

## One Stop Learning Innovation Rumah Kedelai Grobogan as an Effort to Strengthen Indonesia's Food Security

### Inovasi One Stop Learning Rumah Kedelai Grobogan Sebagai Upaya Memperkuat Ketahanan Pangan Indonesia

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#### Abstract

*The objective of this paper is to analyze the 'One Stop Learning' innovation at Rumah Kedelai Grobogan (RKG) and its impact on strengthening food security in Indonesia, considering the high national demand for soybeans and the dependency on imports. This research employs a qualitative approach with a case study method, incorporating secondary data analysis, stakeholder interviews, and field observations. The findings reveal that the 'One Stop Learning' innovation at RKG has significantly boosted local soybean production from 10,709 tons in 2020 to 34,603 tons in 2022. Additionally, this innovation has fostered the growth of small and medium enterprises involved in tofu and tempeh production and increased the number of soybean seed breeders. The study is limited to data from Grobogan Regency and may not be generalizable to other regions in Indonesia with different agricultural conditions. Future research could explore multiple regions and use a longitudinal approach to assess long-term impacts. The practical implications of the 'One Stop Learning' model at RKG provide a replicable framework for other regions in Indonesia to enhance local soybean production and reduce reliance on genetically modified imported soybeans. This model also promotes an integrated agribusiness ecosystem from upstream to downstream processes. This study offers insights into how integrated educational and innovative approaches in agribusiness can strengthen national food security, with the 'One Stop Learning' approach supporting national food security.*

**Keywords:** *innovation, one stop learning, food security, rumah kedelai grobogan, local soybean production.*

#### Abstrak

Tujuan dari makalah ini adalah menganalisis inovasi 'One Stop Learning' di Rumah Kedelai Grobogan (RKG) terhadap penguatan ketahanan pangan di Indonesia, mengingat tingginya permintaan nasional akan kedelai dan ketergantungan pada impor. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus, menggabungkan analisis data sekunder, wawancara dengan pemangku kepentingan, dan observasi lapangan. Temuan menunjukkan bahwa inovasi 'One Stop Learning' di



RKG secara signifikan meningkatkan produksi kedelai lokal dari 10.709 ton pada tahun 2020 menjadi 34.603 ton pada tahun 2022. Selain itu, inovasi ini telah mendorong pertumbuhan usaha kecil dan menengah yang terlibat dalam produksi tahu dan tempe, serta meningkatkan jumlah penangkar benih kedelai. Penelitian ini terbatas pada data dari Kabupaten Grobogan dan mungkin tidak dapat digeneralisasikan ke daerah lain di Indonesia dengan kondisi pertanian yang berbeda. Penelitian selanjutnya dapat mengeksplorasi beberapa wilayah dan menggunakan pendekatan longitudinal untuk menilai dampak jangka panjang. Implikasi Praktis model 'One Stop Learning' di RKG menyediakan kerangka kerja yang dapat direplikasi oleh daerah lain di Indonesia untuk meningkatkan produksi kedelai lokal dan mengurangi ketergantungan pada kedelai impor yang dimodifikasi secara genetik. Model ini juga mendorong ekosistem agribisnis yang terintegrasi dari proses hulu ke hilir. Studi ini menawarkan wawasan tentang pendekatan pendidikan dan inovasi yang terintegrasi dalam agribisnis dapat memperkuat ketahanan pangan nasional pendekatan 'One Stop Learning' mendukung ketahanan pangan nasional.

**Kata kunci:** inovasi, one stop learning, ketahanan pangan, rumah kedelai grobogan, produksi kedelai lokal.

## **Introduction**

Grobogan Regency is one of the regencies in Central Java Province, with its capital in Purwodadi. It is the second-largest regency in Central Java. The geographical conditions of Grobogan Regency are suitable for agricultural land, aided by the potential flow from several major rivers, such as the Tuntang, Serang, and Lusi rivers, along with their tributaries, which can irrigate the rice fields in Grobogan. The valley stretching from west to east is a productive agricultural area, partly supported by an irrigation network. Most of the population in Grobogan Regency are farmers and traders. However, according to data from the Grobogan Regency Government, employment in agriculture has decreased over the years, while employment in trade has increased.

