Guidelines for measuring youth employment and Decent Work in agriculture within developing countries
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Guidelines for measuring youth employment and decent work in agriculture within developing countries.
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# Acronyms

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<tr>
<td>AGRIS</td>
<td>Agricultural Integrated Survey</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agricultural Organization of the United Nations</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GSARS</td>
<td>Global Strategy to improve Agricultural and Rural Statistics</td>
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<td>ICLS</td>
<td>International Conference of Labour Statisticians</td>
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<td>ILO</td>
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<td>KBNS</td>
<td>Kenyan Bureau of National Statistics</td>
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<tr>
<td>LFS</td>
<td>Labour Force Survey</td>
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<tr>
<td>LSMS</td>
<td>Living Standards Measurement Study</td>
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<tr>
<td>LSMS-ISA</td>
<td>Living Standards Measurement Study - Integrated Surveys on Agriculture</td>
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<tr>
<td>NEET</td>
<td>Not in Employment, Education or Training</td>
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<td>SUST2</td>
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Arianna Martella coordinated the design and communication aspects. The document was edited by Sarah Pasetto and formatted by Laura Monopoli.
Guidelines for measuring youth employment and decent work in agriculture within developing countries.
Introduction

Decent Work, a term coined by the International Labour Organization (ILO) in 1999, is broadly defined as work that is done freely without coercion or force, in a safe work environment with fair procedures, workers’ rights, social protection, and secure returns for work. The focus is on job quality and includes issues such as labour relations, hazardous work, workers’ rights, gender gaps, and work-life balance, among others. The framework on the measurement of Decent Work was adopted by the Eighteenth International Conference of Labour Statisticians (ICLS) in 2008, and revised guidelines, Decent Work Indicators - Guidelines for Producers and Users of Statistical and Legal Framework Indicators, were published in December 2013.

While “work” as defined by Resolution 1 (Resolution concerning statistics of work, employment and labour underutilization) of the Nineteenth ICLS includes both employment work and own-use production work—where own-use production is the production of goods or services primarily intended for family consumption—the Decent Work Agenda primarily focuses on employment work. The statistical indicators fit well within a developed country context where social safety nets are in place, employment is primarily one main job over the course of the year, wage labour is the norm, and own-use production of agriculture is minimal. However, many of the statistical indicators in the framework are less applicable in a developing country setting where the majority of households engage in agriculture as a central activity, multiple income earning activities help mitigate income insecurity due to irregular and seasonal work, non-wage employment is the norm, and own-use production of agriculture is essential to households’ well-being.
Guidelines for measuring youth employment and decent work in agriculture within developing countries

With a few exceptions, many of countries in East Asia and the Pacific, South Asia, and sub-Saharan Africa are characterized by a large poor rural population that is reliant on agriculture to feed their families and to earn a livelihood. Many households hold and cultivate small plots of land and rely mainly on family labour for agricultural production. In sub-Saharan Africa the majority of farms are household holdings with less than 2 hectares (ha) (Lowder, Skoet and Raney, 2016). Based on a sample of 9 countries in the region, estimates suggest that 60 percent of farms are less than 1 ha and more than 80 percent of farms are less than 2 ha, making up nearly 40 percent of the land area. Nearly all are family farms. A similar pattern is found in East Asia and the Pacific—including China—and in countries in South Asia (Lowder, Skoet and Raney, 2016). Since household income may fluctuate based on the agricultural season, it is often the combination of income from employment work activities and own-use production work— including agricultural production for household consumption—that sustains these households.

In sub-Saharan Africa, nearly 60 percent of those in the labour force were employed in agriculture in 2010; the figure is closer to 70 percent in low-income countries in the region (Fox and Thomas, 2016). Non-agricultural household enterprises make up another 20 percent of the labour force, the majority of which is own-account work. Within this context, non-agricultural wage labour makes up approximately 15 percent of the labour force; about half of this percentage is considered precariously employed, as their work relationship is not formalized in written contracts. The unemployment rate is less than 5 percent of the labour force and is primarily made up of a small share of the population, often those who have graduated from the university and are from wealthy households. These are individuals who can afford to be unemployed. Unemployment is higher in the upper-middle-income countries—accounting for only 23 million of 523 million people in sub-Saharan Africa in 2010—where social protection is in place.

Within this context, the share of youth (defined in these Guidelines as individuals between the ages of 15 and 24 years) to the total population is expected to increase dramatically in the next few decades. While about 16 percent of youth currently live in least-developed countries, by 2050, it is projected that one-quarter of the world’s youth will live in these same 47 countries. Focusing only on sub-Saharan Africa, in both least-developed and middle-income countries in the region, today one-fifth of the region’s population—and an even greater share of the working age population—is youth. Conservative population estimates suggest that by 2050, nearly one-third of the world’s youth will live in the region (United Nations, 2017).

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1 This is based on data from Burkina Faso, Côte d’Ivoire, the Democratic Republic of the Congo, Ethiopia, Guinea, Namibia, Senegal and, Uganda. Réunion is also classified as sub-Saharan Africa.

2 The least-developed countries, as defined by the United Nations General Assembly, include 47 countries as at June 2017; 33 are in Africa, nine in Asia, four in Oceania, and one in Latin America and the Caribbean.

3 These are based on the median variant estimates.
the labour force, particularly in low-income and low-middle income countries in sub-Saharan Africa (Fox and Thomas, 2016). However, with increasingly limited access to land, youth are less likely to work in agriculture in self-employment activities than to work as contributing family workers for another household member’s agricultural business, or to engage in other types of work. In rural areas, agriculture employs more than 90 percent of 15- and 16-year-olds, many of whom work on the family farm and will continue in agriculture after the age of 24 years (Fox and Thomas, 2016). While more education is associated with being able to obtain wage employment in African countries, demand for secure wage employment will likely continue to severely exceed the jobs available (Fox and Thomas, 2016).

These Guidelines, developed as part of the Global Strategy to improve Agricultural and Rural Statistics (GSARS), seek to measure dimensions of labour force performance and job quality that are not well captured in the Decent Work framework in this setting. More specifically, the Guidelines propose Decent Work indicators that focus on youth (ages 15–24 years) within developing countries where the majority of households depend on agriculture for their well-being and a large share of the population lives in poverty. The Guidelines are not meant to be comprehensive or to replace the current Decent Work framework, but rather aim to provide a small number of indicators that are conceptually useful within this context, straightforward to calculate, and relatively simple in terms of data collection. The indicators proposed require only minor changes or additions to two main types of surveys that are conducted by national statistical offices – labour force surveys (LFSs) and agricultural surveys. Labour force surveys are national representative household-based surveys, which collect employment information on the working-age population (usually from 15 to 64 years of age). Typically, information is collected on all household members within this age range. It is the main survey instrument to provide information for many of the Decent Work indicators within countries, including the employment-to-population ratio, unemployment rate, status of employment, time spent in employment, sector of employment and the Not in Employment, Education or Training (NEET) rate.

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4 GSARS aims to develop cost-effective methods for agricultural statistics that serve as the basis for preparing handbooks and training material for ministries and statistical offices responsible for the design and implementation of agricultural surveys.

5 That is, the Guidelines propose simple incidences that do not require, for example, estimating profits or hourly earnings from own-account work, labour productivity or value of production. All of these examples require more extensive data collection methods.

6 Another survey that captures youth employment is the School-to-Work Transition Survey (SWTS); however, this is not typically conducted by national statistical offices. Specifically, the SWTS collects data on the transition from school to the first job for ages 15 to 29 years. The SWTS is used to measure successful transitions to regular secure employment. Depending on the specific definition used for finding satisfactory employment after completing school, in this setting in many countries, the majority of youth are characterized as “not transitioned”. Other key indicators that can be collected by the SWTS include the youth employment-to-population ratio, youth unemployment rate and the NEET rate, among others. The SWTS also includes a survey component to capture information from employers and their demand for labour. In countries where own-account employment rather than regular wage positions are the norm because of a shortage of regular wage opportunities, measuring the mismatch between the skills needed by employers who offer regular wage positions and the skills of the youth labour force only focuses on a small percentage of the youth in the labour force. This focus is primarily only on youth from the wealthiest households and who have university education. More information on the SWTS can be found on the ILO’s School-to-Work Transition Survey (SWTS) website https://www.ilo.org/employment/areas/youth-employment/work-for-youth/WCMS_191853/lang--en/index.htm.
Agricultural surveys, on the other hand, typically collect information on land tenure and areas, crop activities, planted and harvested land, types of crops grown, livestock activities, agricultural inputs and methods, intended use of agricultural production, and the population involved in agriculture. The sample population differs from labour force surveys and other household-based surveys in that the sampling unit for agricultural surveys is the agricultural holding. The World Programme for the World Census of Agriculture 2020 (WCA 2020) defines an agricultural holding as “…an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form, or size” (FAO, 2015). There are two types of holdings: (1) household holdings and (2) non-household holdings. Household holdings are agricultural households; whereas non-household holdings are run by a juridical person, such as a corporation, cooperative, or government agency (FAO, 2015). For many least-developed countries, the agricultural sector is characterized primarily by agricultural households. Consequently, the national agricultural surveys of these countries are designed primarily to capture household-sector holdings. In Burkina Faso, Togo and Uganda, for example, the main agricultural survey is household-based.

These Guidelines take into account the findings of the technical report, which describes the challenges of applying the ILO’s Decent Work framework within an agricultural context, assesses recent initiatives to collect data on Decent Work in the agricultural sector, and proposes methods for integrating data collection on Decent Work in agriculture into national statistical systems (Discenza, Nico and Rahija, 2018). These Guidelines build on this report, as well as on the results of a field test implemented in Kenya in partnership with the Kenyan Bureau of National Statistics (KNBS) (Hillesland and Mwaniki, 2018).

Youth, in this setting, and particularly in sub-Saharan Africa, generally rely on inheritance to access agricultural land. As land becomes scarce, limited access to agricultural land and limited employment opportunities drive youth to migrate in search of better opportunities, whether it be for their own land, to seek better employment, or to obtain additional education. In Africa, youth migration rates exceed those of adults (Lee and Mueller, 2016). Youth migration is also observed in lower-income countries in Asia. In Nepal, for example, about one-half of youth entering the labour market go abroad for employment (New Era and ILO, 2008). To capture recent youth migration, national statistical offices may wish to consider expanding the definition of the “household” to include both current household members as well as household members who are associated with the household and who have been present in the last year, even if they are not currently residing in the household (see de Brauw and Carletto, 2012). A set of questions can be asked to determine whether a household member who was present in the last 12 months but no longer resides in the household has migrated, and the reasons for migration. Since migration is a statistical occurrence that happens infrequently, sampling frames will need to account for this (de Brauw and Carletto, 2012). While relevant, youth migration is beyond the scope of these Guidelines. If there is interest in including youth migration, de Brauw and Carletto (2012) provide guidance on data collection and capturing migration information in household surveys.

The Guidelines are organized as follows: chapter 2 describes the Decent Work framework with a focus on the youth indicators in the framework. Chapter 3 describes the challenges to applying the framework to a developing country context where agriculture is the main livelihood for households and the agricultural sector is characterized by a significant presence of family farms and subsistence agriculture. Chapter 4 proposes indicators that capture youth employment and work dynamics using labour force surveys or similar household surveys. Chapter 5 proposes indicators that capture youth employment and work dynamics within the holding, using agricultural surveys or similar farm-based surveys. Chapter 6 provides concluding observations.

