

# Strategies to Increase Added Value of Agricultural Products through Local Agribusiness Development

Dyah Ayu Suryaningrum<sup>1</sup>, Putu Fajar Kartika Lestari<sup>2</sup>

<sup>1</sup>Universitas Mataram

<sup>2</sup>Universitas Mahasaraswati Denpasar

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## ABSTRACT

This study explores strategies for increasing the added value of agricultural products through the development of local agribusiness. A qualitative approach was employed, involving in-depth interviews with five key informants, including farmers, an agribusiness practitioner, a cooperative representative, and a local government official. The findings reveal that enhancing product value requires an integrated strategy encompassing product processing and diversification, branding and marketing innovation, technology adoption, farmer empowerment, and policy and institutional support. Farmers' capacity building, supported by cooperatives and government programs, plays a crucial role in sustaining value-added initiatives. The study concludes that the development of local agribusiness not only increases the competitiveness and marketability of agricultural products but also contributes to rural economic growth and improved community welfare.

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## Corresponding Author:

Name: Dyah Ayu Suryaningrum

Institution: Universitas Mataram

Email: [dyahsuryaningrum@staff.unram.ac.id](mailto:dyahsuryaningrum@staff.unram.ac.id)

## 1. INTRODUCTION

Agriculture plays a central role in supporting economic development, especially in rural areas where the majority of communities rely on farming as their primary source of livelihood. However, despite its significance, the agricultural sector in many regions still faces challenges such as low productivity, limited access to technology, weak market linkages, and a lack of added value in agricultural products, which often result in farmers receiving only a small portion of the benefits from their produce, while the largest share of profits is captured further down the value chain by traders, processors, and distributors. This condition

highlights the urgent need to strengthen local agribusiness as a strategic approach to improve competitiveness and increase farmer welfare, involving institutional transformation, agribusiness entrepreneurship, and value chain development. Transforming farmer institutions into reliable economic entities with efficient management, professional human resources, and supportive government policies can enhance competitiveness in global markets and increase labor absorption in rural areas through agribusiness-related ventures and infrastructure development [1]. Agripreneurship is also crucial for

revitalizing agriculture, making it more profitable and appealing by generating jobs, income, and reducing poverty while enhancing nutrition and food security, with successful agripreneurs expected to manage scarce resources, establish market linkages, and possess risk-bearing abilities [2]. In addition, developing efficient linkages between producers and consumers through value chain development can expand employment opportunities and increase rural income via better marketing of agricultural products, while sustainable agricultural practices and policy interventions further foster inclusive growth and reduce rural poverty [3], [4].

The concept of added value in agriculture refers to the process of enhancing the economic worth of raw products through innovation, processing, packaging, branding, certification, and marketing strategies that meet consumer demand and market standards, thereby allowing farmers to capture a larger share of the consumer's dollar that is typically dominated by food processors and brand-name producers [5]. For example, transforming cassava into flour, chips, or ready-to-eat products significantly raises its market value compared to selling it as a fresh commodity, as demonstrated by the Cassava Adding Value for Africa (C:AVA) project which generated over USD 57 million in rural communities by promoting value-added cassava chains and significantly increasing farmer income [6]. Similarly, the development of branding and certification has proven effective in expanding market access and strengthening consumer trust, as seen in successful branded products like Sunkist and Del Monte that capture more value than unbranded commodities [5], while digital marketing channels further enhance the reach and appeal of value-added agricultural products [7]. Beyond increasing farmer income, value addition also contributes to rural development and job creation by fostering entrepreneurship and infrastructure development, as evidenced by the processing of cassava into mocaf flour in Indonesia which shows a medium added value ratio,

indicating strong potential for economic growth and reduced reliance on wheat imports [8], [9].

Several studies have emphasized that local agribusiness development requires a comprehensive strategy involving multiple stakeholders—farmers, cooperatives, private enterprises, and government institutions—where the active role of farmers in adopting innovations, the capacity of agribusiness actors to manage supply chains, and supportive environments provided by policies and infrastructure are interrelated factors determining the success of value-added initiatives. Multi-stakeholder platforms (MSPs) are vital for promoting agribusiness development by bringing together diverse actors to address challenges and generate innovations [10], as seen in Vietnam where collaboration among stakeholders and government support, alongside the role of local cooperatives, strengthen human and social capital [11]. Government initiatives, including infrastructure provision and transparent policies, are also essential for enabling rural populations to capture value-added benefits [12], with India demonstrating how incentives and policies can promote sustainable practices and agribusiness startups [13]. Equally important is empowering local communities through education, training, and access to financing, which enhances rural entrepreneurship and agribusiness management [13], while multi-stakeholder cooperatives address challenges such as capital, marketing, and product packaging to improve the competitiveness and sustainability of MSMEs [14].

