Policy memo

Firms policy roundtable on Friday, 23 September | 13:15-14:45

Bangladesh: What can the government do to create high quality jobs in Bangladesh?

Pakistan: Can conditional cash transfers be leveraged to encourage a reduction in crop burning?

Rwanda: What is the role of credit supply for investments in resilient agriculture technologies?

Uganda: What is the impact of border carbon adjustments (BCA) on Uganda's exporters?

What can the government do to create high quality jobs in Bangladesh?

Policy challenge

While Bangladesh has undoubtedly experienced rapid sectoral transitions (around 84% of all new jobs created were outside of agriculture from 2003-16) and economic prosperity over the past decades, it continues to suffer from extreme vulnerability to natural disasters and climate change. Creation of higher-earning and resilient jobs remains a key development objective. Demographic trends indicate a rapidly growing youth population in Bangladesh, accelerating the need for job creation and inclusive labour market policies, particularly under the development goal to achieve upper-middle income status by 2031. The government's economic policy strategy documents, the Eighth Five Year Plan (2020-2025), and Perspective Plan (2021-2041) underscore the need to create quality, inclusive jobs as a policy priority for the medium term.

Current research

Bangladesh is a leading apparel manufacturer, and a cluster of literature on productivity, job quality, managerial practices in the readymade garment manufacturing (RMG) sector has been developing in the last decade. These questions can be extended to other sectors in Bangladesh as well. Both diagnostic and research to generate evidence (RCTs) are expected to be informative; both types of research has been funded under the IGC's Bangladesh portfolio. Research should tackle the identification of jobs which provide economic diversification. This could involve the formation of multipronged policy support including trade and investment climate reforms and climate change adaptation and improvements to improve job quality.

Policy interventions

At the national level, policy support for higher investment to encourage firm growth through implementation of special economic zones and facilitated access to industrial land will be helpful given poor land market operation has been identified as a binding constraint for investment. In parallel, policies to empower and enable local government—including the various city corporations beyond those of Dhaka and Chittagong — to carry out development planning and implement public investment will also be important. Such measures will require strengthening city corporations' technical and institutional capacity. In addition to Eighth Five Year Plan (2020-2025) and Perspective Plan (2021-2041), other employment-related and sectoral policy documents with action plans have been developed (SME Policy 2019; National Jobs Strategy 2019).

The Ministry of Labour and Employment also proposed launching employment insurance at the national level for professionals under the newly developed National Employment Policy 2022. In July 2022, the government established a "Directorate of Employment" to create more employment opportunities and improve labour conditions. The success of this policy has not been evaluated.

Data availability

- Publicly available microdata: Labour force survey, survey of manufacturing industries and other survey data
- Administrative data: National Board of Revenue's trade database capture export and import oriented firms' transaction level data
- SME Foundation, Bangladesh Banka and A2i are developing a database of SME sector through firm formalisation effort

What is the role of credit supply for investments in resilient agriculture technologies?

Policy challenge

Written down in its Green Growth and Climate Resilience Strategy (GGCRS), the government of Rwanda is strongly committed to reducing the country's ecological impact and improving resiliency through effective policies that target adaptation to climate change. For the agricultural sector, challenges are posed by an increasing number of landslides in western Rwanda, while more frequent and severe droughts torment the East. Building up resilience requires public and private investments. The government acknowledges that high investment costs are an impediment and provides, for instance, 50% subsidises on irrigation systems. Information of land size, ownership structures and household characteristics are now shared with commercial banks via a mortgage registration system to facilitate screening processes. While this aims to reduce frictions on the credit supply side, it remains an open question how this translates into changes in investment behaviour and climate resilience. Insights about the role of credit constraints will be highly informative for the government as it endeavours to promote its land titling initiative, amend details where needed, and inform policy for rural finance.

Current research

Literature on climate change adaptation points to the so-called adaptation deficit (Burton, 2005). This includes the lack of financial resources to adaptation investments including irrigations schemes and other forms of climate-smart conservation agriculture (such as ditches or trees). Despite subsidies, adaptation costs remain high. While informal finance helps smooth consumption and insure against shocks, formal finance is vital for capital investment. Foltz (2004) shows that credit is a requirement for farmers to adopt to new technologies. However, lenders require collateral, mostly in the form of land. Evidence shows a positive relation between land ownership and investments (Hussain and Thapa, 2012; Pellegrina, 2011). The Rwandan setting allows studying this link while exploiting a nationwide policy roll-out and the subsequent relaxation of collateral constraints. The land titling and demarcation project has been accompanied by rigorous data collection. Findings from India (Deininger and Goyal, 2021) suggest that the impact of land titling on credit can be substantially increased if registries are up to date, authoritative, and comprehensive, pointing to the potential of the mortgage registration system.

Policy interventions

Since the implementation of a systematic and nationwide land regularisation programme, the number of mortgages has been on a sharp upward trend. However, a systematic sharing of land information with landing institutions only began after the Land Administration Information System (LAIS) was completed in 2013. While policy interventions intended to facilitate formal lending, there has not been an evaluation of the programme with respect to its effect on lending and impact on investment. It remains an open question whether the mortgage system has improved credit access over and above the already established impact of land regularisation.

Data availability

The Rwandan government has built a comprehensive digital database of boundary and ownership information om each of Rwanda's 10.4 million land parcels. Data by the Rwanda Natural Resource Authority (RNRA) includes digital records, national land use and development planning, amongst others. An IGC project examines real-time data on farmers' production decisions. Other survey data includes: Agriculture Household Survey; National Agricultural Survey; Seasonal Agricultural Survey; Abbot, Mugisha (2015); and Muyombano, Espling, Pilesjo (2018).

