Seasonal Poverty and Seasonal Migration in Asia

Ahmed Mushfiq Mobarak and Maira Emy Reimão*

Abstract

Four in five poor people in the Asia-Pacific region live in rural areas. Crop cycles in agrarian areas create periods of seasonal deprivation, or pre-harvest “lean seasons”, when work is scarce and skipped meals become frequent. In this paper, we document this phenomenon of seasonal poverty and discuss existing formal mechanisms for coping with it. We then focus on seasonal migration from rural to urban areas as a potential coping strategy, and review the evidence on the effects of encouraging seasonal migration through transport subsidies. Over the past 10 years, we have conducted a series of randomized controlled trials in Bangladesh and Indonesia that provided rural agricultural workers with small migration subsidies to pay for the cost of round-trip travel to nearby areas in search of work. This paper summarizes the lessons learned from this multi-country, multi-year series of seasonal migration trials, the implications of these results for spatial misallocation, urbanization, and growth, and the replicability and relevance of this and other policies encouraging domestic migration more broadly for other areas in the Asia-Pacific region.

keywords: seasonality, migration, seasonal poverty, Bangladesh, Asia
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I. An Introduction to Seasonal Poverty and Domestic Seasonal Migration

In the Asia-Pacific region, poverty is highly concentrated in rural areas. Four out of every five poor Asian households are rural (Asian Development Bank, 2007), and the rural concentration of poverty is even starker within some countries. In Vietnam and Cambodia, for instance, rural areas account for 90% of all poor people (Balisacan, Edillon, and Piza, 2005). And in Bangladesh, 35% of rural households are poor, compared to 21% in urban areas. In Pakistan, these figures are 36% and 18%, respectively, and, in the Lao People’s Democratic Republic (Lao PDR), 29% of rural households are poor, almost three times the share for urban residents (10%) (World Bank, 2018).¹

As a sub-region, South Asia is the most rural in the world, and the only one besides Sub-Saharan Africa in which the share of the population living in rural areas still exceeds those in urban areas (Figure 1). A majority of the population in rural areas, coupled with a concentration of poverty in these same places, translates into a large number of poor rural households in relative and absolute terms. Most of these are engaged in agriculture, and are vulnerable to more severe and frequent shocks compared to urban households. In this paper, we discuss the seasonal variation in poverty within rural, agrarian areas, and summarize findings from 10 years of research on a strategy many poor rural households use as a way to cope with seasonal deprivation: temporary, within-country seasonal migration. Both pilot and larger-scale interventions conducted in Bangladesh and Indonesia reveal that policies that encourage seasonal migration by providing transport subsidies and lowering migration costs can, under certain conditions, help poor families mitigate the adverse effects of seasonal poverty by expanding their access to urban labor markets.

A. Internal Migration

Internal migration – permanent, temporary, seasonal, or cyclical – is a common coping strategy among rural households, and has played a key role in accelerating urbanization in the region. There are 282 million internal migrants in Asia, which account for over one-third of all internal migrants globally (United Nations, 2013).² In the region, a lot of internal migration has historically been of a more permanent nature – such as relocation to urban or manufacturing areas, – but this pattern has slowed down in several countries since the late 1990s. In Malaysia, Indonesia, and Vietnam, this deceleration is likely

¹ Based on the national poverty lines.
² This figure, based on data from individual countries, generally does not include seasonal migrants or those who have relocated for less than a year.
related to an aging population (who are less likely to migrate), economic growth, and a reduction in inter-regional wage gaps. The People’s Republic of China is an exception to this trend, as within-province migration actually increased by well over 100% between 1990 and 2000, likely due to the loosening of restrictions on migration to its large cities (Bell and Charles-Edwards, 2014).

**Figure 1: Trends in rural and urban population distributions, by region**

![Graph showing trends in rural and urban population distributions across different regions](image)

Source: Authors’ calculations using World Development Indicators data (World Bank, 2018).

In contrast to the deceleration in permanent migration, temporary, seasonal, and circular migration has increased in Asia over the last few decades, as temporary employment opportunities in urban and manufacturing centers expanded. Given crowding and limited access to housing in urban areas, a lot of the recent rural-urban movement has been temporary and reversible in nature (Deshingkar, 2006). Beyond the draw of better employment opportunities in cities, there are also a couple of push factors that drive rural people into internal, seasonal migration: predictable pre-harvest lean periods in agricultural crop cycles during which labor demand is low in rural areas, and high levels of vulnerability to unanticipated shocks, which further exacerbate income fluctuations.

**B. Risk and Vulnerability in Rural Areas as Drivers of Internal Migration**

The 2014 World Development Report on risk and opportunity analyzed the incidence of adverse shocks using household survey responses, and found a much higher prevalence of shocks in rural areas compared to urban ones (World Bank, 2013). In India, sixty-two percent of rural households reported experiencing a negative shock within the previous 12 months, and 24% reported two or more. In Lao PDR, 36% of rural residents reported a negative shock, compared to 12% of urban residents. Economic activity in rural areas is much more weather-dependent and less diverse than in urban areas, and rural residents report facing both aggregate shocks such as natural disasters (drought, flood) and idiosyncratic health shocks. While health shocks are also common in urban areas, natural disasters do not appear to be as big a concern for urban households, when compared to rural ones (World Bank, 2013).
Acute shocks in rural areas such as droughts and floods certainly contribute to the heavy flux of temporary migration observed in Asia. In 2010, for instance, 14 million people were temporarily displaced in Pakistan because of floods (Lucas, 2015). And in 2001, almost two-thirds of all people in Bolangir, a district the Indian state of Orissa, migrated during a drought (Deshingkar, 2006). It is estimated that between 2011 and 2050, as many as 26 million people in Bangladesh may have to migrate because of floods, storms, riverbank erosion, and sea-level rise (Siddiqui et al., 2014).

Alongside these dramatic responses, a lot of temporary migration is recurring in nature, as people move not only because of unanticipated shocks, but also to cope with predictable seasonal variation in employment opportunities in rural areas. In northern Bangladesh, every year, one-third of poor households in rural areas send a migrant to work elsewhere in the country for an average of two to three months (Khandker and Mahmud, 2012). This massive movement of people that occurs at a predictable time of the year is the result of seasonal fluctuations in income and in work opportunities in areas of origin due to the agricultural crop cycle, and not unexpected natural disasters.

In areas with little crop diversification and distinct cycles, there is a lean season between planting and harvest periods, a time when agricultural jobs are scarce and poor households regularly skip meals and suppress expenditures. Though food insecurity is a non-negligible issue for poor households throughout the year, there is a stark increase in extreme levels of deprivation during this period. In 2006 (a typical year in terms of agriculture), 47% of poor households in northern Bangladesh experienced hunger during the agricultural lean season (Khandker and Mahmud, 2012). In contrast, only 9% of households went hungry outside the lean season that same year.

More recent data we have collected in the region shows spikes in hunger in two different lean periods within the course of a year: August-October and briefly around March (Figure 2). The main rice crop (aman) is typically harvested in November-January, and the secondary rice harvest (boro) is in April. The periods before each of these are marked by heightened food insecurity among landless rural households: whereas over half of poor households reported sometimes skipping meals during the main lean season (August-October), fewer than 25% report doing the same once the aman harvest was underway or after the boro harvest.
C. The Effects of Seasonal Poverty

Income fluctuations, even when seasonal and expected, can have dramatic consequences for the poor who live close to subsistence and are unable to accumulate savings and smooth consumption. In rural areas in the People’s Republic of China, for instance, households in the bottom 10\textsuperscript{th} percentile in wealth respond to a drop of 100 yuan in income with a decrease in food and non-food expenditure of 40 yuan on average. In contrast, for the top-third of households considered “non-poor”, the same drop in income results in just a 10-yuan decrease in expenditures (World Bank, 2013).

Such consumption drops among the poor have serious implications for health and wellbeing, especially for pregnant women and young children. Skipping meals and decreasing food intake leads to stunting, nutrient deficiencies, and other health issues, with potential repercussions for future cognitive capacity and earnings. Given the concentration of poverty – and vulnerability to agricultural cycles – in rural areas, it is perhaps not surprising then that Bangladesh has the fourth highest prevalence of stunting among poor households around the world, and South Asia remains the region with the largest number of stunted children under the age of five (World Bank, 2018). Increases in population per hectare of crop land in several Asian countries forebodes further competition for the few tasks that are available in rural agrarian areas during the pre-harvest period. As is, there is a danger of potentially worsening health outcomes for the rural poor over the next few decades (Deshingkar, 2006).
D. Seasonal Migration as a Policy Tool to Counter Seasonal Poverty

The limited set of tools readily used by the rural poor to cope with seasonal income fluctuations include starting non-agricultural businesses, engaging in non-farm employment, or temporarily migrating. Business creation and non-farm employment are strategies most commonly used in sub-Saharan Africa (World Bank, 2012) and can help households diversify away from agricultural income and its cycles. At the same time, these are reliable coping tools only if there are profitable opportunities within rural areas, which appear not to be the case in large parts of rural Asia (World Bank, 2012). Social and/or cultural constraints may further restrict households’ ability to engage in non-farm employment. Poor rural households in Bangladesh, where women are less likely to work outside the home due to cultural norms, have even less diversified income sources than in neighboring India, for example (World Bank, 2013).

In contrast to rural-based livelihood diversification strategies, seasonal migration may be profitable even when the rural areas are poor and offer sparse employment opportunities. If travel between villages of origin in rural areas and urban destinations is manageable and not too expensive, then spatial wage gaps may create an arbitrage opportunity. Migrants can take advantage of employment opportunities in urban areas and send remittances or bring money back home at the end of their period of employment to help their family cope during the lean period. One study estimates that migrants in Dhaka send as much as 60 percent of their income back home (Deshingkar, 2006), while another shows that a quarter of rural Indonesian households have a migrant, with 85% of urban migrants sending money home (Lu, 2013).

Benefits from seasonal migration and its role in smoothing consumption may extend beyond averted hunger alone and into other gains in human capital. In rural Bangladesh, school attendance is higher among children in households with temporary migrants than in those without, and in Bangladesh, India, and Nepal, households with seasonal migrants report higher expenditures in education than non-migrant households (Srivastava et al., 2014).

