



# Agricultural Cost of Production Statistics (AgCoP)

**Measuring the cost of farming activities**

*A key information source  
for better decision-making in agriculture*



Data on agricultural production costs and profitability is generally scarce and unreliable, especially in developing countries.

## Who can benefit and how?

The additional cost of collecting and compiling Agricultural Cost of Production data is often offset by better targeted, more effective and less costly policies at local or national levels.

### **Policymakers:**

- Improve policy targeting and economic incentives in the agricultural sector
- Better assess the economic impact of policies on the farming sector

### **Analysts and researchers:**

- Estimate productivity, margins and other indicators and compare them across commodities, regions/countries and over time
- Analyze and compare different production practices and their impact on production, productivity and profitability. These data are used by all actors of the agrifood chain, from farmers to processors, traders and decision makers

### **Data producers:**

- Improve the description of the agricultural sector in national accounts and its linkages with other economic sectors
- Improve estimates of agricultural value added

### **Farmers and actors of the agrifood chain:**

- Benchmark their own operations against best practices in farms with similar characteristics
- Improve commodity mix decisions
- Improve investment decisions
- Improve purchasing and marketing decisions

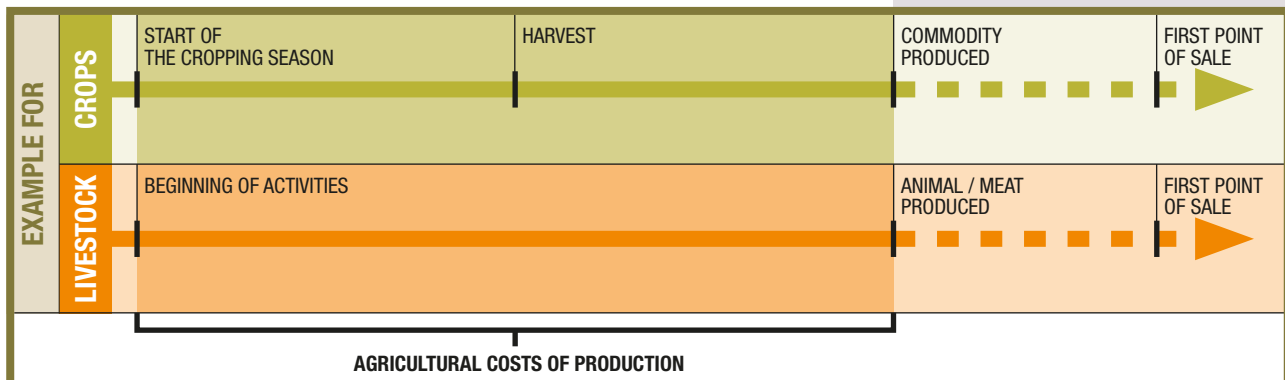


# What is the Cost of Production?

Agricultural Cost of Production (AgCoP) refers to the value of all inputs – purchased or not, fixed or variable – used in the process of production of crops and livestock.

<b>DIFFERENT TYPES OF COSTS</b>	<b>CASH COSTS</b>	<b>CAPITAL COSTS</b>
	<ul style="list-style-type: none"> <li>• Purchased seed, feed, fertilizers, etc.</li> <li>• Paid labour</li> <li>• Custom services (machinery, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Depreciation costs and opportunity costs of capital on owned machinery, buildings and farm equipment</li> </ul>
	<b>NON CASH COSTS</b>	<b>FARM OVERHEAD COSTS</b>
	<ul style="list-style-type: none"> <li>• Unpaid family labour</li> <li>• Farm- produced inputs</li> <li>• Owned animals and machinery</li> </ul>	<ul style="list-style-type: none"> <li>• Unallocated fixed costs</li> <li>• Farm - level taxes, permits, licenses, etc.</li> </ul>
		<b>LAND COSTS</b>
		<ul style="list-style-type: none"> <li>• Land rents and imputed rents, land related taxes</li> </ul>

Costs of production are computed by valuing all processes relating to the production of a given commodity, starting with the first activity necessary to produce the commodity and ending at the “farm-gate”, when the product is ready to leave the farm or to be consumed on the farm.



