microfinance and agricultural technology programs, for example, the interventions were more about having access to services that were exploited to varying degrees, while the educational transfers were benefits provided for families of poor, school-attending children. Nor were they true experimental interventions (as distinct from control cases or sites), because the services and benefits were not under the control of researchers. In addition, in the educational transfer sites, the benefits were rolled out over time to the control sites. Thus, for longitudinal assessment, true controls ceased to exist. Over the same time period, microfinance became more ubiquitous in rural Bangladesh, to such an extent that, at least in the districts we worked in, it was not possible to find households that had no access to microfinance services. In fact, many households did not use microfinance out of choice, rather than due to a lack of access. A further complication was that the agricultural technology interventions were of three different types in different districts; over time, the technologies had diffused to other households within the same communities. Thus, although it may have been useful to distinguish between intervention and control households in the initial evaluation studies, over the longer term, a purely experimental approach to causation became more and more problematic with time.

The statistical analysis of relationships among observed attributes of cases (variables) without an RCT forms a second approach to identifying causal relationships most commonly used in the analysis of survey data. This technique builds on philosopher David Hume's (1739, 1748) idea that causation involves regularity in relations among empirically observed entities. In this case, it is not necessary—or, some would argue, not even possible—to identify the causal mechanisms that underlie correlations between variables (Marini and Singer 1988). This kind of approach observes covariation between causes  $(X_{1,2,...,n})$  and an effect (Y) and is usually expressed in the form of a regression equation. The logic lies behind statistical analyses of using correlations among variables as evidence of causation, where observations provide evidence of explanations of causal relationships without identifying causal mechanisms (see Abbott 2001, 132).

Regularity and experimental approaches to causation underpin most quantitative impact evaluations. Qualitative studies, such as our life-history study, allow other approaches to causation to be explored. We traced causal mechanisms in sequences of life events by drawing from the perspectives of research participants (process tracing). This technique also allowed us to conduct counterfactual thought experiments with research participants regarding the effects of reported events on their lives, including

<sup>&</sup>lt;sup>7</sup> Probabalistic causation refers to the way a cause raises the probability of an effect occurring. It is not possible to say that this class of effect (Y) is always caused by cause X (necessary causation) or that cause X always produces effect Y (sufficient causation).

<sup>&</sup>lt;sup>8</sup> See Deaton (2009) for a discussion of the limitations of randomized control trials in development contexts.

what could have happened without the events. We put the counterfactual ideas into practice in the interviews when we discussed and ranked the main crises and opportunities according to the effect they had had on a person's present circumstances. In order to rank these events, we invited participants to consider the effect of past events on present circumstances. When participants identified events or episodes that made a significant difference on their present situation, we invited them to consider how things could have been if the particular event had not taken place. So, for example, a statement like, "If I hadn't got the job, I wouldn't have been able to afford medical care for my mother, and she would have died," illustrates a counterfactual thought experiment drawing from an insider's perspective of his or her own circumstances.

This kind of analysis also attempts to uncover the particular circumstances in which observed causal regularities are likely to recur. For example, a statistical correlation may be observed between low income and poor health. However process tracing the case studies may clarify mechanisms linking low income to ill health, for example, via malnutrition, poor housing, or poor access to clean water. It may also clarify under which circumstances these events may occur, such as where cheap and effective health provision is not available. Certainly some of these intervening variables can also be measured and covariations analyzed statistically; however, plausible mediating links are usually identified through an examination of individual cases.

An analysis of mechanisms may also uncover instances in which a causal relationship suggested by a correlation is reversed—for example, in some cases, poor health may cause low income due to physical weakness, inability to retain a job, or increased time spent on health-care impeding income earning (see Deaton 2003). Process tracing also allows analyses of the effects of environment or contextual factors (often referred to as *causal fields*) and other complex causal patterns, such as multiple causation, thresholds, and turning points. Some causal processes seem self-evident, while others are more complex; analysis of causal processes or mechanisms, combined with participants' perspectives on counterfactuals, can help uncover the most plausible explanations of observed patterns.

<sup>&</sup>lt;sup>9</sup> The identification of causal mechanisms or processes within life trajectories also helps strengthen the body of evidence that makes causal inferences more plausible. The term "process tracing" is used by political scientists (see, for example, George and Bennett 2005) to describe this kind of activity in political analysis; it refers to peering "into the box of causation" (Gerring 2007, 1). Process and mechanisms are seen as the means by which a cause  $(X_1)$  is seen to produce the effect (Y).

# 4. EVALUATING THE SIGNIFICANCE OF THE INTERVENTIONS WITHIN LIFE HISTORIES

The life-history interview material was useful in exploring the context, extent, and nature of the impact of the microfinance and educational transfer interventions. However, it was less useful in assessing the impact of the agricultural technologies. The agricultural technology programs appeared sparsely in the life-history narratives. One possible reason for this was that a number of years had passed since the specific agricultural technology interventions had taken place, whereas microfinance and educational transfer interventions had become much more widespread by the time of the life-history research in 2007. It is also possible that the agricultural technology interventions were not perceived by research participants as having had a significant long-term impact. In fact, only two research participants reported that an agricultural technology intervention had been a major cause of improvement in their lives.

A number of other development and social protection interventions were significant in the lives of our participants. The Old Age Allowance Scheme, the Allowance Scheme for Widowed and Distressed Women, the Vulnerable Groups Development program, and the more sporadic disaster relief programs and public works programs all played a significant role in the suite of programs providing some social protection and sources of opportunity for the rural poor. However, an evaluation of these programs is beyond the scope of this paper.

At the end of each life-history interview, we identified, with the participant, the three or four most important causes of improvement and decline over his or her life trajectory. The categorization (coding) of events described was done using NVivo 8 (a qualitative data analysis software package) after the interviews had taken place, rather than before, as is usually done in quantitative surveys.