Grobogan Regency remains a significant producer of high-quality soybeans, one of its leading agricultural commodities. Despite the reduction in agricultural land, the Grobogan Regency Government has successfully developed their superior soybean product known as the local variety of Grobogan Non-GMO (Genetically Modified Organism). According to data from the Central Statistics Agency (BPS) of Grobogan Regency, soybean production in Grobogan in 2016 was the highest in Central Java. The

advantage of Grobogan soybeans, which attracts farmers, is their relatively short planting period compared to other local soybeans. Grobogan soybeans have a planting duration of 72 days, whereas other local soybeans, such as Anjasmoro, have a planting duration of 82-92 days. Local soybeans are priced slightly higher than imported soybeans, leading many tempeh and tofu artisans, as well as other soybean product processors, to prefer imported soybeans (Sangadah, 2016). In addition to developing the Grobogan local soybean variety, Grobogan Regency has also established the Grobogan Soybean House (RKG), an innovation centre for learning, information, and innovation in local soybean cultivation.

The establishment of Rumah Kedelai Grobogan (RKG) through the Department of Agriculture marks a significant breakthrough in soybean processing innovation. RKG's activities include a seed center, learning center, tempeh and tofu house, promotion center, and a restaurant for soybean-based products. The RKG conducts a range of activities, from soybean cultivation to processing soybean-based food ingredients and marketing local soybean products. The foundation of RKG aims to develop and disseminate local soybeans to achieve soybean self-sufficiency. The high national demand for soybeans presents a substantial opportunity to increase farmers' interest in soybean cultivation. However, farmers' interest in soybean cultivation has been declining due to low selling prices at the producer level. The low prices of local soybeans are suspected to be a result of soybean import policies with low tax rates (Zakaria, 2016; Prasetya & Yuliawati, 2020).

The development of soybeans at Rumah Kedelai Grobogan requires strategic agribusiness management aligned with RKG's objectives. The primary aim of Rumah Kedelai Grobogan is to serve as a model for local soybean-based agribusiness from upstream to downstream, functioning as a center for information, innovation, and learning about local soybean agribusiness. Another goal is to increase the use of local soybeans and enhance their added value by producing derivative products such as tofu, tempeh, tempeh chips, and other soybean derivatives. As highlighted in the creativity theory mentioned in Du et al. (2021) within Yasmeen and Ajmal (2023), creativity is crucial not only for customer satisfaction but also for business success and sustainability. Several researchers have noted that creativity requires employees to

develop fresh or practical solutions to problems and generate new product and service ideas. Creativity is often seen as a critical component of innovation because innovation requires creativity (Amabile, 1997; Chaubey & Sahoo, 2021). Management literature frequently considers creativity as the first step towards innovation (Scott & Bruce, 1994; Hon & Lui, 2016). Amabile (1998) describes individual creativity as the creation of valuable and useful products, services, ideas, procedures, or processes by individuals working within a social system. Conversely, the successful implementation of a person's new ideas within an organization is considered organizational innovation. RKG represents a new idea in soybean management, competing in the Public Service Innovation event at the Ministry of Administrative and Bureaucratic Reform (KemenPANRB) and winning the Outstanding Achievement of Public Service Innovation (OAPSI) award in 2023.

Government innovation in public service delivery is emphasized in the literature as a means for governments to enhance the design and delivery of public goods and services (Patrisia et al., 2022). This innovation is not merely superficial but involves fundamental changes in principles, processes, and traditional public service models to create new and improved services that benefit society (Sufi, 2023). Such innovation is crucial for governments to demonstrate their presence and effectiveness in providing high-quality services in accordance with existing regulations (Rusmiyati, 2020).

