

COST MANAGEMENT IN SEED PROCESSING AND TREATMENT PLANTS

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Introduction

- There is no doubt that, compared to other continents, agricultural productivity is still very low in Africa.
- This is particularly true in sub-Saharan Africa.
- The main reason for this is that there is poor adoption of modern improved technology.
- Small-scale farmers have not benefited from advances in plant breeding mainly because the seeds and the required inputs are perceived to be too expensive.

- For seed prices to be lowered, their production costs must come down.
- Seed processing and treatment contributes significantly to the final seed price.
- It is therefore important for seed processors to pay particular attention to cost management.
- Low production costs and hence low seed prices will not only expand the market but also lead to both higher productivity and higher profitability for the seed processors.

2. Factors affecting processing costs...

- Jugenheimer (1985) has listed the factors that must be considered in determining the costs of processing seed.
- I list these factors with brief comments.

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2.1. Salaries and labour

- Increases the level of salaries and benefits is to a great extent determined by the market forces
- The total wage bill can be controlled by the seed processors.
- The human resource requirements must be rationalized.

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2.2. Supplies

- These include:
 - a) Bags, tags
 - b) Treating materials
 - c) Thread
 - d) Bag stencils
- All these factors are production dependent.
- However, the consumption of treating materials can be minimized by not exceeding the recommended levels of usage.

2.3. Buildings

- Including storage, processing plant, and other buildings used in the operation
 - The factors include:
 - a) upkeep and repairs
 - b) insurance
 - c) depreciation
 - d) fuel
 - e) power
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- Upkeep and repairs of buildings must be regular to avoid very expensive extensive damage.
- Insurance and depreciation depend on the initial cost of putting up the buildings.
- The buildings must be professionally designed and constructed to minimize their costs.
- In addition insurance services must be professionally procured.

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- Fuel refers to the fuel used in the boiler or drier furnace.
- Fuel cost can be minimized by ensuring that the boiler or furnace has higher thermal efficiency and the seed driers are also efficient in design and operation.
- There should be minimal heat energy losses throughout the processing plant.

- Power refers to electricity used for lighting and other non-processing applications.
- Energy efficient light bulbs and appliances should be used.
- Appropriate elective energy saving measures should be taken to minimize electricity costs.

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2.4. Processing and handling equipment

- These contribute to processing cost in the following ways:
- a) depreciation
- b) upkeep and repairs
- c) insurance
- d) power
- e) gasoline and oil for trucks

- Depreciation and insurance costs should be reduced by ensuring that the processing and handling equipment are not over designed.
- Planned preventive maintenance will keep the costs of upkeep and repairs low.
- Electrical power costs can be reduced by ensuring that, among other measures.
- The equipment is not over designed, energy efficient electric motors are used.
- The equipment is properly maintained, and no equipment is left to run when idle.
- Efficient layout design will minimize the cost of gasoline used for trucks.

2.5. Other processing and handling costs

- These include:
- Insurance on inventory
- Taxes on inventory
- Transportation costs for moving seed to and from the processing plant.
- Loss due to seed stocks going out of condition
- Handling and disposing of screenings
- Quality control costs, including purity and germination tests
- Certification costs
- Record-keeping
- Warehouse handling and shipping costs
- Other items, such as insect bird, and rodent control

- Appropriate location of the plant and good transport management can reduce costs for moving seed to and from the processing plant.
- Production planning and good sales and marketing can minimize loss due to seed stocks going out of condition.
- If market is found for screenings they may become a source of income rather than a cost item.
- Rationalization of personnel establishment and appropriate training programmes can reduce many of the processing and handling costs mentioned above.

2.6. General expenses

- Listed under this are:
 - a) Interest on investment
 - b) Taxes on property
 - c) Advertising and promotion
 - d) General overhead.

- Optimization of the processing plant at the design stage can reduce interest on investment as well as taxes on property.
- Advertising and promotion activities need to be very closely monitored and regularly reviewed to ensure that they do not become counterproductive.

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2.7. Additional costs of buying and selling

- Other costs of buying and selling include losses due to seed deterioration during storage and marketing, and shrinkage while cleaning.
- These costs can be reduced by proper quality control when buying the seed and following recommended storage practices.

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