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Informal economy

Informal Economy in Indonesia

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Summary

This document presents the methodology and results of the mixed survey applied in 2009 through the Asian Development Bank's regional technical assistance for Measuring the Informal Sector. The mixed survey approach had two phases: the first phase expanded the National Labour Force Survey (Sakernas) by adding questions to identify household unincorporated enterprises with at least some market production (HUEMs), informal enterprises, informal employment, benefits received, and working conditions of workers, while the second phase, the Informal Sector Survey (ISS), covered 142 primary sampling units for Yogyakarta and 123 for Banten. The cost-effective data collection strategy presented a workable solution for generating informal employment and informal sector statistics in two pilot provinces. The paper also introduces the new directions taken after the pilot.

I. Introduction

1. While it is perceived that the informal sector contributes significantly in Indonesia's economy, particularly in terms of employment by providing economic opportunities to those displaced from or who cannot be absorbed by the formal sector, informal sector and informal employment statistics have not been regularly collected and have not been included in Indonesia's official labour force statistics. Because of the sparseness of statistics in these areas, Indonesia's informal sector has not benefited from well-informed policies that will eventually mainstream them into the formal sector, provide social protection, and enhance their productivity.
2. The informal sector comprises (i) households with at least some market production; and (ii) production units with low levels of organization and technology, and with unclear distinction between labour and capital or between household and production operations. Other typical characteristics of these units are high mobility and turnover, seasonality, lack of recognizable features for identification, and reluctance to share information. The turnover of these production units are quite fast making it highly unlikely for them to be included in the list of establishments/enterprises that is usually used as sampling frames for business surveys. Moreover, the total number of employees of these production units is usually lower than the threshold number for inclusion in the list of establishments. Thus, it is quite likely that these units are not covered by the regular establishment or enterprise surveys. And though these units might be covered by household surveys, the standard questionnaires for these surveys do not usually include questions pertaining to production. Because of these issues, informal sector statistics are not collected through the regular survey system of national statistical offices (NSOs).
3. The Asian Development Bank's Technical Assistance RETA 6430: Measurement of the Informal Sector, recommends the use of the unified data collection strategy for the data collection of Indonesia's informal sector and informal employment. This strategy, proposed by the Interregional Cooperation on the Measurement of Informal Sector and Informal Employment (ICMISIE) project, can both produce informal sector statistics that is based on internationally comparable as well as country-specific definition. It is also deemed as the most cost effective among existing data collection strategies for the informal sector and informal employment. ICMISIE is a multiyear and multilateral development account project of the United Nations, with the Economic and Social Commission for the Asia and Pacific (UNESCAP) as the lead agency. Its main objectives include increasing the availability of data on the informal sector and informal employment and to improve the calculation of the contribution of informal sector to employment and to gross domestic product (GDP).
4. This unified data collection strategy (Guerrero, 2007 as cited in Maligalig, 2008) is comprised of the scope of data collection, survey design and organization of data collection and list of variables to be collected and published and survey questionnaire. It aims to capture all relevant enterprise characteristics for identifying an informal sector enterprise based on at least two sets of criteria—the country's criteria, as well as that of the Delhi Group's. This approach offers more flexibility from the usual survey approach that selects informal sector enterprises based on a set of predetermined criteria. In this case, the informal sector enterprises are only identified at the analysis stage.
5. The informal sector contributes significantly in Indonesia's economy, particularly in terms of employment by providing economic opportunities to those displaced from or who cannot be absorbed by the formal sector, informal sector and informal employment statistics have not been regularly collected and have not been included in Indonesia's official labour force statistics yet. Thus, the informal sector statistics in the realm of official statistics are very limited. Even if the statistics are available, they have some limitations due to the poor concept and definition of the informal sector or using un-universal concept or incomparable to other countries' statistics. For the time being, statistics on the informal economy in Indonesia are based on the regular national labour force survey (Sakernas) which only lies on the employment status and occupation and not regularly published. Thus, statistical information on the informal economy is not published as frequently as labour force indicators.

II. Defining Informal Sector

6. For an internationally comparable definition of informal employment in Indonesia, classification of the employed population was primarily based on the Fifteenth (15th) and Seventeenth (17th) International Conference of Labour Statisticians (ICLS) guidelines. The 15th ICLS conceptualized the informal sector as:

(i) The informal sector may be broadly characterized as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organization, with little or no division between labour and capital as factors of production and on a small scale. Labour relations - where they exist - are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.