Innovation in public service is closely related to governance innovation, which involves the application of innovative actions through various government mechanisms to streamline processes and improve the quality of public services (Sudrajat & Andhika, 2021). This innovation is essential for enhancing service delivery across all aspects, from input to output, and ultimately, to outcomes that align with the vision and mission of public sector service provision (Rusmiyati, 2020). Additionally, the adoption of innovation in the public sector is a significant policy as it has the potential to enhance the efficiency and quality of government services (Wipulanusat et al., 2017).

To ensure the success of public service innovation, it is crucial for government institutions to foster a culture of innovation and continually generate and implement innovative ideas to improve public services (Santoso, 2023). This ongoing innovation

process is vital for local governments to enhance public service delivery and effectively address community challenges (Suranto, 2024). Moreover, the sustainability of innovation plays a significant role in improving the effectiveness of public service delivery (Sufianti et al., 2021). Government innovation in public service is a multifaceted process involving fundamental changes in traditional service models to improve service quality and efficiency. By fostering a culture of innovation, governments can continually enhance public service delivery, address social challenges, and ultimately improve societal well-being.

Based on the identification of gaps in previous research on agricultural technology innovation and food security, prior studies have explored various aspects of agricultural innovation. These include the role of sustainable and equitable agricultural technology in enhancing food security, as discussed by Pérez-Escamilla (2017) and Anser et al. (2021), the introduction of modern technology in agriculture that improves food production quality and quantity, as described by Garazha et al. (2023) and Rasyid (2024), and the contribution of innovation to strengthening sustainable food systems, as outlined by Zimmerer & Haan (2020) and Gremmen et al. (2019). However, previous research has not addressed the contradictions in findings regarding the role of innovation in food security. The researchers have identified a gap in the evidence, particularly in the context of implementing technological innovations at the local government level in developing countries such as Indonesia. This study's novelty lies in a thorough examination of how agricultural technology innovation can effectively address national food security challenges through the 'One Stop Learning' innovation. Therefore, this study aims to describe the 'One Stop Learning' innovation at the Grobogan Soybean House as an effort to strengthen Indonesia's food security.

### **Public Service Innovation**

Rhodes states that the definition of creativity can be viewed from four aspects, known as the “Four P’s of Creativity: Person, Process, Press, and Product,” as follows. Person : Creative actions stem from the uniqueness of an individual's overall personality in interaction with their environment. Process: According to Wallas, the steps in the creative process, widely applied in the development of creativity, include preparation,

incubation, illumination, and verification stages. Product: Creativity is the ability to generate or create something new. Press: Emphasizes the “press” or drive factor, both internal, such as the desire and will to create or engage in creative activities, and external, from the social and psychological environment.

According to Zhou and George (2001), creativity has several indicators: suggesting new ways to achieve goals; having new and practical ideas to improve performance; seeking out new technologies, processes, techniques, and product ideas; suggesting ways to improve work quality; every employee being a source of creative ideas; not being afraid to take risks; promoting and advocating ideas to others; demonstrating creativity in work when given the opportunity; developing appropriate plans and schedules for implementing new ideas; frequently having innovative new ideas; providing creative solutions to problems; often having fresh approaches/thinking in addressing issues; suggesting new ways to perform work tasks.

The theory of Innovation Capability mentions that innovation capability is an intangible asset utilized by companies to generate innovation continuously, where companies transform ideas and knowledge into processes, services, and products for organizational benefit (Singh et al., 2019). Aggregate innovation capability includes culture, values, leadership, processes, and most importantly, the psychological factors and skills of people (Skarzynski and Gibson, 2008; Robb et al., 2022). Innovation capability is identified as the ability to continuously transform knowledge and ideas into new products, processes, and systems for the benefit of the company and its stakeholders (Lawson and Samson, 2001; Alghamdi and Algag, 2024). A company's innovation capability can be defined as a complex construct encompassing various innovation management practices related to strategy, resources, technology, processes, knowledge, organization, and others, which help realize innovative ideas into new or improved products/services. If an organization has higher innovation capability, it can quickly adopt new processes to reduce production costs, generate new products/services to attract more customers, increase barriers to imitation by competitors, and thus gain a better competitive position (Ngo et al., 2024).