Our research, as described in detail in Section III, employs a series of randomized control trials (RCT) to explore whether encouraging more seasonal migration from rural areas helps poor households mitigate the adverse effects of seasonal deprivation. Since 2008, we have been testing the effects of small migration subsidies (USD 9-15) in rural Bangladesh, and have found that this low-cost intervention increases consumption and income among treated households relative to a control group. The main economic results are reported in Bryan, Chowdhury, and Mobarak (2014) (henceforth, BCM), Akram, Chowdhury, and Mobarak (2017) (henceforth, ACM) and Lagakos, Mobarak, and Waugh (2018) (henceforth, LMW). BCM and ACM show that the impact of a one-time subsidy also carries over to
subsequent years, as treated households are more likely to send a migrant up to three years after the initial treatment. However, LMW shows that the financial benefits of migration are tempered by the disutility associated with bad living conditions experienced in destination areas, particularly urban slums. We are continuing to develop further evidence on this program with each new year of implementation, and asking new questions as the program scales.

Over the last 10 years, through multiple phases of testing this intervention, we have gradually moved from the original RCT covering 1900 households to testing a program now called “No Lean Season”, which is run by a separate entity and disbursed zero-interest migration loans to over 80,000 households in the 2018-19 lean season alone. This scale-up has required more local engagement and resources, and adjustments to the delivery system, moving from an intervention carefully monitored by researchers at each step of the way to one with greater autonomy for implementing partners and a slightly more hands-off approach to ensure scalability.

At the same time, the shift from RCT to program demands attention to effects that might not be relevant to an initial study but that come into play as the target population and area expands. With this transition as motivation, ACM focused on general equilibrium effects on non-migrant households in villages of origin, considering the effects of offering migration subsidies to some households on the consumption levels and incomes of other poor households in the same village. Other papers have explored the non-economic effects of encouraging migration, such as those on beliefs, attitudes, and social norms (Mobarak, Reimão, and Thachil, 2018), effects on intimate partner violence (Mobarak and Ramos, 2018), pressures towards urbanization in the long-run (Chowdhury, Mobarak, and Reimão 2018), effects on the informal insurance available to others in the village who participate in informal risk sharing arrangements with program beneficiaries (Meghir et al., 2017), and the relevance of the intervention to other settings, such as rural, eastern Indonesia (Bryan et al., 2018). We are also preparing to study whether seasonally timed consumption loans (as opposed to seasonal migration) is the right policy response in a different setting, with a new experimental design in Nepal; the effects of the scaled-up version of the program on urban labor markets in Bangladesh; and the role of implementation changes on targeting and migration outcomes.

3 “No Lean Season” is a program run by the Beta division of Evidence Action, and implemented in Bangladesh through its partner RDRS-Bangladesh. One of the authors of this document is a post-doctoral fellow with Evidence Action, and the entire research team engages with Evidence Action on a regular basis to provide input for program decisions.
E. Other Policy Options to Counter Seasonal Poverty

Explicit support for seasonal migration through transportation subsidies is only one option in a suite of potential policies to address seasonal deprivation in rural areas. In Japan, the Republic of Korea (South Korea), and Taiwan, for example, increased crop diversity – which makes seasonal variations in agricultural employment opportunities less acute – and investments in transportation infrastructure to improve access to other regions played key roles in the national development trajectory (United Nations Population Fund, 2016). With improved and expanded transport networks, rural households could both commute and temporarily migrate to cities, better allocating their labor between local agriculture and other employment options – across members as well over time. On a related note, Asher and Novosad (2018) show that a rural road construction program in India allowed connected villages to reduce their reliance on agricultural income earned inside the village.

Likewise, Bangladesh (and other countries in South and Southeast Asia) could benefit from investments in deeper and safer transportation networks, and in better housing options for the poor in urban areas. This strategic funding could transform temporary migration from a coping strategy to a predictable and desirable yearly pattern for rural residents, also enabling local governments and employers to better manage and respond to the influx. Improved transportation can also expand commuting opportunities, which would counter people’s need to migrate and live in destination areas for long periods. However, for the foreseeable future (until transportation networks vastly improve and/or rural residents have better access to local jobs year-round), explicit support for seasonal migration will likely continue to play a role in helping the poor cope with seasonal deprivation.

In the next section, we discuss a broader range of policies that governments and development organizations typically employ to help the rural poor deal with employment and/or income shocks, including guaranteed work schemes, universal basic income, crop insurance, and microfinance, and point to the gap that can be filled by seasonal migration subsidies. In Section III, we discuss in greater depth the design and results of the seasonal migration support programs we have implemented and tested over the last 10 years. We discuss the implications of our research for other countries in the Asia-Pacific region in section IV and subsequently conclude.
II. Rural Development Policies to Address Seasonal Poverty

One of the largest and best known seasonal income support programs in the world is India’s National Rural Employment Guarantee Act (NREGA). Under this program, all rural workers in the country are in theory entitled to 100 days of guaranteed employment per year, and are primarily hired for projects that support local community development, such as irrigation and road construction. Other common rural poverty programs include promoting financial services such as microfinance (a concept that also originated in South Asia), crop insurance, and support for savings. Many governments around the world have also experimented with cash transfers – either unconditional or conditional on a specified activity like school attendance, – and transfers in the form of food subsidies or free food distribution have been deployed in acute situations around the world for decades.

Besides these formal policies, poor households have long used informal coping systems as well. In times of distress, they rely on their social networks for gifts and transfers, on informal loan providers, temporary or permanent migration, and/or by invoking the very costly strategy of cutting back on consumption. In this section, we provide an overview of commonly employed anti-poverty policies for rural areas, and discuss the evidence of impact of such programs, drawing on data from Asian countries whenever possible. We close the section by explaining how subsidies for seasonal migration can fill a gap left by these programs.

A. Guaranteed Work Schemes

NREGA, enacted in 2006, is an ambitious program to address rural seasonal poverty in India. It is a cash-for-work program that provides guaranteed employment during the lean season for rural households across the country. Within 6 years of inception, this program had provided over 12 billion person-days of employment for the rural poor, and, in the 2017-2018 fiscal year, almost 80 million individuals worked under the scheme (NREGA, 2018).

NREGA relies on “self-targeting”, in that offered wages are deliberately low relative to the market, to ensure that only those facing weak employment opportunities will seek out the program. Despite this, no state has been able to provide all of the employment that rural workers have demanded and are entitled to (World Bank, 2012; Dutta et al., 2012). In fact, in the 2017-18 fiscal year, the average number of days worked per participant household was 46 days, well below the guarantee of 100 days per person (NREGA, 2018). Nevertheless, there is evidence that the opportunities offered by NREGA have had a spillover effect on the private sector, pushing up market wages and benefiting the poor more broadly.
Studies report other positive effects of NREGA, including on consumption, assets, nutrition, education expenditures, and women’s empowerment (Das and Singh, 2013; Dasgupta, 2017; Deininger and Liu, 2013), but since the program roll-out was not designed with research in mind, it has been difficult to establish some of the evidence very rigorously. In contrast, a similar rural employment guarantee scheme in Malawi was evaluated using an RCT, and it found no meaningful benefits in terms of agricultural investment, food security, or labor market opportunities for beneficiaries (Beegle, Galasso, and Goldberg, 2017). This study even reported a negative spillover effect on untreated households operating in the same labor markets as the beneficiaries of the cash-for-work program.

Guaranteed work schemes, even when they are effective, are very costly to operate because they must force job creation in a rural area where the structure of the agricultural economy is such that it is difficult to generate employment. This is likely related to crop cycles. Lean seasons often appear in agrarian areas during the period between planting and harvest, where cultivators must patiently wait for the crop to grow. There is relatively little to do on the farm, as weeding and other land management tasks do not require as many workers as during planting and harvest. These pre-harvest lean periods constitute expected seasonal downturns marked by job scarcity, and are known as “monga” in Bangladesh, “musim pakeklik” in Indonesia, or simply “hungry seasons” in Malawi, Zambia, Senegal and Mozambique. The private sector does not generate sufficient employment during this period in rural areas, but it is not clear whether this is due to a market failure or is the natural result of economic conditions given the concentration of poor people with little buying power during the lean season. Nevertheless, government-led guaranteed employment programs expend vast amounts of resources to go against this tide and create local jobs each year during the lean season.

Even setting aside their debatable potential as efficiency-enhancing programs that addresses a market failure, and instead looking at them as a social safety net for the extreme poor, food- and cash-for-work programs are difficult to design to meet local needs. The wages offered through the program need to achieve a balance between being low enough to properly target the poor and needy who should self-select into the program, but high enough to actually address seasonal poverty and be of use to those poor households (who may also face higher prices during the lean season). NREGA participants in India receive an average of 175 rupees (USD 2.5) per day, and there are indications that the program is well-targeted for the poor (Imbert and Papp, 2017). In contrast, the wages offered in the Malawi government program are apparently so low relative to outside options that only 50% of households offered employment through the system actually accepted it (Beegle, Galasso, and Goldberg, 2017).
A job guarantee program in Bangladesh called Food for Assets (FFA) is also reportedly well-targeted to the poorest households, because the nature of the work entailed is physically demanding and the program offers low pay. Seventy-two percent of FFA participants come from the lowest decile of the income distribution (Ahmed et al., 2009). The job availability also generally overlaps – though not perfectly – with the lean season, as most of the work is provided between December and May. There is some evidence, however, that this program crowds out other income, as participants are required to work full days, thereby foregoing labor opportunities in private markets. As such, every 100 takas paid through the FFA program increases household income by an average of only 32 takas (Ahmed et al., 2009).

