Market-level food diversity score

Overview

Poor rural market development could be a significant factor determining access to, and consumption of, diverse foods, but this type of information is not captured by household-level indicators like the Household Dietary Diversity Score [1](HDDS). The diversity of foods available in local markets, referred to as a market-level diversity score represents the number of distinct foods or food groups available in a local market at a given point in time (Pingali & Ricketts, 2014 [2]). Although this indicator has not been fully developed or widely used, it presents an opportunity to fill a gap in the data on factors, such as availability and access to food, that influence household and individual diet diversity. This indicator is considered an 'emerging indicator' because it has not been fully validated and is not in common use.

Method of Construction

The market-level food diversity score is proposed to be constructed in a manner that is analogous to the HDDS [1]. The same 12 food groups that are used in the HDDS could be used to count the number of food groups available in a local marketplace and develop a score using the HDDS guidelines (Swindale et al., 2006 [3]). The broad concept for construction of this indicator is explored in Pingali and Ricketts [2] (2014).

The market-level food diversity score indicator is discussed in Pingali and Ricketts [2] (2014); however, it has not yet been developed and formally validated. Inspiration for construction of such an indicator could be drawn from several sources. For example, the Environmental Profile of a Community's Health (EPOCH) tool provides guidelines on how to assess fruit and vegetable availability in local markets (Miller et al., 2016 [4]; Chow et al., 2010 [5]). In addition, a simple, unweighted count of smallholder production diversity has been used in studies to investigate factors influencing household dietary diversity (Sibhatu et al., 2015 [6]). These methods, or others, could potentially be adapted for the construction of a market-level food diversity score (Jones et al., 2014 [7]; Koppmair et [8] al., 2016 [8]).

Uses

This indicator could be useful for understanding the reasons why households with market access may consume diets lacking diversity. Household market access has been shown to positively affect household diet diversity, but this relationship depends on properly functioning markets (Sibhatu et al., 2015 [9]). This indicator could be used to identify markets that are lacking in diverse foods, which could prompt further analysis and identification of areas of agricultural production and market-level mechanisms (e.g. storage, processing, transportation) that need greater investment to improve market function (Pingali & Ricketts, 2014 [2]). A market-level food diversity score could also be used to monitor and evaluate interventions that aim to improve market function and availability of diverse foods.

Strengths and Weaknesses

This indicator could help to explain why households may consume diets lacking diversity and could highlight constraints in the supply rather than affordability of foods. Although no formal guidelines or validation studies have

been published for a market-level food diversity score, its development presents an opportunity to improve the understanding of how local markets might be a help or a hindrance for achieving household and individual dietary diversity.

Data Source

Any indicator of diversity of foods in markets is likely to require primary data collection in appropriate (local) markets, with attention to geographic location and seasonal variation. Depending on the objectives of the research or intervention, data must be collected from a representative sample of markets to construct this indicator. Information is needed on where communities obtain purchased food, and on the timing of markets, in order to collect these data.

Links to guidelines

- Pingali and Ricketts, (2014). "Mainstreaming nutrition metrics in household surveys" [2]

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Food Security Dimensions

- Quantity [11]
- Quality [12]
- Stability [13]

Data Collection Levels

- Market [14]

Data Sources and Methods

- Dietary Diversity

Requires Food Composition Database

- No [15]