Several studies have linked the role of creativity to innovation. For instance, Amabile (1996) noted that innovation is the successful implementation of creative ideas within an organization. Individual and team creativity is seen as the starting point for innovation. However, the risks associated with public service innovation have received less attention. Risks are often portrayed as negative phenomena that should be minimized or avoided (Osborne and Brown, 2011). The innovation process requires employees to be creative and apply new ideas to achieve high innovation performance (Gerlach et al., 2020).

Innovation is defined as "the intentional introduction and application within a role, group, or organization of ideas, processes, products, or procedures that are new to the relevant unit of adoption." Therefore, the researchers adopt the definition of innovation performance as the successful implementation of observable creative ideas (West and Farr, 1990; Gerlach et al., 2020). However, Anderson et al. (2014) and Hon and Lui (2015) recently advocated for an integrated definition of innovation and creativity, considering them as two continuous stages of the process of introducing new and improved ways of doing things at work. Specifically, they argue that creativity and innovation are interrelated constructs. Hence, creativity and innovation should not be separated but rather combined to uncover highly innovative organizational phenomena.

According to MenPANRB Regulation No. 30 of 2014, Public Service Innovation is a breakthrough in the type of public service that constitutes either an original creative idea and/or an adaptation/modification that benefits society, either directly or indirectly. In other words, public service innovation is not merely a new invention but includes a new, contextual approach that encompasses the expansion or enhancement of quality in existing public service innovations.

Categorization of public service innovations includes: governance, which encompasses one or more elements such as participation, accountability, transparency, effectiveness and efficiency of governance, quality of regulation, law enforcement, social order, and control of corruption in public services; the use of information and communication technology in public services; and the improvement of social welfare. Direct services to the public are those performed through direct contact with the community, providing immediate benefits.

The development of public service innovations is conducted within an integrated system, ensuring continuous and sustainable innovation through knowledge transfer from one unit to another within public services. The definition of public service innovation involves the development and implementation of new ideas by public service organizations to create or enhance public value within an ecosystem. This definition emphasizes three attributes: novelty, development and implementation, and the ecosystem that generates public value (Prabowo et al., 2022).

According to Kuratko (2007) in Prabowo et al. (2022), innovation consists of four types: Invention, which is the creation of a new product, service, or process that has never been done before, often referred to as revolutionary; Extension, which is the development of an existing product, service, or process, applying ideas from something existing to create a different outcome; Duplication, which involves replicating an existing product, service, or process, but with added creative touches to improve the concept and compete effectively; and Synthesis, which is the combination of existing concepts and factors into a new formulation. This process involves taking various previously discovered ideas and products and reformulating them into a product that can be applied in a new way.

Innovation and imitation are common methods for introducing technological shifts in industrial businesses. Imitators attempt to capture the profitability and market share of innovators. Simultaneously, the exclusive use of an innovation provides innovators the opportunity to make it more profitable. However, from another perspective, imitation can also be considered innovation, as one of the primary conditions for changes and reforms to be regarded as innovation is that the imitation introduces a significant element of novelty to the organization implementing it (OECD, 2005). Therefore, public organizations that apply innovations previously implemented by other organizations can also be considered innovators (Marin, 2014).

