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Finding out fast about the impact of Covid-19: The need for policy-relevant methodological innovation

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ABSTRACT

In this viewpoint we explore one joint research initiative in Bangladesh to illustrate how methodological innovations using mobile phone technologies and pre-existing survey databases can generate rapid and insightful data on the impacts of the Covid-19 pandemic with significant policy influence. Situating this innovation within theoretical and methodological antecedents for rapid appraisal, we show how strong local ownership can facilitate innovation, rapid research and strong policy engagement amidst even the most difficult research conditions. Such rapid surveys and analysis must remain a research priority in times of crisis. Academic researchers in partner organisations further afield must ask important questions around how they can best support such locally-led research initiatives: in preparing for, analysing or writing up the research or in joining efforts to communicate them to wider communities of policy-makers and practitioners globally.

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1. Introduction

Covid-19 has devastated lives and livelihoods around the world. Individuals, communities, businesses, governments, and multilateral agencies have all scrambled to respond to the unprecedented health and economic crises that have accompanied the pandemic. The speed of these changes has created a crucial need for 'up-to-date' data to understand 'what' is happening, 'what' is being done to mitigate and adapt and 'what' the results of these responses are. But, rapidly collecting and analysing datasets, often under lockdown, presents a set of major problems: will the data be representative, accurate and good quality? Or will rapid analysis be shoddy analysis?

We explore here the theoretical and methodological antecedents for rapid appraisal in Development Studies; identify the forms of data most needed in the present crisis; describe a rapid response survey in Bangladesh that has supported decision-making; and analyse the key innovations that contribute to its quality and policy relevance. We argue that capacity to undertake rapid surveys and analysis must remain a research priority and that 'Southern' research leadership is central to achieving policy impact.

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2. Finding out fast in development studies

Much of the long history of applied research has been based on conventional disciplinary research approaches, but has 'gone the extra mile' by energetically taking findings to policy audiences. One element of this applied analysis has been 'finding out fast' when circumstances limit the applicability of standard research methods (Thomas & Chataway, 1998). There is explicit recognition that research for rapid policy action requires different research cycles. Such research is subject to tighter timelines, organisational priorities (often even politics) and different information needs. Methods must remain rigorous, but limited timescales may mean that the data drawn upon may, in comparison with longer-term studies, be *incomplete*; what is collected must, therefore, be carefully targeted, relevant and specific to policy needs (Thomas & Mohan, 2007).

These ideas originate in Chambers (1980) promotion of rapid rural appraisal (RRA) to ensure that development projects and policies were not designed on outdated data and understandings. While initially focussing on speed and relevance it was ultimately decided that 'whose knowledge' was most important, morphing first into participatory rural appraisal (PRA) and later participatory learning and action (PLA). Through these approaches, data collection is shared and owned by local people and communities rather than elicited and extracted by outsiders (Chambers, 1994). Speed, as a central criterion for selecting research approaches, slipped off the agenda until 2008's financial and food prices crises, high-

lighting the need for rapid findings to feed into policy and programmatic responses (Rahman & Choudhury, 2009). The need to 'find out fast' slipped off the research agenda again until Covid-19's rapid and global spread.

3. The Covid-19 crisis

Tens of millions of people have been infected by Covid-19 over 2020 and on many days more than ten thousand deaths have been reported globally. No region has been spared. A huge economic crisis and dramatic downturn in GDP has accompanied this, with economies across the world slowing in an attempt to reduce Covid-19's spread. Increasing health and social protection expenditure while public revenues are collapsing raises the spectre of crippling future national debt. Covid-19 is predicted to reverse decades of progress in global poverty reduction. Under worst-case scenarios, the number of people living in extreme poverty could increase by 420 to 580 million people (Sumner, Hoy, & Ortiz-Juarez, 2020).

To select policies that can tackle health problems whilst minimising damage to current and future economic prospects, governments must understand the crisis's impact, including who is worst-affected and how people and businesses are responding. While health data are often collected quickly through public health authorities, economic data is usually collected *ex post* by national statistical offices. It takes time for this to become available. Under lockdown or in countries with high levels of informal employment it may not be collected at all or will exclude significant parts of the economy. In this context, educated judgements based on experience are invaluable. But in a global crisis of this scale there is no contemporary experience to learn from in tackling the scale and severity of the unfolding health, economic and social crises.

