و

بسـت

علمي او څېړنيزه مجله

ټوک : دريم

ګڼه : دوهمه

کال : ۱۴۰۳

بسم الله الرحمن الرحيم

بُست علمي او څېړنيزه مجله

بُست پوهنتون

دريم ټوک – دوهمه ګڼه

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بُست علمی او څېړنیزه مجله

بُست پوهنتون

د امتیاز خاوند: بُست پوهنتون

مسئول مدیر: ډاکټر ذبیح الله انوري

سردبیران: پوهندوی دوکتور علي احمد احمدي او خان محمد وفا

ډیزاین: د بُست پوهنتون د خپرنیزو او فرهنګي چارو مدیریت

د خپرولو کال: ۱۴۰۳

درک: بُست پوهنتون، لښکرګاه، هلمند، افغانستان

د بُست پوهنتون د رئیس پیغام

په ننې ژوند کې د یوې علمي مؤسسې یو له مسؤلیتونو څخه دا دی ، چې نه یواځې خپل محصلان د پوهې په ګانه سمبال کړي، بلکې د پوهنتون د لوړو زده کړو لرونکو پوهانو او استادانو د علمي زیرمتون څخه داسي څه وخت په وخت راوباسي، چې د ټولنې د ژوند د ارتیاوو د پوره کولو لپاره او یا لږ تر لږه د ټولنې د لوستې قشر د خبرولو او که وکولای شي له هغوی څخه د عمل په ډګر کې د ګټې اخیستنې په موخه ، په کار واچول شي.

و دې موخې ته د رسیدلو لپاره پوهنتون باید یو داسې علمي خپرندویه ارګان ولري، چې په هغه کې د پوهنتون ټول با صلاحیته منسوبین که هغه استاد وي، که کارکوونکی او که زده کړه یال ، خپلې علمي او څېړنیزې مقالې او لیکنې د کاغذ پر مخ باندې کښیښودلای شي.

زما په شخصي آند پدې مجله کې لکه له نوم څخه چې یې ښکاري، باید داسي مسائل را برسیره شي، چې نه یواځې په پوهنتون پورې راګیر پاتې شي، بلکې په عام ډول سره د افغانې ټولنې او په ځانګړي ډول سره د هلمند ولایت د اوسیدونکو و نني او سبا ژوند ته په کتلو سره، بریالیتونونه، ستونزې ، وړاندیزونه او د حل لارې-چارې ، وړاندې کړل شي.هغه وخت به د بُست پوهنتون علمي مجله یواځې د بست پوهنتون نه، بلکې د ټول هلمند ولایت ، آن د سیمې او ټول افغانستان په کچه د پوهې او څېړنې په برخه کې د وخت د غوښتنو سره سم ، د پاملرنې وړ او و ځوان نسل ته د یوې سمې لارې د ښودلو په موخه ، یوه محبوبه او پر زیاتو خلکو باندې ګرانه مجله وي او په ټول هیواد کې به خپل مینه وال ولري.

دا مجله به د بُست پوهنتون د مشرتابه، استادانو ، محصلانو ، فارغانو او ټولو مینه د علمي او څېړنیزو مقالو د خپرولو لپاره که هغوی د پوهې په هر ډګر کې چې وي، یو خپرنیز ارګان وي،چې و خپریدلو ته به یې ټول مینه وال په تمه ناست وي.ځومره به پرځای او ښه خبر وي، چې د ټولنې لوستی قشر په تیره بیا د بست پوهنتون محترم استادان ، فارغ شوي او بر حاله محصلان د علمي او څېړنیزو مقالو و لیکلو ته و هڅول شي.

زه د بُست پوهنتون د ټولو منسوبینو په استازیتوب ویاړ لرم ، چې د بُست پوهنتون د علمې مجلې د خپریدلو له امله د محترم مؤسس، محترم علمي مرستیال او د څېړنې له محترم آمر او همدا رنګه د مجلې له ټولو کارکوونکو او پرسونل څخه د زیار او زحمت په ګاللو سره چې مجله یې و خپریدلو ته چمتو کړې ده ، مننه او قدرداني وکړم، ټولو ته د زړه له کومې مبارکي وایم او هیله لرم چې د بُست پوهنتون د علمي مجلې کارکوونکي به خپل رسالت د پوهنتون او ټول هلمندې ولس او په اخری تحلیل کې د ټول افغان ملت پر وړاندې په پوره او ټینګ عزم سره سرته ورسوي.

