Food safety metrics relevant to low- and middle-income countries

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Background

Mounting evidence on the high burdens of foodborne disease (FBD), rapid transformation of agri-food systems, and increasing concerns about food safety are powerful motivations for better understanding food safety in low- and middle-income countries (LMICs). A working group was established to provide a synthesis about measuring food safety in the context of generating actionable evidence and to identify needs and opportunities for food safety research in LMICs.

Research needs for LMICs

• What are the multiple burdens of FBD in a given country (health, economic, social) and what can best be done to mitigate them? (Development methods (participatory risk assessment) and novel technologies (ICT) are promising)
• What happens to food rejected by trade partners? Are there spillover benefits from export and how can these be maximized?
• How can risk analysis work for mass domestic markets?
• How can standards work better for LMICs? (Dual standards? Regional standards? Holistic standards?)
• How can food safety be driven by evidence rather than (mis)perception as now predominates in LMICs?

Conclusion

• Food safety research does not have a consensus set of metrics,
• While aspects of food safety have well-developed metrics these are not widely applied in, or well suited to, the mass markets of LMICs which are responsible for most FBD.
• The main constraint in LMICs may be a lack of feasible, acceptable management options, rather than a lack of metrics.
• FBD occurs at the intersection of health and agriculture and it is likely that the current fragmented framework of health governance, and disconnections between agriculture, health and ecosystems results in systematic under-estimation of the problem of FBD and undermines its management.
• Greater collaboration among food, water and the health and nutrition sectors will improve the design and use of measures and metrics.