The life-history method allowed us to consider the interventions in question within the wider context of reported causes of improvement and decline in people's lives. The categories presented in Table 5 and Table 6 are not mutually exclusive: one event in a person's life could be coded for more than one cause. However, frequency rankings of causes provides an indication of the relative importance of sources of opportunity or decline that research participants saw as being significant in their life trajectories.

Table 5. Main causes of improvement in people's lives

Cause	Number of life histories showing this as a main cause	Percent of life histories showing this as a main cause
Business	135	46
Land assets	113	39
Livestock	80	27
Sons and daughters working	71	24
Agriculture and fish farming	69	24
Help from family or inheritance	65	22
Day labor	53	18
Microfinance	52	18
Benefits from all official programs	49	17
Loans (including from neighbors and relatives)	47	16
Salaried work	42	14
Dowry receipt or favorable marriage	34	12
Household or property division	25	9
Educational transfers	22	8
Domestic labor migration	21	7
House	12	4
Irrigation	11	4
United family	10	3
Assets and savings	8	3
Education and training	8	3
Women's employment	7	2
International labor migration	5	2
NGO nonloan benefits	5	2

Table 6. Main causes of decline in people's lives

Cause	Number of life histories showing this as a main cause	Percent of life histories showing this as a main cause
Illness and injury	220	75
Dowry and marriage	114	39
Death of family member	97	33
Household and property division	63	22
Theft or cheating	59	20
Litigation	56	19
Floods, cyclones, or storms	49	17
Crop damage	42	14
Violence, conflict, or physical insecurity	41	14
Family or village disputes	29	10
Death or illness of livestock	28	10
Disability	27	9
Unemployment or low income	26	9
Business loss	25	9
Sale or mortgage of land or house	25	9
Debt	21	7
Supernatural causes and superstition	20	7
Divorce and abandonment	19	6
Migration	19	6
Extortion corruption and harassment	17	6
Lack of food	12	4
Education and other expense on children	11	4
Fire	10	3
Laziness, wastefulness	8	3
Marital problems	8	3
River erosion	8	3
Loss of assets	7	2
Sale of livestock	6	2
War	5	2

#### **Microfinance**

The life histories show that the most frequent sources of improvement in people's lives came from small business activities, landholding, livestock, the support of family members, agriculture and fish farming, and day labor. For many of these activities, microfinance appeared to be important in helping people raise capital to start businesses, access land, buy livestock, and cover cultivation costs. In many ways, microfinance—in particular, microcredit—has become part of the financial environment of rural families in Bangladesh, thus introducing a challenge for the analysis of causation. If, for example, a household's fortunes are improved by the production of milk from a cow purchased with the aid of a microfinance loan, then should we attribute the improvement to livestock or to microfinance? Now that most families in rural Bangladesh can access microfinance and the removal of microfinance services seems unlikely, these services can be seen much more as part of the financial environment—similar to the presence of a functioning livestock market—and less of a development intervention.

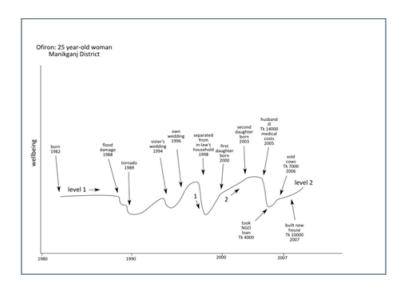
The research did suggest that for many people, involvement in microfinance programs had a substantial positive impact on their lives, with 18 percent of all research participants reporting that microfinance had been one or more of three or four of the most important sources of improvement in their lives. In addition, 55 percent of the life histories contained accounts of microfinance being used in income-generating activities (Table 7).

Table 7. 160 life histories (55 percent) reported microfinance being used for production or investment

Type of Activity	Number of life histories	Percent of all (293) life histories
Crop cultivation and production	43	15
House repairs or improvement	43	15
Small trading, processing shop, or business	38	13
Land purchase, lease, mortgage-in	36	12
Livestock production (poultry, goats, cattle, horses)	35	12
Own savings and lending to others	29	10
Rickshaw, bicycle, or van gari purchase	23	8
Purchase of agricultural machines	8	3
Mobile phone business	6	2
Fishing	1	0.34
Sewing machine purchase	1	0.34

The contribution these interventions made to participants' lives depended on their own circumstances. This fact was particularly important for microfinance, where participants who were able to use microcredit—in particular, to establish successful income-generating activities—were able to benefit and improve their lives. However, if projects failed, or if credit was used to cope with crises rather than to generate income, credit was less likely to contribute to an improving life trajectory; in some cases, it even contributed to decline. The life-history interview of Ofiron (not her real name) from Manikganj District (Box 1) is typical of a life story in which the use of microfinance loans contributed to an improving trajectory.

A significant number of people (37 percent of all research participants) used microcredit in times of distress to cope with crises, such as financing dowries, wedding expenses, and medical care, as well as paying off other debts (Table 8). It seems that the now widespread availability of NGO-based microcredit, combined with a limited set of other options for coping with crises, may be producing unintentional outcomes in rural Bangladesh. Many NGOs still report that their microcredit is used almost entirely for income-generating activities, but this statement appears to be misleading. Our research suggests that a significant proportion of microcredit is used to maintain consumption or to cope with crises. This issue should be more widely recognized in order to allow better-informed debate on the need to extend more effective forms of social protection that do not leave distressed households in avoidable debt and that do not allow credit-providing organizations to profit from poor people's distress.