The 'traditional' academic research model – research design, research funding secured, methods finalised and piloted, data collected, analysed and written up for peer-reviewed journals – has a long project-cycle incompatible with the information needs and time-scales of policymakers navigating crises. This situation calls for innovation, research leadership, and the dissemination of effective rapid research approaches.

4. Finding out fast in Bangladesh: The PPRC-BIGD Rapid Response Research initiative

In Bangladesh, think-tanks and NGOs are increasingly shouldering responsibility for data collection and public policy analysis. The Covid-19 crisis has stimulated research innovation at two such institutions. The Power and Participation Research Centre (PPRC) and the BRAC Institute of Governance and Development at BRAC University (BIGD) launched the PPRC-BIGD Rapid Response Research initiative to assist government and other agencies to unpack unfolding impacts and respond to the crisis. The project quickly collects, analyses and disseminates high-quality longitudinal data (PPRC & BRAC, 2020).

Speed characterises the research approach. Pre-existing sampling frames enabled the research team to complete the preparatory stages (research design, instrument development and mobilization and training of survey teams) in just six days of 'working from home'. The survey was implemented immediately afterwards,¹ with key findings released through a virtual press conference four days after survey completion at a time when policymakers were taking critical decisions. This entire process took less than three weeks, providing rapid, on-the-ground insight into Covid-19's – and the subsequent lockdown's – social and economic impacts. The full analytical report and data were released one month

after survey completion at another well-attended webinar. A second round of survey was carried out on the same sample two months later, together with an additional sample of new respondents.

Four innovations enabled the research's timeliness and quality. First was the opportunistic use of pre-existing, national-level, mobile phone interview sampling frames. This permitted a large-scale national survey to be conducted under lockdown conditions. From a sample frame of 12,000 households, 5,471 interviews were successfully conducted in the first round and a further 7638 interviews in the second round.

Second, strict boundary conditions were set to minimise interview length. Analytical design was tightly framed around five issues critical for an effective crisis response – household mobility, livelihoods, coping strategies, needs/expectations and recovery dynamics. Pre-testing survey instruments helped to identify the optimum number of questions and interview duration that was practical for telephone interviews with respondents not accustomed to such methodologies. All questions were close-ended and related to direct experiences rather than subjective interpretations.

Third, the whole research cycle – analytical scoping, instrument development and data analysis – was consciously transformed into a participatory team-exercise eschewing the conventional hierarchical research culture. Regular, virtual team meetings across junior and senior staff from the two research centres were central to speed and efficiency – and provided a continuous 'reality check' on the interpretation of the data

Fourth, the dissemination strategy through high-powered webinars was conceived as a two-stage process to influence i) an immediate 'policy moment' for near-term social protection policy decisions, and ii) a slightly later 'discourse moment' exploring poverty dynamics.

While in-depth survey findings cannot be provided here (see PPRC & BRAC, 2020), this 'finding out fast' research produced three critical insights that proved to be highly influential.

- (i) The depth and severity of impacts on urban slum households was particularly high. While rural households also experienced devastating impacts, years of neglect of urban poverty research and policy analysis (Banks, Roy, & Hulme, 2011) contributed to a situation in which low-income urban households were more deeply impacted.² They had fewer and more damaging coping strategies to survive during lockdown (PPRC & BRAC, 2020).
- (ii) Livelihood disruptions were not only severe for existing poor households, but also for those subsisting above the poverty line. Various informal occupational groups previously comprising the "vulnerable non-poor" – including rickshaw-pullers, drivers, security guards, maids, petty traders, transport workers, restaurant workers and private school teachers – were pushed below the poverty line. The PPRC-BIGD team coined the term 'new poor' to dramatize this new reality. Extrapolating findings to national level estimates, the survey pointed to an additional 21% of the population who joined the pre-existing 20.5% of the population living under the poverty line. Shortly after study findings were released, the Bangladesh Government announced a new US\$150 million social protection program for the urban informal sector's 'new poor'.

² A staggering 72% of urban households lost their main source of income in the early days of the crisis compared to 54% of rural households. Urban slum households experienced a 75% reduction in their incomes, relative to pre-Covid-19 levels, with reductions particularly high among the extreme and moderate poor. As a result, urban slum households have also been harder hit by food insecurity, especially female-headed households, and have resorted to borrowing money on high interest, emergency terms.

