

FARM DATA RECORDING, READING AND UNDERSTANDING MANUALS

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Introduction

The modern day farming is considered as an enterprise. If it is considered as an enterprise, the modern day farmer is an entrepreneur or a business man. Farmer entrepreneur has tasks such as monitoring farm income, making outside transactions and keeping track of the farm supplies. Farmer must employ Key tools and methods in order to keep track of and manage his business.

The need for farm records and accounting

Farm management is concerned with the process of decision making by the farmers. It also embraces the application of physical and biological sciences in keeping with the economics of profitable resource allocation and maximization of farmers net income and welfare goals. Farm records and account keeping are the pre requisites for effective farm management and the back bone of farm enterprises aiming at profit maximization or any other goals. Farm records and accounts are not usually written down by small or peasant farmers, but some kind of mental record keeping and accounting is done.

Hence there is a need to encourage the documentation , even at the small farm level , of activities on the farm as well as the expenses and returns in physical as well as monetary terms in which the framework of a general farmer education programme.

Types of farm records and accounts

The farm records which a good farmer should keep are

- i. Income and expenditure or Receipts and payments or cash returns— Which gives a clear picture of financial performance of the enterprise. Interim corrective measures are possible and further upscaling , downsizing of the enterprises are possible only if the farmer has clear cut income and expenditure records. A cash book should be maintained ideally in all farms.
- ii. Yield or production records— Yield or production records will always help to analyse the response of plants w.r.t biotic and abiotic factors, responses to fertilization, Irrigation, feeding practices in case of animal husbandry and fisheries which can be of great help in planning the management of the enterprise in a profitable way.
- iii. Farm inventory of tools and properties – An inventory of tools and properties should be maintained and periodic stock verification also needs to be done.
- iv. Annual valuations— Annual valuation of immovable properties and other factors of production should be carried out.
- v. Farm diary— Farm diary should contain records of all the farm operations. Purchase of items, input management, farm output etc.
- vi. Profit and loss account— This is one of the key financial documents all the farms should maintain.
- vii. Labour records— Labour records will help to assess the labour requirement in the successive years. This also will help to judge any alterations in the labour allotment, enhancing the labour efficiency and also provides an insight about the labour requirement for particular operations.
- viii. Farm input utilization record— Input utilization records will

help to assess the requirement in the successive years which can provide a projected figure of operational expenses of the farm which ultimately help the farmer to manage the financial resources effectively.

- ix. Sales record— Sales record will provide information on sales like peak months of sale for a particular commodity, demand of a particular commodity and also profit and loss of particular commodities which can help in future planning and upscaling.
- x. Purchase record— Purchase records is also a must in all farms. Which helps in quantifying the input usage in the farm
- xi. Special or supplementary records— every activity in the farm should be ideally recorded like water usage per month, electricity usage per month, monthly wastage of resources, reasons for mortality of plants, animals or fishes etc.. Which always help in future activities.

Classification of aquaculture records

Aquaculture records can be classified into:

- **Daily records kept** for input usage like feeds, fertilisers, labour and daily occurrence
- **Occasional record** which are kept for events that do not happen on daily basis. Such records would include:
 - i. Specific pond production (Quantity and values) by species
 - ii. Costs of acquisition of inputs
 - iii. Cost incurred in new constructions or repairs
 - iv. Salaries (both in cash and in kind)

Some important aquaculture records parameters include:

- Capital investment costs e.g. cost of constructing ponds, hatchery etc.
- Total area under culture
- Individual pond identity
- Individual pond treatments

- Stocking densities and time of stocking
- Species stocked
- Kinds, quantities and cost of inputs used
- Pond productions in amounts and values
- Other productions and values
- Daily occurrences

Other records to consider include:

1. Salary / wages records
2. Farm inventory records
3. Records on payment of rents and hire of equipment, machinery, services etc
4. Pond sampling records

Advantages of farm record keeping

1. Be used in Determining profitability of various techniques of production or systems
2. Be used to compare the efficiency of use of inputs, such as land, labour and capital, with that of alternative production activities
3. Help the investor in improving the efficiency of farm's operations
4. Be used to preserve institutional memory of the enterprise for future reference.

Net farm income statement (Profit and loss statement)

Total income- Total expenses= Net farm income

Three key financial documents

1. Profit and loss statement

The second important financial statement which contains the summary of receipts and expenses and the resulting profit or loss during an accounting period , usually a year. This profit and loss statement presents a much better estimate of the business performance.

2. Balance sheet

Balance sheet is a statement of the assets, liabilities, and capital of a business or other organization at a particular point in time, detailing the balance of income and expenditure over the preceding period.

3. Cash flow statement

Cash flow statement contain the daily cash inflow and outflow statement. It helps the entrepreneur to plan his present and future actions.

Reading and understanding manuals

Here are some guidelines to help make instructions easy on the user.

- Provide step-by-step sequences in the correct order.
- Follow the timing and sequencing of the actual operations
- Provide visual stepping stones (e.g. Step 1, Step 2 etc.)
- Avoid lengthy paragraphs.
- Use everyday words and terms: avoid jargon.

Things to be remembered while understanding manuals

- Usually all the instructions in a manual will be printed in very small font . A farmer should keep a reading lens to enlarge it and follow all those instructions.
- There would be few mandatory labels in all wrappers of all products related to farming. These are Manufacturing date or packed on , expiry date or best fore , Batch code, QR code etc. selection of products should be based on these labels.
- In few products the ingredients or contents of the product will given in proportion . That will be help the consumer to select or avoid the product based on his or her preference. For eg. Certain contents in a product may cause some allergy to a consumer or certain content in a product are known to

be cancer causing agents which the consumer would like to avoid. In such cases, the contents or the ingredients given in the label would be of great help to the end users.

- A farmer should be able to follow the methods of use given in the label or manual. The instructions would be in a sequence. One should learn to follow the instructions in a sequential manner.
- Knowing simple calculations is also must while using farming related products. For eg. If something is to be sprayed in a crop or some medicine needs to be diluted and administered to animals or fishes in the pond, one should know the basic calculations. 0.2% dilution of something to be sprayed or provided to animals means, 2 g or 2ml of that particular product is diluted in 1 litre of water before usage.
- In case of pesticides there will be statutory warning in products with colour codes. If the colour code of pesticides is Green, it is safe to use. If it is blue is it is slightly toxic but can be used with precaution. Yellow labelled is moderately toxic and should be used with due precautions. Red labelled pesticides are highly toxic and should be used cautiously as per the instructions and recommended doses. All the pesticides should be used as per the recommended dosages only.
