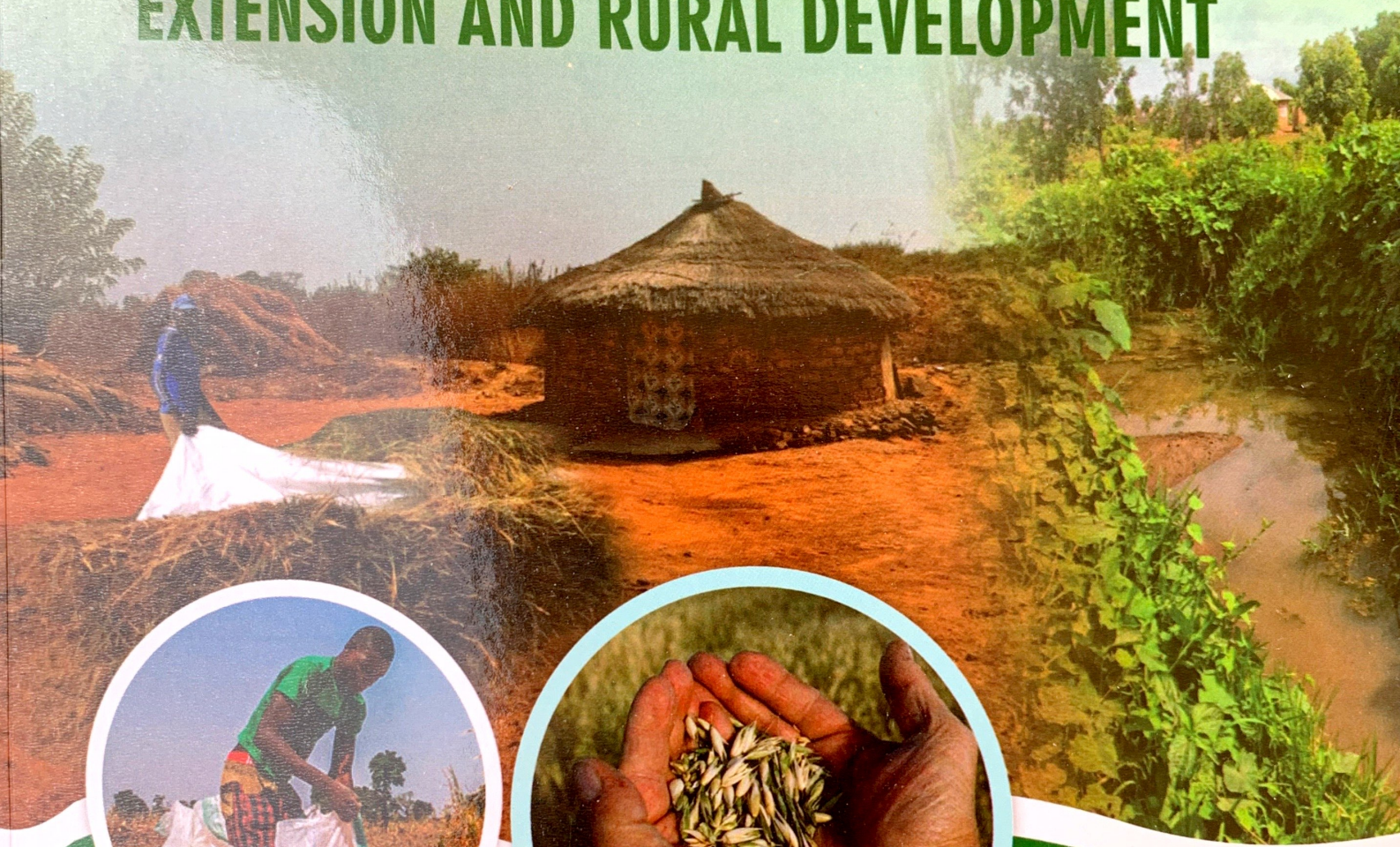


FUNDAMENTALS **OF AGRICULTURAL** **EXTENSION AND RURAL DEVELOPMENT**



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CHAPTER THIRTEEN

AGRICULTURAL VALUE CHAIN ADDITION AND ENTRENEURSHIP

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Introduction

Value chain is a process of understanding how activities of production, sales, processing, marketing, and consumption work. It is a set of linked activities that work to add value to a product, and it consists of actors and actions that increase a product's shelf life while linking commodity producers to processors and markets. Everyone has a role to play in the value chain industry, we could serve as producers, consumers of goods and services, processors, retailers, finance providers, etc. As consumers, we eat and wear clothes, and this makes us contributors to the agro-allied industry, consequently, we are linked to many value chains - chains of grain crops, roots and tubers, fruits and vegetables, legumes, oils, and textiles. Beyond the farming activities, the non-farm industry is also a major player in the agricultural value chain. Of significant importance is the banking industry and government institution, banks provide loans; governments establish laws and policies, and agricultural research organizations contribute by educating farmers and creating awareness for innovations. Radio stations, through radio broadcasts, also have an important complementary role in that they help to inform farmers about prices, innovations, and value chain successes. These contributions help farmers to successfully participate in activities that will enhance the value chains. Therefore, agricultural value chain can be defined as the set of activities that bring basic agricultural products to the consumers through stages such as processing, packaging, and distribution.

The agricultural value chain includes propagation and distribution of crops and livestock genetic material, farm inputs, farm production, post-harvest handling and packaging, processing, provision of technologies of production and handling, storage, packaging, and farmers' organizations. To achieve value addition in agriculture, a set of actors that will take activities (production, processing, packaging, and marketing) through to the consumers' tables must have been identified. In sum, the producers (the farmers) are at one end of the agricultural value chain where they cultivate crops and raise livestock. At the other end, we have the consumers who eat, drink, wear and use the final products, while in the middle, there are several people, businesses, organizations, markets, and government institutions who all contribute to the success and development of the value chain industry. Each actor, as enumerated, performs an activity or the other, to contribute their quota to add value along the chain (growing, buying, selling, processing, transporting, storing, checking, and packaging). It is interesting to note that with rising incomes and improved living standards, comes a growing demand for high value

commodities such as fruits, vegetables, fisheries, livestock, oils etc. leading to an expansion of production by farmers.