Ofiron is a 25-year-old woman who lives in Manikganj District. Sabed, her 26-year-old husband, works as a day laborer in agricultural work on other people's land and sharecrops rice on a small area as well. A few times each year, he travels to other districts to harvest rice, a practice locally referred to as *dawa kata*. For this *dawa kata* work, he is paid in rice. The family is able to eat this rice for ten months of each year, and thus they only buy rice for food for the remaining two months. They have two daughters, 7 and 3 years old.

Ofiron's father lives in a nearby village and also works sharecropping land. She has one brother and one sister. Her elder sister was given in marriage before her, and her parents raised the 3,000 taka (Tk) needed for dowry by selling a sugarcane crop. Her younger brother works as a laborer in a nearby cigarette factory. Ofiron did not get much time at school and cannot read or write. She has learned to sign her own name.

Ofiron was married in 1996 when she was 14. As is usual in rural Bangladesh, she moved in with her husband, his parents, and his brother and sister. One married older brother-in-law lived in the same homestead (*bari*), but his family formed a separate household. For the Tk 10,000 needed for Ofiron's dowry, her parents sold some homestead land and took out loans on interest from local people.

In 1998, Offiron and her husband, Sabed, separated from her in-laws but continued to live in the same *bari*. Her husband built a one-shed house by taking a loan from local people. They had no plates or cooking utensils at that time, so her mother gave her some basic utensils, such as a jug and a cooking pot. This was a very difficult time in her life.

In 2000, Ofiron's first daughter was born. In 2002, they spent Tk 7,000 to build a new house. In 2003, their second daughter was born. However, in 2001, her husband had started to suffer from a stomach ulcer, and they had money for medicine (60 taka per month for three years) for this. The doctors said that his condition had been caused by working so hard as a boy and not being able to eat regularly. In 2004, he became very ill and needed an operation, which was carried out in a private clinic. Their neighbors helped raise the money for this operation, but the couple also had to take out a loan from a moneylender (*mohajan*). Her husband was unable to work for four months after this; they survived by taking further loans.

#### **Box 1. Continued**

Once Sabed was able to work again, they sold the house to repay loans, and Ofiron took out a microfinance loan from a nongovernmental organization (NGO) to repay the higher interest loan taken from the moneylender. In 2006, they bought a cow for Tk 7,000 with another loan that she got from an NGO. They managed to sell the cow at a profit, took another NGO loan, rebuilt their house, and bought another cheaper cow. Now their income is supplemented with money from the sale of milk from this cow.

Sabed has since recovered. In 2007, their eldest daughter started going to the local government primary school. Ofiron hopes that their daughters will be able to study up to the Secondary School Certificate (SSC) level. She also hopes to continue buying and selling cows at a profit to slowly increase their income.

From the new corrugated iron one-room house and the healthy cow, we could understand that their position was a bit better than how she had described it in the past. After they separated from her inlaws, they struggled to survive, and they were in a very precarious situation, particularly when her husband became ill. However, through hard work, loans, small investments in livestock, and help from neighbors and family, they have recovered from this crisis and have slowly moved to a slightly more secure position. Ofiron has been active and astute in taking NGO loans and buying and tending livestock, and Sabed has been willing to work hard (he now earns about Tk 100 a day as a day laborer) and has also traveled to other districts for temporary work. In this way, they have slowly accumulated some assets.

Table 8. 107 life histories (37 percent) reported microfinance used for maintaining consumption or coping in crises

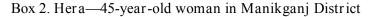
Type of Activity	Number of life histories	Percent of all (293) life histories
Marriage and dowry	41	14
Illness, injury, or death	35	12
Food or living expenses	31	11
Repaying other loans	22	8
Court cases, jail, bribes, or litigation	8	3
Flood or storm damage	8	3
Education costs	7	2
Migration	1	0.34
Religious functions	1	0.34

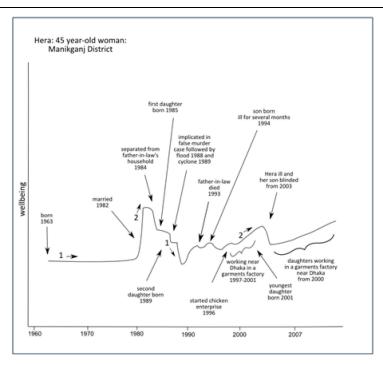
A significant number of participants (50 cases or 17 percent) also reported that they deliberately avoided NGO loans, microfinance in general, and/or NGOs altogether. In addition, some participants (26 or 9 percent) reported harm associated with microfinance. Research participants who stated that they did not want to be involved with NGO microfinance explained that repaying installments each week was inconvenient for them, that they were worried about their reputation if they could not repay installments, or that the NGOs had a reputation for being inflexible with repayments, which put them off. A small number of research participants reported that male household members did not want their wives or mothers talking to unknown men or leaving home to participate in meetings.

The life history of Hera (Box 2) illustrates the complexity of the determinants of improvement or decline in a person's life trajectory and how microfinance can be risky and, in some cases, exacerbate poverty.

We found in the life histories that the uptake of a more diverse range of microfinance products, beyond microcredit, is making a positive impact on many rural households, with savings, pensions, and insurance services playing an important role in the number of poor people who are attempting to improve

their lives. However, there are also a number of unscrupulous purveyors of these products, who have stolen the savings of poor families. In 8 cases out of 293 research participants, NGO workers had stolen money from research participants, causing hardship and distress. This finding highlights the need for effective protection of users of services where deposits for savings, insurance, or pensions are taken.





Hera is a 45-year-old woman living in a village in Manikganj District, about an hour and a half by road from Dhaka. Before her marriage (in her father's household) and immediately after her marriage (in her husband's family's household), her livelihood primarily depended on agricultural income—some from a small amount of their own land and livestock, supplemented by agricultural day labor, which included spells of agricultural migrant work for her husband in other districts of Bangladesh for several months a year.