Can conditional cash transfers be leveraged to encourage a reduction in crop burning?

Policy challenge

Agriculture accounts for a fifth of Pakistan's GDP, largely concentrated in Punjab. Between October and January every year, out of 8.5 million tonnes of rice residue produced, at least 3.6 to 5 million tonnes are burnt to clear the fields for sowing wheat because this remains the fastest and most affordable way to prepare fields for subsequent planting seasons. Excessive reliance on crop burning is a market failure. The external (social) cost of crop burning is not recognised and is in excess of the private costs incurred by farmers while burning stubble. One policy option for reducing crop (stubble) burning can be to provide payments for ecosystem services (PES) to farmers who agree to adopting low pollution land management practices. This could be designed and achieved through a conditional cash transfer (CCT) programme. Investigating whether a CCT programme to discourage crop burning would work, and what is the optimal level of cash transfer is a current interest to Pakistani policymakers. The key stakeholders would include farmers (both small and environmentally aware), provincial department of agriculture and the Punjab Social Protection Authority.

Current research

Information asymmetries lead farmers to think they are cost saving by burning stubble and are often unaware of the adverse long-term implications on the environment, crop productivity and farming costs. CCTs have often been used to restore efficiency where externalities exist and/or improve equity by targeting the poor. CCTs that offer PES to reduce crop burning have shown success in India. CCTs can also make greener alternatives more economically viable and incentivise their adoption by farmers. The government may consider using existing infrastructure to roll out a CCT as it already has in place a Kissan (farmer) card through which eligible farmers can register for and avail such payments digitally. After verification of applications by local staff some payment can be made upfront to help build trust and give farmers a financial cushion to purchase/rent Happy Seeders or other equipment, with overall payments large enough to cover the cost of stubble remover. Farmers could then call relevant teams to check compliance before sowing wheat and receive the remaining amount.

Policy interventions

In 2020, the Punjab Agriculture Department launched a programme to subsidise a bundle of equipment, Rice Straw Shredders and Happy Seeders. They make the rice stubble more manageable and then incorporate it back into the soil, eliminating the need to burn. In 2021, the government decided to pay 80% of the costs (around US$ 2100) to 500 farmers out of 2300 selected through a lottery system. Leveraging this random assignment of machinery, a group of researchers based at IGC are planning to evaluate the hypothesised impacts – in particular whether in the short term, subsidising green technology reduces pollution by shifting farmers away from crop burning. Since 2019, the provincial government has banned crop burning for one month starting in October each year. The district government, with support from the Agriculture Department can fine farmers if caught. However, enforcement and compliance remain weak especially in the absence of feasible alternatives.

Data availability

This would require a database of farmers (with the department), a mapping of areas where crop burning is most likely (research in this area is on-going and some forthcoming in the call) and access to the BISP data.

What is the impact of border carbon adjustments (BCA) on Uganda's exporters?

Policy challenge

Several governments are considering tariffs on imports which produce high carbon emissions. Most pertinently, the EU plans to fully implement the Carbon Border Adjustment Mechanism (CBAM) to complement an EU-wide carbon price from 2027 onwards. While this may present an opportunity for Ugandan businesses to produce lower-emission goods to boost competitiveness on international markets, there are concerns that Border Carbon Adjustments (BCA) will disproportionately hurt poorer countries. It will fall upon the Ministry of Trade, Industry and Cooperatives (MTIC) and the Ministry of Finance, Planning and Economic Development (MoFPED) to ensure Uganda's industrial policy accounts for new, global carbon and its implications. Ugandan policymakers are looking to identify how to respond to this trade policy.

Current research

A study by UNCTAD (2021), using a general equilibrium model, projects that the introduction of the EU CBAM would result in a decline in exports from developing countries which tend to have more carbon intensive production processes than developed countries. Moreover, Sager (2021) forecasts that such border adjustments may impair economic growth and employment in the countries from which the exports originate – including poorer nations.

There has been some research exploring how Uganda can develop without relying on high carbon-emitting industries. A study by Spray & Wolf (2017) found that several of the most productive industries in Uganda lie outside of the manufacturing sector, including marine fishing and aquaculture, agro-processing, and medical and dental practice activities. Policymakers could prioritise these sectors.

Policy interventions

Several interventions are identified in policy documents. The Uganda Green Growth Development Strategy (UGGDS) (2017/18 - 2030/31) outlines plans to markedly increase agro-processing exports, resulting in the creation of around 150,000 new jobs over the timeframe of the strategy and an annual average economic boost of UGX 0.41tn (0.25% of FY 21/22 GDP). In this strategy, there are also plans to shift government expenditure away from "sectors and industries that undertake pollution generation, natural capital destruction and inefficient production".
However, there is little detail in either the UGGDS or Uganda's Nationally Determined Contribution about how certain manufacturing sectors could be decarbonised. Accordingly, at this stage, the extent to which policymakers are thinking about how to adapt to the imposition of BCAs is unclear.

Data availability

To assess the impact of the introduction of BCAs on Uganda both via a loss of export revenue and through a distributional lens, the following data would be required:

- Product-level data on bilateral trade flows
- Firm-level customs data
- Input-output tables to track emissions content in exported goods (using data from GTAP or Eora)
- PAYE data (to explore the impact on employment)