په درنښت

ډیپلوم انجنیر محمود سنګین

د بُست پوهنتون رئیس

سریزه

بُست پوهنتون ویاړ لري چې د خپل علمي پرمختګ په لاره کې يې يو بل ډير مهم او اړين ګام پورته کړ او هغه د بُست د علمي او څېړنيزي مجلې د دريم ټوک، دوهمي ګڼې خپرېدل دي . تر هر څه دمخه د پوهنتون ټولو استادانو، محصلانو او د علم او پوهې د لوی کور مينه والو ته د بُست د علمي او څېړنيزي مجلې د خپرېدلو مبارکي وړاندې کوم او ددې سره جوخت د ټولو ملګرو څخه چې ددې مجلې د جواز په تر لاسه کولو، ترتيبولو او خپرولو کې يې نه ستړې کېدونکې ونډه اخيستې ده د زړه له کومې مننه کوم.

د علمي کور کهول او اړوند کسانو ته ښکاره ده او پوره باور لري چې د ننني نړۍ هر اړخيزه پر مختګ د پوهانو د علمي څېړنو د زيار له برکته ممکن سوی او د لوړو زده کړو مؤسسي، اکادميک انستيتوتونه او څېړنيز علمي مرکزونه پکښې مرکزي او پريکنده رول لوبولی دی.

همدې اصل او ارزښت ته په کتو سره بُست پوهنتون غواړي د پرمختللو اکاډميکو نورمونو په رعايت د تدريس، علميڅېړنو او نوښتونو له لارې مسلکي کادرونه وروزي او د معياري تحصيلي اسانتياوو او زمينو په برابرولو سره د ټولنې ځوانانو ته معياري او د لوړ کيفيت لوړې زده کړې وړاندی او د علميڅېړنو پر بنسټ د کره پوهنيزو اثارو د توليد زمينه برابره کړي ، ترڅو د لوړو زده کړو او مسلکي پوهې په ډګر کې د ګټوړو مهارتونو په تر لاسه کولو او د خپلو رښتينو اهدافو په لاسته راوړلو سره د ټولنې او هيواد په پرمختګ او رغونه کې رغنده ونډه واخلي او د رښتيني خدمت جوګه شي.

ژمن يو چې د هلمند ولايت، ګاونډيو ولايتونو او په ټول هيواد کي ځوان نسل ته د اسلامي ، ملي او کلتوري ارزښتونو په رڼا کي معياري د علمي او مسلکي لوړو زده کړو او پراخو علمي څېړونو زمينه برابره او ټولني او هيواد ته ژمن او روزل سوي کادرونه وړاندي کړو.

د اوس لپاره د بُست علمي او څېړنيزه مجله يوازي د **سائينسي علومو** په برخه کې علمي او څېړنيزي مقالي او ليکني د چاپ او نشر د تګلارې سره سم مني او خپروي او هيله مند يو چې په راتلونکې کي به نوري برخي هم ور زياتي کړل سي.

ډاډ لرم چې د بُست پوهنتون استادان، محصلان او علمي کارمندان به انشأالله، نن، سبا او په راتلونکې کې د خپلې علمي څېړنيزي مجلې د خپرولو له لارې خپل دغه دروند خو ويارلی دين (پور) ادأ کړي. همدا ډول ټولو د علم او پوهې څښتنانو او مينه والو ته په مينه سره بلنه ورکوو چې ددی علمي او څېړنيزي مجلې او د بُست پوهنتون د پرمختګ په لاره کې خپلې علمي او څېړنيزي ليکنې، آندونه، وړاندیزونه او رغنده نيوکې او مرستې د تل په شان راولورول او د علم ددې ستر کور په ودانولو کې د خپلې دينې، او ملي برخې د ادايې ويارِ راوبخښی.

مورِ هوډ کړيدي او هيله مند يو چې انشآ الله د وخت په تيريدو سره به د خپل هيواد و بچيانو او ځوان نسل ته د تدريس ، ښه روزنې او څېړنيز هاند لپاره اړيني او د پام وړاسانتياوي برابري کړو تر څو په لومړي پړاو کښې خپلو هلمندوالو بيا د سهيل لويديځې حوزې او په پاې کښې و ټولو هيوادوالو ته د يو داسې چوپړ مصدر وګرځي چې زمورِ د ځوريدلي اولس او ويجاړشوي هيواد اقتصادي، فرهنګي، سياسي او ټولنيزې ستونزې حل او افغانستان د نړۍ د پرمختللوهيوادونو په ليکه کې ودريږي.