Table 1: Some Policies for Addressing Economic Shocks in Rural Areas

<table>
<thead>
<tr>
<th>Design Strengths</th>
<th>Caveats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guaranteed Work</strong></td>
<td>Self-Targeted</td>
</tr>
<tr>
<td></td>
<td>Supports local infrastructure development by design</td>
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<tr>
<td></td>
<td>Discourages migration in search of jobs elsewhere</td>
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<tr>
<td></td>
<td>Costly</td>
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<tr>
<td><strong>Basic Cash/ Food Guarantee</strong></td>
<td>Universal targeting ensures even those who cannot work receive benefits</td>
</tr>
<tr>
<td></td>
<td>Costly, with leakage to non-poor households</td>
</tr>
<tr>
<td></td>
<td>Implementation costs also very high for food distribution</td>
</tr>
<tr>
<td><strong>Crop/ Agricultural Insurance</strong></td>
<td>Transfers tied to actual agricultural shocks</td>
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<tr>
<td></td>
<td>May encourage risk-taking/ investment by softening downside of shocks</td>
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<tr>
<td></td>
<td>Does not address seasonality of agricultural employment and outputs, only shocks to it</td>
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<tr>
<td></td>
<td>Does not address idiosyncratic shocks</td>
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<tr>
<td></td>
<td>Documented low take-up rates</td>
</tr>
<tr>
<td></td>
<td>Possible abuse of subsidized system by non-agricultural households (as documented in Mexico; World Bank, 2013)</td>
</tr>
<tr>
<td><strong>Microcredit and Savings for Agriculture</strong></td>
<td>Supports investment in agricultural enterprise (versus subsistence)</td>
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<tr>
<td></td>
<td>Not relevant for landless poor</td>
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<tr>
<td></td>
<td>Documented low take-up rates in general</td>
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<tr>
<td><strong>Microcredit for Non-Farm Enterprises</strong></td>
<td>Supports diversification of income away from agriculture in rural areas</td>
</tr>
<tr>
<td></td>
<td>Relies on profitable business opportunities in rural areas</td>
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<tr>
<td></td>
<td>Assumes entrepreneurial skill; training is costly and results mixed</td>
</tr>
<tr>
<td><strong>Support for Seasonal Migration</strong></td>
<td>Self-Targeted</td>
</tr>
<tr>
<td></td>
<td>Relies on having temporary employment opportunities within reasonable traveling distance</td>
</tr>
</tbody>
</table>

Rural workfare programs also discourage labor migration to urban areas, as one must be present in the rural area to take advantage of the job guarantee scheme. Since these programs are more common during
the lean season (both to address seasonality, and because construction projects are challenging to implement during monsoon periods), they also directly compete with seasonal migration-based coping strategies that those households may have otherwise employed. Research in India reveals that districts that were early implementers of NREGA experienced a 50% decrease in seasonal out-migration relative to a comparison group of districts where the program was not yet implemented at the time (Imbert and Papp, 2017). In our own research in Bangladesh, we find that displacement of migration limits the positive effect of work programs on household welfare. Simulations reported in LMW show that introducing a rural workfare program in northern Bangladesh would decrease the seasonal emigration rate of the poorest quintile by 4-6 percentage points and produce lower household welfare gains, on average, relative to migration subsidies or an alternate program providing unconditional cash transfers without imposing a requirement to remain in the rural area (LMW).

B. Unconditional Transfers

Unconditional cash transfers (UCTs) have gained popularity in recent years as a benchmark against which to measure the impact and cost-effectiveness of other poverty alleviation programs. In LMW, we directly compare the effects of seasonal migration subsidies on household welfare to the welfare that would be generated under an untargeted UCT program. The overall welfare gain across the population produced by an untargeted UCT is greater than that of a transfer conditional on migration by definition, because a migration conditionality is imposing a constraint on people, and constraints can only make rational people (weakly) worse off. However, the migration transfer generates some targeting benefits relative to the UCT, since it tends to induce only the people who actually need the support to participate, as opposed to the universal coverage of the UCT, which ends up benefiting many people who are not as poor or who did not face an acute adverse seasonal shock during the year. Therefore, when we conduct a budget-neutral comparison between migration subsidies and UCTs, we see that the migration subsidies improve the welfare of the poorest quintile by about 14% more than a UCT program (LMW). These results highlight a feature of UCTs that are both their strength and their weakness: The lack of any conditionality means that anyone can receive a UCT, which includes both the non-poor (who are not intended beneficiaries of pro-poor programs) and households who may be so poor and so constrained that they may have difficulty complying with the conditions required by a conditional cash transfer (CCT) program.

Baird, McIntosh, and Özler (2011) highlights this particular benefit of UCTs by directly comparing a UCT program against a CCT in which transfers for adolescent girls are conditioned on school attendance. This RCT shows that while the CCT produces larger effects on the schooling outcomes on which transfers are explicitly conditioned, it does not decrease marriage and pregnancy rates among young girls.
by as much as the UCT. This is because there is a sub-group of extremely vulnerable households who cannot comply with the conditionality, and therefore do not receive benefits under the CCT program. These types of households are still helped in the UCT. This logic implies that, relative to seasonal migration support programs or rural workfare programs, a basic income transfer might better reach households that may not have a working member who is able to migrate or even work in the rural area. A substantial part of the transfers, however, would also go to those who may not be in as dire a situation as the target population.

Of relevance to this difference in coverage, we also implemented an RCT in West Timor, Indonesia, designed to empirically compare the relative effects of UCTs and migration transfers directly (Bryan et al., 2018). Not surprisingly, take-up among eligible households is over 90% in the UCT arm, compared to 52-59% in the CCT arms. The conditional transfer increases migration by about 30 percentage points relative to the UCT, and average gains in household income are larger for the CCT group compared to the UCT. Nevertheless, the difference in take-up rates are composed by both households that are too wealthy to be interested in migrating and households that may have been unable to migrate or to find a job in destination areas. A CCT such as a seasonal migration support program cannot directly reach the latter group, a disadvantage relative to UCT programs or other unconditional safety nets.

Seasonal migration – and programs supporting it – is not a substitute for basic income, particularly for households that do not have a working member. It is also important to acknowledge that cash and food transfers for the poorest households are relevant in several circumstances besides seasonal drops in income. That said, these programs are relatively costly to implement, and also vulnerable to elite capture. Ahmed et al. (2009) evaluates transfer programs targeting the ultra-poor in Bangladesh, including Income-Generating Vulnerable Group Development (IGVGD), a food transfer and credit program, and Food Security Vulnerable Group Development (FSGVD), a combined food and cash transfer program. This study finds that 10% of IGVGD-beneficiary households were actually in the top three deciles of the income distribution. Only 43% and 38% of beneficiaries for IGVGD and FSGVD, respectively, were in the bottom decile; in contrast, this share was 72% for the FFA guaranteed workfare program (Ahmed et al., 2009).

On the other hand, the same study also reports that the food-for-work program is the most expensive way to increase household consumption, with the FFA requiring 440 takas per beneficiary per month to increase daily consumption per capita by 100 calories. IGVGD requires 249 takas while FSGVD, the combined food and cash transfer program, requires 156 takas per month. The workfare program is likely
even more costly in ways that are not measured, since participation in workfare generally requires beneficiaries to forgo other labor market opportunities.

The coverage of these transfer programs is also precarious, as only 6-7% of the Bangladeshi poor are actually covered by any food/cash transfer or workfare program (Ahmed et al., 2009), a statistic likely related to the high cost of implementing such schemes. These programs are therefore inadequate in their present form to address the recurrent seasonal poverty that afflicts well over one-third of the rural population in northern Bangladesh each year. Seasonal migration supports may therefore serve as a useful policy complement to these existing social safety net programs in this setting – and similar ones with low safety net coverage and high seasonal vulnerability.

C. Agricultural Insurance

Agricultural insurance programs are designed to mitigate losses associated with extreme events and unexpected weather shocks, rather than predictable and recurrent seasonality. Index-based insurance programs circumvent the adverse selection and moral hazard problems that undermine traditional crop insurance by tying payouts to verifiable weather events or other aggregate outcomes such as average losses at the regional level. By design, then, agricultural insurance is not designed to address seasonal deprivation that arises on a cyclical basis through the regular agricultural calendar, as payouts are made based on deviations from expected patterns.

A more sophisticated tool ties agricultural insurance to a safety net, as is done in Mongolia. Under this particular program, herders fully absorb losses of up to 6% (indexed on the average mortality of adult livestock in each county); losses between 6 and 30% are covered by index insurance; and participants are automatically enrolled in a safety net program if losses surpass 30% (World Bank, 2013).

Though crop (livestock) insurance is traditionally aimed at landowners (livestock owners), payouts are not tied to individual output and it is possible to expand the target population for crop (livestock) insurance from landed to landless (livestock-less) households, who are also vulnerable to extreme shocks through decreased farm employment opportunities. In fact, in an RCT in India where landless laborers were offered rainfall insurance, their take-up rate was only 4% lower that of land-owning households (Mobarak and Rosenzweig, 2013). However, selling crop/weather insurance to the landless poor necessarily requires the use of index insurance, where payments are not tied to individual outcomes but to something like a weather index or an aggregate outcome. This in turn implies that the policy can only insure against aggregate risks (like weather, pest, or price shocks), and not idiosyncratic risks that poor
rural households may face, such as consumption drops due to a mortality or morbidity event in the household.

Empirical research on agricultural insurance also reveals that take-up is relatively low in some contexts even at actuarially fair prices, and that its use has not necessarily led to higher levels of investment and technology adoption (Lybbert and Carter, 2015; Carter, Cheng, and Sarris, 2016). In the study offering insurance to landless households, roughly 40% of all households purchased insurance – a fairly low rate considering that subsidies of 0, 10, 50, or 75% on the insurance product were randomized across households (Mobarak and Rosenzweig, 2013).

A new tool combining index insurance and loans, in the form of emergency loans that are made available to farmers in the event of flooding has been recently designed and implemented in Bangladesh. The key innovation of this intervention is that, unlike other insurance forms, it does not require any upfront payment by farmers; only eligibility is determined before the crop cycle. Preliminary findings are generally positive, indicating that these emergency loans not only provide relief as expected in the case of floods, but also lead pre-qualified farmers to plant 15% more rice once they know they will be eligible for the loan in the event of major flooding (Lane, 2018). This can generate spillover benefits for the landless poor in terms of greater labor market opportunities when the weather cooperates, particularly during the planting period (Mobarak and Rosenzweig, 2013), but still cannot fully address the decrease in employment opportunities during the lean season.