It is undeniable that innovation is not solely the domain of the central government but also of local governments. Thus, local governments must work hard to manage existing potentials and resources to become sources of community welfare. Regional innovation is a normative and descriptive approach aimed at capturing technological



developments occurring in a region. In the regional context, innovation is also crucial in determining competitive advantage, as outlined by Albury (2005) in Prabowo et al. (2022): Interdependencies resulting in knowledge spillover; Knowledge and practices that can be transferred between public service providers; The tacit dimension, which will be effective for knowledge transfer if the distance between parties is close, including physical proximity and the development of intensive interactions; Knowledge transfer through local networks; The development of networks, which will be effective if a condition of mutual trust is established; Sharing information within groups of public service providers; Based on the regional economy, which aligns with the local potential; Social capital, both in the sense of historical and cultural factors of the region, including communal norms and positive factors that develop due to interactions among various parties in socio-economic activities, fostering mutual trust, understanding, and openness; Sharing responsibility with partners; Facilitating cooperation among public service providers and between sectors; Accelerating learning and knowledge flow.

Several types of innovation in the public sector relate to services, such as service product innovation, service process innovation, service method innovation, policy innovation, system innovation, incremental innovation, radical innovation, transformative or systematic innovation, continuous innovation, and discontinuous innovation. All these types of innovation significantly impact when public sector organizations strive to develop the execution of their duties and responsibilities with more creative breakthroughs (Prabowo et al., 2022).

Inovasi sektor publik dapat berhubungan dengan hasil baru (misalnya layanan baru), proses untuk mencapai hasil tersebut (misalnya menggunakan desain bersama), dan dukungan yang diberikan untuk memfasilitasi proses tersebut (misalnya laboratorium inovasi digunakan untuk mendukung tim melakukan proses co-design untuk mendapatkan hasil yang inovatif) (Nählinder dan Eriksson 2019; dalam Prabowo dkk, 2022). Inovasi sektor publik akan sering didorong oleh agen sektor publik (misalnya pegawai negeri, lembaga publik, badan usaha milik pemerintah, dan lain-lain), dan sebagaimana dicatat, hal itu akan sering melibatkan atau memengaruhi pelaku dari seluruh ekosistem. Inovasi pelayanan publik merupakan terobosan dari pelayanan publik baik berupa ide/gagasan kreatif orisinal dan/atau adaptasi/modifikasi yang

memberikan manfaat bagi masyarakat, baik secara langsung maupun tidak langsung. Inovasi diperlukan dalam rangka meningkatkan kinerja penyelenggara pemerintahan. Inovasi juga merupakan kunci untuk meningkatkan pertumbuhan ekonomi, daya saing daerah, dan meningkatkan kesejahteraan masyarakat (Prabowo dkk, 2022).

## **Research Methods**

This study employs a qualitative approach, leveraging a natural setting to answer research questions related to the observed phenomenon. Moleong (2006) defines qualitative research as involving various methods applicable in natural environments. The approach utilized in this research is a case study, which allows for an in-depth understanding of the 'One Stop Learning' innovation at Rumah Kedelai Grobogan (RKG). The research was conducted at the Department of Agriculture in Grobogan Regency, specifically at Rumah Kedelai Grobogan (RKG). The data sources used in this study consist of primary and secondary data. Primary data were obtained through interviews with stakeholders, such as soybean farmers, RKG managers, and Department of Agriculture officials. Additionally, field observations were conducted to gain direct insights into the conditions and activities at RKG.

Data analysis in this study employs the interactive model developed by Miles and Huberman (2014). This model includes several key components: data reduction, data display, data condensation, and conclusion drawing/verification. Data reduction involves selecting and simplifying relevant data, while data display is performed in the form of matrices or graphs to facilitate understanding. Data condensation aims to unify dispersed information into more specific conclusions.

Following these stages, the collected data are condensed and refined to reach a conclusion. Conclusion drawing and verification are carried out to ensure that the research findings accurately reflect the studied phenomenon. By using this approach, it is hoped that this research can provide a deep understanding of the contribution of the 'One Stop Learning' innovation at Rumah Kedelai Grobogan to strengthening food security in Indonesia.