(ii) Production units of the informal sector have the characteristic features of household enterprises. The fixed and other assets used do not belong to the production units as such but to their owners. The units as such cannot engage in transactions or enter into contracts with other units, nor incur liabilities, on their own behalf. The owners have to raise the necessary finance at their own risk and are personally liable, without limit, for any debts or obligations incurred in the production process. Expenditure for production is often indistinguishable from household expenditure. Similarly, capital goods such as buildings or vehicles may be used indistinguishably for business and household purposes.

(iii) Activities performed by production units of the informal sector are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour or other legislations or administrative provisions. Accordingly, the concept of informal sector activities should be distinguished from the concept of activities of the hidden or underground economy.

7. According to the 17th ICLS final report, cited "since the adoption of the resolution concerning statistics of employment in the informal sector by the 15th ICLS in 1993, and the inclusion in the 1993 System of National Accounts (SNA 1993), of the 15th ICLS informal sector definition, it had been recommended by the Expert Group on Informal Sector Statistics (Delhi Group) and others that the definition and measurement of employment in the informal sector should be complemented with a definition and measurement of informal employment". Hence, the conceptual framework on informal employment developed by the International Labour Organization (ILO) linked the enterprise-based concept of employment in the informal sector with a broader, job-based concept of informal employment (Figure 1). As a result, clear delineations among employment in the informal economy, informal employment, employment in the informal sector, and informal employment outside the informal sector were established.

Figure 1
17th ICLS Conceptual Framework on Informal Employment

Production unit by type	Jobs by status in employment								
	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sector enterprises					1	2			
Informal sector enterprises ^(a)	3		4		5	6	7	8	
Households ^(b)	9					10			

^(a) As defined by the Fifteenth International Conference of Labour Statisticians (excluding households employing paid domestic workers)

^(b) Households producing goods exclusively for their own final use and households employing paid domestic workers

Sources: 17th ICLS Final Report and Hussmann, R. 2004a.

8. While the concept of informal sector refers to production units as observation units, the concept of informal employment refers to jobs as observation units. The framework above also applied the 15th ICLS resolution that excludes households employing paid domestic workers from informal sector enterprises, and to treat them separately as part of a category named “households”, for the purpose of statistics on informal employment. On the other hand, informal employment comprises the total number of informal jobs whether carried out in formal sector enterprises, informal sector enterprises, or households, during a given reference period.

9. Hence, given the conceptual framework, informal employment includes:

(i) own-account workers and employers employed in their own informal sector enterprises (cell 3 and 4) - The employment situation of own-account workers and employers can hardly be separated from the type of enterprise, which they own. The informal nature of their jobs follows thus directly from the characteristics of the enterprise.

(ii) contributing family workers, irrespective of whether they work in formal or informal sector enterprises (cells 1 and 5) - The informal nature of their jobs is due to the fact that contributing family workers usually do not have explicit, written contracts of employment, and that usually their employment is not subject to labour legislation, social security regulations, collective agreements, etc.

(iii) members of informal producers' cooperatives (cell 8) - The informal nature of their jobs follows directly from the characteristics of the cooperative of which they are members.

(iv) employees holding informal jobs in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households (cells 2, 6 and 10) - Employees are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.) for reasons such as: no declaration of the jobs or the employees; casual jobs or jobs of a limited short duration; jobs with hours of work or wages below a specified threshold (e.g. for social security contributions); employment by unincorporated enterprises or by persons in households; jobs where the employee's place of work is outside

the premises of the employer’s enterprise (e.g. outworkers without employment contract); or jobs, for which labour regulations are not applied, not enforced, or not complied with for any other reason.

(v) own-account workers engaged in the production of goods exclusively for own final use by their household (cell 9).

10. The framework also presents the important information of informal employment outside the informal sector which is comprised by the following types of jobs:

(i) employees holding informal jobs in formal sector enterprises (cell 2) or as paid domestic workers employed by households (cell 10);

(ii) contributing family workers working in formal sector enterprises (cell 1); and

(iii) own-account workers engaged in the production of goods exclusively for own final use by their household (cell 9), if considered employed according to the resolution concerning statistics of the economically active population, employment, unemployment and underemployment adopted by the 13th ICLS.