D. Microcredit and Savings

Microcredit and savings consists of a broad array of programs that provide small loans for the creation or expansion of non-farm enterprises, credit for agricultural inputs, programs encouraging savings for farm or non-farm businesses, and any combination of these.

Small loans for non-farm enterprises became a hugely popular idea in international development in the 1990s, and South Asia is the birthplace of large microfinance institutions (MFIs), including Grameen Bank and BRAC. But recent meta-analyses of RCTs on microfinance generally find modest impacts at best from this type of intervention. A review of six microfinance studies, two of which were implemented in Asia (India and Mongolia), notes that take-up rates of microloans are relatively low and the impact on family income or consumption was not statistically significant in any of the six settings (Banerjee, Karlan, and Zinman, 2015). Limited take-up is to be expected even before considering loan characteristics, as not all individuals aspire to be entrepreneurs or have a promising business idea, but half the studies also found no impact on the ownership, start, or closure of business, while the other half only found effects in one of
these outcomes. The evaluation in India found significant increases in expenditures on durable goods but not on consumption (Banerjee et al., 2015). And the evaluation in Mongolia shows positive impacts on household food consumption but not income for a group-liability loan, while individual-liability loans generally had no impact across the board (Attanasio et al., 2015).

A Bayesian hierarchical analysis of an overlapping set of seven microfinance studies (Meager, forthcoming) echoes the limited power of microfinance, showing that its impact on consumption is at best small and unlikely to be transformative, with relatively little heterogeneity across beneficiaries. Notably, this study also shows that, for households with no previous business experience, as would likely be the case for most primarily agricultural households in rural areas, microfinance also has zero impact on household profits. It is clear, then, that microfinance for entrepreneurship, though potentially beneficial to some households – mainly those with existing enterprises, – cannot reliably serve as an avenue for income diversification and/or consumption smoothing for a large number of poor agricultural households.

The seasonal migration support program we have implemented and evaluated in Bangladesh is in essence a version of a microcredit program⁴, with some crucial differences from how microfinance has traditionally been conceptualized. First, these loans are explicitly conditioned on migration rather than a business plan or business ownership. Second, they permit job search rather than requiring beneficiaries to set up a business. This difference expands the relevance of the loan and removes undue pressure towards business creation, as there are likely many more “employees” than “entrepreneurs” in the world; many more who would prefer a job with a stable income rather than take on the risk of starting a business. Third, when we have offered seasonal migration support in the form of a loan for travel rather than a grant, they have been at zero-interest. While microfinance institutions require profitability to be sustainable, our intervention is designed to subsidize migration for the poorest households rather than turn a profit. Fourth, the repayment period for our loans has been set at the end of the lean season, typically 3-4 months after loans are disbursed. In contrast, microcredit programs typically require bi-weekly repayment, or other short interval (Field, Holland, and Pande, 2014), which may in itself distort household decisions away from seasonal migration. In fact, data from Bangladesh indicate that clients of microfinance organizations are less likely to migrate than non-clients (Khandker and Mahmud, 2012).

Agricultural loan programs tailored to rural areas (to encourage investment in agricultural inputs) also move away from short repayment periods, and instead offer credit at the start of the planting season and collect repayment at harvest. However, take-up of such loans is also low: A study in Mali found that just

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⁴ The main implementing partner in northern Bangladesh, RDRS-Bangladesh, is actually a microcredit organization.
22% of women offered an agricultural loan accepted it, and only the more productive farmers self-selected into taking out these loans (Beaman et al., 2015).

Savings programs, including agricultural savings accounts, have been studied more extensively in Africa. An RCT in Malawi that encouraged savings after harvest to invest in inputs next season (Brune et al., 2016) found that on average only one-quarter of the original deposit was still in the savings account two weeks later. When a J-PAL research team tried introducing new savings products through banks in Chile, Malawi, and Uganda, the programs failed in all cases, presumably because banks found it too costly to administer products in which poor people deposited very small amounts of savings each month.5

Our data from Bangladesh indicate that the landless poor, who are most vulnerable to seasonal hunger, typically do not have anything to save, especially during the lean season. Both ACM and BCM report significant treatment effects on income and consumption from the migration subsidies introduced, but do not observe any increase in savings in any of the multiple years in which the program was evaluated. The marginal propensity to consume extra income during the lean season is very high for the landless poor. The evidence base suggests that it will likely be difficult to induce savings among the poor as a way to address seasonal deprivation.

Fink, Jack, and Masiye (2018) identifies a more promising option: a well-timed loan during the lean season can reduce farmers’ desperation to sub-optimally supply labor to others’ farms at low wages just to address their short-run cash needs for meeting their family’s subsistence requirements. In this treatment, loans of either cash or grains are not envisioned as encouraging leaps in productivity or business creation; rather, they are disbursed to farmers during the lean season to discourage the use of more costly coping mechanisms, particularly shifts from working in one’s own farm to hiring out one’s labor to work in other farms. The authors find that these loans, also to be repaid after the lean season (effectively at a 4-5% interest rate) do in fact encourage subsistence farmers to work on their own land during the lean season rather than in other farms, with positive repercussions for the subsequent harvest.

Landless rural households may also benefit from seasonally-timed consumption loans, disbursed at the beginning of the lean season and repaid at the end, and with no conditionality. This may be a particularly sensible solution in countries where migration already occurs at high rates, and usually over greater distances and for longer periods, but seasonal poverty remains. Our initial exploration in Nepal indicates that seasonal consumption loans may be relevant there, and calls for further research on this type of

5 The related research paper, Dupas et al. (2018), concludes that traditional bank accounts are unappealing to the majority of the currently unbanked, rural households in all three settings.
consumption loan, with a close look at repayment rates. In Zambia, repayment rates on the lean season loans dropped between the first and second year of treatment even though harvest output increased for treated households (Fink, Jack, and Masiye, 2018). Ensuring high repayment rates year after year is critical for the sustainability of such a program in the long run, and future experiments will be useful for illuminating that path.

E. Temporary Migration

In addition to the formal markets and mechanisms described above (employment guarantee schemes, transfers, insurance, credit, and savings programs) the poor use a variety of informal tools to cope with seasonal volatility. They may draw on support from friends and relatives, secure loans from informal money-lenders, or attempt to diversify their income by engaging in informal business enterprises or by entering the labor market outside the village. Multiple years of data from northern rural Bangladesh show that, in any given year, about a third of poor households in the area send a member to labor markets elsewhere in the country to cope with the seasonal shock through temporary, circular migration. This reliance on migration is not limited to Bangladesh, and is common across the region. It is estimated that two-thirds of the 740 million internal migrants in the world reside in Asia (World Bank, 2013), and that India alone is home to an estimated 30 million temporary internal migrants (Deshingkar, 2006).

Our research focuses on seasonal migration, a type of temporary migration that occurs at a predictable time in the year (often – but not always – during the lean season), and lasts a few weeks to a few months. As a policy intervention, encouraging seasonal migration involves supporting the movement of people to where there are jobs and allowing the market to provide employment and income, which may be more efficient and easier than bringing jobs to local areas (as in a workfare program). Seasonal migration is a form of spatial arbitrage in which people move from areas where there are few jobs during a given season (e.g., due to lean periods in the agricultural crop cycle), and into areas with better employment opportunities during the same period.

Seasonal migration not only diversifies income, but may also have an indirect effect on other informal coping mechanisms. For example, the temporary migration of a subset of members in a risk-sharing network may have a spillover effect on others in the network through a system of gifts and transfers (Meghir et al., 2017). Lowering the cost of migration via grants and/or loans, as we do in our intervention-based research, may also make it easier for others to migrate because they can travel together with grant recipients, as they share costs and risks. In the next section, we delve into the details of the
research methods in and lessons from our multi-year, multi-site research program on encouraging seasonal migration.

III. Evidence on Seasonal Migration

While our research program encourages more migration, one-third of poor households in rural areas of northern Bangladesh (in particular, the Rangpur region) already rely on internal seasonal migration as a coping strategy to deal with deprivation during the lean season. Those households send a migrant for weeks or months at a time for employment in urban areas or other rural areas within the country, where wages are higher and/or employment opportunities are more broadly available. Data from 2017, for instance, reveals that the median daily wage among individuals in our study was 200 takas at home (USD 2.4) during the lean period, but 333 takas (USD 4) for those who migrated domestically.

The starting point for our research was that the prevailing seasonal migration rate of one-third actually seemed puzzlingly low: Given the lack of jobs in rural areas during the lean season, the relatively ample availability of jobs in urban areas during the same period, higher average wages offered to low-skilled workers in common destination areas, and the evident feasibility of temporary travel in this context, economic theory would actually predict a higher seasonal migration rate in the absence of market failures (and as long as individuals were not already sorted according to their comparative advantage). Our research was therefore designed to examine market failures that might prevent poor households in northern Bangladesh from temporarily moving to where there are jobs, and to explore whether an external intervention could help overcome those hurdles.

Rangpur is one of the poorest regions in Bangladesh, and its rural residents are more reliant on agricultural income than residents of other regions. Rural Rangpur households, on average, derive 50% of their income from farming, compared to 28% of rural households elsewhere in Bangladesh (Khandker and Mahmud, 2012). This heavy reliance on agriculture leaves poor households more vulnerable to seasonal fluctuations from crop cycles (predominantly rice in this setting), making seasonal emigration a sensible strategy during periods when agricultural jobs are scarce. International remittance receipts are also relatively low in Rangpur compared to other regions in Bangladesh. And while 32% of households in Rangpur participate in some type of social safety net (mainly food transfers), the benefit amounts are too low to adequately address seasonal deprivation (Khandker and Mahmud, 2012).
With high poverty rates, savings constraints, and low safety net transfer amounts, fluctuations in employment opportunities and income translate into drops in consumption during the pre-harvest period. Using data from our research, Figure 2 shows that up to 20% of poor households in this setting regularly miss meals during the lean season, and only 40% never face food insecurity. Unaddressed, this can have disastrous consequences for those already living close to subsistence, especially families with pregnant women and young children. Reduced consumption for up to three months of the year can adversely affect the physical and cognitive development of children, with attendant effects on learning, productivity, and future earnings.