لړليک

Introduction to Farm Management and Its Importance

Sayed Abdul Wahab Saeedi[1*] and Mir Wais Nazari[2]

[1]Teaching Assistant, Agricultural Economics and Extension Department, Agriculture Faculty, Helmand University

[1]Lecturer, BBA Department, Economics Faculty, Bost University

Corresponding Author Email: saeedi.helmand@gmail.com

Abstract

This is a review article based on Farm management introduction and importance, the main aim of the paper is to define farm management and describe the importance, role, scope and decision making of an effective farm. Farm management is the science of decision making for businesses engaged in the production of primary agricultural commodities. Farm managers make decisions about what to produce, how much to produce, how to produce it, and how to obtain the resources needed to produce it. Farm management requires developing budgets for the purpose of creating a plan, obtaining adequate amounts of land, labour, and capital to implement the plan, and completing financial statements to evaluate how well the plan succeeded.

Keywords: Farm Management, Definition, Importance, Scope and Farm decision making

Introduction

Farm management is a management technique for planning and carrying out agricultural decisions, such as those involving livestock, crops, aquaculture, agroforestry, etc., to maximize output and profitability. By allocating resources, devising strategies, and planning activities, it uses the resources at hand for lucrative, sustainable, and productive farming. (*What Is Farm Management?* 2022).

The practical on-farm management of soil, the setting of targets and the monitoring of target achievement and the decisions taken about what crops to grow and when they should appear in the cropping sequence are fundamental to successful crop production.

The management of individual soil types has been dealt with. Farmers have a responsibility to care for the soil for future generations. This means that, while they are trying to grow profitable crops, they must also take into consideration the long-term effects of their practices on soil health, fertility, structure and stability. This concept now comes under the umbrella of 'sustainability'. This chapter attempts to examine some general management practices which could apply to several different soil types depending on individual situations ((Finch et al., 2014).

Farm management, and its cousin, decision support, are the tools by which farmers or farm managers make decisions about the day to day running of a farm. The decisions that they may have to make can range from planting to pesticide spraying. Text mining may assist the decision-making process by extracting information from texts such as scientific reports, and harvesting schedules. This information can assist in optimal decision making. This is reflected in research literature where text mining has been used directly in farm management and decision support systems (Liao et al., 2015b). These systems are based upon information extraction from either natural language input or textual resources. The textual resources contain actionable information, and there is a small body of work that describes knowledge extraction strategies which can be integrated into farm management systems (Oliveira et al., 2016).

The sophistication of farm management systems based upon text mining is limited because these systems simply use text mining techniques to extract schedule-based information. These systems can be improved by using techniques from bio-medicine to extract information from scientific papers, and other credible information sources to infer new finer-grained information, for example, the interactions of soil acidity, fertiliser, and pesticides. It is arguable that fine-grained information applicable to a specific location may have a more of a beneficial effect than general coarse-grained information such as planting schedules. This area is a potentially rich area of research because of the current lack of documented research.

According to the research (Kahan, 2013), Farm management extension is concerned with the development of management strategies and skills among farmers for improved decision-making in the use of resources and linking farmers to markets. With the increasing market-orientation of farming, the decisions taken by farmers are more complex; for farms to compete they must be run as a business. This creates a demand for specialized extension support. To be successful farmers need the skills to produce what the market wants and what satisfies consumers. The growing importance of specialization in farm management is to support farmers in this work.

What is Farm Management?

It can be defined as, "The science and art of optimizing the use of resources in the farm of farm-households and of achieving the optimal functioning of these systems in relation to household-specified objectives. It is a branch of Agriculture Economics that deals with the economics of farm units. Organization of land, capital for farm production, operations to achieve

all these forms a few objectives of farm management (TraceX Technologies, 2022).

Far management is making and implementing of the decisions involved in organizing and operating a farm for maximum production and profit. Farm management draws on agricultural economics for information on prices, markets, agricultural policy, and economic institutions such as leasing and credit. It also draws on plant and animal sciences for information on soils, seed, and fertilizer, on control of weeds, insects, and disease, and on rations and breeding; on agricultural engineering for information on farm buildings, machinery, irrigation, crop drying, drainage, and erosion control systems; and on psychology and sociology for information on human behaviour. In making his decisions, a farm manager thus integrates information from the biological, physical, and social sciences (Bliss, 2021).