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7 These Guidelines use the terms “household-sector holdings”, “agricultural household holdings”, and “agricultural households” interchangeably.
BOX 1.1. METHODOLOGICAL CONSIDERATIONS

Sampling strategy
There are a number of methodological issues that need to be considered when collecting employment and work data on youth. For indicators describing employment and work dynamics of youth within agricultural households, the rural population, or the country as a whole, the individual—specifically, individuals between the ages of 15 to 24 years—is the unit of analysis. Typically, household-based surveys are used to capture the data needed for these indicators. The sample needs to be large enough to be able to disaggregate by age and focus on youth within a population. There are different possible sampling approaches. Using a representative sampling technique to first select households within the desired population (agricultural households, rural households, etc.), one possible approach is to enumerate all youth within the selected households. Within countries where there is a large youth population, such as many countries in sub-Saharan Africa, the final sample of youth will be larger than the sample size of households. On the other hand, in countries where there are generally few youth per household and the survey’s sample size does not provide the precision required to extrapolate inferences about youth from the full youth population, a larger sample would be needed.

If it is not possible to interview all youth in each household, a second approach is to randomly select and interview one individual of 15 to 24 years of age per household. This approach works best in countries where there is more than one youth per household on average. The Kish method can be used to randomly select the respondent, if implementing a paper questionnaire (see Kish, 1965). To ensure that the sample consists of equal numbers of young men and women, particularly in regions where migration trends may have affected one sex more than the other, the proportion of the households selected for male respondents and female respondents can be based on the likelihood of non-response rates by sex. From that, the selected sex of the respondent within a household can be predetermined randomly. If the survey is implemented using Computer-Assisted Personal Interviewing (CAPI), the appropriate respondent can be randomly selected automatically from the eligible respondents. Sample weights are necessary to address the different probabilities of being chosen across households, as the number of youth vary across households—that is, an individual in a household with fewer youth has a greater probability of being selected than he or she would in a household with many youth. Difficulties with this second approach are the potential high nonresponse rate (Gaziano, 2005; Hamermesh, Frazis and Stewart, 2005) and the possibility of empty households, or households without youth of a particular sex.

For indicators describing employment and work dynamics on farms where the unit of analysis is the holding in Chapter 5, a representative sampling technique and a sufficiently large sample for each type of holding (non-household holdings and household holdings) ensures the indicators provide meaningful inferences by type of holding. Additionally, the same module proposed for labour force surveys in Chapter 4 to capture youth employment and work indicators could be applied to household-sector holdings in agricultural surveys. Indicators from this module are based on the individual. It means that the individual is the unit of analysis and the focus is on the household-sector holding population. If incorporated into an agricultural survey, the sampling strategy will need to take into account.
Who to interview

Additionally, the sampling strategy should take into account who in the household is interviewed in order to capture the information needed about youth employment and work. The literature suggests that proxy respondents may not always provide accurate information, and this can cause biases in estimating the employment and work indicators (Bardasi et al., 2011; Hussmanns, Mehran and Verma, 1990). Living Standards Measurement Study surveys (LSMS) and labour force surveys typically ask each individual within a household above a certain age to self-report their employment and work activities (Bardasi et al., 2011), whereas national agricultural surveys typically ask only the holder of agricultural household holdings for all the information about the holding. If agricultural surveys are used to capture youth employment and work indicators where the individual is the unit of analysis, requiring each household member between the ages of 15 and 24 years to self-report their own work in the labour modules will likely provide more accurate information than that provided by the holder.

8 The holder is an individual or a group of individuals within a household who make the major decisions about the operation of the agricultural holding.
The ILO Decent Work framework

According to Resolution 1 of the Nineteenth ICLS, work is any activity performed to produce goods or provide services with a market value, for use by others, or for one’s own-use. There are five mutually exclusive forms of work: (1) own-use production work; (2) employment; (3) unpaid trainee work; (4) volunteer work; and (5) other. Own-use production work is the production of goods or services primarily intended for family consumption rather than for the market. It includes subsistence agricultural production, which is the production and processing of goods from agriculture, fishing, hunting and gathering that are mainly for own consumption. Employment work is a work activity in which the goods produced or the services provided are intended for sale within the market. It is done in exchange for compensation in cash, other goods or services, or for profit. Contributing family labour, which is work that is done for a family or household enterprise, and assisting family labour, which is work done for a family member’s wage work, may not be directly remunerated; but are considered forms of employment. Similarly, exchange labour, in which individuals provide labour on another farm in exchange for labour on their own farm, is without payment. However, if the work is done to produce goods to sell in the market, the work would be considered employment work. Whereas if the work is done to produce goods for home consumption, it would be considered own-use production work. Unpaid trainee work includes unpaid apprenticeships, internships and traineeships where work is not remunerated in cash or in kind and the aim is to acquire experience or skills. Volunteer work is unpaid work that can be done at formal institutions or organizations or informally, for example, for a neighbour or friend (Nineteenth ICLS).

1 Specifically, Resolution 1 of the Nineteenth ICLS considers the following activities as own-use production work when intended mainly to yield products for own final use:
- producing and/or processing for storage agricultural, fishing, hunting and gathering products that are not intended for sale or profit;
- collecting and/or processing for storage mining and forestry products, including firewood and other fuels;
- fetching water from natural and other sources;
- manufacturing household goods (such as furniture, textiles, clothing, footwear, pottery or other durables, including boats and canoes);
- building, or effecting major repairs to, one’s own dwelling, farm buildings, etc.;
- household accounting and management, purchasing and/or transporting goods;
- preparing and/or serving meals, household waste disposal and recycling;
- cleaning, decorating and maintaining one’s own dwelling or premises, durables and other goods, and gardening;
- childcare and instruction, transporting and caring for elderly, dependent or other household members and domestic animals or pets, etc.
With the exception of the 12 Economic and social context for decent work indicators, which capture the country’s socio-economic environment, the Decent Work Indicators primarily focus on employment of the five types of work. The Decent Work framework contains 60 statistical indicators, as well as 11 legal framework indicators classified within four themes of work. These are (1) employment; (2) social protection; (3) labour standards and rights at work; and (4) social dialogue. The “Employment” theme refers to the adequate opportunities for market-based work and covers all types of market activities, whether it is wage work with a formal contract or self-employment activities and home-based work. The “Social protection” theme aims to capture income security and workers access or lack of access to social security. “Labour standards and rights at work” includes freedom of association, non-discrimination, and the elimination of forced or compulsory labour and child labour. “Social dialogue” is the right for workers to express their views and defend their interests in the workplace. Built around these four themes, the framework consists of multiple indicators in ten dimensions that measure aspects of work within a country’s national economy. While each dimension has both statistical and legal indicators, these Guidelines focus solely on the statistical indicators.

The first of the ten dimensions is Employment opportunities. It comprises of statistical indicators that are traditionally used to measure labour force performance by countries. These are the most commonly available Decent Work indicators across countries (Disanza, Nico and Rahija, 2018). These indicators include the employment-to-population ratio, which is the share of working-age individuals who worked in an employment activity in the short reference period. It also includes the unemployment rate, which is the share of working-age individuals who did not work in an employment activity in the short reference period, are available to work, and who have recently sought employment. The labour force participation rate is the sum of those who are employed and those who are unemployed.

Under this dimension, there are also two youth-focused indicators: the (1) youth not in employment, education or training (NEET) rate and the (2) youth unemployment rate. The youth unemployment rate is defined the same as for the full population, but for youth aged 15 to 24 years. It captures those seeking employment of those who are not currently employed. The NEET rate captures those who are neither in employment nor in education or training. Although youth may not be employed, they still may be attending school, college, university or engaged in other types of training. Youth not captured in the NEET rate or in the youth unemployment rate are those who are not in school or training and are considered economically inactive (that is, those who do not have employment and are not looking for employment). These individuals may be discouraged workers. They could also be engaged in non-employment work such as subsistence agriculture, childcare, and household maintenance.

The second dimension is Adequate earnings and productive work. These indicators include the working poverty rate, based on a country’s national poverty line, of those in employment work as well as the share of employees with a low pay rate based on the median hourly wage rate. Additional indicators include average hourly earnings by occupational group, average real wages, and minimum wage as a percentage of median wage. The third dimension, Decent working time, focuses on time worked in employment activities. All these indicators capture the time spent only in employment work. Combining work, family, and personal life within employment work is the fourth dimension, and includes two statistical indicators that are being developed, one on asocial or unusual work hours and another on maternity protection.
Work that should be abolished is the fifth dimension and includes child labour rate, hazardous child labour rate, rate of the worst forms of child labour other than hazardous work, forced labour rate, and forced labour rate among migrants. These indicators include youth aged 15 to 17 years. The indicators on worst forms of child labour other than hazardous work rate indicator and forces labour rate among migrants capture those who work in forced or bonded labour, in armed conflict, or in sexually exploitative or illicit activities. Given the scarcity of information due to the fact that this type of labour – which includes slavery, prostitution, pornography and illicit drug trafficking – is often hidden, this indicator is particularly difficult to estimate. The child labour rate is the share of children who are working long hours (for youth of 15 to 17 years of age this is usually more than 42 hours) a week on a regular basis. Child labour, depending on the context, can also be hidden (especially if younger children are involved) and requires special care in data collection.

The hazardous child labour rate captures those who either work long hours or work in a designated hazardous industry or occupation. The definition of hazardous labour is determined by the national context (see ILO Convention No. 182). However, ILO Recommendation No. 190 on the Worst Forms of Child Labour (1999) urges Member States to consider the following as hazardous work:

- work that exposes children to physical, emotional or sexual abuse;
- work underground, under water, at dangerous heights or in confined spaces;
- work with dangerous machinery, equipment and tools, or that involves the manual handling or transport of heavy loads;
- work in an unhealthy environment, which may, for example, expose children to hazardous substances, agents or processes or to temperatures, noise levels, or vibrations damaging to their health; and
- work under particularly difficult conditions, such as work for long hours or during the night, or work that does not allow for the possibility of returning home each day.

For the purposes of calculating global estimates, the World Report on Child Labour 2015 refers to the International Standard Classification of Occupations (ISCO) and classifies hazardous child labour as including work in the following occupations: Forestry (ISCO-88-614); Fishery, hunters and trappers (ISCO-88-615); Work in agriculture that requires the use of heavy motorized equipment (ISCO-88-833); and Unskilled labour in agriculture, fishing, forestry, hunting, and trapping (ISCO-88-921). Within a developing-country setting, in which the majority of households engage in agriculture as a central activity, many youth are engaged in unskilled labour in agriculture on the family farm, whether the goods produced are for own-use consumption or intended for the market, and, thus, would be classified as engaged in hazardous work. According to ILO (2016), more than half of children 5 to 17 years of age engaged in hazardous work are youth aged 15 to 17 years. Some common tasks in agriculture that are considered hazardous, according to ILO, (2011) are the following:

- Loading and carrying produce or water.
- Climbing trees to harvest fruit.
- Collecting fodder.
- Collecting, preparing, redistributing manure.
- Weeding and harvesting.
- Caring for farm animals.
- Handling, mixing, spraying agrochemicals.
- Using motorized or sharp farm tools.
- Driving tractors or other farm machinery.
- Outdoor work in general.
The sixth dimension is \textit{Stability at work}. It seeks to capture the extent to which employment is secure. The indicators include precarious employment rate, which is defined as employment work that is for a short duration or that can be terminated with little notice, including seasonal, casual, and short-term workers; thus, it is relevant within the agricultural context. Another indicator that is particularly relevant within the agricultural context is the subsistence rate. Subsistence production is the production of agricultural goods that are intended primarily for household consumption and not for sale and until recently was considered a form of employment. It includes both the production, processing, and preparation of the goods for storage. The 2013 Decent Work Guidelines define the subsistence rate as the share of individuals employed as subsistence workers of all employed individuals. The Decent Work Guidelines refer to ISCO-08 to define subsistence agriculture. Examples of subsistence agriculture include

“[P]reparing the soil; sowing, planting, tending and harvesting field crops; growing vegetables, fruit and other tree and shrub crops; gathering wild fruits, medicinal and other plants; breeding, tending and feeding animals and poultry mainly to obtain meat, eggs, milk, hair, skin or other products; hunting or trapping animals; catching fish and gathering other forms of aquatic life; fetching water and gathering firewood; storing produce for later use and carrying out some processing of produce; building and maintaining houses and other shelters; making tools, clothes and utensils for use by the household…” (ISCO-08).