Since 2008, we have tested whether transport subsidies can facilitate out-migration and help poor rural households avoid drastic drops in consumption during the lean season, specifically by taking advantage of employment opportunities elsewhere in the country. And since 2013 we have partnered with Evidence Action, an NGO supporting and implementing evidence-based programs, to explore the viability and impact of a scaled-up version of this intervention. Working with their “No Lean Season” project, we have gone beyond the first step of measuring the direct effects of seasonal migration subsidies on targeted beneficiaries to exploring the potential effects of a large intervention under the same framework, such as that on destination workers, on permanent migration, and on beliefs and social norms.

**A. Direct Effects of Seasonal Migration Support on Beneficiaries**

In 2008, we implemented an RCT covering 1900 households across 100 villages in Rangpur (discussed in further detail in BCM). First, each village was randomly assigned into one of four arms: (1) a grant for seasonal migration; (2) zero-interest loan for seasonal migration; (3) information about migration and job opportunities and wages at the destination; or (4) a control group. Next, within each village, 19 poor households\(^6\) were randomly selected for the study, so that each of the 19 households living in the same village was assigned into the same RCT arm. In August 2008, those in the first treatment arm were given information on popular migration destinations and their prevailing low-skill wages, and offered a grant of 800 takas (USD 8.50) conditional on the temporary migration of at least one household member in the upcoming lean season. This amount was intended to cover the cost of a bus ticket and a few days of food,

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\(^6\) Eligibility was defined as having less than 50 decimals (half an acre) of land and having skipped meals in the previous lean season. Seventy-percent of households in these 100 villages were considered eligible (BCM).
and in our data we find that migrants spent on average 450 takas on migration transport in that round, and 529 takas when including food and incidentals related to the journey\(^7\) (BCM).

There were no further restrictions to the grant, and beneficiaries could choose the specific member(s) who would travel, the destination, the length of stay, and the nature of their job search. For the majority of the sample, we also did not impose any restriction on destination or the identity of travel companions. The second treatment arm was similar to the first, except that the disbursement was offered as a zero-interest loan rather than a grant. Repayment was expected upon return, but forgiven in the case of failure to find a job, though this latter feature was not disclosed upfront. The third arm only received information on popular destinations and prevailing wages using the same script as the first two arms, while the control group did not receive anything.

This RCT design helped us evaluate whether the treatments were successful in encouraging more migration, which in turn allowed us to learn about the constraints limiting seasonal migration. We found that the small subsidy significantly increased the migration rate from 36% in the control group to 59% for those receiving the grant and to 57% for those receiving the loan. The difference between the latter two is not statistically significant, while the average migration rate remained at 36% in villages with the information-only treatment. From these results, it is evident that the relatively low base seasonal migration rates given the availability of jobs in urban areas was not due to a lack of information about jobs – poor households either already knew about the availability of jobs and prevailing wages in urban areas, or this piece of information is not relevant to the decision to migrate.

To study the effect of the program in subsequent lean seasons, we tracked migration rates one and three years later, without repeating the intervention itself in those villages. During the lean season a year later (2009), 47% of households in villages where the conditional subsidies (loan or grant) had been offered in 2008 sent a seasonal migrant, which was significantly higher than the migration rate in the control and information groups. The migration rate in the grant and loan villages was still significantly higher (by 7 percentage points) than the control group even in 2011, the next time we collected data on this sample.

Using the randomized treatment as an instrument, we find that households that were induced to migrate through this program increased both food and non-food expenditures by 30-35% relative to the control group, and consumed 550-700 more calories per person per day. This is equivalent to each person in the house eating one additional meal per day, during a period when food is scarce and meals are commonly

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\(^7\) Migrants may have taken more than one trip or households may have sent more than one migrant, but the transfer amount is limited to 800 taka per household regardless of the number of trips. Calculating the overall cost of living at destination is problematic, as over half of migrants in our study receive housing and/or meals from their employer as part of compensation, or, in the case of rickshaw drivers, may be given housing above the garage. The monetary value assigned to these benefits differ by migrant and the quality of housing and food, and also from employers’ responses.
skipped. For comparison to the 800-taka transfer, households that sent a migrant in response to the subsidy increased their consumption by 350-400 takas per person per month (BCM). In a context where migration lasts two to three months and households have between four and five members, this represents a large rate of return on the initial subsidy. Figure 3 illustrates how the subsidies work, enabling households to send a migrant for temporary employment elsewhere in the country and using the additional earnings to raise consumption and calorie intake.

**Figure 3: Seasonal Migration Subsidies in Practice**

Further analysis of our data indicates that poor families close to subsistence were hesitant to invest in the uncertain returns to migration partly because they were too risk averse. Even though seasonal migration is profitable on average – as indicated by the gains in expenditures and consumption for households that responded to the subsidy by migrating, any chance of migration failure (e.g., spending the money for transport but failing to find a job, or at least one that is worth the travel) can have devastating consequences for households living at the edge of subsistence. As a result, even with knowledge about average benefits, poor households may be unwilling to risk spending the little money they have on migration. The migration subsidy acts as insurance against this downside risk, protecting households from having to use their own money upfront to pay for migration.
B. Further Exploration for Scale-Up

Results from the initial RCT show that supports for seasonal migration have potential as a tool for addressing seasonal poverty. It is certainly cheaper to implement than work guarantee programs (which require paying beneficiaries for each day of work), owing to the fact that a one-time transport subsidy allows beneficiaries to earn market wages on their own at the destination. It is also more easily scalable considering the complexities of program implementation: It depends on the capacity of an institution to make subsidy disbursements but does not require the creation and management of jobs and payments. The upper bound of scalability may be constrained by the capacity of potential destination areas to absorb temporary laborers.

But before declaring that support for seasonal migration should be scaled up and implemented as a policy for addressing seasonal poverty in Rangpur or other agrarian areas of Asia, the potential indirect effects and spillover effects of this intervention demand some attention. To move from an RCT to policy, it is not sufficient for an RCT to simply demonstrate positive effects on its treated sample, particularly for a complex program that can in theory have repercussions for other parts of the population. For scale up and policy, we must also look at the effect of the intervention on, say, other poor households who are operating in the same labor markets and competing for the same jobs. It is also important to understand any unintended non-economic consequences on social norms, political beliefs, or intra-household decision-making. In contemplating a move from pilot-scale research to an at-scale program, programmatic issues also arise or gain more importance, such as the incentives and constraints faced by funders and implementers and the cost-effectiveness of the intervention. In the following sub-sections, we discuss these additional areas we have studied, providing information on the potential of this particular intervention as scalable policy while also illustrating some issues that come into play in the move from RCT to scale.

1. Targeting and Welfare

The research described above focuses on the economic returns to migration, but there is also the question of whether migration raises welfare more broadly. If the extra income and consumption from migration comes at the cost of temporary family separation, worse living conditions for the migrant in urban slums, or any other negative experience stemming from migration, the effect of the subsidies on the welfare of targeted households cannot be represented simply by their income or consumption gain. Much of this “disutility” is difficult to directly observe or collect through survey questions. LMW uses a simulated method of moments approach to implement a model that allows for unmeasured disutility, and matches this model to experimental moments generated from the same RCT reported in BCM. In the RCT round described above, roughly 80% of migrants experienced success at the destination in economic terms, but
at most 50% chose to re-migrate in subsequent years. This gap between “success” (in terms of employment, income, consumption) and the revealed-preference of re-migration choices is informative about how large the unmeasured disutility must have been, for migrants who experienced success according to our economic metrics to nonetheless choose not to migrate again in a subsequent year. The quantitative model in LMW matches these moments in the data to infer the disutility and the net welfare gains from migration.

Through this method, LMW deduces that migration comes with substantial disutility, and that the actual welfare gains from the subsidies are smaller than the 30-35% consumption increase observed through the experiment. We validate this inference with discrete choice experiments on the same BCM experimental sample, asking potential migrants to choose between migration and stay-at-home options that vary in the (hypothetical) conditions associated with the migration experience such as wages, the likelihood of finding work, living conditions at the destination, and the length of family separation. We learn that, of these dimensions, the quality of living conditions in the city is the component of welfare that matters most to migrants. In this context, toilet type and access serve as realistic proxies for living conditions, and we find that having housing with an indoor latrine (as opposed to public options) at the destination leads to a 17 percentage point increase in the reported propensity to migrate. This large effect is equivalent to increasing destination wages by 21%, or increasing the likelihood of finding work three-fold. The clear policy implication is that governments should invest in urban living conditions and improve housing and sanitation in slum areas, as this would be valuable not only with respect to human rights and dignity but also for its economic draw. In a survey of migrants working construction jobs in Dhaka (Srivastava et al., 2014), 71% report worse housing conditions at the destination compared to their own homes in rural areas.

Given the disutility from worse living conditions, this model suggests that potential migrants would only choose to leave when they are sufficiently economically desperate and the situation at home is precarious. The LMW modeling exercise allows us to learn about the types of households that are most likely to respond to the migration support intervention, and the conditions under which they would choose to migrate in any given year. Understanding who exactly this migration support program manages to target is an important component of understanding the economic growth or welfare generated by this program.

It could have been the case that there are many rural workers who would fare well in the city but who are “spatially misallocated” in rural Bangladesh because they are not sure about their prospects in the city, and do not travel as a result. The financial incentive for migration would allow them to try out the urban labor market, and those who then learn that they have a comparative advantage in the city become repeat cyclical migrants or even permanent migrants. The results derived through the LMW model suggest that
this is not the case, likely because those with a strong comparative advantage in the city are for the most part already there.

Instead, it is those who have experienced recent bad shocks but are hesitant to draw down their small savings to make another trip (that may fail) that are induced to migrate by the financial incentive. The migrants from these households are not necessarily a lot more productive in the city compared to the village, but the migration support program allows them to weather unexpectedly bad periods by accessing jobs in urban areas. As such, this program does not generate much economic growth, as workers are not generally spatially misallocated and moving them does not create substantial changes to aggregate productivity. Rather, the value of the program lies elsewhere: It offers a safety net to extremely poor households, enabling them to cope with cyclical and idiosyncratic shocks.