## **Results And Discussion**

Rumah Kedelai Grobogan (RKG), located in Krangganharjo Village, Toroh Subdistrict, represents an innovative initiative by the Grobogan Regency Government to serve as an educational center for soybean agriculture. According to [jatengprov.go.id](http://jatengprov.go.id), the RKG complex is equipped with various facilities designed to support researchers, students, institutions, and the general public in learning about Grobogan's superior agricultural commodity. In addition to disseminating knowledge about the nutritional content and diverse varieties of soybeans, RKG also offers education on soybean cultivation and the processing of various soybean-based foods.

Grobogan Regency has developed and patented a superior soybean seed known as the Grobogan Non-Genetically Modified Organism (Non-GMO) local variety. The RKG includes several operational units, such as a seed center, learning center, tofu and tempeh house, promotion center, and restaurant. The activities at RKG encompass education on soybean cultivation, the processing of soybean-based foods, and the marketing of local soybean products. The establishment of RKG aims to promote and expand the use of local soybeans to achieve soybean self-sufficiency (Prasetya and Yuliawati, 2020). Each unit provides distinct functions and services, which the public can utilize according to their needs.

RKG's vision is "Building a Dignified Soybean Agribusiness," with the following mission statements (Source: Rumah Kedelai Grobogan): Promoting the realization of national soybean sovereignty; Enhancing the knowledge and skills of local soybean farmers and craftsmen; Developing processed products made from local soybeans; Encouraging the growth of soybean-based craftsmen and industries; Increasing the income of local soybean farmers and craftsmen; Fostering a love for local, hygienic food products among the community.

Based on the categories of public service innovation from PermenPANRB number 30 of 2014, the innovation at RKG falls under the category of social welfare improvement and direct public service. In addition to boosting the local economy, RKG also serves as an educational center for soybean farming and processing. Notably, RKG was awarded the Outstanding Achievement of Public Service Innovation (OAPSI) 2023 by the Ministry of PANRB. Furthermore, RKG has received numerous visits not only

from individuals working in soybean farming and processing but also from the general public and academics, and it has been adopted by several regions for similar innovations.

Rumah Kedelai Grobogan specializes in processing Grobogan soybean varieties and producing non-GMO local tempeh through a hygienic process. Tempe hygiene is the name given to the tempeh produced by Rumah Kedelai Grobogan. This tempeh contains 140.71 mg of calcium, 16.25 ppm of iron, 6.69% carbohydrates, 20.39% protein, 2132.20 ppm of phosphorus, 8.86% total fat, and 166.44 Kcal of total energy. In comparison, imported soybeans contain 14.77% protein and 8.31% fat per 100 grams (Astawan et al., 2013; Sari et al., 2022). The price set for tempe hygiene at Rumah Kedelai Grobogan is Rp 6,000 per 350-gram package, which is relatively expensive compared to market tempeh made from imported soybeans, priced at Rp 2,000 per 350-gram package (Sari et al., 2020). This higher price is due to the use of organic soybeans processed hygienically by RKG.

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### **Public Service Innovation at Rumah Kedelai Grobogan (RKG)**

Based on the type of business RKG, as mentioned above, Rademakers (2015) in Prabowo et al. (2022) identifies four categories of innovation: product innovation, process innovation, organizational innovation, and business innovation. RKG falls into the categories of product, process, and business innovation. Several factors support this analysis: RKG has developed an organic soybean variant known as non-GMO soybeans. Additionally, RKG operates a restaurant that features a menu based on soybean products produced by RKG. This demonstrates RKG's ability to create distinct and superior product innovations compared to others.

The next category of innovation is process innovation. RKG's processing and sale of soybean products encompass the entire production chain, from seed breeding to production and processing centers. Rumah Kedelai Grobogan also enhances the use of local soybeans and adds value by producing soybean derivative products such as tofu, tempeh, tempeh chips, and other soybean-based products.

RKG also meets the criteria for business innovation. RKG's products, including tempeh, tofu, and others, are marketed within the Grobogan region and surrounding areas. Some of RKG's marketing partners include shops, supermarkets, farmers' markets, and both public and private hospitals. RKG's business model has adopted modern business practices, covering production, marketing, and product development. RKG also collaborates with local farmers who participate in seed breeding and soybean cultivation.

