REPORTED CROP YIELD PER UNIT

Impact indicator, Outcome indicator

Indicator Phrasing

English: average yield of [specify the crop] per [specify the unit – m2, acre, hectare] achieved by the target households

French: rendement moyen de [spécifiez la culture] par [spécifier l'unité - m2, acre, hectare] atteint par les ménages cibles

Portuguese: rendimento médio do cultivo de [especifique a cultura] por [especifique a unidade - m2, acre, hectare] alcançado pelos agregados familiares-alvo

Czech: průměrný výnos [určete plodinu] na [určete jednotku – m2, akr, hektar] dosáhnutý cílovými domácnostmi

What is its purpose?

The indicator measures the households' average yield of a given crop per unit area of land (usually kilograms per hectare), as reported by the households' members.

How to Collect and Analyse the Required Data

Collect the following data by conducting individual interviews with a representative sample of the target farmers:

RECOMMENDED SURVEY QUESTIONS (Q) AND POSSIBLE ANSWERS (A)

Q1: *During the past* [specify the season], *did you grow* [specify the crop variety]?

A1: yes / no

(ask the following question only if the previous answer is YES)

Q2: *On how big plot of land did you grow* [specify the crop]?

A2: .... [specify the number and units]

(ask the following question only if the answer to Q1 is YES)

Q3: *Do you know how much* [specify the crop] *you harvested during the last season?*

A3: 1) yes - .... (specify the number + units); weight in kg: ....

     2) no / is not sure

If required, select one of many on-line calculators to **convert the reported size of lands and the harvest's weight** into the required units.

To **calculate the indicator's value**, sum up the entire weight of the harvest and divide it by the total size of land. For example, 4,500 tons of rice divided by 1,500 hectares = yield of 3 tons per hectare.

Disaggregate by

Disaggregate the data by wealth.

Important Comments

1) A slightly re-phrased indicator can also be used for **assessing animal production** – for example, average number of litres of milk per cow per day or average number of eggs per chicken per day (always specify the exact animal breed).

2) **Self-reporting faces common errors** which decrease the precision of the provided information, including lack of knowledge (guessing), intentional over- and under-reporting (due to certain expectations or concerns), non-standard harvest units (even among individual households), poor quality of responses due to the respondent being tired, and many others. To minimize these risks, **use the following tips**:

  > always pilot the questionnaire and if you record some difficulties, address it accordingly

  > explain to the farmer, in an easy-to-understand way, why it is so important that his/her responses are precise

  > clarify any unnecessary concerns or unrealistic expectations

  > collect the data as soon after the harvest as possible (minimizing recall errors)

  > if possible, use portable scales to measure the weight (in kg) of the unit the farmer reports in (e.g. 8 bags of wheat)

  > if possible, go and measure the actual size of the land the survey is concerned about (in areas where farmers are less likely to know the land size, this must be a mandatory part of the data collector's job)

3) Consider replacing interview-based self-reporting by supporting farmers in **recording yields and other required information in forms** provided by your organization (note – farmers should have a

clear reason and incentive to do so).

4) If the survey team's expertise allows, replace reported yield with **crop cut measurement methods** – harvesting samples of the given crop and using them to calculate the average yield. IndiKit currently does not have detailed guidance on crop cuts – if you can help us to prepare it, contact us please. We would appreciate your help!

5) **Select the most suitable units of measurement** based on focus groups discussions with farmers. Make sure that your **staff is well-trained** in determining the size of the land and the weight of the units reported by respondents.

6) Always **ensure that you are comparing what is comparable** – comparing the yields of a low-input crop variety with a variety requiring high financial and time investment might be of limited value (unless you are conducting an analysis of the production efficiency).

7) When **interpreting the results**, keep in mind that the indicator does not consider the amount of invested inputs (money, time, water…) and the sustainability of the production. Where relevant, **use it together with the Agricultural Productivity indicator**.

8) The measurements always need to be **conducted in the same season** of the year – do not compare, for example, vegetable yields in the dry and rainy season.

9) It is important that you also assess whether the respondent **incurred any significant production loses** (e.g. due to pests), otherwise the practice you promoted might have had a positive impact on his/her yield but your endline data will show no improvement.

10) **European Commission's DEVCO** recommends to use a similar indicator: "*Average crop yield*".

E-Questionnaire

- XLS form for electronic data collection - indicator Reported Crop Yield Per Unit