This is also an efficient mechanism for targeting support to such households. The migration requirement acts as an ordeal that, in effect, aids in the selection of households who really need to travel that year, due to dire circumstances or an adverse shock they experienced at home. It is precisely through the disutility of migration that the program is able to better target those who can benefit from the program but are unable to afford the risk of migration, compared to other possible programs we have discussed in this essay: (a) UCTs, which target much more broadly – often based on fixed assets, – are vulnerable to leaks to the non-poor, and cannot easily identify those who have faced recent shocks; (b) agricultural insurance, which typically targets richer, landed households; or (c) weather-index insurance for landless households (Mobarak and Rosenzweig, 2013), which can only indemnify aggregate shocks, and not protect households from uniquely harsh idiosyncratic shocks.

2. Labor Market Spillover Effects in Sending Communities
As a migration support program is scaled up, with offers made to more and more poor households, it may start indirectly affecting other poor households who live in the same communities as program participants, but who may themselves not receive the transfer or may not be able to send a migrant. In other papers, we investigate such “general-equilibrium effects” of the migration support program through labor market channels and risk sharing channels in villages where the program is implemented.

ACM (2018) reports on an expanded trial implemented in 2014 that randomized 133 study villages into three arms: (1) a high-intensity treatment in which around 70% of eligible households were offered the migration subsidy simultaneously (47 villages), (2) a low-intensity treatment in which around 14% of eligible households were offered the migration subsidy (48 villages), or (3) control (38 villages). This set-

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8 Eligibility criteria remained the same as in the previous RCT rounds: owning less than 0.5 acres of land and reported hunger (i.e., at least one member skipped meals) in the previous year’s lean season.
up creates five types of study households: (1) offered a subsidy in villages where many others were also
offered the subsidy; (2) offered a subsidy but residing in a village where few others were offered the same
subsidy; (3) not offered the subsidy but in a village where many others were offered the subsidy; (4) not
offered a subsidy and in a village where few others were offered a subsidy; and (5) not offered a subsidy
and in a village where no one was offered the subsidy either.

The ACM analysis reveals strong network effects in migration decisions: While households in low-
intensity villages who were offered the subsidy are 25 percentage points more likely to migrate than the
control group, those in high-intensity villages who were offered the subsidy are 40 percentage points
more likely to migrate. The difference between these groups is statistically significant, and both represent
a very large jump in migration rates from a mean of 34% for the control group (type 5 households).
Notably, even those who were not offered the subsidy directly but who reside in high-intensity villages
are 10 percentage points more likely to send a migrant relative to households in control villages.

Migration decisions therefore appear to be strategic complements, as one is more likely to migrate if
others within one’s the network are also migrating. Further analysis reveals that connections matter, as
migrants frequently travel in groups with others from the same village. An operational implication of this
finding is that a program offering migration subsidies in this context will be more cost-effective by
targeting many people concentrated in fewer villages rather than few people spread out across many
villages, taking advantage of the positive spillovers within villages and networks in migration decisions.9

ACM also documents a positive spillover on households residing in the same village who do not send a
migrant. For every 10-percentage-point increase in the emigration rate, agricultural wages in the village
rise by an average of 2.2%. This benefits agricultural workers who do not migrate, as well as migrants
during the weeks of the lean season when they are home. The real effects of the program are, however,
slightly smaller, as food prices also increase by 0.9% for that same 10-percentage-point increase in the
emigration rate. This rise in the food price index is largely driven by a rise in the local price of fish, as
families with (successful) migrants increase their protein consumption, particularly through fish (BCM
2014).

3. Risk Sharing Spillover Effects in Sending Communities
While ACM focuses on spillover effects through labor market channels, in a separate study (Meghir et al.,
2017) we look at how a migration support program may affect local risk-sharing networks, particularly
for households that are members of the same informal risk-sharing network as program beneficiaries, and

9 To optimize cost-effectiveness, this consideration must be balanced against coverage of infra-marginal households who would
migrate because neighbors receive a subsidy and do not really need a subsidy themselves to be induced.
reside in the same villages. In theory, migration could erode these informal risk-sharing networks, as migrants who are exposed to a new labor market opportunity may choose to self-insure instead, and exit the network. More generally, even if that drastic outcome of network exit is not realized, others may need to offer migrants a larger share of the risk-sharing pie to keep them interested in participating in the network. In this sense, migration subsidies could have a negative spillover effect on non-beneficiaries. Conversely, the new migration opportunity may improve risk-sharing in the aggregate across the network, by providing some members of the network a new income stream that is less correlated with the village income stream. The network’s sources of income as a whole become more diversified, and aggregate risk-sharing improves.

Using a structural model on our panel data of migrants across four rounds, Meghir et al. (2017) finds that the latter effect dominates: Migration opportunities not only weaken the link between own income and own consumption for those who migrate, but they do so for others in the village as well. That is, program villages exhibit higher levels of risk-sharing after the treatment compared to control villages. Household consumption levels for both migrant and non-migrant households in program villages become less volatile and less dependent on the household’s own income. Households evidently diversify their income through migration and choose to remain in the network, consequently sharing the benefits of this diversification with other households in the village. This is a positive spillover: Both direct beneficiaries and other village residents are better able to smooth their consumption through migration opportunities.

4. Non-economic Effects of Migration: Changes to Social Norms
It has been documented that the permanent movement of people over long distances changes social and/or behavioral norms amongst both migrants and their host communities through pressures such as assimilation, adoption, and backlash (World Bank, 2011). In northern Bangladesh, seasonal migration is generally characterized by the migration of just one member while the rest of the family stays home. Most of these temporary migrants are male heads of households (over 80% of all migrants in our sample), who are away for 2-3 months at a time, and the majority of households are nuclear, with only two adult members. During their absence, migrants may be exposed to different lifestyles, norms, ideas, and ideals, which could in turn transform their beliefs and actions once they return home. At the same time, during this period, in nuclear households women may take on more decision-making roles with respect to the family and the home, a shift that can also in theory have a persistent effect on the way the household is managed even once the migrant is back.

We explore these possible changes in Mobarak, Reimão, and Thachil (2018), and find that migrants do become more progressive in their beliefs: Individuals offered migration subsidies in treated villages become two percentage points more likely to recognize that women are capable of managing a household
on their own, an effect best attributed to wives (or other female household members) effectively taking on that role during a male migrant’s absence (as opposed to migrants simply observing other women outside the family doing so, either in destination areas or in one’s village with heightened male out-migration). While migrants are away, there is also a substantial shift in decision-making roles. While men clearly dominate decision-making when they are at home, the proportion of women reporting that they participate (alone or jointly) in decisions regarding household expenses triples for periods when the migrant travels away. These changes in beliefs and experiences are statistically significant even after adjusting for multiple hypothesis testing. Individuals in treated households also tend to take on some other more progressive views with respect to society, such as agreeing with the notion that governments should address income inequality and rejecting vote-buying by political parties.

These changes, however, do not appear to translate into a difference in actions when migrants return home. Even though women take on additional responsibilities during the male migration period and migrants are more likely to recognize women’s capabilities upon their return, there are no significant differences between treatment and control villages with respect to women’s participation in household decisions – including those regarding their own physical mobility outside the house – once migrants return. We also see no difference in the use of social services or in civic participation, or in behaviors tied to gender norms, such as female labor force participation or expenditure allocations. It appears that, in this setting, the (perceived) social costs for deviating from the social norm are so high that migrants do not change their behavior even after adopting more progressive beliefs (Mobarak, Reimão, and Thachil, 2018).

This is disappointing – as we do not see any positive effect of seasonal migration towards more progressive and inclusive behaviors – but also reassuring, as we do not detect any negative effects, such as the deterioration of norms or a backlash. We observe these (non-)effects in the short-run (a few months to two years post migration subsidies), and it remains to be seen whether the observed changes in beliefs translate into broader changes in social norms regarding women’s role in society as momentum builds and individuals learn about each other’s (transformed) beliefs (Bursztyn, Gonzalez, and Yanagizawa-Drott, 2018; Dhar, Jain, and Jayachandran, 2018).

5. Effects on Intimate Partner Violence

In 2015, the Bangladesh Bureau of Statistics carried out a survey on violence against women, uncovering that 75 percent of women in rural Bangladesh have experienced some form of intimate partner violence (IPV) in their lifetime, and 28 percent experienced physical or sexual violence in the six months prior to the survey (Bangladesh Bureau of Statistics, 2016). Mobarak and Ramos (2018) explores how subsidies
to seasonal migration affect the likelihood of IPV in practice, particularly in light of the various forces through which seasonal migration can influence IPV in theory.

There are three competing forces shaping the potential effect of migration on IPV. First, limited resources can raise conflict within the family, especially in contexts with traditional gender roles, where men are expected to provide most of the financial support for their family and failure to do so can be seen as failure in a broader social role. Poor households facing seasonal fluctuations in income may be particularly vulnerable to this type of conflict. A positive income shock through migration (and its subsidy) may reduce these poverty stressors and, with it, decrease the incidence of violence.

Alternatively, increases in male income can strengthen their bargaining position, increasing female relative vulnerability and, potentially, susceptibility to violence. Lastly, reducing the time a woman spends with her potential perpetrator can itself decrease the risk of victimization. Since migrants are overwhelmingly male in Bangladesh, subsidies that encourage migration can effectively decrease the time women spend with their spouses – and potential abusers, – mechanically leading to less overall IPV experienced by women in treated households.

Using data from the 2017 RCT and focusing on the effect of the migration of married male heads of household, Mobarak and Ramos (2018) finds evidence that subsidies to migration may decrease IPV, particularly by reducing women’s exposure to their male heads of household. Relative to the control group, women in households offered the migration subsidies are 3.5 percentage points less likely to say they have experienced physical or sexual violence in the 6 months prior to the survey (a 10 percent decrease in incidence). The results are most consistent with the idea that seasonal migration has an additional mechanical benefit, giving women some temporary relief by physically separating them from their perpetrators. Whether this produces any persistent reductions in violence beyond the period of migration, including perhaps through a shift in gender norms over time, is still an open question.

