

Food Riots: From Definition to O

Lagi, Bertrand, and Bar-Yam (2011) recorded the associated death toll with each event, but none of the publications above included injuries or arrests, which are critical to assessing different degrees of intensity across events and over time.

To sum up, recent work on food riots has included events that are not (reasonably) connected to food; involve (too restrictively) only deaths or (too broadly) peacefully demonstrated discontent; focus on a singular region; or are limited to a very short period of time.

In light of these gaps, a widely acknowledged

inefficiency of the food distribution system (for example, India 2007³) or demands for a higher level of subsidies (for example, Peru in 2008 [Schneider 2008]). In other cases, food riots may not target the government directly, but may involve turmoil over food supplies from trucks, shops, or refugee camps (for example, Sudan in 2008⁴). To the extent that these episodes can be shown to be violent, they will be recorded as food riots.

A third key element of the definition relates to the ultimate motivation underlying food riots. Even though a

To tackle this issue, the proposed definition seeks to identify any form of violence, but pays particular attention to physical attacks, clashes with police forces, and associated human casualties as well as property damages. Three measures of violence are reported, aiming at assessing the intensity of food riots: deaths, injuries, and arrests. This definition is especially careful when interpreting arrests associated with social unrest: in effect, depending on whether protests are considered legal under a given regime, arrests may or may not be associated with physical force.

A second challenge arises when assessing the relative weights of multiple motives and, consequently, determining their required ranking. The key question for an event motivated by multiple factors is how important food grievances are relative to other motives of discontent. In practice, however, the available information (for instance, from the media) allows a thorough analysis of involved motivations and their respective weights. This issue is particularly relevant when assessing the relevance of the 2011 Arab Spring, which comprised a unique wave of events driven by a mix of political and economic grievances. The issue is also relevant in the case of more recent events in 2014, such as in Bosnia and Venezuela, and others.

In the case of the Arab Spring, a growing consensus seems to exist, mainly in the media, but also in academia (see Lagi, Bertrand, and Bar-Yam [2011] and Bellemare [2013]), that food price inflation and food insecurity were important catalysts behind the unrest. Indeed, following the Arab Spring uprisings, *The Economist* (May 17, 2012) stated: vals than most people realize. This opinion has been supported by a number of experts and newspapers.⁷ However, although food disturbances were important in triggering unrest, these events may more appropriately be described as revolutions and antigovernment demonstrations than food riots: the essential motive of discontent was an overwhelming dissatisfaction and disaffection with the regime in office. Food-related grievances may have acted as a catalyst, but it becomes unclear when all claims may coalesce and amalgamate into demands capable of driving countrywide revolution and overthrowing an administration. As a result, in contrast with Lagi, Bertrand and Bar-Yam (2011), the proposed definition does not incorporate most of the 2011 Arab Spring events although the database will record them for reference. What, instead, the definition would allow is the inclusion of early pre-revolution stages in Tunisia and Algeria, where people rioted over food price inflation before events turned into wider revolutions.⁸

In addition, the proposed definition will be operationalized including records of food riots between 2007 and 2014. It is worth noting, however, that another geographical consideration is in order. Food riots occurring in major cities often spillover into other smaller cities or rural areas, but it is difficult to find specific information about each of these events separately. This typically implies that all such interlinked episodes are recorded as *one* event that may have aftermaths in subsequent months and across regions

⁷ A sampling of some of the early reporting on the protests that gradually became known as the Arab Spring: Ariana
The Washington Post, January 14,
a *The Guardian*, January 15, 2011; Marilynn

Toronto Globe & Mail, February 9, 2011 (footnote 46 in

Rosenberg [2011]).

⁸ Bellemare (2013); *Daily The Pak Banker* (January 11, 2011); *The Times* (January 10, 2011); *Carmarthen Journal* (January 26, 2011).

The fourth step consisted of a final search across targeted academic publications, resources, and two search engines, Google and IRIN, which is a pool of humanitarian news and analysis maintained by the United Nations Office for the Coordination of Humanitarian Affairs. This final round ensured that there were no missing episodes from the *Factiva* data set. For example, reports from Schneider (2008), Berazneva and Lee (2013), and Lagi, Bertrand, and Bar-Yam (2011) were carefully compared with the identified episodes from *Factiva*. Finally, for documentation purposes, the data set includes relevant quotation(s) and the corresponding source(s) associated with each food riot registered.

As a result of this multistage data collection process, the final data set registered 55 food riots in 38 countries between 2007 and 2014.

Results: Key Highlights

Two types of food riots emerged after the data collection process. **Type 1 riots** constitute the most frequent type of food riot in the data set. This type of food riot occurred frequently during the food price crisis because it is motivated mainly by food price inflation. These food riots are directed against the government and may also be triggered by dissatisfaction with subsidy programs or other food-related policies. In some cases, secondary motives involve non-food-related political and economic demands. **Type 2 riots**, in contrast, are usually not directed against the government and do not have strong political underpinnings. These food riots target food supplies, and usually occur around food supply trucks, shops or refugee camps. These food riots typically arise in response to severe shortages. Moreover, these food riots are usually associated with a lower casualty toll

Tunisia	2011	January	23	100s	-	"Tunisia and Algeria sought yesterday to stem growing revolts over food prices."	dead by police in food riots" (<i>The Times</i> , January 10, 2011) "Riots in Tunisia highlight concern over food security" (<i>Carmarthen Journal</i> , January 26, 2011)
Yemen, Rep. of							

The Economist,

The Guardian,

28, 2010).

The Guardian,
2007).

27,

Reuters, "Food riots, anger as floods swamp South Asia" (August 22, 2008).

Reuters, "Flood damage in India hurts India's poor" (October 12, 2007).

Reuters, "Food riots in east India, flood waters lap Taj Mahal" (September 24, 2008). *Reuters,*

Lagi, M., K. Z. Bertrand, and Y. Bar-

Maystadt, J-F., J. F. Trinh Tan, and C. Breisinger. 2012.

Pinstrup-Andersen, P., and S. Shimokawa. 2008.

Risk of Armed *Food Policy* 33: 513-20.

Rosenberg, D. 2011. . , Global Research in International
Affairs.

Schneider, M. 2008. *Are Hungry! A Summary Report of Food Riots, Government Responses, and
States of Democracy in 2008.* Cornell University.