III. Designing Mixed Sample Survey for Informal Sector

11. Based on the definitions of the informal sector that were agreed at the 15th International Conference of Labour Statisticians, there are two types of informal sector production units: informal own account enterprises and enterprises of informal employers. Both these types of informal production units are owned by households and since the operations of these enterprises are not easily distinguishable from those of the households that own them, a household survey has an advantage in identifying these production units. How can this be done? Households must be screened for these enterprises following the dichotomy presented in Figure 2. Those household enterprises that are producing at least some goods and services for the market and belonging either in the agricultural or non-agricultural informal sectors will be the target sampling units. These are called household unincorporated enterprises with some market production or Household Unincorporated Enterprises with some Market Production (HUEMs).

Figure 2

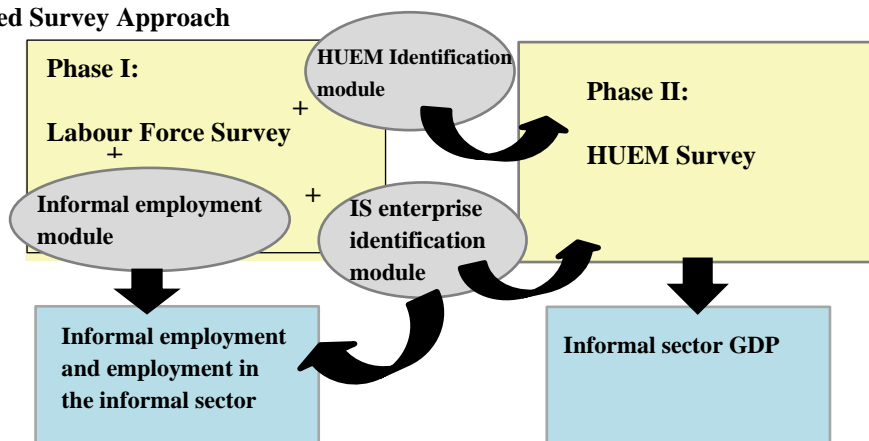
Dichotomy of Household enterprises

Household enterprises					
Producing at least some goods & services for market				Producing goods & services for own final use	
Non-agricultural		Agricultural		Goods	Services
Formal sector	Informal sector	Formal sector	Informal sector	Agriculture, forestry and fishing	Paid domestic services
				Other activities	Owner occupied dwelling services

Household Unincorporated Enterprises with some Market Production (HUEMs)

12. The mixed survey approach utilizes a household survey in the first phase to identify the HUEMs, some of which will be sampled for the second phase survey or the HUEM survey. Since the Labour Force Survey's (LFS) ultimate sampling units are the adults in sampled households and its questions are mostly on labour and employment, LFS is the most appropriate household survey to use for the first phase. Also, LFS is the most frequently conducted household survey and hence, informal employment statistics will be up to date. LFS is expanded by adding questions to identify HUEMs, informal enterprises, informal employment, benefits received and working conditions of workers.

Figure 3

Mixed Survey Approach

13. Figure 3 shows the graphical description of the mixed survey approach. Phase 1, the Expanded LFS (Sakernas), contains additional questions that can be classified into three categories namely: 1) informal employment module; 2) informal sector enterprise module; and 3) HUEM identification module. The informal employment module will determine the extent of informal employment by distinguishing informal from formal workers. The data to be collected will be used to analyse the characteristics of informal workers, available social protection mechanisms and working conditions. This module, when combined with the informal enterprise module, will further enrich the examination by determining informal employment in the informal sector. The informal sector enterprise module will determine if the enterprise/establishment of a respondent worker is informal or not. This is significant since the concept of informal employment also covers the people working in the formal sector who are informally employed. The HUEM identification module determines the existence of a probable HUEM in the household and identifies the respondent in the phase 2 of the survey. Meanwhile, the phase 2, the Informal Sector Survey (ISS), concentrates on the enterprise and its production, providing relevant information on the informal sector's contribution to the country's economic output or the gross domestic product.

14. The HUEMs that were identified in the Expanded LFS will be used as the sampling frame for the phase 2 survey. Hence, the cost of listing operations, which could be very large because small production units are difficult to identify will not be incurred, and the second phase – the HUEM survey -- will still maintain a probability sample design.