# How to collect basic data on Agricultural Cost of Production

**Agricultural censuses and surveys** are frequently used as a basis to produce national-level estimates, as the results yielded by these data collection methods can often be interpreted as regional or national averages.

**Qualitative approaches based on typical farms** are cheaper methods that can be used to produce quick estimates of AgCoP at an initial phase or as a complement to traditional sample-based surveys.

The choice of data collection strategy depends on the desired data representativity, coverage, frequency, timeliness, accuracy or precision and the available budget.



## Which costs should be measured?

### Variable inputs

**The cost of variable inputs** – such as fertilizers, plant protection products or seeds – can be measured by collecting farm-level data on the quantities used during the reference period and the prices paid. The cost must also be estimated for inputs that have not been purchased but supplied by the holding itself.

### Labour

**Farm labour** includes both paid and unpaid activities carried out by external workers or members of the household. The cost of hired labour includes all salaries, in-kind payments and benefits paid for by the employer. Unpaid labour such as family work must also be valued.

### Land

**When a farmer rents land**, rental costs must be added to its costs of production. The rental fee may be paid in cash or in-kind, for example in the form of a share of the harvest.

### Capital

**Capital costs** correspond to the loss in value of the stock of capital goods of the holding (depreciation). Capital goods (or fixed assets) comprise machinery, buildings and farm infrastructure such as irrigation systems. Depreciation costs must be distributed over the life of the asset, for example by assuming a fixed depreciation amount each year.

## ESTIMATING THE COST OF FARM-SUPPLIED INPUTS

**Agricultural inputs can be directly supplied by the holding itself, without having to be acquired on the market.**

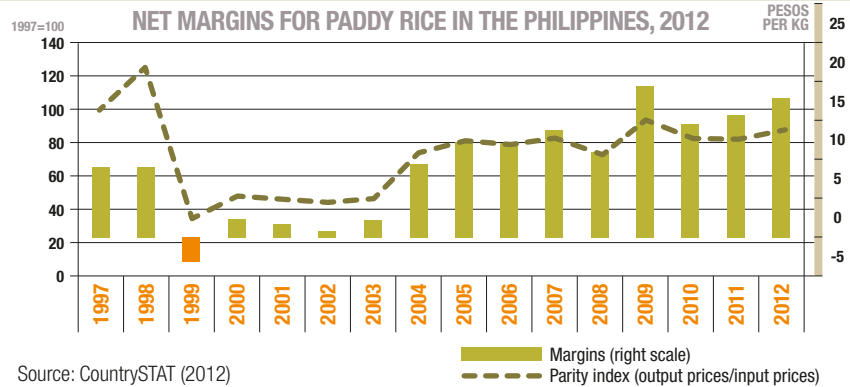
**Examples include manure produced by livestock activities and used as fertilizer for crops; seeds retained for the next cropping season; or farm-produced hay used as feed for animals.**

**To estimate the cost of these inputs, it is possible to use the price that would have been paid by the farmer had he decided to purchase the input on the market.**

## Examples of country indicators and analysis

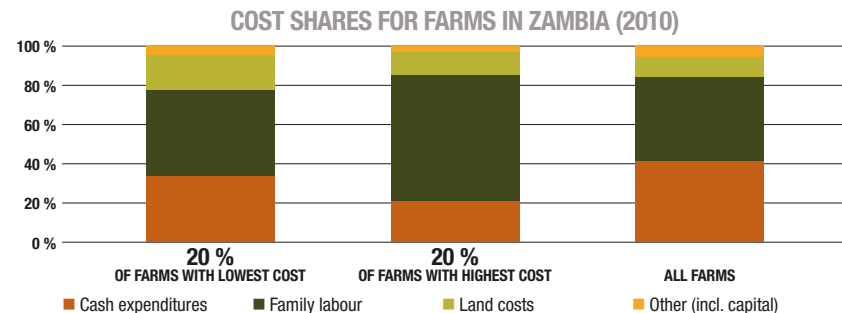
The **Philippines** calculate the average production costs and returns per hectare, per farm and per kilogram for their main agricultural commodities. This data comes from a regular sample survey on agricultural revenues and costs (Agricultural Costs and Returns Survey).