It is the science of organizing and combining people, natural and material resources for the purpose of crop and livestock production in order to maximize profit while optimizing input use. Such resources include land, labour, management skill, specialist knowledge, capital (financial and equipment), sunlight, irrigation, plants and animals, livestock feed, fertilizer, agrochemical, time, etc. Farm management is best examined and understood under the whole farm situation. This include a study of the a) Human elements b) Technical elements c) Economic, financial, growth and investment aspect d) Risk and uncertainty Economics is the core of farm management, since the key task of farm management is making choice between two or more alternatives (*DEFINITION, SCOPE and IMPORTANCE of FARM MANAGEMENT Farm Management*, n.d.)

Importance of Farm Management:

At its core, farm management is the process of planning, organizing, directing, and controlling the activities of a farm. This includes everything from crop selection to labour management, resource allocation, and financial planning. The goal is to ensure that the farm operates efficiently, sustainably, and profitably (TraceX Technologies, 2022). Effective farm management helps farmers make informed decisions, optimize resource use, and increase profitability. It also plays a crucial role in sustainability, allowing farms to produce food while minimizing environmental impact. Here are some reasons why farm management is vital:

- **Increased Productivity:** By implementing best practices and using the right technologies, farmers can enhance crop yields and improve overall farm productivity.
- Cost Efficiency: Effective management helps in controlling costs, ensuring that resources are used wisely and reducing waste.
- **Risk Management:** Farming is inherently risky due to weather conditions, market fluctuations, and other uncertainties. Good management practices help mitigate these risks.
- **Sustainability:** Farm management includes practices that promote environmental sustainability, ensuring that farming can continue for generations to come.

Objectives of Farm Management:

The primary objectives of farm management are to optimise the use of available resources, maximise farm productivity and profitability, and ensure the sustainable use of natural resources. Let's explore these objectives in detail using easy vocabulary (Rudra, 2023).

1. Resource Optimization: Farm management aims to efficiently utilise the available resources such as land, labour, capital, and technology. It involves making informed decisions on resource allocation to ensure the best possible outcomes in terms of crop yields, livestock productivity, and overall farm performance

2. Productivity Maximisation: The core objective of farm management is to maximise productivity across all farm activities. This includes enhancing crop yields, improving livestock performance, and optimising the output of horticultural and other agricultural products. Increased productivity

directly impacts farm income and contributes to food security.

3. Profitability: Farm management focuses on achieving economic viability by maximising profits while minimising costs. Farmers strive to make well-informed financial decisions, including cost analysis, budgeting, and marketing strategies, to ensure the farm's financial success.

4. Sustainability: Sustainable farm management is an essential objective that considers the long-term impacts of agricultural practices on the environment and society. It involves adopting eco-friendly practices, conserving natural resources, promoting biodiversity, and ensuring the well-being of future generations.

5. Risk Management: Farm management seeks to mitigate various risks that farming operations are exposed to, including climate uncertainties, market fluctuations, and pest and disease outbreaks. Effective risk management strategies help farmers cope with unforeseen events and reduce potential losses.

6. Enhanced Quality of Life: Farm management aims to improve the quality of life of farming families and rural communities. By optimizing farm productivity and profitability, farmers can generate sufficient income to meet their basic needs and invest in education, health, and overall well-being.

Scope of Farm Management:

Farms have a lot of moving parts. Farm management ensures none of them are overlooked (Fig. 1).The scope of farm management can be divided into several key components, each playing a crucial role in the overall success of a farming operation (Kunz, 2024).

Fig. 1: Farm Management Elements (Source: Kunz, 2024)

1 .Planning and organization:

Effective planning and organization are the bedrock of successful farm management. They not only save time and resources but also help predict and mitigate potential challenges.

Here are its key components:

Strategic business planning: Farmers should work on setting long-term goals and mapping out the strategies to achieve them. This means assessing market conditions, evaluating farm performance, and identifying opportunities for growth and improvement.

Operational planning: This focuses on the day-to-day management of the farm. It includes scheduling planting and harvest times, organizing labour schedules, coordinating the maintenance of equipment, and so on.

Resource allocation: Efficient use of resources such as seeds, fertilizers, water, and energy is critical. Planning helps ensure that these resources are used optimally to maximize output while minimizing waste.

Contingency planning: Every farm should have some measures in place to prepare for unforeseen events like adverse weather or pest outbreaks.

For any farm, big or small, proper planning and organization is key to running a successful business.

Financial management:

Every business needs to worry about and carefully manage its finances — and farms are no exception. Here are the core aspects of financial management in farming:

Budgeting: Creating detailed budgets helps farm managers plan for upcoming expenses and anticipate revenue. This is crucial for maintaining financial balance and ensuring funds are available for necessary inputs and operations.

