

### Usability of the Indonesian Family Life Survey (IFLS) to Examine Recurrent Flooding and Household Food Access in Central Java, Indonesia

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**Objectives:** We examine the utility and quality of IFLS – a longitudinal health and economic survey of Indonesian households – for studying the relationship between recurrent flooding and household diet-related food access.

**Methods:** We reviewed IFLS documentation and modules for availability, alignment, completeness, variety, continuity, and compatibility of information related to natural disasters and food access by considering the Data4Diets framework. Specifically, we examined household exposure to flood events and diet-related indicators. We conducted a crosswalk of modules and variables. We link flood monitoring data to IFLS to create a multilevel, longitudinal dataset for the current study.

**Results:** Over a 22-year span in 1993-2015, the IFLS database provides information on 15,921 interviewed households including

1,949 from Central Java. IFLS was implemented in 5 waves: 1993, 1997, 2000, 2007, 2014 at a “kecamatan” (sub-district) spatial level of aggregation. Of the interviewed sample, 6,044 are “origin” households appearing in all waves and 9,877 are newly formed households containing a target member from a previous wave. The 15,185 (95%) households provided detailed information on sociodemographic characteristics, assets, economic shocks, farm and non-farm businesses, non-labor income, and household consumption and expenditures. The aggregated monthly consumption and expenditure data allow to derive the following food access indicators: food consumption score, household average dietary energy acquisition or consumption, household adequacy of fruit and vegetable consumption, household food expenditure share. Information pertaining to natural disasters was collected for waves 4 and 5, covering a 10-year time span. In Central Java, 828 (42%) origin and 1,121 (58%) offspring households allow to track food access outcomes over two decades. Flood monitoring data linked with IFLS is presented in dynamic maps.

**Conclusions:** The created dataset demonstrates how we can study the effects of climate changes on food security and nutrition. Our next step is to examine peak timing of poor household food access following flood events and explore the threshold effect among households with greater adaptive capacity.

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