**THE PROFITABILITY OF PADDY RICE PRODUCTION INCREASED BETWEEN 2000 AND 2012 THANKS TO IMPROVED MARKET CONDITIONS**



In **Zambia**, cost of production estimates are drawn from the Crop Forecasting Survey (CFS) and the Post-Harvest Survey (PHS). The results are used by the Government as an instrument for information-based policy support in designing national food security and agricultural development policies.

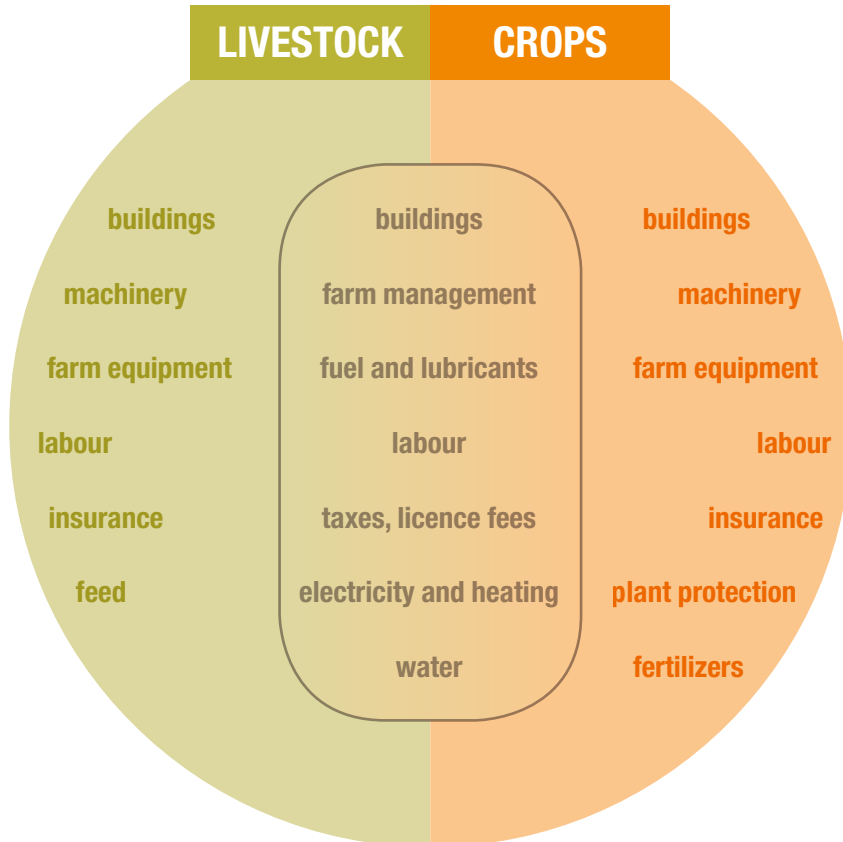
**FARMS WITH A HIGHER SHARE OF FAMILY LABOUR SHOW HIGHER COST OF PRODUCTION**





## Costs of production: by commodity or farm?

Information on costs and revenues for the activity (or commodity) is required to compare the economic performance of different activities and to take better decisions in terms of commodity mix. When inputs are employed for different agricultural activities of the farm, such as fertilizers being used for different crops, these costs must be allocated to each activity to obtain commodity-specific data.



**COMMODITY-SPECIFIC COSTS ARE NECESSARY TO COMPARE THE PROFITABILITY OF AGRICULTURAL PRODUCTS**



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Handbook on Agricultural Cost  
of Production Statistics  
(EN - FR - ES)



Agricultural Cost of Production -  
Country Field Tests  
and Desk-Study Reports



Literature Review  
on Cost of Production  
Methodologies



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