As of the Nineteenth ICLS (Resolution 1), subsistence production is no longer a form of employment; as such, the Decent Work indicator needs to be revised accordingly.

The seventh dimension, \textit{Equal opportunity and treatment in employment}, aims to identify differences in men’s and women’s occupations, wages, employment in middle management and discrimination based on ethnicity and nationality. \textit{Safe work environment} is the eighth dimension and aims to measure occupational injuries. \textit{Social security} is the ninth dimension and includes indicators on pensions, public social security, healthcare, needs-based cash income support and sick leave. Finally, the \textit{Social dialogue, workers’ and employers’ representation} dimension includes indicators that capture freedom of association within the employment setting. Table 2.1 presents the ten dimensions and their indicators in more detail.
# TABLE 2.1. THE DECENT WORK INDICATORS OF THE ILO STATISTICAL FRAMEWORK.

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>No.</th>
<th>Indicators</th>
<th>ILO priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment opportunities</td>
<td></td>
<td>1   Employment-to-population ratio</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   Unemployment rate</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3   Youth not in employment, education, or training, 15–24 years</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4   Informal employment rate</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5   Labour force participation rate</td>
<td>Additional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6   Youth unemployment rate, 15–24 years</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7   Unemployment by level of educational attainment</td>
<td>Additional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8   Employment by status in employment</td>
<td>Additional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9   Proportion of own-account workers and contributing family</td>
<td>Additional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10  Workers in total employment</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11  Share of wage employment in non-agricultural employment</td>
<td>Additional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12  Labour underutilization</td>
<td>Future</td>
</tr>
<tr>
<td>Adequate earnings and productive work</td>
<td>13  Working poverty rate</td>
<td>Main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14  Employees with low pay rate (below two-thirds of median hourly earnings)</td>
<td>Main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15  Average hourly earnings by occupation group</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>16  Average real wages</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>17  Minimum wage as a percentage of median wage</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>18  Manufacturing wage index</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>19  Employees with recent job training (past year/past four weeks)</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td>Decent Working Time</td>
<td>20  Employment in Excessive Working Time (more than 48 hours per week)</td>
<td>Main</td>
<td></td>
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<tr>
<td></td>
<td>21  Employment by weekly hours worked (hours in standardized hour bands)</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>22  Average annual working time per employed person (hours actually worked)</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>23  Time-related underemployment rate</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24  Paid annual leave</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td>Combining work, family and personal life</td>
<td>25  Asocial/unusual hours</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26  Maternity protection</td>
<td>Future</td>
<td></td>
</tr>
<tr>
<td>Work that should be abolished</td>
<td>27  Child labour rate (as defined by ICLS Resolution)</td>
<td>Main</td>
<td></td>
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<td></td>
<td>28  Hazardous child labour rate</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>29  Rate of Worst Forms of Child Labour (WFCL), other than hazardous</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30  Forced labour rate</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31  Forced labour rate among returned migrants</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td>Stability and security of work</td>
<td>32  Precarious employment rate</td>
<td>Main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>33  Job tenure</td>
<td>Additional</td>
<td></td>
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<tr>
<td></td>
<td>34  Subsistence worker rate</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35  Real earnings of casual workers</td>
<td>Additional</td>
<td></td>
</tr>
<tr>
<td>Thematic area</td>
<td>No.</td>
<td>Indicators</td>
<td>ILO priority</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>-----</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Equal opportunity and treatment in employment</td>
<td>36</td>
<td>Occupational segregation by sex</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>Female share of employment in senior and middle management</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>Gender wage gap</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>Share of women in wage employment in the non-agricultural sector</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>Indicator for fundamental principles and rights at work</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>41</td>
<td>Measure for discrimination by race/ethnicity/of indigenous people/of (recent) migrant workers/of rural workers, where relevant</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>Measure of dispersion for sectoral/occupational distribution of (recent) migrant workers</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>Measure for employment of persons with disabilities</td>
<td>Main</td>
</tr>
<tr>
<td>Safe work environment</td>
<td>44</td>
<td>Occupational injury frequency rate, fatal</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>Occupational injury frequency rate, nonfatal</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>Time lost due to occupational injuries</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>Labour inspection (inspectors per 10 000 employed persons)</td>
<td>Main</td>
</tr>
<tr>
<td>Social security</td>
<td>48</td>
<td>Share of population above the statutory pensionable age</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>Public social security expenditure (% of GDP)</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>Healthcare expenditure not financed out-of-pocket by private households</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>51</td>
<td>Share of economically active population contributing to a pension scheme</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>Share of population covered by (basic) health care provision</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>53</td>
<td>Public expenditure on needs-based cash income support (% of GDP)</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>Beneficiaries of cash income support (% of the poor)</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>Sick leave (developmental work to be done by the ILO)</td>
<td>Main</td>
</tr>
<tr>
<td>Social dialogue, workers’ and employers’</td>
<td>56</td>
<td>Trade union density rate</td>
<td>Main</td>
</tr>
<tr>
<td>representation</td>
<td>57</td>
<td>Employers’ organization density rate</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>Collective bargaining coverage rate</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>59</td>
<td>Indicator for fundamental principles and rights at work (freedom of association and collective bargaining)</td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>Days not worked due to strikes and lockouts</td>
<td>Main</td>
</tr>
</tbody>
</table>


There are also 12 additional Economic and social context for decent work indicators, which capture the socio-economic environment. They include the percentage of children not in school, the estimated percentage of working-age population who are HIV-positive, labour productivity based on Gross Domestic Product (GDP) per employed person, a measure of income inequality, the inflation rate, employment by branch of economic activity, education of adult population, and labour share of Gross Value Added.
Applying the ILO Decent Work framework to an agricultural context in least-developed countries

There are some challenges to applying many of the Decent Work indicators in countries with a large poor rural population that relies on agriculture to feed their families and to earn a livelihood, where many households hold and cultivate small plots of land and rely mainly on family labour for agricultural production. These challenges fall into two categories. The first is the conceptual challenges in measuring work in this setting. The second is that there is a good deal of work in agriculture in this setting that is not well captured by the framework.

Conceptual challenges

Within this setting, household members may work on agricultural production that is both intended for sale and for household or family consumption. It is often difficult to distinguish between the time spent on cropping or livestock activities solely for household consumption versus the time spent on activities to yield products for the market. Prior to Resolution 1 of the Nineteenth ICLS, employment work included subsistence agriculture (or agricultural production intended for household or family consumption). With Resolution 1, however, subsistence agriculture production is no longer considered a form of employment. This means that just like with other types of work, such as childcare, preparing meals, and making pottery, the work is considered an employment activity only when it is done with the intention of exchange for compensation in cash or in kind, in exchange for services, or for profit. When the work is done for household consumption, it is classified as own-use production work.

Within agricultural households, identifying the boundary between work dedicated to the market-oriented production of goods and work dedicated to own-use production can be challenging. Labour management, investments in the land, clearing the land, planting, applying fertilizer and other inputs and cultivating are all activities that an individual may perform across plots and parcels with one or multiple crops. Some of these crops may be intended primarily for the market, some for home or family consumption, and others for both. When all agricultural work done by the individual is only for crops with one intended destination, it is simple to categorize the individual’s work. When an individual works across crops with different intended destinations, this work can be more difficult to categorize. Moreover, individuals may not always be aware of the intended destination of the goods produced by their work (Discenza, Nico and Rahija, 2018).
Based on Resolution 1 of the Nineteenth ICLS, an individual could be classified as both employed and as someone who engaged in own-use production in agriculture.\footnote{According to Resolution 1 of the Nineteenth ICLS, these two categories are not necessarily mutually exclusive and individuals can work in both types of work. Specifically, paragraph 9 states that “[p]ersons may engage in one or more forms of work in parallel or consecutively, i.e. persons may be employed, be volunteering, doing unpaid trainee work and/or producing for own use, in any combination.”} If an individual engages in agricultural production in any capacity in the reference period (or is absent but intends to return to the work in the near future), in which the products are mainly intended for the market, the individual is considered employed. If the same individual also worked in own-use agricultural production, the individual could also be considered as having engaged in subsistence agriculture. Further complications arise, however, when it is necessary to separate the time spent on agricultural employment activities from own-use production work, as is needed for the Decent working time indicators, or to calculate hourly earnings from own-account enterprises for indicators under the Adequate earnings and productive work indicators.\footnote{Correspondingly, the seasonality and irregularity of work makes the decent working time indicators, particularly time underemployment, more complicated to calculate (Oya, 2015).} Since time worked in self-employment activities often overlaps with other activities and is difficult to separate from own-use production, indicators that use hourly earnings are difficult to estimate in this context (asking an individual to specify the number of hours for employment work within a reference period, which requires separating the time between work done for the market versus work on cropping activities for crops intended for home consumption, may not be possible or practical). Additionally, distinguishing between whether the individual is primarily engaged in work dedicated to market-oriented production of goods and work dedicated to own-use production is not always straightforward.

A related challenge is that own-use production of goods, but not of services, is included in the System of National Accounts (SNA) production boundary. Just as it can be difficult to classify own-use production from market production, it can also be difficult to establish a clear boundary between own-use production of goods compared to services in small family farms when much of the food for meals comes from crops and gardens on the farm.\footnote{Report II on the Statistics of Work, Employment and Labour Underutilization presented to the Nineteenth ICLS conference (ILO Report II, 2013) recognizes this difficulty.} Processing a good for storage or for the market is a form of production and would be classified inside the SNA production boundary, whereas processing the same good for the household for consumption (that is, preparing the meal) would fall under own-use provision of services. For example, mashing groundnut into paste for storage or for the market would be classified as a form of production, whereas mashing groundnut into paste for groundnut soup would be classified as cooking, which would be a service.

To keep the activity conceptually straightforward and to ensure data collection is methodologically as simple as possible, these Guidelines do not seek to separate own-use production of goods from the provision of services in agriculture. These Guidelines also do not attempt to separate the time spent on employment activities from own-use production activities in agriculture, nor to classify whether an individual mainly engages in own-use production of agriculture or employment work activities. If an individual engages in both own-use production of agriculture and agricultural production intended for sale, the individual will be considered employed and he or she will be classified as having work in subsistence agriculture.
An additional challenge is that the time worked in agriculture is seasonal. Time spent working in agriculture changes throughout the year, depending on whether it is high season or low season. Individuals may work long hours during the peak season in agriculture and, during the off-season, they may engage in other employment activities. Indeed, many studies of households in developing countries find that income diversification of on-farm and off-farm income earning activities is an essential strategy of poor rural households, particularly in sub-Saharan Africa (see, for instance, Ersado, 2006; Block and Webb, 2001; Davis et al., 2010). Often, these strategies may include earnings in cash or in kind from temporary or casual wage labour, petty trading, street vending or other self-employment activities. A typical labour force survey asks for the employment activities in a short reference period (usually one week). The main employment activity is often the employment activity in which the individual spent the most time, taking into account the jobs in the reference period as well as work he or she is absent from but intends to resume. It excludes work the individual has been absent from for more than three months and work he or she is absent from because the work is seasonal. Hypothetically, this means that within this setting, whether the individual is employed, and whether the main employment activity is agriculture or another activity, depends on when the survey is administered within the agricultural season. This, in turn, can affect the estimates of many of the Employment opportunities indicators in the Decent Work framework, as well as all indicators that rely on the characteristics of the main employment activity. Depending on the timing of the survey, these indicators could vary greatly. Additionally, when the focus is primarily on the main employment activity in a short reference period, there is a tendency to underestimate other employment activities, particularly wage employment activities (Arthi et al., 2016).

