

# Extreme Poverty Estimate Following Russia's Invasion of Ukraine (Mid-March 2022)

## Center For Global Development

### Background

This background note describes the approach to the estimated increase in extreme poverty from the food price spike resulting from Russia's invasion of Ukraine. The estimate was produced as part of an immediate (18th March, full blog [here](#)) and broad guide to the potential global fallout of the invasion on the world's poorest people. It uses estimates of the poverty impact of previous price spikes produced by the World Bank based on household survey data.

It concluded:

*"Consumers are unambiguously made worse off by spikes in food prices. World Bank researchers estimated the 2007 spike may have pushed up to an extra 155m people into extreme poverty with separate work suggesting the 2010 surge had the same effect on 44m people. Price increases seen to date are already of a similar magnitude to the 2010 increases, and **our analysis suggests at least 40m people will be pushed into extreme poverty by the 2022 price spike.**"*

### Approach

The estimate drew on the 44m falling below the poverty line during the 2010-11 spike from [Ivanic et al](#) based on household spending surveys, and then compared the 2010-11 price change to that of the annual increase to March 18th 2022. The increase arising from the 2007 spike seemed less relevant as it included the effects of a doubling in rice prices, which are crucial to those in poverty in Asia but so far in 2022 rice prices are largely unaffected. Both World Bank estimates are based on the consumer impact, and do not consider the likely positive effect on net producers' income (Ivanic et al also provide estimates of the net effect extreme poverty but notes this arises only over a longer-term time frame).

To consider the size of the current price increase, the estimate used the FAO food price index for the comparison—between 2010 and 2011 the FAO index increased 23.6 percent (Ivanic et al used the World Bank's food price index but the FAO index is similar and more readily available). FAO's latest index (end Feb-22) did not include the main early March price increases, so an estimate was produced of how much movements in (just the) cereal prices would add to the February year-on-year figure or 20.7 percent (cereals make up 29 percent of the FAO index, what and corn increased by an average of 12.5 percentage points in early March). This suggested a price increase marginally above the 2010 to 2011 figure (specifically, 24.3 percent—this is likely an under-estimate as other commodities in the basket—particularly vegetable oils- also rose in this period). A straight scaling would suggest 45m moving into extreme poverty but the blog used the broad estimate of 'above 40m'.

The FAO will update their food price index for March 2022 on 7 April, enabling a more complete comparison.

### Limitations and extensions

There are a few macro and micro limitations to this figure. On the macro side, there are fewer people in extreme poverty (maybe 200-400m fewer, depending on COVID) than when the Ivanic et al estimate was undertaken, and the number above the extreme poverty-line is [also lower](#) (perhaps 100-200m—roughly , 7.5-15 percent lower). This would suggest reducing the estimate proportionately from 45m, towards 40m.

The estimate did not look at energy prices which are also an important part of consumers baskets. Oil prices are very broadly similar to those in 2011 (over \$100 in 2011, similar now).

Of course, food prices could still go up or down during 2022—we may not yet have seen the end of export bans or production issues, though fortunately there haven't been any major ones so far.

On the micro side, the mix of price increases in the 2011 spike is different to the one today (Ivanic's study has expenditure shares by commodity, so it would be possible to look at this in more detail, and the mix may be more or less important to those in or near extreme poverty).

On an arithmetic point, for the 2011 price increase, the calculation used the change between 2011 to 2010 annual index figures. As the 2022 figure was based on the difference in monthly figures, it may be insightful to use those for the 2011 increase, although this would involve a judgement on the appropriate period.