Hera's life history illustrates a gradual move from a diverse livelihood profile of agriculture-related income sources to a spell in peri-urban Dhaka, which marked a shift to nonagricultural earnings, even after they moved back to the village due to the chronic illness of Hera and her son. An attempt to scale up agricultural income by running a small poultry project, supported with a loan from an NGO, ended in failure and debt, illustrating the risk involved with moving into new forms of business enterprise—particularly if those enterprises are funded by credit. Hera's case also illustrates the cost, in health terms, of working in the garment industry: she was left with chronic health problems since working 12-hour shifts while supporting three small children in the early 1990s.

Hera was born in 1963 and spent her childhood in considerable poverty, from time to time going without food. She had five brothers and sisters. Her father and two of her brothers worked together, some of the time on their land and the remainder as agricultural day laborers on other people's land. The family relied on their income to survive. Hera hardly attended school and never learned to read or write. Hera's father became unable to work as he grew older, and with this loss of income, the family could no longer afford to have three meals a day.

#### **Box 2. Continued**

Hera married Liton in 1981, when she was 18. Her dowry payment amounted to 4,000 taka (Tk) in cash, plus gold earrings and silver bracelets and bangles worth Tk 2,000. To raise the dowry and pay for the wedding, Hera's father sold 17.5 decimals of land. When she married, Hera moved to herhusband's household, where Liton lived with his widowed father, brother, and brother's wife. Liton's mother had died from a fever (probably typhoid) in 1972, the year after the liberation war. In this home, Hera did household work and looked after her husband and his father, brother, and sister-in-law. Life for Hera was better at her in-laws, as the household was less poor than her father's, with her father-in-law owning 165 decimals of land at the time.

However, after two years (in 1984), Hera and Liton separated from his father's household following a family disagreement over their contribution to household income. They continued to live in the same homestead (*bari*) but in a different room (*ghor*); they cooked, ate, and budgeted separately. When interviewed, Hera identified this move as the major crisis in her life. Following a period of irregular earnings, Liton found work at a rice mill, earning a daily wage of Tk 30. This allowed the couple to maintain a reasonable standard of living. In that same year, Hera became pregnant with their first child, but he died at birth. Then, in 1985, a girl was born.

During this period, Liton sometimes went to other regions to harvest paddy. This common practice for men in the village is locally referred to as *dawa kata*, in which the men are organized into a working gang and travel to other parts of Bangladesh, where daily wages are higher. The men stay away from home usually for about a month at a time and will go two or three times a year. Part of their earnings are brought home as unprocessed rice. Over this time, Hera felt that they were managing reasonably well, even though she had some health problems that forced them to sell cattle to pay for medical costs.

In 1988, Liton was falsely implicated in a murder case. He was held in prison for six months, during which time Hera and the children suffered much hardship, although they were helped by her father-in-law. Even though they did not have to pay any bribes to secure his release from prison, as often occurs when people are implicated in false cases, they did lose the main household breadwinner during this time, which caused severe hardship. A few months after Liton's release from prison, in the severe nationwide flooding of 1988, the family's house was submerged by floodwaters, which also resulted in their trees (mainly mango and jackfruit) dying. Trees are an important asset, as they provide fruit and shade around the homestead and, more important, can be sold for timber when required. Trees are often sold in times of crisis or to contribute to dowries. Liton could not drive a rickshaw while the village was flooded, so the family borrowed rice from their neighbors in order to eat. These food loans were repaid later from Liton's income driving a rickshaw.

In 1989, a second daughter was born. In that same year, the family suffered a third shock. At 5:30 p.m. on April 26, a tornado completely destroyed the family home and remaining trees. Most of their belongings were lost, and most of their housing material could not be recovered. Following the tornado, the family rebuilt a shelter using paper and bamboo. It was about a month before they received sheets of corrugated iron as relief from the government. The family also received food and clothing from various relief programs. During this period, Hera, Liton, and their two daughters moved back in with her father-in-law.

In 1993, her father-in-law died after suffering from asthma for four years. To pay for his funeral ceremonies, including the cost of feeding guests, they sold 7 decimals of his land. The rest of the land was divided between the brothers; Liton and Hera got 99 decimals.

In 1994, Hera gave birth to her third child, a son, who became seriously ill with an undiagnosed disease when he was about a year old. Hera and Liton took their son to various doctors and traditional healers (*kobiraj*). They managed the Tk 5,000 medical expenses with income from Liton's work as a rickshaw driver. After about three months, the boy was healthy.

In 1995, Liton's sister returned home having become ill during the delivery of a child. At that time, Tk 3,000 was spent for her treatment, medicine, and food. Liton sold 17.5 decimals of land to collect that money.

#### **Box 2. Continued**

In 1996, Hera joined a cooperative group run by a large NGO in an attempt to provide a better standard of living for her family. She borrowed money and bought 30 hens for Tk 7,000. Unfortunately, all the chickens died the following day, and Hera had to repay Tk 14,000, plus interest, to the NGO. The veterinarian told Hera that someone had poisoned the chickens, but she did not see anyone do this. Making the repayment proved very difficult for Hera; they raised the money by selling 12 decimals of land

Repayment of this loan caused the family much hardship. They decided to move to Savar near Dhaka. Here, Liton earned money driving a rickshaw, and Hera found work at a garment factory, where she earned Tk 950 per month. The family rented a house for Tk 600 per month. A year after moving to Savar, Hera's eldest daughter got a job at a garment factory, for which she received a starting salary of Tk 600. At that time, Hera's son and her other daughter also lived with them.

