



EMERGENCY MARKET ASSESSMENT TIMBER, POLES AND BAMBOO

THE IDAI CYCLONE RESPONSE BRIEFING

Members of the data collection team conducting the market survey with an informal vendor near Sussendunga, Manica.
© CRS/MOZ/Christopher Reichert

Background

In March 2019, over 1.5 million people were affected by Cyclone Idai across four provinces of Mozambique. By October 1 that year, half of those in shelters had returned home, while 61 resettlement areas remained open. An estimated 240,000 homes have been affected, half destroyed completely, and the rest partially destroyed. Through a rapid market assessment, the government of Mozambique and its partners sought to better understand markets to help communities rebuild their homes. Using mixed methods, the report assessed the capacity of markets to supply key inputs (timber, poles and bamboo) to the Idai-affected populations across two provinces and eight markets. (Beira, Chimoio, Dondo, Nhamatanda, Dombe, Mafabise, Tica and Mbuzi). The qualitative portion included 20 key informant interviews with 14 entities across five main segments: government, multilateral institutions, non-governmental organizations (NGOs), vendors and communities. The quantitative portion used a mobile structured survey of nearly 100 vendors, with over 30 variables in key themes, such as vendor contact information, vendor and client profiles, vendor payment options and terms, stock levels and pricing data. Pricing data included current prices, wholesale pricing and pre-Idai pricing. The study was designed, implemented and written-up over the course of one month in September and October of 2019. The projection used in the report indicates support will be needed for 179,158 households (127,056 conventional block houses; 20,202 mixed; and 31,900 traditional adobe homes). Total estimated need for each input is: 57,255m³ of timber, 1,355,742 poles and 2,232,987 bamboo sticks.

Vendor profile / pricing. The assessed vendor profile is dominated by informal merchants, cash business, low stock levels, poor storage practice, and vendor-centric terms (100% pre-payment). All items were found in the markets, but at varying quality levels. The more distant input markets from the main inter-provincial axis were characterized by insufficient quantity and inferior quality. Overall, assessed timber stocks yielded enough supply for about 500 houses, poles for 180 houses, and bamboo for 85 houses. Prices were commensurate with material size, quality and vendor type. Average 6m timber ranges from \$6.85 to \$17.82 (5cm to 15cm), poles from \$1.19 to \$2.98, and bamboo \$0.31 to \$0.40. Average input prices for informal vendors is significantly lower than the formal vendors (24% less). Idai-impact data indicate prices increased an average of 13% for the selected inputs.

Timber supply. For the most crucial material (timber), average prices on the open market are 168% higher than the main producer (IFLOMA in Manica) and range widely (between 141% and 235%). Although IFLOMA production potential is very high, production capacity was severely limited to 30m³ per day, or the equivalent timber for 90 houses. For perspective, at this rate, the total timber needs would take 5.5 years to process. LevasFlor currently processes about 13m³ per day, but currently has a greater capacity to scale up sawing production (250m³/day). LevasFlor may be a very good option for certain partners, particularly those with a strategy focus on environment sustainability.



Recommendations

From the findings, the top recommendations include:

1. Due to the severe shortfall of projected needs, negotiate with national and international suppliers for large pipeline timber procurements. IFLOMA may be able to leverage its relationship with its South African parent company to meet targeted needs, which may include treated timber.

2. Timber pricing models including transport to affected areas indicate that economies of scale hit a tipping point between 50 and 100 houses. Partners targeting more than 50 homes in one geographic area should consider bulk orders from IFLOMA.

3. Partners with a strategic environmental focus can consider suppliers that have alternatives to pine, such as LevasFlor. LevasFlor has a production capacity of 250m³ per month (694 houses). Additional inquiry or pilot projects may be needed to understand how communities react to using local non-precious woods as construction material.

4. Partners with smaller target numbers should consider pilots of small-scale market-based voucher programs for timber, exotic poles and bamboo.

5. Given the varying quality of timber and poles on the market, and poor storage facilities, implement strong quality control mechanisms. Examples

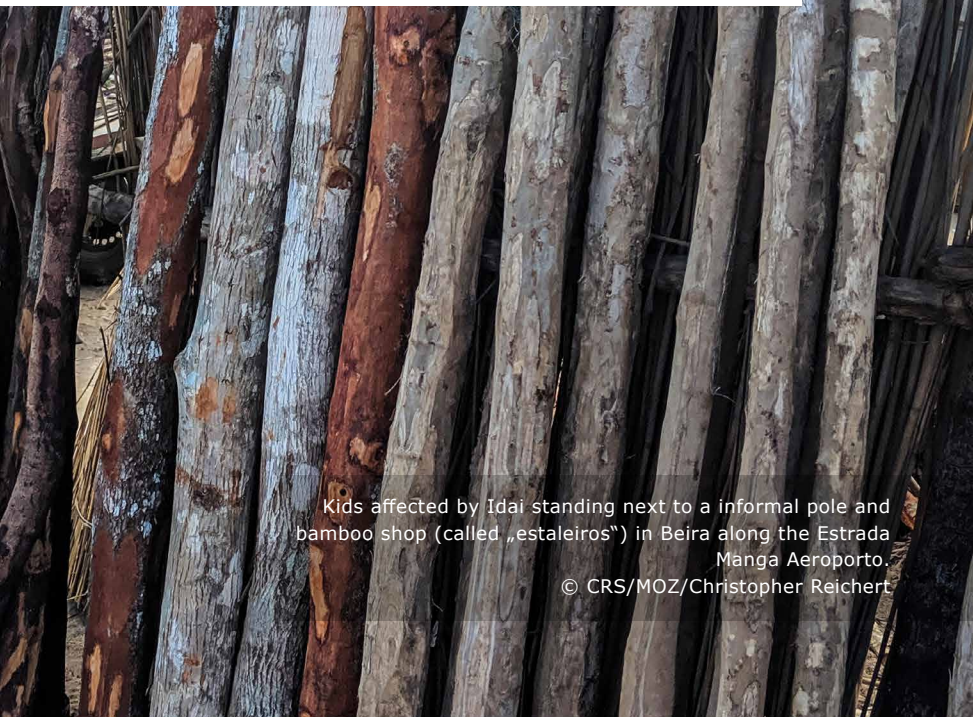
may include detailed contractual specifications (in-kind or processed) and pre-delivery sampling at IFLOMA (in-kind). Support vendors to improve storage practices and facilities, such as basic education outreach, and conditions on projects to incentivize proper storage.

6. For owner-driven support (e.g. cash mechanisms), use conditionality to manage and monitor construction quality if households are responsible for their own rebuilding (e.g. ensuring minimum cyclone proofing, adequate foundations, etc., before issuing the next installment). Support communities during the material selection process via technical trainings.

7. Of the three value chains, cash-based market programming in the current market climate may be most suitable for bamboo, which is relatively less likely to have environmental implications (need to verify and monitor this assumption), and would inject cash into rural economies.

8. Research, lobby and support pilots and partners that promote burnt brick alternatives, especially in more concentrated areas, such as the resettlement sites.

9. As the market responds to increased demand, promote successful market-based solutions, such as cash-for-shelter and vouchers.



Kids affected by Idai standing next to a informal pole and bamboo shop (called „estaleiros“) in Beira along the Estrada Manga Aeroporto.
© CRS/MOZ/Christopher Reichert