Significance of Value Chain in Agriculture: The term value chain is often used interchangeably with supply chain, commodity chain and agri-food system though they differ in meaning as it depends on the context and focus of usage. Value-chain captures all aspects of goods and services rendered in the process of transiting the agricultural product from the farm to consumer. It describes all the activities related to different phases of production ranging from procurement of raw materials through retailing of end-product to the consumer. The concept of value chain in agriculture has continued to gain momentum since the beginning of the millennium in developed countries. It is understood there is a need to align agriculture alongside the value-chain framework as it is now evidently clear that the value-chain industry has emerged as one of the strategies to make the agricultural sector more efficient.

Management of Inter-Personal Relationship in the Value-chain Industry: Agricultural value chain revolves entirely around human interactions, from the farmer on the farm to the ultimate customer. They deal with connections between individuals and organizations that move or trade goods, cash, information, and knowledge. People at various points throughout the chain actively help one another to ensure a successful value chain. Everyone performs their duties more effectively and everyone's standard of living is enhanced when all actors in the chain help one another. The shared objective of everyone in the supply chain is to boost individual earnings by meeting consumer needs.

Why talk about agricultural value chains?

Small-scale farmers throughout the world, including Africa, frequently complain of getting low prices for their produce at the point of sale. This is because farmers, typically, wait for dealers/vendors/retailers/merchants to come to their farms during harvests, hence they end up selling their products at cheap give away prices, to traders who will not even procure the entire harvest in the first place. This dissatisfies the farmer for three reasons, one is that he is getting low payments for his products, second is that he is not able to dispose of all his products, and third is that he believes their work is not appreciated.

Farmers and merchants frequently argue over prices. Farmers make attempts at defrauding traders by hiding inferior products in the bottom of crates while traders can also deceive farmers by using erroneous weights and measurements. A commonality in the two instances is that there is a lack of trust, and this causes the value chain industry to perform less effectively than it should. The trader sells the farmer's produce to a processor, who in turn supplies to a wholesaler, who in turn vends to a retailer, and from

this point, it gets to the customer, along with any necessary transportation. Each link in this chain contributes value and is compensated with an economic return, sometimes referred to as "economic rent." various products and value chains have various amounts that each actor in the chain receives. However, the amount paid by the consumer is a far smaller portion of the price the farmer obtains for his raw materials. In the presented value-chain scenarios, the individual small-scale farmer is consistently at a disadvantage because they have little bargaining power. In addition, they have little or no influence on the price traders pay them for their produce, or the price they pay input suppliers for seeds, fertilizers, pesticides, etc.