6. Long-Term Effects on Permanent Migration
In Chowdhury, Mobarak, and Reimão (2018), we explore whether seasonal migration leads to permanent migration – as migrants build networks in and gain familiarity with the city – or instead makes rural living more viable, and permanent moves into the city less likely. For this analysis, we use a follow-up survey of all households included in the 2008 study, gathering information on the whereabouts of each member eight years after the initial treatment. Household members and/or their neighbors were interviewed, producing a dataset with very low attrition – we do not know the migration status of less than 1% of households.
Overall, we find relatively low levels of permanent out-migration from rural Rangpur in general. Over an eight-year period (2008 to 2016), only 5% of households in the BCM sample (aggregating across treatment and control villages) permanently migrated away from their home village. This is consistent with other district-level data that documents comparatively low levels of out-migration from the northern part of Bangladesh, particularly relative to the southeast (United Nations Population Fund, 2016)\(^{10}\).

Moreover, it is no more difficult for us to find the original 2008 sample households in the treatment villages compared to control villages, or to learn of their whereabouts. There is also no significant difference in the likelihood in permanent migration of the household or one of its members between treated and control villages. The data are precise enough to rule out large effects: The seasonal migration subsidies induced \textit{at most} one in 200 households to permanently migrate over an eight-year period after the offer.

For the sub-sample of households that were primarily engaged in agriculture at baseline,\(^{11}\) the subsidies actually \textit{decreased} their likelihood of permanent migration relative to the control group, with households in treated villages 3.8 percentage points \textit{less} likely to permanently leave the area than those in control villages. This indicates that, rather than serving as a gateway to permanent migration, seasonal migration actually makes living in rural areas more viable in the long-run, particularly for households whose skills and experience are in agriculture. For households with a comparative advantage in agriculture, a one-time support for seasonal migration helps them draw on it as a coping strategy in subsequent years, thereby avoiding the substitute, more costly and drastic coping strategy of permanent migration. For policymakers in Bangladesh concerned about over-crowding and congestion in Dhaka and other populated urban areas, this finding implies that supports for seasonal migration may be a tool for easing urban pressures that come from permanent rural-to-urban population influxes.

7. \textit{Other Open Questions}

In contemplating the implementation of a migration support program at this scale or larger, one must also be aware of the spillover effects on poor households in destination areas – and potentially other rural villages. We have designed the current implementation rounds (2017 and 2018) to capture these economic and non-economic spillover effects, as loan offers are made to well over 100,000 households in each season (compared to fewer than 1,500 in the 2008 study).

We initially expected the 2017 results to answer some of these questions, revealing the effect of seasonal migration subsidies on the employment prospects and earnings for would-be construction workers and

\(^{10}\) Compare, for example, a lifetime net migration (in-migration minus out-migration) of -39.49 per 1,000 people in Rangpur to -167.22 per 1,000 people in Barisal (United Nations Population Fund, 2016).

\(^{11}\) Defined as having a plurality of workers within the household noting agriculture as their sector of employment.
rickshaw drivers (two of the most popular jobs for seasonal migrants in our research rounds when they reach urban areas) already living in destination areas. Unfortunately, however, the 2017 intervention did not lead to a statistically significant effect on migration, contrary to all previous rounds. This was likely due to a confluence of factors – both avoidable and not – such as having disbursement targets for each migration officer\textsuperscript{12} set too low, heavy workloads, and the worst flooding in the region in over 40 years (for more information, see Levy and Sri Raman (2018)). To better understand these results and to learn about the effect of seasonal migration subsidies on poor households outside target villages, the 2018 round was implemented with a very similar design as the previous year – though of course addressing some of the weaknesses encountered in 2017. The administrative data gathered thus far reflects these changes: while the implementing organization (RDRS-Bangladesh) disbursed just over 40,000 migration loans during the 2017 lean season, in 2018 this figure is close to 90,000 loans (Figure 4).

![Cumulative Weekly Disbursements](source: Evidence Action)

Although we do not yet know the effect of the 2018 intervention on the seasonal migration of those in treated villages, we do expect the impact of these subsidies, even at over 85,000 direct beneficiary households, to be relatively small on residents of popular destination areas, particularly Dhaka. In the past

\textsuperscript{12} Migration officers are the local implementers, making the loan offers, disbursing the loan, checking on migration, and collecting repayment.
rounds, migration destinations were quite varied, with less than 25% of all migrants traveling to Dhaka, even though it is the single most popular destination for migrants from Rangpur (and elsewhere in the country).

Dhaka is home to 14 million people, so even if one-quarter of all loan recipient households send a migrant to the mega-city, this would amount to less than 0.2% of its regular population. Nevertheless, it is possible that while this influx is negligible for the general population in Dhaka, individuals engaged in particular sectors popular with migrants – namely, construction and rickshaw pulling – do feel an effect, positive or negative (depending on whether seasonal migrants’ labor are complements or substitutes to local labor). We expect the results from the 2018 intervention to provide more information on this potential spillover effect on destination workers, which becomes relevant as we move from pilot to scale.

Another consideration relates to the effect of seasonal migration on agricultural employers. We have found that, in the short run, inducing temporary migration out of rural areas increases local agricultural wages (ACM). While this is beneficial to poor rural workers who do not migrate (as well as those who do, on the weeks they are home), it also imposes a cost on agricultural employers in the same villages, who must now offer higher wages to secure the labor they need. In the short run, this results in a pecuniary transfer from comparatively richer employers to poorer employees, reducing inequality in treated areas. However, landed employers are also more likely to be a politically powerful group, so that their losses can potentially pose a risk to the sustained implementation of this intervention. They may also choose to shift towards more labor-saving technology, with innumerable positive and negative consequences for local residents. In Nepal, we are planning on testing one way to guard against the political risk, designing an RCT that offers agricultural employers subsidized access to a labor-saving technology in the same villages where migration subsidies are provided. By conducting an intervention that deals with demand and supply simultaneously, we expect to learn about labor market interactions as general equilibrium effects come into play in response to the subsidies.

8. **Comparisons to Other Programs**
A program offering seasonal migration subsidies is one among several potential anti-poverty interventions, and a part of our research agenda has been designed to study its merits and effects relative to other interventions in this group. Through an RCT in Indonesia (Bryan *et al.*, 2018), we directly compare the effects of migration subsidies to a UCT of an equivalent amount. The results from this RCT implemented in West Timor (Nusa Tenggara Timur province) in 2017 reveal that only 13% of households offered the UCT migrate in the six months following disbursements, compared to 42-46% when the transfer is made conditional on migration. The lower effect on migration from the UCT is not in itself
surprising, but highlights the fact that lack of funds is not the only (or even main) factor limiting households’ migration decisions.

LMW takes a completely different route for comparing effects between subsidies for seasonal migration and UCTs, combining data from the 2008-2011 interventions with a structural model to simulate effects. The simulations indicate that a UCT of the same amount as the migration subsidies would increase migration by less than 1% among poor households in Rangpur, and its welfare benefits for the poorest quintile of households would also be slightly lower. The simulations indicate that a one-time migration subsidy improves welfare (measured as consumption over a lifetime) of the poorest quintile by 1%, whereas a budget-neutral UCT program would improve it by 0.9%. This difference is driven by the fact that migration subsidies rely on self-targeting: Only households who have faced negative shocks and are desperate for money take up the CCT and migrate while the UCT transfers are applied uniformly to all households. In contrast to these two policies, a rural workfare scheme increases welfare of the poorest quintile by only two-thirds as much, 0.6%, as it discourages households from migrating to locations that offer better wages.

We have also directly compared the cost-effectiveness of seasonal migration subsidies to other existing transfer programs in Bangladesh using secondary information, as discussed in subsection II.B. As with seasonal migration subsidies, the majority of beneficiaries for each of three existing pro-poor programs (food transfer; food and cash transfer; and guaranteed work) are in the bottom three income deciles. Ahmed et al. (2009) estimates that the food transfer and the food and cash transfer programs each increase consumption by five times as much as the workfare program, per-dollar-spent. By our calculations, the seasonal migration support program is even more cost-effective, increasing consumption on a per-dollar-spent basis by almost twice as much as the food and cash transfer program, which is the most cost-effective of the three (Mobarak and Akram, 2016). And disbursing the offers as zero-interest loans rather than grants (which can be recovered and re-used for the program in subsequent years) makes seasonal migration subsidies three times as cost-effective as the food and cash transfer program.

IV. Implications for Asia

For the last 10 years, our research on seasonal migration has been primarily – though not exclusively – in Rangpur, the most rural division in Bangladesh (United Nations Population Fund, 2016). The potential for this intervention to improve the welfare of poor rural households vulnerable to seasonal fluctuations in agricultural income and employment opportunities, however, evidently extends well beyond the area, into other parts of Bangladesh and the Asia-Pacific region more broadly. In this section, we discuss
requirements and adaptations for seasonal migration subsidies as a concept and as a program, as well as the importance of context – in terms of both time and place – for its viability.

A. Applicability and Adaptability

Subsidies for seasonal migration may be relevant to many sub-national areas throughout the Asia-Pacific region. In general, for such an intervention to have potential as a tool for addressing seasonal poverty, the target setting must have three minimum characteristics:

i. **An agricultural lean season.** Recurring and predictable periods of hunger indicate that there are constraints that keep consumption and income tied too closely together, and that existing coping mechanisms and support systems are not adequate for weathering drops in income.

ii. **Spending money on migration is risky.** Supporting seasonal migration makes sense if there is a large rural population living close to subsistence, and for whom spending money on migration but failing could be catastrophic. Seasonal migration subsidies lower the cost of failure to find a job in destination areas, and enable would-be migrants to set aside money/goods as a cushion for their families prior to migration.

iii. **Jobs available in nearby areas.** Ideal conditions include the availability of employment opportunities in several urban areas 4-8 hours away. For any distance closer than this, rural residents can commute and probably do so, and larger distances may require much higher subsidies. The existence of multiple destination areas makes it more likely that an increased influx of migrants can be absorbed without large impacts on the target labor market(s).

Many rural areas around the world match these conditions, though not all. We conducted exploratory work for a potential replication in Malawi and Zambia, for example, but decided not to test the program further in either setting because we were not convinced that they met the third condition. It is not clear that either country has vibrant urban labor markets with labor demand that can absorb many domestic migrants.