Hera started to take the pill after her son was born. Working at the garment factory in Savar, Hera did not eat or drink properly during the shifts, which were 12 hours long (8 a.m. to 8 p.m.). This led Hera to suffer from gastric problems and to stop taking the pill. At this time, Hera became pregnant with her youngest daughter, born in 2001. When she was five months pregnant, Hera's gastric problems returned, and she was hospitalized. They sold a further 14 decimals of land and took out a loan to cover the Tk 60,000 required to cover medical expenses. When this daughter was born, Hera needed a caesarean; to pay for this, a loan was taken out from a neighbor, with interest paid in rice. For the Tk 9,000 borrowed, 15 *maund* of rice would be paid as interest. At this time, to raise money for the medical costs, Liton also sold several rickshaws he owned and a van rickshaw. The family is repaying this loan by selling ornaments and using the wages of Hera's daughter and husband. Ever since, Hera has suffered chronic health problems.

In 2002, Hera's son went away to a printing press in Dhaka to learn to work, where he was given food and lodging but no wage. After a year, he returned to the family, suffering from what they thought was typhoid fever, which damaged both his eyes, eventually leaving him completely blind. Their son was treated in Savar, and the Tk 1,000 medical expenses were paid by his sisters, as Hera was also ill at this time. Since then, he has had further operations on his eyes, costing Tk 20,000. However, to date, they have been unsuccessful in restoring his vision.

At the moment, Hera's daughters get salaries of Tk 4,500 and Tk 1,500. They send Tk 2,000—3,000 to the family every month, which helps meet expenses, including medical expenses for Hera and her son. Hera and Liton have recently built a new dwelling for Tk 18,000, using Liton's income and their daughters' savings. In 2006, Liton also bought a rickshaw van for Tk 5,500. He currently earns Tk 100 a day driving this.

Although Hera's two daughters work in garment factories and her husband drives a rickshaw van, there has not yet been any improvement in the family's standard of living. This is because the majority of the household income is spent on ongoing medical treatment for Hera and their son. Both Hera and her husband are very anxious about the difficult situation they currently face: they are dependent on their daughters' income but are also concerned about arranging their marriages, as both daughters are older than the usual age for marriage. Hera and Liton do not currently have the financial resources to arrange a sufficiently large dowry (*jotuk*) for their daughters who, once married, will be unable to support their parents any more. Along with her own ongoing ill-health problems and her son's blindness, this is a source of great anxiety for Hera and Liton.

#### **Educational Transfers**

The Food for Education program and the Primary Education Stipend (Cash for Education) program, as well as the various Female Secondary Stipend programs, <sup>10</sup> are referred to here as educational transfers. In 2002–2003, Food for Education was converted into Cash for Education, formally known as the Primary Education Stipend program. These primary school programs are described by Baulch (2010). The Food for Education program, which was implemented in economically disadvantaged rural unions, provided 15 kilograms of wheat or 12 kilograms of rice per month for one child attending school. Cash for Education provides Tk 100 per month for one child and Tk 125 per month for more than one child. Children must attend 85 percent of classes and meet at least one of five criteria aimed at targeting the poorest 40 percent of households. Baulch (2010) pointed out that in real terms, the value of the Primary Education Stipend has fallen since its inception in 2002–2003, because nominal values have remained the same.

Although the Female Secondary Stipend programs were not part of the initial study, respondents often referred to these as well. These programs provide secondary school fees and two annual payments directly to the students' bank accounts. These payments increase with progression through high school and are conditional on exam grades, class attendance, and the girls remaining unmarried.

Research participants generally viewed educational transfers positively in their life-history interviews (Table 9). Although the monetary values were low, the funds were appreciated, especially by the poorest families, and were often used to pay for children's books, pens, pencils, and clothing so that they could attend school. In 29 percent of the life histories, it was recorded that the receipt of food for education (prior to 2003), and cash for education (Primary Education Stipend Program, since 2003), and other financial supports for children attending school had a positive impact. However, only 8 percent of research participants reported that the educational transfers had contributed to one or more of three or four of the most important sources of improvement in their lives. The benefits were seen as particularly helpful for low-income families, in which there were often pressures to withdraw children from school in order to meet immediate needs or to arrange marriages for girls. Compared with other contributors of improvement in people's lives, however, the impact of educational transfers was limited by the relatively low monetary value of the benefits received, although a small number of participants reported that their children may have had to withdraw from attending school without the benefits.

Table 9. Reported benefits of educational transfers

	Number of life histories	Percent of life histories
Educational transfers (ETs) as a help overall	85	29
Nonspecified general help	65	22
Help with education expenses and equipment	23	8
ETs as a main cause of life improvement	22	8
Help with food	18	6
Help with clothing costs	11	4
Corruption or irregularities	5	2
Help in medical costs	1	0.34

The educational transfer programs were not without problems and irregularities, including participants reporting that full benefits were withheld from them and used for nonlegitimate purposes, such as supplementing teacher's salaries, or that one benefit was sometimes shared between two families by the local administrators of the program.

16

<sup>&</sup>lt;sup>10</sup> These are the Female School Stipend Project, the Female Secondary School Assistance Project, the Secondary School Development Project, and the Female Secondary School Education Stipend Project, which all target secondary school–aged girls in rural areas.

#### **Agricultural Technologies**

The agricultural technology programs in question have been described by Hallman, Lewis, and Begum (2007), who provide a detailed, short-term evaluation of the impact of the programs. Kumar and Quisumbing (2009, 2010) also provided a detailed analysis of the long-term impact of the programs, drawing from the 2006–2007 round of the survey.