Another setback for farmers in the value-chain process is their lack of information about markets or marketing for their end-products. Sometimes, farmers do not have the knowledge of the real worth of their produce, consequently they are not in tune with how much more they could earn if, for example, they transported it to a nearby market rather than selling it to a trader. Farmers may also not be aware of whom the other players in the markets are nor do they have an idea of what happens to their produce after they sell it. In certain instances, the farmer may even be cultivating the wrong crop for the market because they often do not know what the people want. In sum, a typical subsistence farmer may not fully benefit from the value chains.

An important aspect of the value-chain industry is sorting and packaging. Sometimes the farmer unknowingly adds to the complications. For example, a farmer who has a mango field of different varieties will most likely produce mangoes of various kinds. Some may be juicy, large, and healthy while others could be small and spotty. If the farmer puts all mangoes together in a crate, the merchant may offer a low price because they do not know what quality to expect. Hence, there is a need for farmers to upgrade their involvement in the value-chain industry to guarantee increased incomes and better services. To achieve this, farmers must become "crop specialists." A crop specialist is a one who has improved his or her farming practices and is producing goods for the market in an efficient and productive way. For example, by adopting innovation and making use of improved farming practices, the farmer can produce more of the similar type of mangoes with higher quality, and this satisfies both the buyer and the consumer.

What are the benefits of taking a value chain approach?

The value chain method considers the function of the current actors in the chain, the supporting players, and the regulatory environment. The value-chain enables us to examine the difficulties that a value chain is now facing as well as the chances for increasing the chain's effectiveness and reaping rewards for all parties. A successful value chain can result in increased revenue for farmers, in their opinion. Finding new income-generating prospects can be aided by analysing a value chain and highlighting its difficulties, points of strength, and weaknesses. In some cases, joining a well-run

value chain might give farmers a more secure and predictable income instead of increased wages or prices. Young people can equally be convinced to engage in farming or to stay in rural regions as this will provide them with better opportunities for employment, well-functioning markets, and enhanced value chains. A farmer can also acquire new skills and adopt better practices by taking part in value chains. Farmers can make more money by performing basic processing on the farm rather than packing crops into crates and shipping them to a trader or market. Products can greatly benefit from cleaning, grading, sorting, and packaging; therefore, a better price can be obtained by washing, packaging, and transporting lettuce or tomatoes to a nearby shop or supermarket. Peeling and chopping fruit can be a good method to tap into the expanding ready-to-eat food sector that is near urban areas.

Who benefits from value chains?

Firstly, participation in the value chain adds value to the product. It is no gainsay that everyone who takes part in a value chain contributes to its value addition from the beginning of the chain towards the consumer. An economic rent is the benefit or incentive that a participant gets in exchange for adding this value. The popular beneficiaries from value chain industries are usually: those that are entrepreneurial, those who are willing to effectively communicate with people in different parts of the value chain, those who have the farm and financial resources and the knowledge to develop new markets or willing to participate more effectively in current markets. In contrast, farmers who are less capable, who do not have access to productive resources such as land, capital, inputs, irrigation facilities, markets, and effective farmer groups, who are more remote, who have language barriers may find it more challenging to benefit from a value chain.

The importance of farmer groups: As it is important for a farmer to become a crop specialist, it is necessary to belong to an organization. Invariably, joining a farmer organization is a necessary step for small scale farmers who want to increase their income and capture more value in the value chain. In essence, farmers need to be well coordinated if they must measure up and compete in an increasingly demanding marketplace. This is because it is easier for farmer organizations, unlike individual farmers, to have the resources that will attract and build stronger relationships with different links in the value chain. Farmer organizations also help individual producers to pull their harvests together and attract markets for the entire group by selling in bulk. This way, farmers have access to farm support services, and they can get better prices for their commodities. Farmers' cooperatives have adequate market power to boost the prices received by individual farmers and ensure that farmers obtain regular and more secure incomes. Many farmer organizations also incorporate savings and loan schemes which help members to access funds, keep records, and learn financial skills that are crucial to improve their businesses.