Cash flow management: Monitoring the inflow and outflow of cash is essential to keep the farm

operational. It helps you plan major purchases and avoid financial strain.

Cost management: Keeping track of all costs, including fixed and variable expenses, is key to minimizing unnecessary expenditures. This includes costs associated with inputs, labour, machinery, and maintenance.

Financial analysis and reporting: Regular financial analysis and reporting helps in understanding the economic impact of different farm management decisions.

2 .Crop management:

Effective crop management aims to maximize yield and quality while ensuring sustainability. This involves a variety of practices tailored to the specific needs of each crop and the environmental conditions of the farm.

In general, crop management includes tasks such as selecting seeds, setting planting and harvesting times, maintaining soil health, managing water and irrigation systems, and minimizing the damage from weeds, pests, and diseases .

Modern crop management often incorporates precision agriculture techniques. Tools like GPS mapping, satellite imagery, and other data-driven technologies enable farm managers to make precise and informed decisions about when and how to plant, treat, and harvest crops.

3 .Livestock management:

Livestock management focuses on the comprehensive care and administration of animals raised for profit, including cattle, sheep, goats, pigs, and poultry. Its goals are ensuring animal health, productivity, and welfare.

Here are some of the essential practices in livestock management:

Breeding: Selecting the right breeds and employing effective breeding strategies are fundamental to improving herd quality.

Nutrition: Feed management strategies must be tailored to the specific needs of each species and life stage.

Health and veterinary care: Regular health checks, vaccinations, and prompt treatment of illnesses are crucial to maintaining a healthy livestock population.

Housing and environment: Providing suitable housing that protects animals from extreme weather, allows sufficient space, and maintains hygiene can significantly affect their health and productivity. Environmental management also includes proper manure handling and ensuring adequate water supply.

Welfare practices: Ethical treatment and handling of animals not only fulfill legal and societal expectations but also influence productivity and output.

These days, farmers can incorporate various technologies to increase efficiency and oversight. Tools such as electronic identification tags, automated feeding systems, and health monitoring devices help managers keep track of individual animals and manage large herds more effectively.

4 .Equipment management:

Effective equipment management involves the selection, procurement, and maintenance of various types of farm machinery and equipment, from tractors and combines to irrigation systems and more .

The key aspects of farm equipment management are:

Selection of equipment: Factors to consider include the size of the farm, the type of crops or livestock, and the specific needs of the operation .

Maintenance and repair: Proper storage conditions and regular maintenance is crucial to extend the lifespan of farm equipment and prevent unexpected breakdowns. This includes routine checks, lubrication, cleaning, part replacements, and timely repairs.

Operational training: All personnel should be properly trained to operate “their” piece of equipment to ensure safety and efficiency .

Record keeping: Keeping detailed records of equipment status, maintenance schedules, and repair history helps plan and budget for future equipment needs. This data is also essential for troubleshooting problems and making informed decisions about upgrades or replacements.

Farm managers often struggle with scheduling and keeping track of maintenance work, especially on larger farms with diverse equipment and infrastructure. One way to solve this problem is by digitizing these processes .

For example, farmers can use Forms On Fire to create schedules, assign maintenance work, provide equipment-specific checklists for technicians and operators, keep detailed history records, and much more.

5 .Labor Management:

Farm labor management encompasses the recruitment, organization, and supervision of farm staff. Its goal is to ensure that the farm operates smoothly and efficiently by creating a productive and safe working environment.

Some of the major tasks include hiring reliable workers, providing necessary training, scheduling work, ensuring health and safety on the farm, and addressing conflicts swiftly and fairly.

Again, farm managers can use mobile technology and Forms on Fire to streamline many of these tasks. They can build a system to track hiring and labor costs, create standardized training and on boarding checklists, and streamline any type of farm audit they want to conduct .

6 .Risk management:

Farm operations are threatened by all kinds of risks, including:

Weather events such as droughts, floods, and storms.

Price volatility, fluctuating market demands, and economic downturns.

Diseases in crops and livestock.

Machinery breakdowns, labor shortages, and logistical challenges.

Changes in agricultural regulations or non-compliance with laws that lead to penalties and operational disruptions.

Proper risk management on a farm includes identifying potential risks, assessing their likelihood and impact, and implementing strategies to mitigate or manage these risks effectively .