References to the agricultural technologies were sparse in the life-history interviews, with no references to the NGO-implemented improved vegetable program in Manikganj District. One respondent in Kishoreganj District and one respondent in Mymensingh District cited fish production as making one main contribution to well-being improvement. In Jessore, two respondents reported benefits gained from participation in the group fish polyculture program, but neither of these saw this program as a main contributor to well-being improvement. However, there were positive references to other programs implemented by this NGO (Banchte Shekha), including its microfinance and handicrafts programs. It was also noted that in the Jessore area, a number of research participants had not received or paid dowries when children were married and that this practice was linked to the Banchte Shekha's antidowry stance.

The lack of the long-term impact of agricultural technology projects is not surprising, given previous assessments. These assessments also confirmed that although there were beneficial impacts from all three of the programs (improved vegetable cultivation, group-based fish polyculture, and individual-based fish polyculture), the overall economic impacts of the programs were marginal (see Naved 2000; Hallman, Lewis, and Begum 2007) as compared with other sources of household income.

It also seems that our life-history approach was limited in that we did not focus interviews deliberately toward any particular program. Instead, we allowed participants to highlight the main causes of improvement or decline in their life-history narratives. As a result, our approach did not benefit from a more focused evaluation of these particular programs.

#### 5. CONCLUDING REMARKS

This paper illustrates the strengths and weaknesses of using a life-history approach to explore the causes of improvement or decline in people's life trajectories. Because of the wide-ranging nature of the interviews, we were able to capture the complexity of people's life trajectories and to place the development interventions into a wider context of causes of improvement or decline in people's lives. Because microfinance has become so widespread in rural Bangladesh, we were able to learn much more about the impact of these development interventions. Microfinance plays a significant role in people's lives in income generation in coping in crises. We also observed that a range of non-credit-based microfinance, such as deposit pension schemes, savings, and insurance, were playing an increasing role in people's lives. However, credit remains the mainstay of NGO activity in rural Bangladesh, and the widespread use of microcredit in coping with crises draws attention to the need to provide alternative means of supporting the vulnerable in ways that do not result in crippling long-term debt. The expansion of the range of social protection measures, which allow the vulnerable to protect assets in crisis, would be a better alternative.

The life-history method was less effective in evaluating the impact of the educational transfer and agricultural technology programs. Research participants often mentioned that they were receiving help in the form of stipends (or before 2003, in the form of Food for Education), but the monetary value of these benefits was small compared with the other causes of improvement or preventions of decline in people's lives. Although the stipends tended to be gratefully received, often used to contribute toward children's education, there was not much more to be said, and the respondents moved on to more important issues in their lives, such as business, agriculture, livestock production, illness, court cases, and dowry expenses. These conversations did help put the interventions into perspective.

References to the agricultural technology interventions were also sparse in the life-history narratives. This sparseness perhaps highlights a weakness of using the nonfocused life-history approach to evaluate a development program that may have had small, yet beneficial, impacts for participants. In addition, because the agricultural technologies were "bundled" with microfinance as part of the overall package that the NGO (or extension agency) provided, it was difficult to attribute an impact to them separate from the microfinance.

We would have been able to assess these programs in a more nuanced way if we had focused on them in our interviews. However, we also would have lost the overall, more natural picture of the patterns of improvement and decline provided by interviews led by an interest in people's lives as a whole.

# **APPENDIX: SUPPLEMENTARY TABLE**

Table A.1. Interview guide/checklist for the life-history interviews

General topic area	Particular events and issues
Family life history	Marriage dates (dowry, wedding costs), births (children and so on), deaths (parents, siblings, children, spouse), separation of property
Education and training history	Own education, what level, reason for leaving education, sibling's education, children's education
<b>Employment history</b>	Dates of jobs, who helped to get a job, business starting/finishing, assets bought or sold, how assets were bought (loans, savings, mortgage, sale of land and so on), promotions, loss of job, migration for work (national, international)
Asset and loans history	Land (bought, sold, lost, mortgaged, leased), livestock, buildings (house, shop), pond, materials (bamboo, bricks, tin), trees (when sold and why), jewelry, furniture, cooking utensils, loans, savings
Migration and place history	Reasons for moving (marriage, employment, security, other), family members moving
Health and illness history	Chronic illnesses, illness before death of relatives, accidents, medical expenses
Identity and membership history	NGO samiti, ROSCA, neighborhood groups, kinship ( <i>bangsho</i> ), religious groups, labor union, political group, who they celebrate <i>Eid</i> or other festivals with, <i>samaj</i> , who are <i>amader lok</i> ?, who helps in times of crisis?
Crisis and coping history	Crisis:  Dowry, illness, flooding, crop loss, livestock losses, business loss, unemployment or job loss, divorce, court cases, land and property division, migration, death of family members, accidents, injuries, cheating, theft, violence, threats, intimidation, extortion, conflicts and disputes, loans
	In these crises, who helped and why?
	<b>Coping:</b> <i>Forms</i> : sales, loans, savings, labor, business, mortgage, informal help, local collections, religious charity, begging, common property, divorce, migration, marriage, child labor, sending children away, crime
	<i>Channels</i> : own resources, kinship, friends, employers, neighbors, community groups, NGOs, public programs, political leaders, <i>mohajan</i> , <i>mastaans</i>
Opportunities and improvements history	Job, land (bought, gift), dowry, remittances, loan, government program (VGD, VGF, boyoshko bhatta, bidhoba bhatta, mukti juddho bhatta) pension, provident fund, savings, son working, daughter working
Additional contextual information to look for	How social structures (roles, values, norms, sanctions) have constrained or enabled people's agency (choices, options, opportunities)
	How endowments and circumstances (economic, health, status, education, memberships) have interacted with events and episodes (crises and opportunities)
	How sequences or combinations of events have combined
	How life-cycle position is important
	National events: 1947—partition, 1965—Indo-Pak war, 1971—Independence, 1975—
Historical markers to use	Sheikh Mujib's death, 1981—Zia Rahman's death, 1988—flood, 1990—protest and end of Ershad era, 1998—flood

