

# Indonesia Village Law: Technical Evaluation of Infrastructure Built with Village Funds

## Technical Evaluation Data Documentation

World Bank  
November 2019

### Acknowledgements

The TTLs for the report titled *Indonesia Village Law: Technical Evaluation of Infrastructure Built with Village Funds* include Kathy Whimp and Ihsan Haerudin. Task team members Nick Menzies, Laura Ralston, and Nick Menzies led the initial design and write up, and Vic Bottini provided valuable inputs during design, execution and writing up. Neil Neate, professional engineer and consultant to the World Bank, led the technical evaluation. Neil was assisted by the Indonesia World Bank Country office staff and worked with a team of Indonesian rural development engineers who undertook the field assessments and data collection: Su'udi Noor, Saleh Siregar, Ghufon Efendi, Wawan Munawar, Chiaril Latief, and Bambang Warsito. Matthew Borden, consultant research analyst, prepared the data from the Technical Evaluation for the World Bank Open Data catalogue.

### Introduction

**The Village Law, enacted in 2014, mandated the transfer of funds to villages with the goals of reducing poverty and improving living standards in villages through village-led development and community empowerment.** Village Law (VL) builds on Indonesia's 17-year history of participatory and community-driven development (CDD) approaches such as under the Kecamatan Development Project (KDP) and Program Nasional Pemberdayaan Masyarakat (PNPM). The changes consequent upon the closing down of PNPM and its replacement by Village Law transfers (Dana Desa and Alokasi Dana Desa) and implementation arrangements, form a critical backdrop to the report titled: *Indonesia Village Law: Technical Evaluation of Infrastructure Built with Village Funds*.

**The Technical Evaluation of Village Infrastructure evaluates the development process, quality, costs, and operations and maintenance (O&M)** of 168 village infrastructure projects (VIPs) with budgets greater than USD 10,000, from 39 villages in six provinces. The five types of projects assessed were: A) buildings (33); B) bridges (15); C) water supply (14); D) roads and drainage (94); and E) irrigation (12). Assessors evaluated the physical structures and related files (budgets, design, approvals, etc.) implementation methods, and operations and maintenance (O&M) procedures. The technical evaluation covers VIPs in the same provinces as in 2012 under the PMPN program.

## About the Technical Evaluation Data

This collection of data is comprised of audit results from seven field tools, plus one administrative data file. The technical evaluation team collected data on five types of infrastructure projects, with total observations at 168, as described above. The seven field tools are included in this data deposit, for reference. Data were originally collected and assembled as eight data files; one for administrative data and one for each of the seven field tools. The technical evaluation team stored data primarily in binary format, using hundreds of variables per field tool to accommodate the options available for each question within each of the field tools. These data were reorganized into five data sets, one for each infrastructure type (compare to one for each field tool). The data were also consolidated from many sets of binary variables to encoded numeric variables, where applicable, for efficiency. Responses to open-ended questions were left as string variables. Responses to simple yes/no questions were left as binary numeric variables. Table 1 below provides an overview of summary statistics for the five technical evaluation datasets. All variables are named logically and include descriptions in their labels.

**Table 1:** Summary Statistics of Technical Evaluation Datasets

File Name	Variables			Obs
	ID vars	Infra vars	Total vars	
BPS_FT_(0-7)_A_public.dta	4	137	141	33
BPS_FT_(0-7)_B_public.dta	4	128	132	15
BPS_FT_(0-7)_C_public.dta	4	119	123	14
BPS_FT_(0-7)_D_public.dta	4	242	246	94
BPS_FT_(0-7)_E_public.dta	4	110	113	12
Total		736		168

### Unique and Linking Identifier Variables

Across the datasets, an observation represents one piece of infrastructure located fully within one village according to the Indonesia Statistical Agency (BPS) definition for village. Often more than one piece of infrastructure of the same type within the same village was evaluated. To structure data and to facilitate linkage between these datasets and other datasets for analysis, each piece of infrastructure was assigned a unique infrastructure identification code. These infrastructure codes, stored under the variable “infra\_ID”, are comprised of the BPS village unique ID, stored under the variable “kodedesa”, and values for each infrastructure type, stored under the variable “infra\_type”. Where more than one piece of infrastructure of the same type within the same village is evaluated, unique pieces of infrastructure are distinguished with additional values, stored under the variable “infra\_VID.” Note that the variable “kodedesa” is common with the Village Master File and other World Bank village datasets. The following formulas describe how village unique ID codes and infrastructure unique ID codes are constructed.

## BPS Village Unique ID Formula

Village unique ID is the 10-digit ID code which consists of the province ID (provinsi), district ID (kabupaten), sub-district ID (kecamatan), and village ID (desa).

For example, a village unique ID is **AABBCCDDDD**, where:

**AA** : 2-digit province ID;

**BB** : 2-digit district ID;

**CCC** : 3-digit sub-district ID;

**DDD** : 3-digit village ID;

Similarly, a district unique ID is **AABB**, and a sub-district unique ID is **AABBCCC**.

## Infrastructure Unique ID Formula

Infrastructure unique ID is the 11 or 12-digit ID which consists of the village unique ID and the village-level identifying infrastructure number (infra\_VID).

For example, an infrastructure unique ID is **AABBCCDDDE#**, where:

**AABBCCDDDE** : 11-digit infrastructure unique ID;

**E** : village-level identifying infrastructure number contains one letter for the only piece of infrastructure of one type in a village;

or **AABBCCDDDE#** : 12-digit infrastructure unique ID;

**E#** : village-level identifying infrastructure number contains one letter and one digit for each piece of infrastructure of one type in a village.