Farm Equipment :

Farm equipment has evolved over the centuries from simple hand tools such as the hoe, through ox- or horse-drawn equipment such as the plough and harrow, to the modern highly technical machinery such as the tractor, baler and combine harvester replacing what was a highly labor-intensive occupation before the Industrial Revolution. Today much of the farm equipment used on both small and large farms is automated (e.g. using satellite guided farming).As new types of high-tech farm equipment have become inaccessible to farmers that historically fixed their own equipment, Wired magazine reports there is a growing backlash,[37] due mostly to companies using intellectual property law to prevent farmers from having the legal right to fix their equipment (or gain access to the information to allow them to do it). This has encouraged groups such as Open-Source Ecology and Farm Hack to begin to make open-source hardware for agricultural machinery. In addition, on a smaller scale Farmbot and the Rep Rap open-source 3D printer community has begun to make open-source farm tools available of increasing levels of sophistication (Pearce, 2015 .(

What is Farm ?

A farm (also called an agricultural holding) is an area of land that is devoted primarily to agricultural processes with the primary objective of producing food and other crops; it is the basic facility in food

production.[1] The name is used for specialized units such as arable farms, vegetable farms, fruit farms, dairy, pig and poultry farms, and land used for the production of natural fiber, biofuel, and other commodities. It includes ranches, feedlots, orchards, plantations and estates, smallholdings, and hobby farms, and includes the farmhouse and agricultural buildings as well as the land. In modern times, the term has been extended so as to include such industrial operations as wind farms and fish farms, both of which can operate on land or at sea.

There are about 570 million farms in the world, most of which are small and family-operated. Small farms with a land area of fewer than 2 hectares operate on about 12% of the world's agricultural land, and family farms comprise about 75% of the world's agricultural land.[2[

Modern farms in developed countries are highly mechanized. In the United States, livestock may be raised on rangeland and finished in feedlots, and the mechanization of crop production has brought about a great decrease in the number of agricultural workers needed. In Europe, traditional family farms are giving way to larger production units. In Australia, some farms are very large because the land is unable to support a high stocking density of livestock because of climatic conditions. In less developed countries, small farms are the norm, and the majority of rural residents are subsistence farmers, feeding their families and selling any surplus products in the local market ((Lowder et al., 2016)

Farm Decision Making Process:

As indicated before, farm management is concerned with the allocation of limited resources Among a number of alternatives uses which requires a manager to make decisions. A manager, First, must consider the resources available for attaining goals which have been set. Limits are Placed on goal attainment because most managers are faced with a limited number of resources. Decision-making is the most important responsibility of a manager of a farm business or other type business. Decisions form the life-wire of the farm business. A successful manager is one who has the skill to choose between alternatives in a constrained environment and effective at attaining the stated objectives at best. In a farm business, goal attainment is confined within some limits set by the amount of land, labour and capital available. These resources may change overtime, but they are never available in infinite amounts. The level of management skill available or the expertise of the manager may be another limiting resource. If the limited resources could only be used one way to produce one agricultural product, the manager's job would be much easier. The usual situation allows the limited resources to be used in several different ways to produce each of a number of different products. In this case, the manager may be faced with a number of alternative uses of the limited resources and must make decisions on how to allocate them among the alternatives to maximize profit from the total business. This is one of the reasons why decision making is mentioned in the definition of farm management. Without decision nothing would happen. Even allowing things to continue as they are implies a decision, perhaps not a good decision but a passive decision nevertheless. The process of making a decision can be formalized into a logical and orderly series of steps. Following these steps will not ensure a perfect decision but ensure that the decision is made in a logical and organized manner (Raju, & Rao, 1990).

1. Identify and define the problem: A manager must constantly be alert to identify problems as quickly as possible. Most problems will not go away by themselves and represent an opportunity to increase the profitability of the business through wise decision making. Once identified the problem, it should be concisely defined. Good problem definition will minimize the time required to complete the remainder of the decision making steps. Definition of the problem involves locating the root cause of the problem identified. This helps to identify factor responsible for the problem identified. For the case of low yield identified as a problem, the possible cause can include low input

use such as fertilizer which may depend on several factors.

2. Collecting relevant data and information: Once a problem has been identified, the next step should be to gather data, information and facts, and to make observations which pertain to the specific problem.

3. Identifying and analyzing alternatives: Once the relevant information is available, the manager can begin listing alternatives which are potential solutions to the problem. Several alternatives may become apparent during the process of collecting data and transforming data into information. Each alternative should be analyzed in a logical and organized manner to ensure accuracy and to prevent something from being overlooked.

4. Making decision: Choosing the best solution to a problem is not always easy, nor is the best solution always obvious. Sometimes the best solution is to do nothing or to go back, redefine the problem and go through the decision-making steps again.