Rather than focusing on a short time period for employment, the Living Standards Measurement Study - Integrated Surveys on Agriculture (LSMS-ISA) capture the primary employment activities over the last 12 months (Discenza, Nico and Rahija, 2018). Similarly, pilot studies led by the FAO Statistics Division in Togo and Burkina Faso included an employment matrix that listed all possible employment activities and asked the respondent if he or she engaged in each activity in the last 12 months, and whether this was done in exchange for compensation in cash, in kind, for services or for profit or gain (Discenza, Nico and Rahija, 2018). Because individuals may engage in employment activities irregularly or in short periods, individuals may have difficulty recalling all employment activities done over the 12 months. This approach of asking about all possible employment activities is more burdensome; however, it reduces possible recall bias and better captures the employment and labour force situation in this setting than asking only for employment activities engaged in the last week.

As a slightly less burdensome approach, a field test (Hillesland and Mwaniki, 2018) implemented in Kenya by GSARS, in partnership with the Kenya National Bureau of Statistics (KNBS), asked the respondent to first list any work done for a wage, salary, commission or payment of any kind, and then list any businesses or income-earning activities, large or small, he or she engaged in in the last year. Finally, the respondent was asked if he or she helped without being paid in any kind of business run by his or her household or family, or if he or she helped a household member with his or her paid work in the last year. To determine the main job based on the most time spent in an employment activity in the last week, the respondent was asked for his or her working hours each day over the last week for each employment activity. The respondent was also asked which employment activity was his or her main job over the 12 months, as determined based on the activity in which the respondent believes he or she spent the most time. As expected, a large share of individuals were engaged in multiple income activities over the year. Forty percent of those in paid employment activities over 12 months were engaged in more than one activity. When contributing family labour and assisting family labour are included, nearly half of those employed over the last 12 months were engaged in more than one employment activity. A large majority were engaged in multiple income-earning activities over the year, as a way to ensure greater income security because of the seasonality of work in agriculture.

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4 This was similar to the module in version B (models 4 and 5) from the LFS pilot questionnaires. However, in the ILO pilots, the individual was told that the main job is the one for which he or she usually works the highest number of hours, even if he or she was temporarily absent in the last week or seven days. The respondent was then asked to determine his or her main job. For more information on the ILO Department of Statistics pilot tests, see www.ilo.org/stat/Areaesofwork/Standards/ils/WCMS_484799/lang--en/index.htm.
These Guidelines propose indicators that capture employment and work over a longer reference period. While other approaches could be used to collect the data, the example in the Guidelines use the approach adopted in the Kenya field test.

**Employment work in emphasized in the Decent Work framework**

Another major limitation of applying the Decent Work framework to this context is that the indicators primarily focus on employment work, and not on other types of work. Within this context, own-use production work of goods and services in poorer, rural agricultural households can be just as important to households’ well-being and survival as income from employment work. When dealing with shocks or income shortfalls, households may substitute market goods and services with goods and services that they produce and provide at home. Because incomes tend to fluctuate, there can be great fluidity between the consumption of goods and services produced for home consumption and goods and services purchased in the market. In poor rural households engaged in agriculture, it is often the combination of income from employment work activities and own-use production work in collaboration with other household members and family members living in other households that sustains the household.

Figure 3.1 presents the work that is left out when the focus is primarily on employment work activities, using data from a field test implemented by GSARS – in partnership with the Uganda Bureau of Statistics (UBOS) – in agricultural household holdings in Bukedea, Kamelia and Buikwe districts in the Eastern Region of Uganda in July 2016. The survey included a time-use module using a 24-hour recall period in 15-minute intervals administered to the household holder and his or her spouse. The data provides a snapshot of the average time spent on activities in one day for a sample population within the month of July. The data suggests that individuals in these households spend a substantial amount of time in non-employment, own-use production activities. On average, 3 hours and 36 minutes per day were spent on own-use production activities (including subsistence agriculture); whereas 3 hours and 18 minutes on average per day were spent on employment activities. By focusing almost completely on employment work activities, the Decent Work framework is ignoring more than half of individuals’ working time in these agricultural households during this time period.

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5 The initial sample consisted of 510 agricultural households from 30 randomly selected enumeration areas (EAs) in the districts of Bukedea, Kamelia and Buikwe in the Eastern Region, with 17 systematically selected house-holds per EA. The sample is not representative at the district level as this would have been cost-prohibitive and some EAs had to be dropped from the population prior to EA selection. A complete listing of the selected EAs was done prior to survey implementation and sampling. In 19 households, the interviews were not completed (resulting in a nonresponse rate of 4 percent). The final sample comprises of 491 households with 169 house-holds from Bukedea, 161 from Kamelia and 161 from Buikwe. For 318 households, there were two respondents. Of these 318 households, 99.7 percent of the first respondents and 97.8 percent of the second respondents were interviewed privately to help ensure that their responses were not influenced by others. Eighty-five percent of the second respondents were spouses of the first respondent. There were 381 men and 409 women.
Another aspect that needs to be better captured by the Decent Work framework within this setting is underemployment. In a developing country context, the employment indicators tend to overestimate the performance of the labour force for youth (Filmer and Fox, 2014). Although there is variation, within many developing agrarian countries, unemployment is low even among youth because many cannot afford to be unemployed (Filmer and Fox, 2014; Baah-Boateng, 2015; Dewan and Peck, 2007). Individuals who cannot afford to be unemployed find paid work in whatever way they can – for example, street vending, food stands, shoe shining – if there is no better alternative. In this context, a more informative measure of labour force performance is a measure of underemployment.

To date, time-related underemployment is the only component of underemployment that has been agreed upon and properly defined within the ICLS. The time-related underemployment indicator within the Decent Work framework is defined as the share of employed individuals “who, during a short reference period, wanted to work additional hours, whose working time in all jobs was less than a specified hours threshold, and who were available to work additional hours given an opportunity for more work” (ILO, 2013).
Time-related underemployment estimates the underutilization of labour. Given that in many developing countries, individuals often work longer hours than a nationally determined threshold, the time-related indicator may not capture the right type of underemployment in that context (Bescond, Chataignier and Mehran, 2003). Additionally, in an agricultural context, a short reference period, rather than an average over time, may over- or underestimate underemployment, depending on the timing in the agricultural season. The ILO pilot study includes tests on the measurement of underutilization where underutilization is the sum of time-related underemployed, unemployed, and a subgroup of individuals outside the labour force (hidden unemployment). As part of this effort, additional approaches to capturing time-related underemployment are being tested to make them more suitable for developing countries; an example is usual hours worked, rather than hours based on a shorter reference period. Nevertheless, additional underemployment measures that better fit this context are needed.

One measure of underemployment that is often used in the academic literature is skill underemployment. Skill underemployment is the mismatch between the skill required for an occupation and the skill level of an individual. This measure is already well established in the academic literature, and may be of particular interest to countries that have focused on education in youth polytechnics and skills development programmes as a way to promote youth employment.

Similar to the time-related indicator, a skills-based underemployment indicator captures underutilization of labour in employment. These two indicators do not conceptually capture, however, individuals who are employed out of necessity because of a lack of other options as the only alternative to unemployment. In other words, they do not capture those who would be unemployed if social safety nets were in place, as they are in many developed countries. It would be useful to have indicators that capture the underemployment of those who are obliged to take jobs characterized by difficult working conditions, minimal remuneration and minimal income security.

The following chapters propose a small number of indicators that take into account the setting and address the challenges and limitations of the current Decent Work framework. These indicators complement the current framework, rather than replace it, and can be easily calculated with only minor changes or additions to labour force surveys or agricultural household surveys.

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6 The short reference period is often specified as one week.
Youth indicators to be measured using data from labour force surveys or other household-based surveys

In addition to the indicators that include youth 15 to 17 years of age under the Work that should be abolished thematic area, the Decent Work framework includes the three specific indicators on youth employment and work:

- youth employment-to-population ratio;
- youth unemployment rate; and
- youth not in employment, education or training (NEET) rate.

The first two, when applied to the full working-age population, are the most widely used indicators to monitor labour market conditions using data from nationally representative labour force surveys. For youth, these two indicators together capture those who are economically active. The third indicator, the NEET rate, includes those who are discouraged or who are not in employment and not in school or training. It may be that these individuals are engaged in other types of work, such as own-work production in agriculture, childcare or household chores. Other indicators within the Decent Work framework can be also be disaggregated by age in order to capture youth employment. For example, the employment in agriculture to population ratio could be disaggregated by age to capture the share of employed youth in agriculture.

This chapter proposes five additional indicators that could be estimated with some minor changes to the typical labour force survey. The proposed indicators attempt to address some of the conceptual limitations and gaps in the Decent Work framework within the developing country context, where the majority of households engage in agriculture as a central activity, multiple income-earning activities help mitigate the income insecurity of irregular and seasonal work, non-wage employment is the norm, and own-use production of agriculture is essential to households’ well-being. The indicators proposed are simple incidences that are informative without requiring extensive data collection and analysis. This means, for example, that the indicators proposed do not attempt to estimate profits, hourly earnings from own-account work, labour productivity, or the value of production of own-use production work, nor any other areas that require extensive data collection and complicated calculations, although they may also be relevant to youth employment and work.
While the focus is on labour force surveys, the modules for these indicators could also be incorporated into another household-based survey or into the household holding section of agricultural surveys. If included in an agricultural survey, the indicators would represent youth employment and work within agricultural households, rather than the full population.

Many household surveys include a household roster that captures basic information on all household members. The roster typically contains the individual’s relation to the respondent, age, sex and current marital status for each household member. Figure A.1 in the annex to these Guidelines provides an example. Information from the roster can then be used to identify the household members that will be administered the employment and work questionnaire (figure A.2). Data from the employment and work questionnaire is used to calculate these five indicators – which are discussed in detail below – as well as the three youth indicators already in the Decent Work framework.

**BOX 4.1. CALCULATING THE THREE YOUTH INDICATORS IN THE DECENT WORK FRAMEWORK**

The Decent Work framework includes the three specific indicators on youth employment and work:
- the youth employment-to-population ratio;
- the youth unemployment rate; and
- the NEET rate.

To calculate the **youth-employment-to-population ratio** based on the short reference period (one week) using the example household roster and employment and work questionnaire in the annex (figures A.1 and A.2), the denominator is all youth in the sample. For the numerator, an individual is considered employed if:
- he or she engaged in at least one wage activity for at least one hour in the last week (Q4.3 equals “YES”) or
- he or she engaged in at least one income-earning activity for at least one hour in the last week (Q5.3 equals “YES”) or
- he or she engaged in at least one unpaid employment activity for at least one hour in the last week (Q7.3 equals “YES”) or
- he or she was temporarily absent from either paid or unpaid employment, and expects to return to this work (Q9.1 equals “YES” or Q9.2 equals “YES”) AND the work is not seasonal (Q9.4 does not equal “1”) AND the length of absence is three months or less (Q9.3 equals “NO”).