Instead, we chose to pilot and test a version of this intervention in West Timor, Indonesia, a setting where most poor households in rural areas are not landless (as is the case in Rangpur). This changed one fundamental aspect of the program design. During the pre-harvest period, poor rural household members in West Timor generally have to stay back home and work on weeding and land management of their own farm, and are not interested in migrating at that time – even though that is the period of seasonal deprivation, like in Bangladesh. In response to this, we adapted the intervention to allow for migration in other periods. Although poor households have relatively more cash post-harvest, this time tends to also be best for migration among land-owning poor households since there is little agricultural work to be done.
In this study site, land-owning migrants traveled after the harvest, aiming to save money in anticipation of the next lean season.

When considering the implementation of migration subsidies in a new context, there may be other norms and processes that need to be accounted for as well, such as the prevailing labor migration arrangement. For example, a survey of construction workers found that in Bangladesh only 10% of workers that secured a job through a contractor received any payment in advance, whereas 52-80% of workers in India received advance payments. These advances facilitate migration, helping migrant households purchase goods to be left at home and guarantee some consumption during migration (Srivastava et al., 2014), and may change the role of or transfer amount required for migration subsidies. A migration support program in India may also affect welfare along a different margin: Wages for workers who secure jobs at destination areas tend to be higher than those who are recruited and receive advances from contractors, so that a migration subsidy may serve as an alternative to the use of contractors, enabling individuals to arrange their travel first and search for a higher paying job upon arrival at their destination.

Nevertheless, it is clear from our experience in Indonesia that subsidies for seasonal migration are viable solutions outside of Rangpur, and that the program can be adapted to a certain extent to local conditions. Dimensions over which seasonal migration subsidies could be modified to account for circumstances include – but are certainly not limited to – transfer amount; timing; modality (e.g., loans, grants, or even transport tickets); number of members to whom subsidies are made; and even the extent to which the program works with employers or contractors and facilitates hiring in advance. Some of these modifications are more drastic than others, and a few might require piloting and further testing, but none alter the fundamental nature of the concept, which is to support and subsidize the temporary movement of people from rural areas to destinations where there are more job prospects for low-skilled workers.

B. Limitations

Drawing a distinction between subsidies for seasonal migration (the concept) and “No Lean Season” (the program), we recognize that while the former has a broader potential and applicability than the latter, neither is implementable everywhere. Not only are seasonal migration subsidies likely not a worthwhile investment in settings where one of the three requirements above are not met, but the extent to which subsidies can induce migration is highly context-dependent.

In 2013, we attempted to implement the first version of “No Lean Season”, after the positive results of the initial RCT on seasonal migration. That same year, however, mass political strikes (hartals) “designed to
disrupt the county’s transportation network” and involving the burning of buses (the main mode of transportation used by migrants from Rangpur) took place throughout Bangladesh (Ahsan and Iqbal, 2016). As one of the main goals of this form of protest is to “restrict vehicular movement in key urban areas”, it naturally lead to longer transport times and higher costs during that period, not to mention fear among the population in and outside cities (Ahsan and Iqbal, 2016). While the lack of effect from offers for migration subsidies under these conditions might not be surprising in hindsight, it also points to an implementation challenge for such a program. As strikes are often unpredictable more than a few weeks in advance, implementation – from contracting to loan offers – may already be underway when it is clear that circumstances will limit take-up.

We witnessed a similarly low take-up in 2017, and suspect that extreme flooding in northern Bangladesh – the likes of which had not been seen in 40 years – contributed to this pattern. In Rangpur, the yearly swelling of rivers can lead to houses or entire villages being swept away, but that year’s uniquely severe flooding made implementation of the program especially difficult and may have also discouraged seasonal migration, as potential migrants cannot abandon their families under potentially disastrous weather conditions, and transport may be more limited and/or precarious.

External shocks such as extreme weather conditions and violence impose limitations on the applicability of seasonal migration subsidies as a concept, indicating that even in settings where the intervention would normally work, it might not work in certain years, no matter the design. This is distinct from – and in addition to – programmatic limitations related to implementation capacity and delivery.

In the transition from a closely delivered and monitored RCT in 2008-2011 to “No Lean Season”, the implementation of the program was handed over to a local partner, RDRS-Bangladesh, a microfinance institution. We have learned that its decades of experience in microfinance and in the region are both a benefit and a hurdle, as its managers and officers are used to thinking in terms of loan disbursement and repayment and its institutional measurements are tailored around that model. But if one were to implement “No Lean Season” as a pure microcredit program, it would make sense to focus efforts on individuals most interested in migrating and most likely to repay – not necessarily those who recently experienced a drastic negative shock. While flooding may have played a role in the 2017 migration rates we found, we suspect that part of this dampened result also stemmed from targeting issues, as migration officers were given disbursement goals by their managers and may have concentrated their efforts on households most likely to migrate anyway. In response to these findings, RDRS-Bangladesh changed the goals set for its officers in 2018, and current loan disbursements show a promising change, with twice as many loans made per branch compared to the previous year (Figure 4).
It is also worth noting that, while the intervention in Bangladesh has been transformed into “No Lean Season”, migration subsidies can in theory be implemented not only outside this program, but also without an NGO or microfinance institution entirely. The concept could be taken on by national or sub-national governments, for whom cost-benefit calculations may weigh differently and for whom a program that might not be feasible from the perspective of an NGO that requires a minimum impact per dollar is nevertheless worthwhile for its benefit to the rural poor in addressing seasonal deprivation.

V. Conclusion

The last 10 years of research on seasonal migration has shown that an intervention that supports this strategy by subsidizing travel can have large positive impacts on poor rural households. In several study rounds conducted in northern Bangladesh, households that were offered a small migration subsidy were 22-40 percentage points more likely to migrate over a given lean season compared to control households. Households that responded by sending a migrant also recorded on average higher levels of consumption, income, and expenditures during the lean season than those not offered the subsidy, and villages in which a large share of poor households were offered the migration subsidies also experienced an increase in wages during this period, which is usually characterized by low employment opportunities and pay. A one-time migration transfer continued to have a positive effect on migration rates up to three years later.

We believe that this type of intervention may be an appropriate tool for poverty alleviation – particularly seasonal poverty – in rural areas where a large part of the population (both in relative and absolute terms) is engaged in agriculture and lives close to subsistence for at least part of the year, but have potential destination areas with ample low-skill temporary employment opportunities that are within a reasonable (4-8 hours) travel time away. The complete lack of seasonal migration is not a required element, as exemplified in Rangpur, and temporary migrants are not restricted to traveling to destinations 4-8 hours away. Among migrants in our study in northern Bangladesh, for example, migration is already fairly common (but still lower than expected given the availability of jobs elsewhere in the country) and Dhaka is a popular destination despite being a day’s travel away. In India, temporary migrants are just as likely to migrate to urban centers within their state as to other states, and actually less likely to migrate within their district (Imbert and Papp, 2017).

There are other programmatic requirements for the success of a migration subsidy intervention, a topic that we have not covered in depth here. Local implementation capacity and political support are likely to be crucial. In Rangpur, since 2014 our intervention has been implemented through RDRS-Bangladesh, a local institution with a strong presence and long history in the northern part of the country. In Indonesia,
we have experimented with collaborating with local government agencies. In general, the nature of the implementing partner (e.g., local NGO, international organization, or government) may be less important than its capacity, will, and presence in rural areas, as the design of the intervention offers some flexibility to adapt to an implementer’s priorities and requirements.

Our research results also highlight the importance of removing other types of barriers to temporary migration. The People’s Republic of China, for example, imposes many explicit restrictions on the movement and employment of rural workers. Other countries in the region also have policies that implicitly deter poor rural households from taking advantage of urban labor markets. In India and Vietnam, for example, full access to social safety nets is only given to individuals at their permanent residence area (Deshingkar, 2006), which limits poor households’ willingness to send a migrant away in search of jobs elsewhere, lest they lose benefits at home.

Encouraging seasonal migration is a complex intervention that may produce a range of indirect effects and unintended consequences beyond the direct economic effects on treated households. Over the last 10 years, our research agenda has expanded from considering the effect of these subsidies on the migration, consumption, and income of targeted households, into exploring secondary effects on both beneficiaries and non-beneficiaries, with scale-up always in mind. Results from the initial RCT in Bangladesh with 1900 households only indicated that this intervention was “promising”. The path from a successful RCT to an implementable program called for a greater understanding of potential general equilibrium, non-economic, and long-term effects.

The majority of the population in Asia remains rural and agrarian. Support for seasonal migration can play a valuable role in helping poor rural families cope with drops in employment opportunities and income during lean periods in the agricultural cycle. The Asian-Pacific region has a uniquely large concentration of poor households in rural areas, but is also peppered with large urban areas and manufacturing zones that have attracted both domestic and regional migrants. While the applicability of seasonal migration subsidies may vary across and within countries – depending on the dominance of the agricultural cycle, proximity of poor households to potential destination areas, and the ability of an area to absorb temporary migrants – the basic elements of demand for this intervention exist in many parts of the region today.

Lowering the barriers to temporary migration – through changes in policies (either explicit or implicit), investment in transportation networks, and/or subsidies – can expand poor rural households’ access to labor markets elsewhere in their countries. And while encouraging seasonal migration might not be a path to growth in contexts where migration is already common and rural residents are unlikely to be spatially
misallocated, facilitating the free movement of people within their own countries – enabling them to take advantage of labor opportunities elsewhere and to avoid resorting to hunger – is a desirable pursuit in its own right.

Poverty reduction in Asia has been associated with diversification away from farm activities – of which employment opportunities in urban areas is one possibility – as opposed to increasing farm productivity (World Bank, 2012). Policies that support seasonal migration can help steer countries down that path, encouraging poor rural households to diversify their income sources and increasing labor supply for sectors with higher productivity potential than agriculture. In fact, seasonal migration may be a valuable but temporary tool; as countries develop, transportation networks improve, and non-agricultural employment opportunities for rural residents expand at home, the need for seasonal migration as a coping strategy might decrease. Until then, supporting seasonal migration – through direct policies and/or with interventions like “No Lean Season” – can help address seasonal poverty and hunger in various parts of the region.
VI. References


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