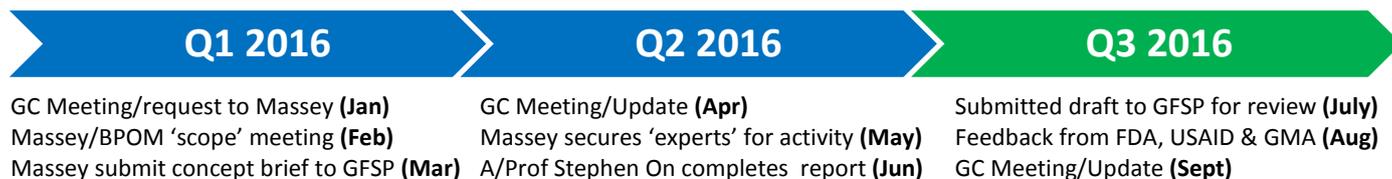


## MEMORANDUM

**To:** Members of GFSP Governing Council  
**From:** Massey University GFSP DGF Project Team  
**Date:** 31<sup>st</sup> August 2016  
**Subject:** GFSP INDONESIA INITIATIVE - #3 ECONOMIC ANALYSIS

**Purpose and Background**

Massey University was tasked by the GFSP Governing Council via BPOM to provide a report on 'Review and revision of an estimate of the costs of foodborne illness in Indonesia. In a February face-to-face meeting with BPOM Chairman Dr Roy Sparringa and his team, he expressed their desire for support to confirm and demonstrate how significant the country's food safety issue is to the Indonesian Government. BPOM had previously had some work done by ESR which calculated the losses at 2.9 trillion IDR.

**Timeline****Executive Summary**

An estimate for the cost of foodborne illness (FBI) in Indonesia was reviewed by A/Prof Stephen On (Lincoln University, New Zealand). The model is formulated from well-established prior studies in the field and contains key parameters required to provide a basis for such estimations. The linearity of the model largely reflects the core input data that are used as the basis of the costings. The input data is based on outbreak reports only and thus highly likely to under-represent FBI in Indonesia. Consequently, the estimate likely markedly underestimates associated costs. Revised estimates were calculated using five different approaches, including recently published (2015/2016) results of a major multinational study undertaken by the World Health Organisation; and a study conducted in North Jakarta recalculated to represent the whole of Indonesia. Revised estimates for the number of FBI cases in Indonesia per annum range from 11,622,518 – 25,637,908; the lower value can be considered to be conservative.

Revised cost estimates per annum range from \$5.435 billion USD for the most conservative FBI values based on the Indonesian cost model to \$17.54 billion USD based on the WHO Disability Adjusted Life Years approach

**Recommendations for BPOM consideration**

The use of scientific evidence to inform policy development and implementation is well established in various bodies including the Food and Agricultural Organisation (FAO, 2014), European Food Safety Authority (EFSA, 2010) and New Zealand Ministry for Primary Industries (Ministry for Primary Industries, 2015). The report presents the following recommendations for consideration:

1. Establish a Governmental task force to instigate/coordinate surveillance/research activities in food safety with international experts.
2. Establish an Indonesian surveillance network for foodborne hazards (microbiological and chemical) reported in the human population. Depending on resource availability, sentinel site-based monitoring may be considered.
3. Undertake appropriately informative surveys to determine the prevalence and concentration (as appropriate) of microbiological and chemical hazards in foods consumed in Indonesia. Ideally, such surveys would be nationally representative.
4. Undertake epidemiological studies as appropriate to attribute foodborne diseases to food sources.
5. Establish an analytical and reporting team to collate and analyse data from activities 2-4, to provide evidence-based information for appropriate Government actions.
6. Establish laboratory facilities of sufficient scale and resource to deliver surveillance, diagnostic and research for regulatory activities in food safety.
7. Establish capability and capacity – building activities appropriate in scale to support each of the above actions (1-6) at a national level. These activities will require the establishment of international networks and could involve bilateral visits of Indonesian scientists to, and joint research programmes with, key expert partners, including supervision of joint postgraduate degrees, to facilitate technology transfer. The involvement of academic, regulatory and industrial partners in Indonesia and overseas is critical to assure the skills and disciplines needed are properly disseminated into food safety culture.
8. Establish Government funding to support actions 1-7 above, to counter public health expenditure and impacts, and to provide assurances necessary for future export growth.

**Recommendation for the Governing Council**

- **Review** and **accept** the Indonesia Economic Analysis Report and Presentation.
- **Coordinate** a meeting with BPOM to provide the updated Indonesia FBI cost estimates report and presentation

**Professor Hamish Gow**

**Project Leader**, Massey University GFSP DGF Project Team

**Enclosed** – Covering Letter, Report and Presentation of Est. of Foodborne illnesses in Indonesia by A/Prof Stephen On.