¹ Use of the Survey CTO app allowed for instant data entry.

(iii) The longitudinal nature of the research also revealed a reversal in traditional rural–urban migration. The second round of the research highlighted that many urban households that were unable to cope with sharp income losses alongside the inelastic burden of urban living,³ relocated to less expensive bases in villages and secondary towns. This was as many as 16% of households in Dhaka city.

Each of these findings found traction in the media as well as in the policy discourse within the Government and its development partners. Most significant, is that engagement on the hitherto neglected urban social protection agenda has been triggered (Rahman, Hashemi, & Wazed, 2020).

5. Methodological Innovation: Learning from the PPRC-BIGD initiative

This survey highlights several lessons for conducting policy relevant ‘crisis’ research. First, it illustrates the potential of rapidly analysed, large-scale mobile telephone surveys to inform public policy – providing pre-existing sampling frames exist. A relatively small and recent literature explores the ability of mobile surveys to reach nationally-representative populations in low and middle-income countries, including traditionally harder to reach populations (c.f. Dabalen et al., 2016; Firchow & Mac Ginty, 2017; Gibson, Pereira, Farrenkopf, Labrique, & Pariyo, 2017; Leo, Morello, Mellon, & Peixoto, 2015). Here, we add their critical importance in the pursuit of ‘finding out fast’.

Second, this approach reveals a new quantitative turn in ‘rapid research’, which has been rooted traditionally in small sample sizes and qualitative/participatory research methodologies. Qualitative methodologies are critical to look beyond headline statistics and understand local contexts around power and inequality; both PPRC and BIGD are strongly invested in such methodologies. However, a crisis like Covid-19 highlights the additionality of quantitative ‘rapid research’ to support immediate decision-making. Without mobile technology, quantitative participatory methodologies – like Krishna (2004) *Stages of Progress* – cannot achieve the speed, scale, breadth, and objectivity of findings required. This is illustrated by findings around the ‘new poor’. Would policymakers be convinced of the creation of a new class of poor people based on participatory measures from a small sample of households? Would they have responded so quickly with additional investments in social protection?

The third key lesson surrounds policy engagement. Impact is often a long-term consequence of research. But in crisis contexts, time is of the essence for influencing policymakers and development stakeholders. The project’s two-stage engagement strategy was effective, releasing research findings four days post-survey to impact on the scale and targeting of short-term social protection measures. One-month later findings around the ‘new poor’ started to influence the national poverty discourse. Such close policy engagement and influence requires a deep understanding of and relationships with policy audiences. Local research leadership and ownership is central. Both PPRC and BIGD have a long history of influence in issues of poverty, governance and development in Bangladesh and the respect from policymakers and thought leaders that accompanies this.

6. Concluding reflections

This viewpoint highlights two pressing priorities for researchers. The first is to use and share innovative methods for ‘finding

out fast’ widely. The second is the importance of reorienting research partnerships and traditional ways of working across the global North and South. For research to be rapid and ‘impactful’ requires strong Southern leadership. This is not just in designing and implementing large-scale research projects with speed, but also in terms of engagement. PPRC’s and BIGD’s reputations and their deep embeddedness in long-standing policy networks have been critical to reaching and influencing policy audiences. Important questions can therefore be asked by academic researchers in partner organisations further afield. What role can I play and what support can I offer in such initiatives to find out fast without sacrificing quality? Generating clever, elegant and esoteric critiques about sample bias⁴ or measurement problems does not fall into this category; finding a role as practical partners striving to support rapid surveys and analysis is where input is most helpful. This may be short-term – supporting the funding, execution and analysis of rapid response surveys – or long-term, by working in partnership to document such methodological innovations in more traditional academic structures or to join efforts to communicate them to wider communities of policy-makers and practitioners globally.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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³ Including rent, utilities, transportation, and healthcare expenses, amongst others.

⁴ There are concerns that ‘the poorest of the poor’ cannot be accessed by mobile phone. This needs to be tested and, if this is a problem, a search for mechanisms to overcome it must be undertaken (eg. could a set of the poorest households be supplied ‘free’ mobiles by NGOs on the condition that they respond to future survey calls)?