5. Implementing decision: Selecting the best alternative will not give the desired results unless the decision is correctly and promptly implemented. Resources may need to be acquired and organized. This requires some physical actions to be taken.

6. Evaluation: This is the last step in the process of decision making. It involves comparing the result or performance of your farming business before and after the implementation of the solution.

Classifying Decision:

Decision made by farm manager can be classified in a number of ways. One way of classification system may be to consider decisions as either organizational or operational in nature.

Organizational decisions are those decisions made in the general areas of developing plans for the business, acquiring the necessary resources and implementing the overall plan. Some of such decisions include: decisions regarding selection of the best size of the farm, what scale should be the farm operation, decisions regarding (how much land to purchase or lease; how much capital to borrow; the level of mechanization; construction of buildings and irrigation facilities, etc.). Therefore, organizational decisions are related to planning and organization of the farm that tend to be long run decisions which gives shape to the overall organization of the farm and are not modified or re-evaluated more than once a year. Compared to operational decisions, organizational decisions require heavy investment and have long lasting effect. **Operational decisions** are made more frequently than the organizational decisions and related to the many details made on a daily, weekly or monthly basis and are repeated more often than the organizational decisions as they follow the routines and cycles of agricultural production. Operational decisions are frequent which involve relatively lower investment and their effect is short lived. Some of such decisions include:

- Selecting fertilizer and seeding rates for a given field and year.
- Making changes in livestock feed ration
- Selecting planting and harvesting dates.
- Marketing decisions and daily work schedules.
- What to produce (selection of enterprises).
- How much to produce (enterprise mix and production process).
- How to produce (selection of least cost method).
- When to produce (timing of production)

Farm Records and Accounts:

Farm records are important to the financial health of the farm. Good records do not ensure the successfulness of the farm; however, success is unlikely without them. Farm records are like grade report papers students receive in higher institutions. With a farm record report, you can tell how well you are managing your business operation and you can also see the strengths and weaknesses of your farm operation (Tony, 1998).

Farm record is an account of the various activities carried out on the farm on a regular basis. Such activities include farm purchases, utilization of farm inputs, number of livestock kept and equipment procured. It also includes crop

cultivated, seed planted, cultural activities carried out, quantity harvested, etc.

Types of Farm Records: There are different types of records that are important for decision-making. And there is no single widely accepted design for farm record. However, any farm record has to provide the most important requirements. These most important requirements include simplicity, specificity, ease of accessing information, and comprehensible to another user. The most important farm records are discussed below.

Inventory Records: Inventory is the listing of assets owned by the farming business. The farm tools and equipment inventory contain information of the asset such as name, the year of purchase, the cost price, the expected years of life, the annual depreciation and the beginning and end of year values. The common types of farm records are production record and sales record. Farm inventory record contains list of assets owned by the farm. Examples include crop and livestock inventory records. The crop inventory record contains information concerning the quantity and value of crops at the beginning and end of the accounting period; and the livestock inventory record shows the number of each type of livestock owned and their value at the beginning and end of the accounting period.

Income or Receipts Records: Income or receipts records can be classified by enterprise with details of each transaction like product sold, units produced and total value.

Home Consumption Record: The home consumption record usually contains the product, price per unit, total weight and the value of home consumed products. In subsistence small scale farming the proportion of home consumed products out of the total production could be substantial.

The Crop and Livestock Expenses Record: The crop or livestock expense record, which is similar to the direct expense record shows date of purchases, the seller, quantity purchased, unit price and total cost.

Farm Labor Record: This often includes both family and hired labor components. On enterprise basis the number of workers, the hour spent by each person and the wage are recorded. Hired labor costs are often transferred to the general expense record.

Durable Assets Depreciation Record: It records type of asset, purchase date and condition at purchase, purchase value, expected useful life (service period), and the rate of depreciation of the asset. The methods of determining the depreciation of farm durable items is already discussed earlier. The data will help in determining the salvage value which is the value of the assets at the end of its useful life i.e., scrap value.

Net Farm Profit Record: It records the values and sources of receipts (crop, livestock), value of home consumed products and the gross farm receipts for a given year.

Farm Accounting: Commercial farming involves many transactions and book keeping. Books of account present summary of records on business transactions. Accounting systems should be designed to provide information efficiently and quickly at the least cost as well as capable of offering protection to the business by exposing theft or fraud.