This study aims to explore strategies for increasing the added value of agricultural products through the development of local agribusiness. By employing a qualitative approach with five key informants—comprising farmers, agribusiness practitioners, and local government representatives—this research provides an in-depth understanding of the challenges and opportunities faced in the field. The findings are expected to contribute practical

recommendations for strengthening local agribusiness, enhancing rural economic resilience, and improving farmer welfare in the long term.

## 2. LITERATURE REVIEW

### 2.1 Concept of Added Value in Agriculture

The concept of added value in agriculture refers to enhancing the economic worth of products through innovation, processing, packaging, and marketing, allowing farmers and agribusinesses to transform raw commodities into higher-value goods that boost profitability, competitiveness, and sustainable rural income. This can be achieved through processing and packaging, such as converting fresh fruits into juices or jams to increase market value and shelf life [5], [7], as well as branding and differentiation, which use attributes like organic certification or local origin to capture larger consumer shares [5], [15]. Integration and collaboration also matter, as shown by the “Owoc Łącki” company, which united fruit producers and adopted new models to streamline processes and improve quality [16]. Economically and socially, added value enables producers to capture more of the value chain and raise incomes—critical amid declining farmers’ retail shares due to industrialization [15]—while also supporting rural development through job creation, processing facilities, and promotion of local products [17].

### 2.2 Agribusiness Development

Agribusiness development in developing countries is a multifaceted approach that integrates agricultural production with processing, distribution, and marketing to drive economic growth, reduce poverty, enhance food security, and create employment opportunities by transforming agriculture from subsistence-based to market-oriented. This transformation is evident in African countries, where agribusiness has become pivotal in strengthening agri-food systems [18], and in India, where globalization and technological advancements have reshaped agribusiness, improved market access and optimizing

supply chains despite challenges like price volatility [13]. Effective coordination of agricultural value chains is essential for achieving food security and rural prosperity, yet smallholder farmers often remain disadvantaged due to structural impediments, requiring strategies such as improved access to inputs, expanded markets, and stronger involvement of universities and research centers [19]. At the same time, technological innovations like blockchain and IoT are increasingly transforming agribusiness by streamlining supply chains, though adoption barriers persist [13], while government initiatives, such as India’s “Make in India” program, foster agribusiness startups and provide a supportive policy environment crucial for sustainable rural development.

### 2.3 Role of Technology and Innovation

Technological advancements are pivotal in enhancing the added value of agricultural products by improving quality, extending shelf life, and facilitating market access through post-harvest technologies, digital platforms, and branding innovations. Nonthermal methods like high-pressure processing and vacuum drying preserve nutritional quality, while advanced packaging such as MAP and CAP extends product freshness [20]. Digital technologies, including e-commerce, social media, IoT, and blockchain, allow direct marketing, reduce intermediaries, and provide real-time agricultural information to support sustainability [21], [22]. Meanwhile, branding and certification, such as eco-labeling, build consumer trust and open international markets [23], with eco-friendly processing methods further boosting marketability in line with growing health-conscious demand [24].

### 2.4 Farmer Empowerment and Capacity Building

Empowering farmers is crucial for local agribusiness development as it enhances their capacity to participate actively in the value chain and improve economic outcomes through training, financial literacy, collective action, and institutional support. Capacity-

building initiatives, such as millennial farmer programs, have proven effective in preparing farmers as agents of change by focusing on both individual and organizational skills, though continuous evaluation remains necessary [25]. Agribusiness training programs also significantly improve productivity and income, with collective empowerment showing stronger impacts than individual efforts [26]. Financial literacy, a major constraint for many farmers, has been addressed in India through initiatives that improve access to credit and financial stability, positively influencing socio-economic conditions [27]. Moreover, cooperatives play a vital role in empowering small farmers by expanding market reach, improving access to resources, and strengthening supply chain participation, as exemplified by the Subasta Integrated Farmers Multi-Purpose Cooperative in the Philippines [28]. Finally, strengthening farmers' economic institutions through efficient management, professional human resources, and supportive government policies is essential to enhance competitiveness and sustain rural economic growth [29].