To calculate the **youth unemployment rate**, for the numerator, an individual is considered unemployed if:
- he or she did not engage in any employment activity for at least one hour in the last week (Q4.3 equals “NO”, Q5.3 equals “NO” and Q7.3 equals “NO”), and was not temporarily absent from a job or business during the reference week (Q9.1 equals “NO” and Q9.2 equals “NO”), and
- he or she answered “YES” to either Q9.5 or Q9.6 AND he or she answered “YES” to Q9.7.

The denominator is all youth in the labour force in the sample. The labour force is the sum of unemployed and employed youth.

To calculate the **NEET rate**, the denominator is all youth in the sample. For the numerator, an individual is considered to be NEET if
- he or she did not engage in any employment activity for at least one hour in the last week (Q4.3 equals “NO”, Q5.3 equals “NO”, and Q7.3 equals “NO”), and was not temporarily absent from a job or business during the reference week (Q9.1 equals “NO” and Q9.2 equals “NO”), and
- he or she is not currently attending school or a training program (Q3.2 equals “NO”).
The five proposed additional indicators are the following:

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Youth in agricultural employment</td>
</tr>
<tr>
<td></td>
<td>a. Share of youth employment in agriculture (main employment over 12-month period)</td>
</tr>
<tr>
<td></td>
<td>b. Share of youth employment in agriculture (as any form of employment in agriculture in 12-month period)</td>
</tr>
<tr>
<td>2.</td>
<td>Youth engaged in agriculture production for home consumption (subsistence agriculture)</td>
</tr>
<tr>
<td></td>
<td>Share of youth engaged in own-use production of agriculture (12-month period)</td>
</tr>
<tr>
<td>3.</td>
<td>Youth engaged in agriculture production (for either home consumption or market)</td>
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<tr>
<td></td>
<td>Share of youth engaged in agriculture production (regardless of intended use)</td>
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<td>4.</td>
<td>Youth underemployment based on job quality</td>
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<td></td>
<td>Youth underemployment rate based on job quality (main job based on 12-month reference period)</td>
</tr>
<tr>
<td>5.</td>
<td>Youth engagement in multiple income-earning activities</td>
</tr>
<tr>
<td></td>
<td>Share of youth employed that are engaged in multiple income-earning activities as a consequence of income insecurity (12-month reference period)</td>
</tr>
</tbody>
</table>

1. **Youth in agricultural employment**

Following the employment in agriculture to population ratio sub-indicator in the Decent Work framework, which is based on the short reference period (of one week), two indicators to capture the share of youth employment in agriculture are proposed on the basis of a longer reference period. One is the share of youth employment in agriculture based on the main job and the other is the share of youth employment in agriculture based on any employment activity over the year. The indicators can be computed as follows:

\[
\text{a. Youth employment in agriculture (main employment)} = \frac{\text{Number of youth employed in agriculture as main employment (12 months)}}{\text{Number of employed youth (12 months)}}
\]

\[
\text{b. Youth employment in agriculture (any employment activity)} = \frac{\text{Number of youth employed in any employment activity (12 months)}}{\text{Number of employed youth (12 months)}}
\]

To calculate the denominator of both (a) and (b), an individual is considered to have been employed in the last 12 months if he or she engaged in even a small amount of time in work for a wage, salary, commission or payment of any kind; engaged in any income-earning activity including running a business; or engaged in work for a family member’s business or wage work in the last 12 months. Using the household roster and employment and work questionnaire in the annex (figures A.1. and A.2.), this means that

- he or she engaged in at least one wage activity for at least one hour in the last 12 months (Q4.1 equals “YES”) or
- he or she engaged in at least one income-earning activity for at least one hour in the last 12 months (Q5.1 equals “YES”) or
- he or she engaged in at least one unpaid employment activity for at least one hour in the last 12 months (Q7.1 equals “YES”).

To calculate indicator (a), the numerator is all those who are employed in agriculture as their primary employment activity over 12 months. Specifically, an individual is employed in agriculture if his or her main employment activity in the long reference period (based on either Q10.1 and Q8.1 or Q10.2) is an agricultural activity (Q4.4 equals “YES,” if the main activity is wage employment, Q5.4 equals “YES” if the main activity is self-employment, or Q7.4 equals “YES” if the main activity is an unpaid employment activity).
To calculate indicator (b), the numerator is all those employed in any agricultural activity either as the main job or as a non-primary job in the last 12 months. Specifically, an individual is employed in any agriculture activity if he or she said “YES” to Q4.4, Q5.4, or Q7.4 for any employment activity.

2. Youth engaged in agriculture production for home consumption (subsistence agriculture)
This is the share of youth engaged in own-use production of agriculture over a 12-month period. This indicator can be computed as follows:

\[
\text{Youth engaged in own use production of agriculture} = \frac{\text{Number of youth engaged in own use production of agriculture (12 months)}}{\text{Number of youth}}
\]

Own-use production of agriculture is the production of agricultural products for household consumption. It can be just as vital to the well-being of the household as income from employment activities, and is thus important to capture the extent to which individuals engage in subsistence agriculture. In many households in this context, it is likely that household members who engage in agricultural employment activities also engage in own-use production of agriculture, particularly if their employment is on the household farm.

To calculate the indicator using the household roster and employment and work questionnaire (figures A.1 and A.2), the denominator is all youth. For the numerator, an individual is engaged in own-use production of agriculture if he or she answered “YES” to any of the following questions: Q11.1, Q11.2, Q11.3, Q11.4, Q11.5, Q11.6, or Q11.7.

3. Youth engaged in agriculture production (for either home consumption or market)
This is the share of youth engaged in agriculture over a 12-month period, regardless of whether the agriculture is intended for the market or for home consumption. This indicator can be computed as follows:

\[
\text{Youth engaged in agriculture} = \frac{\text{Number of youth engaged in agriculture (12 months)}}{\text{Number of youth}}
\]

To calculate the indicator using the household roster and employment and work questionnaire (figures A.1 and A.2), the denominator is all youth. For the numerator, an individual is engaged in agricultural production if he or she answered “YES” to any of the following questions: Q11.1, Q11.2, Q11.3, Q11.4, Q11.5, Q11.6, or Q11.7; or he or she said “YES” to Q4.4, Q5.4, or Q7.4 for any employment activity.
4. Youth underemployment based on job quality

This indicator captures underemployed youth based on inadequate employment using the main job over a 12-month period. Inadequate employment is defined as employment characterized by difficult working conditions, minimal remuneration and minimal income security. It is employment chosen because it is the only alternative to unemployment in an environment without unemployment benefits. Inadequate employment includes contributing family labour, which is a form of work that is not directly remunerated and in which the worker’s protections, conditions and hours are more likely to depend on intrahousehold dynamics rather than regulated by a formal legal framework or an arranged informal agreement. It also includes own-account work where individuals are engaged in survival-type activities, such as street vending, proxied as those who are own-account workers who sell their goods or services without a specific location. Lastly, it includes seasonal, casual or short-term wage work that is based solely on a verbal contract. This indicator can be computed as follows:

<table>
<thead>
<tr>
<th>Youth underemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>= \frac{\text{Number of employed youth in inadequate employment (12 months)}}{\text{Number of employed youth (12 months)}}</td>
</tr>
</tbody>
</table>

To calculate this indicator using the household roster and employment and work questionnaire (figures A.1 and A.2), for the denominator, an individual is considered employed in the last 12 months if he or she engaged, for even a short period of time, in work for a wage, salary, commission or payment of any kind; engaged in any income-earning activity, including running a business; or engaged in work for a family member’s business or wage work in the last 12 months. Using the example questionnaire, this means that

- he or she engaged in at least one wage activity for at least one hour in the last 12 months (Q4.1 equals “YES”) or
- he or she engaged in at least one income-earning activity for at least one hour in the last 12 months (Q5.1 equals “YES”) or
- he or she engaged in at least one unpaid employment activity for at least one hour in the last 12 months (Q7.1 equals “YES”).

For the numerator, an individual is considered underemployed if his or her main employment activity in the long reference period (based on either Q10.1 and Q8.1 or Q10.2) is

- an unpaid employment activity (any activity in Q7.2) or
- a self-employment activity where he or she is the only employee (Q10.4 equals 1) and the work is without a fixed location or permanent premises (Q10.3 equals 5), or
- wage employment that is seasonal, occasional, project or task-based, or fixed-term (Q10.5 does not equal 5) and without a written contract (Q10.6 does not equal 1).

If the data allows, this indicator could be disaggregated by type of work activity: (1) unpaid employment activity; (2) a survival-type self-employment activity; and (3) seasonal, casual, or short-term wage work.

This indicator overlaps with the informal employment indicator in the Decent Work framework. As national circumstances vary and the definition of informal employment is dynamic, informal employment is difficult to measure. However, informal employment – as measured as part of the Decent Work framework, like the proposed underemployment indicator here – also includes own-account work and contributing family work (irrespective of whether the work is in formal or informal sector enterprises). It differs from the proposed underemployment indicator because the indicator in the Decent Work framework specifically includes employment in informal jobs in formal-sector enterprises and employment in informal-sector enterprises, whereas this indicator does not. Capturing informal employment and the informal sector is difficult, as conceptually, there is not a clear divide between formal and informal work.
This indicator also overlaps with the indicator in the Decent Work framework: the proportion of own-account contributing family workers in total employment. However, it differs in that the indicator proposed here includes casual wage work and only the most vulnerable own-account workers. Additionally, a chief difference between the two Decent Work indicators and the underemployment indicator proposed here is that the Decent Work indicators use a short reference period, whereas the indicator proposed here uses a 12-month reference period.

5. Youth engagement in multiple income-earning activities

This indicator captures underemployment in terms of income insecurity as a result of irregularity of work. An individual is considered underemployed if he or she is engaged in multiple seasonal or irregular income-earning activities throughout the year because of the lack of regular employment opportunities, or as a way to minimize income variability. This indicator can be computed as follows:

\[
\text{Youth engaged in multiple income activities} = \frac{\text{Number of employed youth with multiple income activities (12 months)}}{\text{Number of employed youth (12 months)}}
\]

To calculate this indicator using the household roster and employment and work questionnaire (figures A.1 and A.2), for the denominator, an individual is considered to have been employed in the last 12 months if he or she engaged, for even a short period of time, in work for a wage, salary, commission or payment of any kind; engaged in any income-earning activity, including running a business; or engaged in work for a family member’s business or wage work in the last 12 months. Using the questionnaire example, this means that

- he or she engaged in at least one wage activity for at least one hour in the last 12 months (Q4.1 equals “YES”) or
- he or she engaged in at least one income-earning activity for at least one hour in the last 12 months (Q5.1 equals “YES”) or
- he or she engaged in at least one unpaid employment activity for at least one hour in the last 12 months (Q7.1 equals “YES”).