Types of Farm Accounts: Some farm accounts that could be prepared and kept by a farm management include balance sheet and net income statements. We will discuss these independently.

a. Balance Sheet: It is also called the net-worth statement. It shows the value of farm assets that would remain if the farm business is liquidated and all outside clams paid. It is like taking a snap shot of the business at a particular point in time. The net-worth statement sometimes gives information on the solvency of the business and is used as a basis for credit access because it shows the ability of the business to meet short-run financial demands. If the total assets exceed the total liabilities the business is solvent, that is, the greater the net-worth, the better the solvency position of the business. Components of balance sheet are given below:

Assets: An Asset is anything of value owned by a business entity. In order to ascertain the condition of a business with regard to its immediate obligations, its assets are categorized according to their liquidity. A net-worth statement requires an inventory of all properties or assets as well as records of all liabilities of the business. There are three classes of assets. These are:

• **Fixed Assets:** Are those assets which cannot be easily converted into cash to meet current obligations. Examples of fixed assets are land, buildings and other permanent improvement like fence. • **Working Assets:** Are those assets which are used up within the production process of the business. Their values may be regarded as being transferred slowly to the products during the farm operations. They are liquidated at a faster rate than fixed assets. Examples of working assets are farm equipment (like hoes and machete), and donkeys.

• **Current Assets:** Are also called liquid assets. Examples of current assets are cash in hand bills receivable within a short time, crops and feeds in hand. Liability Liabilities are those legitimate claims that can be made against a business. It is useful to have classification of the liabilities that correspond to that of the assets.

Liabilities: are classified according to the time they become due for payment. These classifications of liability include long-term, intermediate and current liabilities.

• **Long-Term Liabilities:** Are those that will not fall due for payment in a lump sum within a short period of time. They may fall due to a period like twenty years. Examples of long-term liabilities are real estate mortgages and long-term land leases. These are not commonly used by subsistence farmers.

• **Intermediate Liabilities:** Are those obligations that are deferred for the time being but which will be paid within a few years like five years or less. Examples of intermediate liabilities are promissory notes, obligations based on crop or livestock in the process of production and ready to mature within a few years.

• **Current Liabilities:** Are those obligations that are payable within a year. These payments when due demand the immediate attention of the farm manager.

Conclusion

Farm management is the process of running a farm as a business. This involves making decisions about what crops to grow, how to use the land, and how to best care for the animals. It also includes keeping track of finances, marketing the farm's products, and managing employees. Farm management requires a deep understanding of agricultural science and business. With years of experience, successful farmers are able to make their farms thrive. by carefully considering each decision they make. In recent years, there has been an increasing interest in sustainable farming practices. This means using methods that protect the environment and improve the long-term health of the land. As more consumers become interested in buying organic food, it is important for farmers to stay up-to-date on the latest sustainable practices. By implementing these practices on their farms, they can ensure that their products are meeting the highest standards.

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د کروندې د مدیریت پیژندنه او د هغې اهمیت

پوهنیار سید عبدالوهاب سیدي[1*] او میرویس نظري[2]

[1]کرنیز اقتصاد او ترویج څانګه، کرهنې پوهنځی، هلمند پوهنتون

[2]اداره او تجارت څانګه، اقتصاد پوهنځی، بُست پوهنتون

د مسؤل ایمیل ادرس: saeedi.helmand@gmail.com

Abstract

دا د کروندې د مدیریت د پیژندنې او اهمیت پر بنسټ یو کابتوني څېړنه ده. د څېړنې عمده موخې د فارم مدیریت پیژندنه، د اغیزمن فارم اهمیت، رول، د هغې ساحې او د فارم پرېکړې کول په بر کې نیسي. د فارم مدیریت د سوداګرۍ لپاره د پرېکړې کولو ساینس دی، چې د لومړني کرهنیزو توکو تولید کې برخه لري. د فارم مدیران پرېکړه کوي، چې څه شي تولید کړي، څومره تولید کړي، څنګه یې تولید کړي او څنګه د تولید لپاره اړین سرچینې ترلاسه کړي؟. د فارم مدیریت د پلان جوړولو لپاره د بودیجې پراختیا ته اړتیا لري. د پلان پلي کولو لپاره کافي اندازه ځمکه، کار او پانګې ترلاسه کوي او ددې تر څنګ مالي سرچینې بیانوي، ترڅو ددې ارزونه وکړي، چې پلان څومره په بریالي او اغیزمنه توګه پلي سوي دي.

کلیدي کلیمې: د کروندې مدیریت، تعریف، اهمیت، ساحه او د فارم پرېکړې.

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