### **2.5 Policy and Institutional Support**

The success of agribusiness development is closely tied to policy and institutional support, as these elements create an enabling environment for sustainable and inclusive growth by providing infrastructure, access to financing, and regulations that protect farmer rights while encouraging innovation. Governments play a vital role in supplying critical infrastructure such as roads, railways, and storage facilities to connect production with consumption centers [30], while effective policies can enhance investment, productivity, and competitiveness, as seen in Indonesia [31]. Institutional frameworks are equally important in ensuring market functionality and resource allocation, with examples like hybrid pearl millet adoption in India and dual-purpose cowpea in Nigeria showing how innovative institutions facilitate seed delivery and address production constraints

[32]. Strengthening farmer institutions through guidance, capital support, and expanded market access further enhances competitiveness in global markets [29]. Moreover, localized agribusiness can capture added value that might otherwise be lost to external agents, emphasizing the role of government in ensuring transparency and infrastructure provision [12], while transforming farmer institutions into reliable economic entities remains essential for efficient management and the production of high-quality, competitive agricultural products [29].

### **2.6 Previous Studies on Agribusiness Strategies**

Several studies highlight strategies for increasing the added value of agricultural products, including agro-industrial processing, digital marketing, and value-added product development, all of which enhance competitiveness and farmer welfare. Agro-industrial processing transforms raw produce into high-quality processed goods that meet international standards, significantly boosting farmers' income and welfare in Indonesia [33]. At the same time, digital marketing through social media and e-commerce has become a breakthrough tool for directly linking local agricultural products with urban consumers, expanding market reach and improving competitiveness through strategies like storytelling and content personalization [34]. Furthermore, value-added product development using unsellable produce such as papaya and bananas has proven effective in increasing marketability and farmer income, as demonstrated in small and medium enterprises in Penantian Village [35], while training and community service activities in Cilebud Bogor show how plantation products can be processed into high-value goods like juices and snacks, further contributing to rural economic growth [36].

### **2.7 Research Gap**

Although many studies have examined the economic benefits of agribusiness, fewer have focused specifically on the strategies required for developing local

agribusiness from a qualitative perspective that considers the voices of farmers, practitioners, and policymakers. Most prior research has concentrated on quantitative outcomes such as productivity and income, while the institutional, cultural, and contextual dynamics remain underexplored. This study aims to fill that gap by identifying and analyzing strategies for increasing the added value of agricultural products through the development of local agribusiness, using insights from key informants directly involved in the sector.

### 3. METHODS

This study employed a qualitative research approach to explore strategies for increasing the added value of agricultural products through the development of local agribusiness. A qualitative design was chosen because it enables an in-depth understanding of social, economic, and institutional dynamics that influence agribusiness development, aspects that cannot be fully captured through quantitative methods. The focus of the study was on exploring experiences, perceptions, and strategies from various stakeholders directly involved in local agribusiness activities. The research was conducted in a rural agricultural area where farming is the primary livelihood, selected purposively due to its potential for agribusiness development, diversity of agricultural products, and the presence of local initiatives aimed at enhancing value-added processing.

The study involved five key informants selected through purposive sampling, consisting of two local farmers engaged in both primary production and small-scale processing, one agribusiness practitioner in marketing and distribution, one representative of a local cooperative, and one local government official responsible for agricultural development. These informants were deliberately chosen because of their direct involvement in agricultural production, processing, marketing, and policy implementation, which allowed the research to capture comprehensive insights into value-

added strategies. Data collection techniques included in-depth semi-structured interviews to explore perspectives on challenges, opportunities, and strategies; field observations to understand agricultural practices, processing activities, and market linkages; as well as documentation analysis of government reports, cooperative records, and marketing materials to complement primary data.

The collected data were analyzed using thematic analysis following Braun and Clarke's (2006) framework, which involved familiarization with the data, coding significant statements, developing broader themes such as processing, marketing, technology, farmer empowerment, and policy support, and interpreting findings in relation to the research objectives and theoretical framework. To ensure validity and trustworthiness, triangulation was applied by cross-checking multiple data sources, member checking was conducted by confirming interpretations with selected informants, and peer debriefing with academic colleagues was carried out to enhance the credibility of the findings.