For the numerator, an individual engaged in multiple income-earning activities if

- he or she held multiple income-earning activities in the last 12 months (more than one employment activity in either Q4.2, or Q5.2, or both Q4.2 and Q5.2), to ensure greater income security (Q6.2 equals 1, 2, or 3), or
- he or she held one income-earning activity in the last 12 months (in either Q4.2 or Q5.2) and he or she looked for additional paid work in the last four weeks (Q6.1 equals “YES”).
The indicators were calculated by the author from data collected through an employment survey administered in Kenya in July and August 2017, in partnership with KBNS. The initial sample consisted of 540 households from 36 randomly selected enumeration areas (EAs) in the counties of Machakos, Murang’a, and Kiambu, near Nairobi, with 15 households per EA. The majority of households in these counties are agricultural producers. The survey for the field test consisted of two parts: a household questionnaire and an individual questionnaire. The household questionnaire was administered to the household member who was most informed about the household and the household’s agricultural activities. It included a household roster with demographic questions regarding each household member and questions on the characteristics of the dwelling, land held and cultivated, crops harvested, and livestock held.

The individual questionnaire on employment and own-use production of agriculture for the field test was similar to the one presented in the annex (figures A.1 and A.2). For the individual questionnaire, enumerators were instructed to interview each eligible household member rather than have another household member answer the questions for an eligible household member, as proxy responses can result in statistically different employment estimates compared to self-responses (Bardasi et al., 2011). This, at times, required more than one visit to the household. After more than two visits, if it was not possible to individually interview all the eligible household members, a proxy informant – ideally someone familiar with the individual – would respond to the questions for that individual. The final sample consists of 1,073 individuals from 495 households. Ninety-two percent of the individuals self-reported their education, employment, and engagement in agriculture in the individual questionnaire. Twenty-two percent of the sample are youth aged 15 to 24 years.
Guidelines for measuring youth employment and decent work in agriculture within developing countries
Indicators to be captured in agriculture surveys

This chapter proposes four additional simple indicators (indicators 6 through 9) that capture youth employment and work dimensions of the Decent Work framework in an agricultural setting within developing countries, using agricultural surveys. Because holdings are characterized predominantly by small family farms in this context, the indicators in this chapter focus primarily on agricultural household holdings. However, one set of indicators focuses on hired (external) labour and captures aspects of youth employment within both household and non-household sector holdings. The four additional indicators are divided into indicators that capture youth in agricultural holdings and indicators that capture youth who are external workers (hired labour) on household holdings and non-household-sector holdings.
The indicators for agricultural household members (agricultural household holdings only) are the following:

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</table>
| 6. | Youth in agricultural households who have paid employment on the holding | a. Share of youth in agricultural household holdings who work on the holding for wages, salary or payment of any kind (12-month period)  
   b. Share of youth in agricultural household holdings who run a business or are self-employed in agriculture or non-agricultural activities on the holding (12-month period) |
| 7. | Youth in agricultural households engaged in agricultural activities, by activity | Share of youth in agricultural households engaged in agricultural activities, by activity |
| 8. | Youth in agricultural households engaged in potentially hazardous work (ages 15–17 years) | a. Share of youth (aged 15–7 years) in agricultural households who handled, mixed or sprayed pesticides (including insecticides, herbicides, fungicides and nematicides or other agrochemicals)  
   b. Share of youth (aged 15–17 years) in agricultural households who worked in agricultural activities who used large mechanized agricultural tools (tractors, combine harvester, thresher, manure spreader and fertilizer distributor, plough with draught animals or cultivating machines, seeder and planters, etc.)  
   c. Share of youth (aged 15–17 years) in agricultural households who worked in agricultural activities and used agricultural hand tools and other small tools (sickle, fork, hoe, scythe, spade, etc.) |

The indicator set for external workers (hired labour) in both household holdings and non-household holdings is the following:

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</table>
| 9. | Youth employment as hired labour on holdings, by holding type | a. Proportion of hired (external) casual, seasonal or temporary workers who are youth  
   b. Proportion of long-term external employees (including managers) who are youth |

Since national statistical offices typically have their own methodology for structuring their agricultural surveys, the questionnaire examples used for this chapter are based on the Agricultural Integrated Survey (AGRIS) Labour module. AGRIS is a survey program designed by GSARS with the aim of developing a cost-effective method for collecting agricultural data for ministries and statistical offices responsible for the design and implementation of agricultural surveys. The focus is on developing countries that may not already have an agricultural statistical system in place. AGRIS provides a comprehensive guide on how to collect agricultural data, including on the type of data to collect, the method of collection, the sampling strategy, and specific questionnaires. The questionnaires are generic, which allows countries to modify them to meet their individual needs. The AGRIS Labour module questionnaire is used only as an example. For countries that already have agricultural survey systems in place, individual questions can be added to the current survey as needed.
AGRIS includes a household roster that is similar to the roster provided as an example in the annex (figure A.1.). Following the roster, the module example in the annex asks about agricultural and non-agricultural work on the holding of household members (figure A.3). This module can be used to capture the first three indicators proposed here. Information on external labour (hired labour) in both agricultural household holdings and non-household holdings is also captured, as shown in the annex (figure A.5).

6. Youth in agricultural households who have paid employment on the holding

This is a set of indicators. One indicator is the share of youth in agricultural households who worked on the holding for wages, salary or payment of any kind in the last 12 months. The second indicator is the share of youth in agricultural household holdings who ran a business or were self-employed in agriculture or non-agricultural activities on the holding in the last 12 months. These indicators can be computed as follows:

<table>
<thead>
<tr>
<th>a. Youth in agricultural households who received payment for activities on the holding =</th>
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<tbody>
<tr>
<td>Number of youth in agricultural households who worked on the holding for payment</td>
</tr>
<tr>
<td>Number of youth in agricultural households</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Youth in agricultural households engaged in self employment activities on the holding =</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of youth in agricultural households engaged in selfemployment activities on the holding</td>
</tr>
<tr>
<td>Number of youth in agricultural households</td>
</tr>
</tbody>
</table>

To calculate indicators 6(a) and 6(b), using the example questionnaire in the annex (figure A.3), the denominator is all youth in agricultural households. The numerator for indicator 6(a) is youth who received payment (examples include, but are not limited, to wages, salary, piece rate and in kind) for activities on the holding (Q1.4 equals “YES”). The numerator for indicator 6(b) is youth who are engaged in self-employment activities on the holding (Q1.5 equals “YES” and Q1.6 equals “YES”).

7. Youth in agricultural households engaged in agricultural activities, by activity

This is an indicator that captures youth engaged in agricultural activities on the holding. If the sample is large enough, it can disaggregated by type of agricultural activity. This indicator can be computed as follows:

Youth engaged in agriculture in agricultural households by activity =

| Number of youth engaged in agriculture in agricultural households by activity (12 months) |
| Number of youth in agricultural households |

To calculate the indicator using the example questionnaire in the annex (figure A.3), the denominator is all youth in agricultural households. For the numerator, an individual is engaged in agriculture if Q1.3 includes 11 – 34 or 41.\(^2\)

---

\(^2\) This follows the broader definition of agriculture used by the Decent Work framework and the ILO. AGRIS does not include activities 31 to 39 as agricultural activities.
8. Youth (ages 15 to 17 years) in agricultural households engaged in potentially hazardous work

This is a set of indicators aimed at capturing youth (aged 15 to 17 years) engaged in potentially hazardous work. Hazardous child labour rate, in the Decent Work framework, includes children from the ages of 5 to 17 years. The AGRIS survey asks for information on the work of each household member on the holding aged 15 years and older; however, the minimum age could be decreased to five years to capture the work done by children and hazardous child labour for children 5 to 17 years of age).

The indicators can be computed for children aged 15 to 17 years as follows:

\[
\text{a. Children in agricultural households who handled agrochemicals} = \frac{\text{Number of children in agricultural household who handled agrochemicals on the holding}}{\text{Number of children in agricultural households}}
\]

\[
\text{b. Children in agricultural households who used large mechanized agricultural tools on the holding} = \frac{\text{Number of children who used large mechanized agricultural tools on the holding}}{\text{Number of children in agricultural households}}
\]

\[
\text{c. Children in agricultural households who used small agricultural hand tools on the holding} = \frac{\text{Number of children who used small agricultural hand tools on the holding}}{\text{Number of children in agricultural households}}
\]

To calculate the indicators using the example questionnaire in the annex (figure A.3), the denominators are all youth 15 to 17 years of age in the sample. The numerator of indicator 7(a) is calculated using Q1.8 for youth aged 15 to 17 years (Q1.8 equals “YES”). The numerator of indicator 7(b) and 7(c) are calculated using Q1.9. The large mechanized tools are 11 to 22 and the smaller hand tools are 23 to 28. These tools will need to be adapted to each country.

9. Youth employment as hired labour on holdings, by holding type

This is a set of indicators that captures youth hired as external labourers on agricultural holdings. These indicators can be computed as follows:

\[
\text{a. Hired (external)casual, seasonal, or temporary workers who are youth} = \frac{\text{Number of youth hired (external) casual, seasonal, or temporary workers}}{\text{Number of hired (external)casual, seasonal, or temporary workers}}
\]

\[
\text{b. Hired (external)long term employees including managers who are youth} = \frac{\text{Number of long term employees including managers who are youth}}{\text{Number of long term employees including managers}}
\]

To calculate the indicators using the example questionnaire in the annex (figure A.4), the denominator for indicator 9(a) is the total number of paid temporary or seasonal employees. The numerator is the total number of paid temporary or seasonal employees who are youth aged 15 to 24 years. The denominator for indicator 9(b) is the total number of paid, long-term employees (hired permanently), including managers. The numerator is the total number of paid, long-term employees (hired permanently), including managers who are youth aged 15 to 24 years.
Conclusion

These Guidelines seek to measure dimensions of youth employment and work in agriculture that are not well captured by the Decent Work framework within developing countries where agriculture remains the primary livelihood for the majority of the population. With a few exceptions, many countries in East Asia and the Pacific, South Asia, and sub-Saharan Africa are characterized by a large poor rural population that relies on agriculture to feed their families and to earn a livelihood. Many households hold and cultivate small plots of land and rely mainly on family labour for agricultural production. Within this context, the share of youth – defined as individuals between the ages of 15 and 24 years – to the total population is expected to increase dramatically in the next decades. Focusing on sub-Saharan Africa alone, in both least-developed and middle-income countries in the region, one-fifth of the region’s population is youth. Conservative population estimates suggest that by 2050, nearly one-third of the world’s youth will live in the region (United Nations, 2017).

The youth indicators in the Decent Work framework fit well within a developed country context where social safety nets are in place, employment is primarily one main job over the course of the year, wage labour is the norm, and own-use production work is minimal. However, many of the statistical indicators in the framework are less applicable in a developing-country setting where the majority of households engage in agriculture as a central activity, multiple income-earning activities help mitigate the income insecurity of irregular and seasonal work, non-wage employment is the norm, and own-use production of agriculture is essential to households’ well-being. These Guidelines are not meant to be comprehensive or to replace the current Decent Work framework, but rather aim to provide a small number of indicators that are conceptually useful within a developing-country context, are straightforward to calculate, and require minimal questions and only simple additions to labour force survey and agricultural surveys.

