**EXERCISE 10A. CALCULATING COSTS OF PRODUCTION AND MARKETING**

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| --- | --- |
| *OBJECTIVE*  **After this exercise the participants will be able to:**   * List all the costs they incur in producing and marketing a product. * Calculate the material costs of production and marketing. | |
| *EQUIPMENT NEEDED*   * Flip chart, marker pens, cards, calculator | *EXPECTED OUTPUTS*   * List of costs of materials, labor, and services * Calculation of materials costs * Expected income from future sales |
| *TIME*   * 3 hours | *PREPARATION*   * Prepare blank tables like Table 34, Table 35 and Table 36 on large sheets of paper |

*This exercise guides the farmers through the task of listing and calculating the costs of materials and labor. This exercise is designed for a focus group of up to 8 farmers. You can also adapt it for interviews with individual farmers.*

*You will need to repeat this exercise for each of the products the farmers are thinking of producing.*

*Or if you have enough participants, split them into small groups: one for each type of product they are considering.*

*SUGGESTED PROCEDURE:*

1. Explain to the participants that they will be calculating the costs of producing and marketing a particular product. Explain why they need to do this – to help them decide whether it is a good idea to produce this product.
2. Ask them to think of producing a standard amount of the product. For maize, this might be one hectare of the crop. For chickens, it might be 100 chickens.
3. Ask them to list all the items they need to produce and market the product – these might include material costs such as seed, fertilizer, land rental, irrigation, and labor costs for plowing, sowing, weeding and so on. Prompt them if necessary. Sort the cards into three piles: consumable items, durable items, and labor and services.
4. For the consumable items, ask them to say how much of each item they need, and the price of each unit (e.g., renting 1 ha of land, buying 1 kg of seed). List these in the “Quantity” and “Price per unit” columns of Table 34.
5. For each item, get the farmers to calculate the total cost (the last column in the table).
6. Repeat these steps for the durable items, remembering to ask how many years (or production cycles) the item can be expected to last. Write this information in the appropriate section of Table 35.
7. Then repeat these steps for labor and services, filling in Table 36.
8. Check back that the farmers have not forgotten any items. Double-check the calculations.
9. Add the totals from Table 34, Table 35and Table 36:

Total costs:

**= Consumable material costs**

**+ Durable items cost per year**

**+ Labor**

This is the total cost of production and marketing.

TABLE 34. FORM FOR ESTIMATING AND RECORDING COSTS OF CONSUMABLE MATERIALS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Product type** |  | **Currency** | |  | |
| **Land area** |  | **Currency per $** | |  | |
| **DATE MATERIALS UNITS QUANTITY PRICE PER UNIT COST ($)**  **($)** | | | | | |
|  |  | Eg, kg, bags | A | B | A × B |
| **Pre-production** | | | | | |
|  | Tools |  |  |  |  |
|  | Land rental |  |  |  |  |
|  | ... |  |  |  |  |
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| Total pre-production costs | | | | |  |
| **Production** | | | | | |
|  | Seed |  |  |  |  |
|  | Fertilizer |  |  |  |  |
|  | Agrochemicals |  |  |  |  |
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| Total production costs | | | | |  |
| **Postharvest** | | | | | |
|  | Bags |  |  |  |  |
|  | ... |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total postharvest costs | | | | |  |
| **Marketing costs** | | | | | |
|  | Transport to market |  |  |  |  |
|  | Market fees |  |  |  |  |
|  | Communications |  |  |  |  |
|  | ... |  |  |  |  |
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| Total marketing costs | | | | |  |
| Total consumable materials costs | | | | |  |
| Total consumable materials costs ($) | | | | |  |

TABLE 35. FORM FOR ESTIMATING AND RECORDING COSTS OF DURABLE ITEMS

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| --- | --- | --- | --- | --- | --- |
| **Product type** |  | **Currency** | |  | |
| **Land area** |  | **Currency per $** | |  | |
| **ITEM** | **UNITS** | **QUANTITY** | **PRICE PER UNIT ($)** | **YEARS USED** | **COST PER YEAR**  **($)** |
|  | E.g. hoes, buildings | A | B | C | A × B / C |
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| Total cost of durable items per year | | | | |  |
| Total cost of durable items per year ($) | | | | |  |

TABLE 36. FORM FOR ESTIMATING AND RECORDING LABOR COSTS

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| **Product type** | |  | | **Currency** | |  | | |
| **Land area** | |  | | **Currency per $** | |  | | |
| **DATE** | **ACTIVITY** | **PERSON-DAYS** | | **COST/DAY ($)** | | **COSTS ($)** | | |
| **Hired** | **Family** | **Hired** | **Family** | **Hired** | **Family** | **Total** |
| A | B | C | D | E = A × C | F = B × D | E + F |
| **Pre-production** | | | | | | | | |
|  | Land clearing |  |  |  |  |  |  |  |
|  | ... |  |  |  |  |  |  |  |
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| Total pre-production costs | | | | | |  |  |  |
| **Production** | | | | | | | | |
|  | Cultivation |  |  |  |  |  |  |  |
|  | Fertilizer application |  |  |  |  |  |  |  |
|  | Weeding |  |  |  |  |  |  |  |
|  | ... |  |  |  |  |  |  |  |
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| Total production costs | | | | | |  |  |  |
| **Postharvest costs** | | | | | | | | |
|  | Harvesting |  |  |  |  |  |  |  |
|  | Drying |  |  |  |  |  |  |  |
|  | Threshing |  |  |  |  |  |  |  |
|  | Storage |  |  |  |  |  |  |  |
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| Total postharvest costs | | | | | |  |  |  |
| **Marketing costs** | | | | | | | | |
|  | Packaging |  |  |  |  |  |  |  |
|  | Cleaning |  |  |  |  |  |  |  |
|  | Sorting / grading |  |  |  |  |  |  |  |
|  | Produce to market |  |  |  |  |  |  |  |
|  | ... |  |  |  |  |  |  |  |
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| **Total marketing costs** | | | | | |  |  |  |
| **Total labor costs** | | | | | |  |  |  |