#### REFERENCES

- Abbott, A. 2001. Time matters: On theory and method. Chicago, Ill., U.S.A.: University of Chicago Press.
- Ahmed, A. 2005. *Comparing food and cash incentives for schooling in Bangladesh*. Study commissioned by the United Nations University. Washington, D.C.: International Food Policy Research Institute.
- Baulch, B. 2010. Medium-term impact of the primary education stipend in rural Bangladesh. Working paper. International Food Policy Research Institute, Washington, D.C.
- Brady, H. E. 2002. Models of causal inference: Going beyond the Neyman-Rubin-Holland theory. Paper presented at the annual meeting of the Political Methodology Group, Seattle, Wash., July 20.
- Davis, P. 2007. Discussions among the poor: Exploring poverty dynamics with focus groups in Bangladesh. Chronic Poverty Research Centre Working Paper 73. Manchester, U.K.: Chronic Poverty Research Centre.
- Davis, P., and B. Baulch. 2009. *Parallel realities: Exploring poverty dynamics using mixed methods in rural Bangladesh*. Chronic Poverty Research Centre Working Paper 142. Manchester, U.K.: Chronic Poverty Research Centre.
- \_\_\_\_\_\_. 2010. Casting the net wide and deep: Lessons learned in a mixed methods study of poverty dynamics in rural Bangladesh. Chronic Poverty Research Centre Working Paper. Manchester, U.K.: Chronic Poverty Research Centre, forthcoming.
- Deaton, A. 2003. Health, inequality, and economic development. Journal of Economic Literature 41 (1): 113-158.
- \_\_\_\_\_\_. 2009. Instruments of development: Randomization in the tropics, and the search for the elusive keys to economic development. Proceedings of the British Academy, 2008 Lectures, vol. 162, pp. 123-160. Oxford: Oxford University Press.
- George, A. L., and A. Bennett. 2005. *Case studies and theory development in the social sciences*. Cambridge, Mass.: Massachusetts Institute of Technology Press.
- Gerring, J. 2005. Causation: A unified framework for the social sciences. *Journal of Theoretical Politics* 17 (2): 163–198.
- \_\_\_\_\_\_. 2007. The mechanismic worldview: Thinking inside the box. *British Journal of Political Science* 37: 1-19.
- Hallman, K., D. Lewis, and S. Begum. 2007. Assessing the impact of vegetable and fishpond technologies on poverty in rural Bangladesh. In *Agricultural research, livelihoods, and poverty: Studies of economic and social impacts in six countries*, eds. M. Adato and R. Meinzen-Dick. Baltimore, Md.: Johns Hopkins University Press.
- Holland, P. W. 1986. Statistics and causal inference. *Journal of the American Statistical Association* 81 (396): 945-960.
- Hume, D. 1739 (1896). A treatise of human nature: Being an attempt to introduce the experimental method of reasoning into moral subjects. Oxford: Clarendon Press.
- . 1748 (1900). An enquiry concerning human understanding. Chicago: Open Court.
- Kumar, N., and A. Quisumbing. 2009. *Does social capital build women's assets? The long-term impacts of group-based and individual dissemination of agricultural technology in Bangladesh*. IFPRI Working Paper. Washington, D.C.: International Food Policy Research Institute. Forthcoming.
- \_\_\_\_\_\_. 2010. Access, adoption, and diffusion: Understanding the long-term impacts of improved vegetable and fish technologies in Bangladesh. IFRPI Working Paper. Washington, D.C.: International Food Policy Research Institute. Forthcoming.
- Marini, M., and B. Singer. 1988. Causality in the social sciences. Sociological Methodology 18: 347-409.
- McKim, V. R., and S. P. Turner, eds. 1997. *Causality in crisis? Statistical methods and the search for causal knowledge in the social sciences*. Notre Dame, Ind.: Notre Dame Press.

- Naved, R. T. W. 2000. *Intrahousehold impact of transfer of modern agricultural technology: A gender perspective.* Food Consumption and Nutrition Division Discussion Paper 85. Washington, D.C.: International Food Policy Research Institute.
- Pearl, J. 2000. Causality: Models, reasoning, and inference. Cambridge, Mass.: Harvard University Press.
- Quisumbing, A. 2007. Poverty transitions, shocks, and consumption in rural Bangladesh: Preliminary results from a longitudinal household survey. Chronic Poverty Research Centre Working Paper 105. Manchester, U.K.: Chronic Poverty Research Centre.
- \_\_\_\_\_\_. 2008. Intergenerational transfers and the intergenerational transmission of poverty in Bangladesh:
  Preliminary results from a longitudinal study of rural households. Chronic Poverty Research Centre
  Working Paper 117. Manchester, U.K.: Chronic Poverty Research Centre.
- Quisumbing, A., and B. Baulch. 2009. Assets and poverty traps in rural Bangladesh. International Food Policy Research Institute, Washington, D.C. Photocopy.
- Ringer, F. K. 1989. Causal analysis in historical reasoning. *History and Theory* 28: 154–172.
- Sobel, M. E. 1995. Causal inference in the social and behavioral sciences. In *Handbook of statistical modeling for the social and behavioral sciences*, eds. G. Arminger, C. C. Clogg, and M. E. Sobel. New York: Plenum Press.
- Thompson, W. R. 2003. A streetcar named Sarajevo: Catalysts, multiple causation chains, and rivalry structures. *International Studies Quarterly* 47 (3): 453–474.
- Waldner, D. 2002. Anti anti-determinism: Or what happens when Schrodinger's cat and Lorenz's butterfly meet Laplace's demon in the study of political and economic development. Annual Meeting of the American Political Science Association, Boston, Mass., August 29 September 1.
- Wendt, A. 1998. On constitution and causation in international relations. *Review of International Studies* 24: 101-117.
- Winship, C., and M. Sobel. 2004. Causal inference in sociological studies. In *Handbook of data analysis*, eds. M. Hardy and A. Bryman. London: Sage.
- Zeller, M., M. Sharma, A. U. Ahmed, and S. Rashid. 2001. *Group-based financial institutions for the rural poor in Bangladesh*. Research Report 120. Washington, D.C.: International Food Policy Research Institute.