While the indicators and the topics presented in the Guidelines are not exhaustive, the Guidelines provide an important starting point for collecting data on and estimating dimensions of Decent Work among youth within an agricultural context in developing countries.
Guidelines for measuring youth employment and decent work in agriculture within developing countries
References


Guidelines for measuring youth employment and decent work in agriculture within developing countries.
### Glossary of concepts and definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural holding</td>
<td>An agricultural holding is “...an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form, or size” (FAO, 2015). There are two types of holdings: (1) household holdings and (2) non-household holdings. Household holdings are agricultural households, whereas non-household holdings are run by a juridical person, such as a corporation, cooperative or government agency (FAO, 2015).</td>
</tr>
<tr>
<td>Agricultural household</td>
<td>Household that engages in agricultural activities, such as cropping and raising livestock.</td>
</tr>
<tr>
<td>Decent Work</td>
<td>Decent work is broadly defined as work that is done freely without coercion or force, in a safe work environment with fair procedures, workers’ rights, social protection and secure returns for work. The focus is on job quality and includes issues such as labour relations, hazardous work, workers’ rights, gender gaps and work-life balance.</td>
</tr>
<tr>
<td>Employment work</td>
<td>Employment work is a work activity in which the goods produced or the services provided are intended for sale within the market. It is work done in exchange for compensation in cash, other goods or services, or for profit. Contributing family labour, which is work that is done for a family or household enterprise, and assisting family labour, which is work done for a family member’s wage work, may not be directly remunerated; nevertheless, it is considered a form of employment.</td>
</tr>
<tr>
<td>Employment-to-population ratio</td>
<td>The employment-to-population ratio is the share of the population that is engaged in employment work. It is typically based on a short reference period.</td>
</tr>
</tbody>
</table>
| Hazardous work                            | The definition of hazardous labour is determined by the national context (ILO Convention No. 182). However, ILO Recommendation No. 190 on the Worst Forms of Child Labour (1999) urges Member States to consider the following as hazardous work:  
  - work that exposes children to physical, emotional or sexual abuse;  
  - work underground, under water, at dangerous heights or in confined spaces;  
  - work with dangerous machinery, equipment and tools, or that involves the manual handling or transport of heavy loads;  
  - work in an unhealthy environment, which may, for example, expose children to hazardous substances, agents or processes or to temperatures, noise levels or vibrations damaging to their health;  
  - work under particularly difficult conditions, such as work for long hours or during the night, or work that does not allow for the possibility of returning home each day.  
For the purpose of computing global estimates, the World Report on Child Labour 2015 classifies hazardous child labour as including work in the following occupations: Forestry (ISCO-88-614); Fishery, hunters and trappers (ISCO-88-615); Work in agriculture that requires the use of heavy motorized equipment (ISCO-88-833); and Unskilled labour in agriculture, fishing, forestry, hunting, and trapping (ISCO-88-921). |
<p>| Labour force                              | The labour force is the share of the population that is either employed or unemployed.                                                                                                                                                                        |
| Own-use production of goods and services  | Own-use production work is the production of goods or services primarily intended for family consumption rather than for the market. It includes subsistence agricultural production, which is the production and processing of goods from agriculture, fishing, hunting and gathering that are mainly for own consumption (Nineteenth ICLS). |</p>
<table>
<thead>
<tr>
<th><strong>Unemployment</strong></th>
<th>Unemployment means to be without employment work and to be seeking employment.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unemployment rate</strong></td>
<td>The unemployment rate is the share of the labour force that is not currently employed, has sought employment in the last four weeks, and is available for employment in the next two weeks.</td>
</tr>
<tr>
<td><strong>Unpaid trainee work</strong></td>
<td>Unpaid trainee work includes unpaid apprenticeships, internships and traineeships where work is not remunerated in cash or in kind and the aim is to acquire experience or skills (Nineteenth ICLS).</td>
</tr>
<tr>
<td><strong>Volunteer work</strong></td>
<td>Volunteer work is unpaid work that can be done at a formal institution or organization or informally, for example for a neighbour or friend (Nineteenth ICLS).</td>
</tr>
<tr>
<td><strong>Work</strong></td>
<td>Work is any activity performed to produce goods or provide services with a market value, for use by others or for one’s own-use. There are five mutually exclusive forms of work: (1) own-use production work; (2) employment; (3) unpaid trainee work; (4) volunteer work; (5) other (Nineteenth ICLS).</td>
</tr>
<tr>
<td><strong>Youth</strong></td>
<td>Youth are defined in these Guidelines as individuals between the ages of 15 and 24 years.</td>
</tr>
</tbody>
</table>
Annex
**FIGURE A.1. EXAMPLE OF HOUSEHOLD ROSTER.**

**HOUSEHOLD ROSTER**

**MAKE A COMPLETE LIST OF ALL INDIVIDUALS WHO NORMALLY LIVE AND EAT THEIR MEALS TOGETHER IN THIS HOUSEHOLD. BEGIN WITH THE RESPONDENT.**

**Q1.1. Identify household member**

<table>
<thead>
<tr>
<th>Q1.1a</th>
<th>Household member number</th>
<th>. . . . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.1b</td>
<td>First name</td>
<td>. . . . . .</td>
</tr>
<tr>
<td>Q1.1c</td>
<td>Surname</td>
<td>. . . . . .</td>
</tr>
</tbody>
</table>

**REPEAT Q01 FOR ALL HOUSEHOLD MEMBERS**

**THE FOLLOWING QUESTIONS WILL BE ASKED FOR EACH OF THE NAMES IDENTIFIED ABOVE.**

**Q1.2. Answer the following questions about [NAME].**

<table>
<thead>
<tr>
<th>Q1.2a</th>
<th>What is the relationship of [NAME] to the respondent?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[Fill in one circle only]</td>
</tr>
<tr>
<td></td>
<td>1. Self</td>
</tr>
<tr>
<td></td>
<td>2. Wife/husband or consensual union partner</td>
</tr>
<tr>
<td></td>
<td>3. Child/adoptive child</td>
</tr>
<tr>
<td></td>
<td>4. Grandchild</td>
</tr>
<tr>
<td></td>
<td>5. Niece/nephew</td>
</tr>
<tr>
<td></td>
<td>6. Father/mother</td>
</tr>
<tr>
<td></td>
<td>7. Sister/brother</td>
</tr>
<tr>
<td></td>
<td>8. Son-in-law/daughter-in-law</td>
</tr>
<tr>
<td></td>
<td>10. Grandfather/grandmother</td>
</tr>
<tr>
<td></td>
<td>11. Father-in-law/mother-in-law</td>
</tr>
<tr>
<td></td>
<td>12. Others - Other relative</td>
</tr>
<tr>
<td></td>
<td>13. Others - Servant/servant’s relative</td>
</tr>
<tr>
<td></td>
<td>14. Others - Lodger/lodger’s relative</td>
</tr>
<tr>
<td></td>
<td>15. Others - Other non-relative</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q1.2b</th>
<th>[NAME]'s age, in completed years</th>
<th>. . . . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.2c</td>
<td>Indicate [NAME]'s Sex</td>
<td>. . . . . .</td>
</tr>
<tr>
<td></td>
<td>[Fill in one circle only]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Male</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Female</td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL QUESTIONS COULD BE ADDED.**

**IF [NAME]'S AGE IS HIGHER THAN 5, ASK Q04h; OTHERWISE, GO TO Q04i.**

**Q04h. What is the highest level of education that [NAME] has completed?**

<table>
<thead>
<tr>
<th>[Fill in one circle only]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. None</td>
</tr>
<tr>
<td>2. Less than primary</td>
</tr>
<tr>
<td>3. Primary</td>
</tr>
<tr>
<td>4. Lower secondary</td>
</tr>
<tr>
<td>5. Upper secondary</td>
</tr>
<tr>
<td>6. Tertiary/Post-secondary</td>
</tr>
</tbody>
</table>
YOUTH QUESTIONNAIRE

YOUTH QUESTIONNAIRE

GUIDELINES FOR MEASURING YOUTH EMPLOYMENT AND DECENT WORK IN AGRICULTURE WITHIN DEVELOPING COUNTRIES

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FIGURE A.2. EXAMPLE OF YOUTH EMPLOYMENT AND WORK QUESTIONNAIRE.
GUIDELINES FOR MEASURING YOUTH EMPLOYMENT AND DECENT WORK IN AGRICULTURE WITHIN DEVELOPING COUNTRIES

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FIGURE A.2. (CONTINUED) EXAMPLE OF YOUTH EMPLOYMENT AND WORK QUESTIONNAIRE.

INCOME SECURITY OF PAID EMPLOYMENT
ASK THE RESPONDENT THE FOLLOWING QUESTION IF [NAME] WORK IN AT LEAST ONE WAGE ACTIVITY OR ONE SELF-EMPLOYMENT ACTIVITY.

Q8.1 During the last 4 weeks, did you look for additional paid work / During the last 4 weeks, did [NAME] look for additional paid work?
- [ ] No
- [ ] Yes

Q8.2 Do you engage in multiple jobs or income earning activities / Does [NAME] engage in multiple jobs or income earning activities...
- [ ] 1 because the jobs or income earning activities are irregular or seasonal?
- [ ] 2 to help provide a more stable income stream?
- [ ] 3 because [NAME] cannot find a full time regular job?
- [ ] Other (specify)

UNPAID EMPLOYMENT
Q7.1 Did you help without being paid in any kind of business run by your household or family in the last 12 months? / Did [NAME] help without being paid in any kind of business run by the household or family in the last 12 months?
- [ ] Yes
- [ ] No

Q7.2 List all the different unpaid activities that [NAME] engaged in to help a household member’s business, income earning activity, or paid work in the last 12 months.
- [ ] Household activity
- [ ] Unpaid employment activity

FOR EACH UNPAID EMPLOYMENT ACTIVITY
Q7.3 Did [NAME] work in [UNPAID EMPLOYMENT ACTIVITY] for at least one hour in the last week? / Did [NAME] work in [UNPAID EMPLOYMENT ACTIVITY] for at least one hour in the last week?
- [ ] No
- [ ] Yes

Q7.4 Is [UNPAID EMPLOYMENT ACTIVITY] an agricultural activity?
- [ ] Yes
- [ ] No

ADDITIONAL QUESTIONS ON THE MAIN EMPLOYMENT (SHORT REFERENCE PERIOD)
ASK THE RESPONDENT THE FOLLOWING QUESTIONS IF [NAME] ENGAGED IN MORE THAN ONE PAID EMPLOYMENT ACTIVITY.

Q6.1 Ask the respondent the following question if [NAME] worked in at least one wage activity or one self-employment activity.

In the last week which employment activity [of the WAGE ACTIVITIES, SELF EMPLOYMENT ACTIVITIES, and UNPAID EMPLOYMENT ACTIVITIES] did [NAME] work the most hours?
- [ ] WAGE ACTIVITY
- [ ] SELF EMPLOYMENT ACTIVITY
- [ ] UNPAID EMPLOYMENT ACTIVITY

TEMPORARY ABSENCE
ASK THE RESPONDENT THE FOLLOWING QUESTIONS IF THE RESPONSE TO Q8.1 IS 99 (NONE).

Q9.1 In the last week, did [NAME] work in at least one wage activity or one self-employment activity or one unpaid employment activity [of the WAGE ACTIVITIES, SELF EMPLOYMENT ACTIVITIES, and UNPAID EMPLOYMENT ACTIVITIES]?
- [ ] Yes
- [ ] No

Q9.2 In the last week did [NAME] work for at least one hour in [UNPAID EMPLOYMENT ACTIVITY]?
- [ ] Yes
- [ ] No

Q9.3 During the last month/4 weeks/30 days, did [NAME] do anything to find any kind of work to generate income even small or casual jobs?
- [ ] Yes
- [ ] No

Q9.4 During the last month/4 weeks/30 days, did [NAME] do anything to find any kind of work to generate income even small or casual jobs?
- [ ] Yes
- [ ] No

Q9.5 To help provide a more stable income stream?
- [ ] Yes
- [ ] No

Q9.6 Are you available to start work in a new job within 2 weeks?
- [ ] Yes
- [ ] No

Q9.7 Is this [UNPAID EMPLOYMENT ACTIVITY] an agricultural activity?
- [ ] Yes
- [ ] No

JOB SEARCH
ASK THE RESPONDENT THE FOLLOWING QUESTIONS IF THE RESPONSE TO Q8.1 IS YES OR Q10.1 IS NO (OR BOTH 8.1 AND 10.1 ARE NO.) OTHERWISE SKIP TO 10.1.