15. Sakernas is conducted twice a year such that the February round can provide estimates at the provincial level while the August round renders district-level estimates. The total sample sizes for February and August rounds are 68,000 and 285,000 households, respectively. Sakernas was expanded by adding questions to identify household unincorporated enterprises with at least some market production (HUEMs), informal enterprises, informal employment, benefits received, and working conditions of workers. The second phase covered 142 primary sampling units (PSUs) for Yogyakarta and 123 PSUs for Banten. The sampling frame constituted the list of identified HUEMs in the first phase. A total of 1,830 HUEMs were included in the ISS for the two pilot provinces, Banten and DI Yogyakarta.

IV. Informal Employment

16. In 2009, it was estimated that a total of 1.9 million persons were employed in Yogyakarta, and 3.8 million in Banten. However, since having additional jobs is a common practice in Indonesia, the total employment (the total number of jobs) in Yogyakarta and Banten reached 2.5 million and 3.9 million, respectively.

17. Throughout the document, the term total employment is expressed as the total number of jobs, unless stated otherwise. This is to facilitate straightforward classification between formal and informal employment since an employed person may have multiple jobs. For

instance, a person with two jobs may have both formal and informal jobs. In turn, this person will be counted both under total formal employment and total informal employment. A job is conveniently defined as any productive activity carried out by an employed person, following the official definition of employment adopted in Indonesia.

18. For all categories of employment status, more than half of the jobs were assumed by men in both provinces, except unpaid work. Specifically, in Yogyakarta, men comprised 61% of own-account workers; 69% of employers; and 65% of employees. The same pattern was observed in Banten: men comprised 73% of the population of own-account workers, 78% of the employers, employment estimates and those from the published Sakernas for Yogyakarta and Banten.

19. In Yogyakarta, two in five jobs (44%) were in the agriculture sector in 2009. The wholesale and retail trade sector provided 15% of the total number of jobs in the province, followed by the manufacturing sector at 11%. In Banten, one in five jobs (21%) was in the manufacturing sector. The wholesale and retail trade sector provided 21% of the total number of jobs in the province, followed by the agriculture sector at 17%.

20. Of the total employment in Yogyakarta in 2009, nine in 10 jobs (89%) were informal. This is equivalent to 2.3 million jobs undertaken with informal arrangements. In Banten, 76% of total employment was informal.

21. In both provinces, the incidence of informal employment is higher in rural areas. In 2009, informal employment in Yogyakarta's rural areas was 95% compared with 83% in urban areas. In Banten, the incidence of informal employment in rural areas reached 91% while in urban areas, it was only 67%.

22. Jobs in the agriculture industry are predominantly informal in both provinces. In 2009, 99.8% of total agricultural employment in Yogyakarta had informal arrangements; it was 99% in Banten.

23. Survey results suggest that four in five jobs in Yogyakarta's non-agriculture industries were informal. In Banten, seven out of ten of non-agriculture employment had informal arrangements.

24. In Yogyakarta, about 87% of total employment was sourced from informal enterprises, 13% from formal enterprises, and only 0.1% from households. Similarly, jobs in Banten were mainly provided by informal enterprises, at 71% and informal enterprises, at 29%. Only 0.1% of total jobs were supplied by households.

25. Informal employment is primarily linked to informal enterprises; about 95% (in Yogyakarta) and 87% (in Banten) of the informal jobs are carried out in informal production units. Informal arrangements also exist in formal enterprises. Formal enterprises supplied 5% of the total informal employment in both Yogyakarta and Banten.

26. In Yogyakarta, eight in 10 formal jobs (78%) were assumed by middle-aged workers (25–54 years old). About 16% of the total formal employment were carried out by young workers (aged 15–24) while 6% were associated with senior workers (aged 55 and above). A different structure is observed in informal employment. While majority of informal jobs were also carried out by middle-aged workers (65%), this is followed by the more senior workers (24%), then by young workers (6%). In Banten, the age composition of workers engaged in formal jobs is as follows: 25–54 years old, 72%; 15–24 years old, 8%; and 55 years old and above, 3%. Meanwhile, informal employment is comprised of middle-aged workers, 73%; young workers, 15%; and senior workers, 13%.

27. Survey results suggest that formal employment is associated more with higher levels of education while informal employment is linked to lower educational attainment. In Yogyakarta, one in two formal jobs (48%) was assumed by a person who reached college; only 2% of all formal jobs can be associated with individuals with at most, primary education. Conversely, one in two informal jobs (49%) was carried out by individuals who have, at most, reached the primary level. In Banten, one in five formal jobs was associated with workers with college education (23%). However, one in two informal jobs (53%) was assumed by workers who did not attend school or received primary education, at most.