### 4. RESULTS AND DISCUSSION

#### 4.1 Descriptive Findings

The descriptive findings of this study provide an overview of the current conditions, practices, and perceptions of local farmers and agribusiness stakeholders in developing strategies to increase the added value of agricultural products. Two farmers interviewed cultivate crops such as cassava, rice, and vegetables, which are generally sold in raw form to local markets. Both farmers face challenges including low selling prices, post-harvest losses, and limited access to processing technologies, but expressed interest in adopting value-added techniques like processing cassava into chips or flour to improve income stability. The agribusiness practitioner emphasized the role of branding, packaging, and quality assurance in differentiating products, noting that processed goods with attractive packaging are more appealing to consumers and have the

potential to penetrate urban markets via digital platforms. However, the practitioner also stressed the need for greater farmer support in logistics and marketing to maximize these opportunities. Meanwhile, the cooperative representative highlighted the role of cooperatives in organizing collective action, offering training in processing, assisting with product marketing, and improving access to financing, all of which reduce costs and strengthen bargaining power with buyers.

From the policy perspective, the local government official underlined the significance of infrastructure, training, and financial support in fostering sustainable agribusiness development. Initiatives such as training workshops, subsidized processing equipment, and small-scale funding schemes were identified as essential measures, though consistent policy support and stakeholder coordination remain crucial. Field observations reinforced these insights, showing that most agricultural products continue to be sold raw, with limited post-harvest processing and inadequate storage facilities, while marketing channels are often restricted to local markets. Despite these constraints, farmers are increasingly aware of the benefits of value-added processing and the opportunities offered by both local and digital markets, suggesting a strong potential for future growth in agribusiness value chain development.

#### **4.2 Thematic Analysis**

Thematic analysis of the qualitative data from five key informants revealed five major themes as strategies for increasing the added value of agricultural products through the development of local agribusiness. These themes represent recurring patterns in the data and provide insight into practical approaches for enhancing agribusiness outcomes.

##### **1. Product Processing and Diversification**

All informants emphasized the importance of processing raw agricultural products into higher-value goods. Farmers and practitioners reported that transforming cassava into chips, flour, or packaged snacks

significantly increases market value. Diversification also reduces the risk associated with market price fluctuations and extends product shelf life. This theme highlights that value-added processing is a fundamental strategy for improving farmer income and sustaining local agribusiness.

##### **2. Branding and Marketing Innovation**

Branding, packaging, and certification emerged as key strategies to attract consumers and enhance product competitiveness. Informants noted that labeling products with quality indicators (e.g., organic, halal, or locally branded) builds trust and can target niche markets. Furthermore, the use of social media and digital marketing platforms allows farmers and agribusiness actors to reach urban and regional consumers directly, bypassing intermediaries. This strategy strengthens market visibility and broadens opportunities for revenue generation.

##### **3. Technology Adoption**

The informants highlighted that adopting appropriate technology is crucial for maintaining product quality and efficiency in processing. Simple post-harvest technologies, such as drying machines, milling equipment, and vacuum packaging, reduce losses and improve product durability. Informants emphasized that technology should be accessible, affordable, and tailored to local conditions to ensure widespread adoption among farmers.

##### **4. Farmer Empowerment and Capacity Building**

Training and education emerged as critical components for the success of local agribusiness. Informants stressed the need for programs focused on entrepreneurship, financial literacy, and technical skills for processing and marketing. Cooperative-led training and mentoring enable farmers to participate actively in the value chain, enhance decision-making, and take advantage of new opportunities. Empowering farmers also strengthens their role in collective initiatives and encourages innovation.

## 5. Policy and Institutional Support

Government and institutional support were identified as essential enabling factors. Informants noted that policies facilitating access to financing, providing infrastructure, and supporting market development are critical for the sustainability of agribusiness. Collaboration between local government, cooperatives, and private sectors ensures coordinated efforts, reducing barriers to entry and promoting inclusive growth in rural communities.

### 4.3 Discussion

The findings of this study indicate that increasing the added value of agricultural products through local agribusiness development requires a holistic approach that integrates production, processing, marketing, technology, capacity building, and institutional support, with product processing and diversification emerging as fundamental strategies to enhance economic value, increase income, and mitigate risks of price volatility and post-harvest losses. Diversification not only allows access to new market segments and reduces dependence on single products but also provides broader benefits such as stabilizing farmer incomes and community economies in the face of globalization and climate change [37], creating new job opportunities that reduce poverty and enhance resilience [38], and strengthening community resources like labor, tax bases, and services to support sustainable development [37]. However, diversification is not without challenges, as it must be adapted to the socio-economic, structural, and environmental conditions of each locality to be effective, and it may involve trade-offs such as diluted workforce efforts or simplified management practices that risk reducing ecological value [39].