#### RECENT IFPRI DISCUSSION PAPERS

For earlier discussion papers, please go to <a href="http://www.ifpri.org/publications/results/taxonomy%3A468">http://www.ifpri.org/publications/results/taxonomy%3A468</a>.

All discussion papers can be downloaded free of charge.

- 990. The costs and benefits of duty-free, quota-free market access for poor countries: Who and what matters? Antoine Bouët, David Laborde Debucquet, Elisa Dienesch, and Kimberly Elliot, 2010.
- 989. Mountains, global food prices, and food security in the developing world. Kamiljon T. Akramov, Bingxin Yu, and Shenggen Fan, 2010.
- 988. Examining the dynamic relationship between spot and future prices of agricultural commodities. Manuel Hernandez and Maximo Torero, 2010.
- 987. Dynamic agricultural supply response under economic transformation: A case study of Henan Province. Bingxin Yu, Fengwei Liu, and Liangzhi You, 2010.
- 986. *R&D investment in national and international agricultural research: An ex-ante analysis of productivity and poverty impact.* Alejandro Nin Pratt and Shenggen Fan, 2010
- 985. Food security and economic development in the Middle East and North Africa: Current state and future perspectives.

  Clemens Breisinger, Teunis van Rheenen, Claudia Ringler, Alejandro Nin Pratt, Nicolas Minot, Catherine Aragon,
  Bingxin Yu, Olivier Ecker, and Tingju Zhu, 2010.
- 984. Improving resource allocation and incomes in Vietnamese agriculture: A case study of farming in the Dong Nai River Basin. Joshua Dewbre, 2010.
- 983. Positional spending and status seeking in rural China. Philip H. Brown, Erwin Bulte, and Xiaobo Zhang, 2010.
- 982. Assessing food security in Yemen: An innovative integrated, cross-sector, and multilevel approach. Olivier Ecker, Clemens Breisinger, Christen McCool, Xinshen Diao, Jose Funes, Liangzhi You, and Bingxin Yu, 2010.
- 981. Long-term impact of investments in early schooling: Empirical evidence from rural Ethiopia. Subha Mani, John Hoddinott, and John Strauss, 2010.
- 980. Infrastructure and cluster development: A case study of handloom weavers in Ethiopia. Gezahegn Ayele, Lisa Moorman, Kassu Wamisho, and Xiaobo Zhang, 2010.
- 979. Country-level impact of global recession and China's stimulus package: A general equilibrium assessment. Xinshen Diao, Yumei Zhang, and Kevin Z. Chen, 2010.
- 978. Emergence of Sri Lanka in European fish trade: Is there cause for concern in the Lake Victoria Region (East Africa)?

  Andrew Muhammad and Guyslain Ngeleza, 2010.
- 977. China has reached the Lewis Turning Point. Xiaobo Zhang, Jin Yang, and Shenglin Wang, 2010.
- 976. The medium-term impact of the primary education stipend in rural Bangladesh. Bob Baulch, 2010.
- 975. A review of empirical evidence on gender differences in nonland agricultural inputs, technology, and services in developing countries. Amber Peterman, Julia Behrman, and Agnes Quisumbing, 2010.
- 974. An experiment on the impact of weather shocks and insurance on risky investment. Ruth Vargas Hill and Angelino Viceisza, 2010.
- 973. Engendering agricultural research. Ruth Meinzen-Dick, Agnes Quisumbing, Julia Behrman, Patricia Biermayr-Jenzano, Vicki Wilde, Marco Noordeloos, Catherine Ragasa, Nienke Beintema, 2010.
- 972. Sarpanch Raj: Is the president all powerful? The case of village councils in India. Nethra Palaniswamy, 2010.
- 971. Asset versus consumption poverty and poverty dynamics in the presence of multiple equilibria in rural Ethiopia. Lenis Saweda O. Liverpool and Alex Winter-Nelson, 2010.
- 970. Poverty status and the impact of social networks on smallholder technology adoption in rural Ethiopia. Lenis Saweda O. Liverpool and Alex Winter-Nelson, 2010.
- 969. Wage subsidies to combat unemployment and poverty: Assessing South Africa's options. Justine Burns, Lawrence Edwards, and Karl Pauw, 2010.
- 968. Patterns and trends of child and maternal nutrition inequalities in Nigeria. Babatunde Omilola, 2010.

# INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

#### www.ifpri.org

#### IFPRI HEADQUARTERS

2033 K Street, NW Washington, DC 20006-1002 USA

Tel.: +1-202-862-5600 Fax: +1-202-467-4439 Email: ifpri@cgiar.org

#### IFPRI ADDIS ABABA

P. O. Box 5689 Addis Ababa, Ethiopia Tel.: +251 11 6463215 Fax: +251 11 6462927

Email: ifpri-addisababa@cgiar.org

#### IFPRI NEW DELHI

CG Block, NASC Complex, PUSA New Delhi 110-012 India

Tel.: 91 11 2584-6565

Fax: 91 11 2584-8008 / 2584-6572 Email: ifpri-newdelhi@cgiar.org