28. In Yogyakarta, 29% of formal jobs were classified as professionals; 19%, clerks; and 15%, service workers and shop and market sales workers. Of the total informal employment in Yogyakarta, almost half (46%) were skilled agricultural and fishery workers, followed by service workers and shop and market sales workers (19%), and craft and related workers (13%). In Banten, formal jobs were associated with elementary occupations (22%) and plant and machine operation and assembly (20%). Most of the informal jobs in Banten were distributed between plant and machine operation and assembly (32%) and service workers and shop and market sales workers (21%).

29. The average monthly wage of employees in Yogyakarta is estimated at 1.2 million rupiah (Rp) while the average earnings of own-account workers reached Rp 853,000. Men generally receive higher compensation than women. For instance, male employees receive Rp 1.4 million per month, 38% more than women's average monthly wage of Rp 988,000. Male own-account workers earn Rp 1.0 million, or almost twice as much as what their female counterparts receive on the average. On the other hand, the average monthly wage of employees in Banten is estimated at Rp 1.4 million while the average earnings of own-account workers reached Rp976,000. Male employees receive a monthly average of Rp 1.6 million while female employees earn Rp 1.2 million.

30. Workers with formal arrangements generally earn better than those who depend on informal employment. Formal employees in Yogyakarta earn roughly 2.4 times more than the average informal employee. In Banten, the average wage of formal employees is Rp 1.7 million a month while informal employees earn an average of Rp 1.2 million a month. Among own-account workers, the average income for the formally employed is Rp 1.5 million a month and for informally employed, Rp 971,000.

31. In 2009, seven out of 10 formal wage workers in Yogyakarta were entitled to sick leave (67%), or maternity/paternity leave (66%). Three in five formal wage workers (60%) were entitled to severance pay in case of termination from work. In Banten, three in five formal wage workers (61%) were entitled to sick leave; one in two wage workers (52%) was entitled to paid leave.

32. One fifth of informal wage workers in Yogyakarta was entitled to sick leave (19%) or maternity/ paternity leave (15%). In Banten, one fourth informal wage workers (25%) was entitled to sick leave; one in five was entitled to either maternity/paternity leave (21%), or paid leave (20%).

V. Informal Sector

33. In Yogyakarta, the estimated contribution of informal sector to its total gross value added (GVA) in 2009 was 37%. Informal enterprises are key players in agriculture industry, accounting for 89% of its GVA, manufacturing (69%), wholesale and retail trade (53%), and other services (53%).

34. In Banten, approximately 27% of its GVA can be attributed to the informal sector. In agriculture industry, the informal sector accounts for 87% of its total GVA. Among non-agriculture industries with significant informal sector contribution to the province are other services (72%), wholesale and retail trade (63%), and hotels and restaurants (55%).

35. In 2009, Yogyakarta's informal sector in agriculture contributed Rp 5.7 trillion or 89% of its total GVA, while the non-agriculture informal sector generated Rp 9.8 trillion or 28% of its GVA. On the other hand, Banten's informal sector in agriculture contributed Rp 9.8 trillion or 87% of its total GVA, while non-agriculture informal sector contributed Rp 25.6 trillion or 21% of its GVA.

36. Labour productivity in Yogyakarta's informal sector is approximately Rp 7.0 million per job, less than half of the estimated total productivity in the province. Banten's labour productivity in the informal sector is estimated at Rp 12.7 million per worker's job or approximately one-third of its total labour productivity.

VI. Characteristics of HUEMs

37. In Yogyakarta, three in five informal enterprises are motivated by either family tradition or their knowledge of the profession in choosing their respective business activities. In Banten, four in five informal enterprises attributed their choice of business activities to either family tradition or knowledge of the profession.

38. Survey results suggest that in 2009, nine in 10 informal enterprises from either Yogyakarta or Banten did not apply for a bank loan. In Yogyakarta, the main reason cited for not doing so is (that they are) “not interested” at 25%. While in Banten, the complicated procedures associated in getting loans hindered 35% of the informal enterprises from applying for loans.

39. In 2009, three in five informal enterprises in Yogyakarta, which obtained a loan, reported an increase in the volume of their production. In Banten, only 12% reported an increase in production volume with the help of loans.

40. In general, informal enterprises from Yogyakarta and Banten use social networks as main source of financing. 82% of the informal enterprises in Yogyakarta and 76% in Banten reported that family, relative, neighbours, or friends serve as their main source of financing.

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