The significance of the radio in value chains: In a value chain, there are essentially three things that go back and forth: the produce from producers to consumers, the cash from consumers to producers, and the flow of information. Radio can serve as a conduit for information and knowledge. Radio is a good tool to help farmers understand the benefits of collaboration with other organizations and businesses in the value chain. It can massively help to broadcast success stories, and it presents an opportunity for different actors in the value chain to interact. This implies that radio stations can enlighten their audiences about value chains. Farmers can equally learn more about the advantages of increasing their value chain participation through radio. The radio can also be used to propagate cutting-edge information regarding processes in value chains. It can be used to advertise, market, or create opportunities to disseminate innovative technologies, create awareness of methods and strategies that could help farmers to scale up their production, processing, and marketing.

The terminology broadcasters' use when discussing value chains must be suitable. They should speak with some of the farmers in their audience and they need to find the most appropriate translations of "value chain". Broadcasters should weave other value chain terminologies into their broadcasts, especially in local languages that the audience will comprehend and that accurately convey the content. As always, it is crucial to avoid talking down on farmers, whether through the tone of voice or the use of unfamiliar words. Broadcasters should ensure they have a solid understanding of value chains and how such information might benefit farmers before they produce programmes about them. Extension agents, industry representatives from the food sector, or other stakeholders can help to enlighten and educate radio broadcasters. It is therefore important that such people are consulted before rolling out information over the radio. Broadcasters can also get information from local value chain actors by talking to farmers, processors, retailers, distributors, and others in the value chain. There is a need to find out what arrangements are working well, and which ones are not. By interviewing people involved with specific value chains on-air, broadcasters can pass along accurate information about these chains.

The broadcasters have integral benefits that they can derive from various interactions with different links in the value chain. The connections that develop between broadcasters and processors, retailers, distributors, as well as farmers can help broadcasters to diversify advertising sources, and uncover new business possibilities for their stations. One of the major drawbacks in the value chain industry is the lack of dialogue and understanding between different actors. Through radio broadcasts, farmers can get the chance to talk about problems with processors, traders, decision-makers, and other stakeholders and such information can be aired in the form of news, documentaries, agricultural talks, etc. These pieces of information can be picked up by governments and policy makers and this means farmers now have a voice and are empowered to take an active role in the value chain.

Chain vision: Farmers ought to espouse a "chain vision" to collaborate with other value chain participants as this will offer an opportunity for them to network with specialized businesses that are usually dependent upon one another for profit. The value chain industry consists of a network of collaborators; farmers on the one hand should recognise the position of other linkages in the chain, while acknowledging that the interests of others are also genuine. On the other hand, the other linkages in the value chain must equally understand the need for collaboration. They should understand that they have a common interest which is to satisfy the consumer; and the satisfaction of the consumer translates to growth in the businesses of both the seller and the buyer. For a value chain to be successful, everyone in the chain must benefit and must feel that they are being treated fairly.

Gender and value chains: It is increasingly worrisome to note that women face more challenging situations in the agricultural value chains. For example, women are frequently hired as casual workers in the fruit and vegetable export chains, whereas men are the permanent workforces in this industry. In many African export businesses, women workers usually occupy the packing, sorting, grading units and receive lower wages than men. This is a reason why membership in associations will greatly help to offer support to the marginalized groups. Joining a farmer group will consequently help women to become more successful as they can leverage on the strength of an organization to negotiate for better deals. It is becoming even more apparent that men are habitually waiting to take over the role of men when situation appears to be improving for the womenfolk. For example, if market prospects improve for women's crops, men may want to take over women's activities and they can achieve this by limiting women's access to land. Care should be taken for the family not to alter access and control over productive resources as this could jeopardise the chances of access by women. If changes are made in a way that men begin to have more control over the resources linked to specific crops, especially those tagged women's crops, the family food security may suffer. Again, family food security can be hampered if women's access to funds becomes limited. This is because bank accounts are usually opened in the man's name in some communities and monies realized from women's endeavours gets to the women through their husbands. Overall, it is important to consider not only how men and women participate differently in value chains, but how upgrading their activities can benefit (or not benefit) both men and women.