Q10.1 During the last month/4 weeks/30 days, did you do anything to find a paid job or to start a business? During the last month/4 weeks/30 days, did [NAME] do anything to find a paid job or to start a business?
- [ ] Yes
- [ ] No

Q10.2 During the last month/4 weeks/30 days, did you do anything to find any kind of work to generate income even small or casual jobs? During the last month/4 weeks/30 days, did [NAME] do anything to find any kind of work to generate income even small or casual jobs?
- [ ] Yes
- [ ] No

Q10.3 Are you available to start work in a new job within 2 weeks? / Is [NAME] available to start work in a new job within 2 weeks?
- [ ] Yes
- [ ] No

Examples include cleaning, helping with the accounts, helping to set up the goods, helping to produce the goods, etc.
Q20.1 In the last 12 months did you rear or tend to animals in which the products produced or animals themselves are intended mainly for consumption by your household? / In the last 12 months, did [NAME] rear or tend to animals in which the products produced or animals themselves are intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q20.2 In the last 12 months did you gather wild berries, mushrooms, or other food stuff intended mainly for consumption by your household? / In the last 12 months, did [NAME] gather wild berries, mushrooms, or other food stuff intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q20.3 In the last 12 months did you fish or collect shellfish intended mainly for consumption by your household? / In the last 12 months, did [NAME] fish or collect shellfish intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q20.4 In the last 12 months did you engage in any cropping activities—such as land preparation, land investments, sowing, weeding, and harvesting—of any crops, vegetables or fruits intended mainly for consumption by your household? / In the last 12 months, did [NAME] engage in any cropping activities—such as land preparation, land investments, sowing, weeding, and harvesting—of any crops, vegetables or fruits intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q20.5 Did you work on a farm (and in the last 12 months)? / Did [NAME] work on a farm (and in the last 12 months)?

  1 Yes [  ]  0 No [  ]

Q20.6 Where do you typically work? / Where does [NAME] typically work?

  1 At an office, shop, factory or other permanent non-household location [  ]
  2 Home or holding of other family members [  ]
  3 Home(s) of client(s) [  ]
  4 Own home or holding [  ]
  5 Work without a fixed location or permanent premises [  ]

Q20.7 How many people work at your place of work including yourself? / How many people work at the place of work including [NAME]?

  1-4 [  ]  5-9 [  ]  10-49 [  ]  50+ [  ]

Q21.1 In the last 12 months how much time did you spend fetching water from natural or public sources for use by the household? / In the last 12 weeks, how much time did [NAME] spend fetching water from natural or public sources for use by the household?

  1 hours minutes [  ]  2 hours minutes [  ]

Q21.2 In the last 12 months how much time did you spend collecting firewood or other natural products for use by the household? / In the last 12 weeks, how much time did [NAME] spend collecting firewood or other natural products for use by the household?

  1 hours minutes [  ]  2 hours minutes [  ]

Q21.3 In the last 12 months did you hunt for animals intended mainly for consumption by your household? / In the last 12 months, did [NAME] hunt for animals intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q21.4 In the last 12 months did you fish or collect shellfish intended mainly for consumption by your household? / In the last 12 months, did [NAME] fish or collect shellfish intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q21.5 In the last 12 months did you rear or tend to animals in which the products produced or animals themselves are intended mainly for consumption by your household? / In the last 12 months, did [NAME] rear or tend to animals in which the products produced or animals themselves are intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q21.6 In the last 12 months did you gather wild berries, mushrooms, or other food stuff intended mainly for consumption by your household? / In the last 12 months, did [NAME] gather wild berries, mushrooms, or other food stuff intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q21.7 In the last 12 months did you engage in any cropping activities—such as land preparation, land investments, sowing, weeding, and harvesting—of any crops, vegetables or fruits intended mainly for consumption by your household? / In the last 12 months, did [NAME] engage in any cropping activities—such as land preparation, land investments, sowing, weeding, and harvesting—of any crops, vegetables or fruits intended mainly for consumption by the household?

  1 Yes [  ]  0 No [  ]

Q22.1 Are you employed on the basis of ___? / Is [NAME] employed on the basis of ___?

  1 A written contract [  ]
  2 A verbal agreement [  ]
  3 Project or task-based [  ]
  4 Fixed term [  ]
  5 Permanent or long term [  ]

Guidelines for measuring youth employment and decent work in agriculture within developing countries
**FIGURE A.3. EXAMPLE OF A LABOUR MODULE IN AN AGRICULTURAL SURVEY (MODIFIED FROM AGRIS)**

### HOUSEHOLD MEMBERS: TIME WORKED, MAIN ACTIVITIES, PAYMENTS AND BENEFITS FOR THE WORK ON THE HOLDING

**THIS IS ONLY TO BE ASKED FOR HOLDINGS WHERE THE HOLDER IS A CIVIL (NATURAL) PERSON OR GROUP OF CIVIL (NATURAL) PERSONS**

### AGRICULTURAL WORK ON THE HOLDING IN THE PAST 12 MONTHS

The following questions will be asked for each of the household members reported in turn:

**Q1.1.** In the past 12 months, was [NAME] involved in agricultural activities (crop or livestock) for this holding?

- (fill in one circle only)
  - 0 No
  - 1 Yes

**Q1.2.** What is [NAME]'s position on the holding?

- (fill in all that apply)
  - 1 Holder/co-holder of the holding
  - 2 Manager
  - 3 Worker on the holding, with no decision-making role

**Q1.3.** Report the agricultural and non-agricultural activities related to the holding that were carried out by [NAME] during the past 12 months, even if it was for one day.

- * Include all activities done using the means of production of the holding (or the holding's establishments).
- * Include all agricultural services provided to other holdings using this holding's means of production.

- (fill in all that apply)
  - 11 Land clearing
  - 12 Felling
  - 13 Swearing/planting
  - 14 Pest control
  - 15 Weed control
  - 16 Harvesting, including collecting fruits
  - 17 Preparation of non-processed crops for primary markets (cleaning, trimming, grading, disinfecting, packaging, etc.)
  - 18 Grazing
  - 19 Feeding
  - 20 Shearing
  - 21 Milking
  - 22 Slaughtering
  - 23 Breeding
  - 24 Animal and veterinary care
  - 25 Preparation of non-processed animals/animal products for primary markets (cleaning, grading, disinfecting, packaging of raw milk, etc.)
  - 26 On-farm processing of agricultural products
    - 26.11 Grain milling: production of flour, grits, meal or pellets of wheat, rye, oats, maize (corn) or other cereal grains
    - 26.12 Rice milling: production of hulled, milled, polished, glazed, parboiled or converted rice: production of rice flour
    - 26.13 Processing and preserving of fruit and vegetables
    - 26.14 Manufacture of crude vegetable oils: olive oil, soybean oil, palm oil, sunflower seed oil, cottonseed oil, rape, coba or mustard oil, linseed oil, etc.
    - 26.15 Manufacture of wines
    - 26.16 Distillation of spirit drums
    - 26.17 Manufacture of tobacco products (cigars, chewing tobacco, etc.)
    - 26.21 Processing and preserving meat
    - 26.22 Manufacture of dairy products
    - 26.23 Manufacture of leather and related products
  - 27 Selling of holding's products at a market/shop (including preparation, packaging and transport of processed products)
  - 28 Production of forestry products
  - 29 Production, processing and preserving of fish, crustaceans and molluscs
  - 30 Production of renewable energy
  - 31 Contractual work for other holdings using the means of production of this holding
  - 32 Accommodation, restaurant, catering and other leisure/educational activities
  - 33 Making handicrafts
  - 34 Training of animals
  - 35 Management and/or administration of the holding
  - 99 Other (specify)

- 0 None of the above

### A QUESTION COULD BE ASKED HERE ABOUT WHETHER [NAME] ENGAGED IN ACTIVITIES ON THE HOLDING PRIORILY FOR HOUSEHOLD CONSUMPTION OR TO SELL IN THE MARKET.

The following questions are to be asked for [NAME] if [NAME] engaged in at least one economic activity on the holding (Q1.3 does not equal 0). Otherwise, restart at Q1.1 for the next household member.

**Q1.4.** Did [NAME] receive payment for the work done on agricultural or other economic activities on the holding during the last 12 months?

- * Include wages, salaries, commission, tips or any other pay.
- * Include in-kind payments. That is, payments made in goods or services rather than cash. This includes payments of agricultural products.

- (fill in one circle only)
  - 0 No
  - 1 Yes

**Q1.5.** Did [NAME] make the decision to sell any of the products made on the holding in the market him or herself the last 12 months?

- (fill in one circle only)
  - 0 No
  - 1 Yes

**Q1.6.** Did [NAME] make a decision over how any income earned was used from products made on the holding in the last 12 months?

- (fill in one circle only)
  - 0 No
  - 1 Yes

**Q1.7.** Does [NAME] receive health insurance benefits paid in whole or in part by the agricultural holding?

- (fill in one circle only)
  - 0 No
  - 1 Yes

### ADDITIONAL QUESTIONS ON ANY EMPLOYMENT BENEFITS FROM THE HOLDING COULD BE INSERTED HERE.
Q1.8 Did [NAME] handle, mix, spray insecticides, herbicides, fungicides and nematicides or other agrochemicals on the holding in the last 12 months?
- ☐ 0 No
- ☐ 1 Yes

Q1.9 What tools does [NAME] use on the holding?
- ☐ 11 Tractors
- ☐ 12 Combine harvester
- ☐ 13 Thresher
- ☐ 14 Manure spreader
- ☐ 15 Fertilizer distributor
- ☐ 16 Plow with draft animals
- ☐ 17 Plow without draft animals
- ☐ 21 Other cultivating machine
- ☐ 22 Seeder or planter
- ☐ 23 Hoe
- ☐ 24 Scythe
- ☐ 25 Sickle
- ☐ 26 Fork
- ☐ 99 Other (specify) [ ]

The series of questions above will be asked for each of the household members reported.
EXTERNAL WORKERS

Q1.1 Did the agricultural holding have any external workers during the past 12 months?

- For agricultural holdings where the holder is a civil (natural) person or group of civil (natural) persons, include workers that are not members of the household.
- For agricultural holdings where the holder is a legal person, include all workers.

☐ 0 No → Go to NEXT SECTION.
∪ 1 Yes

Q1.2 Identify the types of external workers providing labour to the holding during the past N months.

(Strike out all that apply) RESPONSE = [WORKER]

☐ 1 External managers
☐ 2 External, paid, long-term employees (hired permanently, that is, for more than a season)
☐ 3 External, paid, temporary workers (hired for a season or less)
☐ 4 External, paid, casual workers (hired on a daily or weekly basis)
☐ 5 Unpaid external workers (mutual helpers, unpaid trainees, volunteers, unpaid relatives living in another household, etc.)

The following question (Q1.3) will be asked for each of the Worker types identified in Q1.2.

Q1.3 Identify how many [WORKERS] worked on the holding during the past 12 months.

Number

Q03a Adult males . . . . . . .
Q03b Adult females . . . . . . .
Q03c Youth ages 15 to 24 (males) . . .
Q03d Youth ages 15 to 24 (females) . . .
Children under 15 years of age
Total (calculated) . . . . . . .

Figure A.4. Example of an external labour module in an agricultural survey (from AGRIS).
Layout:

- Laura Monopoli

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