Branding, packaging, and certification play critical roles in improving competitiveness, and this study confirms that the integration of e-commerce and digital marketing significantly enhances market access, visibility, and consumer trust. E-commerce platforms facilitate direct interactions between producers and

consumers, increasing transparency in the supply chain and opening wider market opportunities for rural farmers [40], [41]. At the same time, digital marketing strategies such as social media, SEO, and content marketing improve brand recognition, sales performance, and consumer engagement, as seen in Brazilian agribusiness where they strengthened brand positioning and credibility to meet new consumer standards [42], [43]. These innovations have also influenced rural consumer behavior by bridging the urban-rural digital divide, enabling broader access to products and services [44]. Overall, by combining branding, certification, and modern digital strategies with traditional agricultural practices, farmers and agribusiness actors can expand market reach, improve competitiveness, and elevate the positioning of local products in broader markets.

The study highlights the central role of technology and capacity building in agribusiness development, where accessible post-harvest processing and packaging technologies improve product quality, efficiency, and shelf life, but their successful adoption relies on adequate training and mentoring. Empowering farmers through structured training strengthens decision-making, innovation, and agency, while cooperatives and community groups act as key facilitators of capacity building, collective action, and economies of scale. Recent innovations such as AI and ICT further expand opportunities in agriculture: AI enables precision farming, optimizes resource use, and improves supply chain management, provided farmers receive proper training to ensure inclusive participation and job creation [23], while ICT delivers data-driven services that enhance productivity and resilience, requiring proficiency among farmers and extension agents [45]. Evidence shows that structured training significantly boosts agricultural innovation, as educational learning, organizational training, and coaching enhance the technical capacity of agricultural scientists [46], and interventions such as those of Krishi Vigyan Kendra

demonstrate how tailored training and technology adoption can increase farmers' income and improve socio-economic well-being [44]. Moreover, cooperatives play an instrumental role in localizing technological innovations and complementing grassroots extension services, fostering a modern agricultural system that connects science, technology, and rural development [47].

Finally, institutional support and government policies provide the enabling environment for sustainable agribusiness development, with infrastructure development, access to credit, and market facilitation serving as key pillars in reducing barriers to value addition. Infrastructure such as irrigation, energy, transportation, and storage facilities is essential for efficient production, while agro-processing and packaging facilities enhance competitiveness in both domestic and global markets, often developed through carefully planned public-private partnerships [48]. Equally important is financial and credit infrastructure, as specialized credit mechanisms tailored to agriculture enable enterprises to expand economic activities, invest in infrastructure and technology, and sustain operations [49], [50]. Market facilitation also plays a critical role, with government policies and cooperatives helping to improve access to input and output markets, supported by infrastructure such as telecommunications and covered markets that strengthen economic networks in rural areas [29], [48]. These findings confirm arguments on the role of institutions in shaping economic outcomes and reinforce the necessity of collaboration between government, cooperatives, and private sectors to sustain agribusiness initiatives. Overall, strategies for value addition cannot be implemented in isolation; when product processing, marketing innovation, technology adoption, farmer empowerment, and policy support are integrated, they generate a synergistic effect that enhances competitiveness, improves farmer income, and fosters rural economic

growth, offering both academic and practical guidance for future programs and policies to build sustainable, value-added agricultural systems.

## 5. CONCLUSION

The study demonstrates that increasing the added value of agricultural products requires a comprehensive and integrated approach that combines multiple strategies. These include product processing and diversification to transform raw commodities into processed goods, thereby enhancing economic value and reducing post-harvest losses; branding and marketing innovation through packaging, certification, and digital platforms to strengthen market visibility and consumer trust; and technology adoption, where accessible post-harvest technologies are applied to improve product quality and efficiency. Equally important are farmer empowerment and capacity building, achieved through training, mentoring, and cooperative support, which enhance skills, decision-making, and active participation in the value chain. Policy and institutional support also play a vital role, particularly in providing infrastructure, facilitating financing, and establishing supportive regulations to sustain agribusiness initiatives.

When these strategies are implemented in an integrated manner, they create a synergistic effect that significantly boosts the economic value of agricultural products, improves farmer income, and supports sustainable rural development. The findings of this study thus provide practical insights and guidance for farmers, cooperatives, policymakers, and agribusiness practitioners in strengthening the competitiveness and resilience of local agricultural systems. By aligning production, processing, marketing, technology, empowerment, and policy frameworks, local agribusinesses can transform into engines of inclusive growth and long-term sustainability.



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