The Agricultural Value Addition

Value addition as a concept is multi-dimensional and its definition differs in focus and breadth, which can influence its measurement. It can be a form of changing or transforming a product from its original state to a more valuable state through innovation or industrial innovation at an advanced stage (Obaga & Mwaura, 2018). It can be an increase in the worth of a product in form of time, form, and place satisfaction.

It can also be said to enhance a product to gain more from it and can be realized in two ways, innovation, and coordination. Value addition through innovation centres on improving the current processes, products, and services or creating new ones; while value addition through coordination involves arranging and organization among the value chain performers that produce and market through direct marketing and cooperative efforts. Value addition to agricultural production in rural areas facilitate employment generation, improve producers' access to market, reduce poverty, and thus facilitates the betterment of socio-economic conditions in rural communities.

Agricultural Entrepreneurship

Entrepreneurship is an art of identifying market opportunities, marshalling the resources required to investigate them, and investing the resources to seize the opportunities for long-term gains. It requires starting and maintaining an enterprise while earning income by integrating resources in fresh ways while these fuel competitive advantage. It is widely accepted and implied that entrepreneurship is a critical skill and a creative pursuit that is relevant to the economy of every nation. The entrepreneurial process, which encompasses all the roles, duties, and actions associated with the discovery of opportunities and the creation of organizations to capture them, is quite popular among academics. On the other side, all companies benefit greatly from the success and growth of their business owners.

Agricultural entrepreneurship can be characterized as having a close relationship with the production, distribution, and use of various agricultural inputs. A few examples of the industries that agricultural entrepreneurs collaborate with include dairy, forestry, horticulture, production, and marketing of agricultural inputs and outputs. Traditionally, agriculture is seen as a low-tech industry with limited underlying forces and dominated by several small family farms. Traditional agriculture mostly dwelt on improving existing technologies rather than trying out innovativeness. However, the situation has significantly changed due to economic liberalization, reduced protection of agricultural markets, and a fast-changing, more critical, society. Agricultural companies thus have to adjust to the market fluctuations, changing consumer habits, improved environmental regulations, chain management, and new requirements for product quality. These changes have cleared the way for new entrants, innovation, and portfolio entrepreneurship. Agricultural entrepreneurship along the value chain can be described as activities including land preparation, crop harvesting, pressing, grinding, mixing, drying, processing, packaging, and marketing (Yussuf & Adenegan 2008). Entrepreneurship especially in the agricultural value chain enterprise is emerging as an avenue for gainful employment and a means of liberating people from poverty and unemployment. It is a way of improving both economic and social status of the upstarts. Agricultural entrepreneurship plays numerous roles in the growth and development of national economy through entrepreneurship development. This increases the income

level and employment opportunities in rural as well as urban areas (Bairwa *et al.*, 2012). Agripreneurship also play the following roles in the economic system (Sah, *et al.*, 2009).

- i. It helps in inducing productivity gains by smallholder farmers and integrating them into local, national, and international markets.
- ii. It helps in reducing food costs, supply uncertainties and improving the diets of the rural and urban poor in the country.
- iii. It also generates growth, increasing and diversifying income, and providing entrepreneurial opportunities in both rural and urban areas.

Agricultural entrepreneurship is a process that requires an adequate amount of time to make agriculture a more attractive and profitable venture. Agripreneurship is time reliant because a substantial amount of it is needed to move a product across the value chain. For example, time must have been invested to move cotton from production stage (farm) through the factory (processing) to the shopping malls (marketing). It is until the produce (cotton) gets to the point of sale that we can say value has been added and the product can become profitable. There is a great scope for entrepreneurship in agriculture and this potentiality can be tapped only by effective management of agro-elements such as soil, seed, water, and market needs. An individual with risk bearing capacity and a quest for latest knowledge in agriculture sector can prove to be a right agripreneur. The agriculture sector has a large potential to contribute to the national income while at the same time providing direct employment and income to the numerically larger and vulnerable section of the society. Agripreneurship is not only an opportunity, but also a necessity for improving the production and profitability in agriculture and allied sectors (Bairwa, Lakra, Kushwaha, Meena, and Kumar 2014).

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