RKG is managed under the Department of Agriculture of Grobogan Regency. The head of RKG is the Head of the Department of Agriculture. According to data from 2020, Rumah Kedelai Grobogan employs 11 people: five in the restaurant unit, three in the tempeh and tofu unit, one in the seed center, two in marketing, and each unit has one person in charge (Prasetya and Yuliawati, 2020).

Through the innovations of Rumah Kedelai Grobogan, the community can innovate and learn about local soybean agribusiness. Education at Rumah Kedelai is provided by skilled coaches who are part of the P4S (Self-reliant Agricultural and Rural Training Center) organization. The training method offered by these coaches consists of 20% theory and 80% practice, allowing visitors to gain knowledge and skills in local soybean cultivation and processing into various food products. This service is available to all community members (Ikhrohmah, 2021).

### **Identification of Internal and External Factors in the Development of Rumah Kedelai Grobogan**

Identifying the key variables that influence a company's performance is essential for analyzing its environment. According to David (2009), the analysis of a company's environment consists of two main components: internal and external environments. The internal factors used to identify the strengths and weaknesses in the development of soybeans at Rumah Kedelai Grobogan include operations, marketing, and management. The external factors that identify opportunities and threats in the development of soybeans at Rumah Kedelai Grobogan include government policy, economy, social, cultural, and environmental aspects.

Prasetya and Yuliawati (2020) noted several internal factors that constitute the strengths and weaknesses of Rumah Kedelai Grobogan (RKG), as shown in Table 1.

**Table 1. Internal factors which are the strengths and weaknesses of the RKG**

Internal Factors	Strengths	Weaknesses
Operational	Soybean productivity is high	Facilities are not well utilized
	Complete building facilities	High operational costs
	There are integrated activity units	
Marketing	The products produced are hygienic and high quality	Lack of promotion through the media
	The product is already known to the wider	

	community	
	Able to develop product innovation and marketing expansion	
Management		Lack of management and controlling
		Human resource strength is lacking

Prasetya and Yuliawati (2020) (data processed)

The external factors in the development analysis of RKG are: (a) Government Policy: RKG receives support from the Grobogan Regency Government and is one of the flagship products for the local government, showcasing public service innovation and winning national-level competitions; (b) Economic Factors: Revenue generated by RKG contributes to the regional income of Grobogan Regency and stimulates the local economy through the marketing of RKG products; (c) Social, Cultural, and Environmental Factors: The high demand for soybeans; partnerships with seed breeders, farmers, and stores in various locations; distribution of products to different regions; direct and intermediary marketing; a loyal customer base; and significant development potential.

The factors hindering the implementation of Rumah Kedelai Grobogan's innovation in Grobogan Regency can be identified through the following indicators: (a) Bureaucratic Factors: Availability of human resources at Rumah Kedelai Grobogan; discipline of Rumah Kedelai Grobogan staff; coordination between leaders and staff; provision of incentives to Rumah Kedelai Grobogan staff; and community participation in supporting Rumah Kedelai Grobogan's innovation; (b) Political Environmental Factors: The influence of budget allocation and short-term planning on the development process of Rumah Kedelai Grobogan's innovation; regulations or policies related to the implementation of Rumah Kedelai Grobogan's innovation; (c) External Public Sector Factors: Involvement of third parties in determining the success of innovation development.

### **Contribution of Rumah Kedelai Grobogan and Economic Development Potential**

Since its establishment in 2013, Rumah Kedelai Grobogan (RKG) has significantly benefited both the community and the Grobogan Regency Government. RKG has supported numerous farmers in cultivating high-quality soybeans, thereby enhancing their economic conditions. This aligns with the definition of innovation as creating new or improved products/services. The existence of RKG has also spurred residents' creativity, allowing them to develop creative ideas in product marketing strategies and creating new menus in restaurant units. However, research by Prasetya and Yuliawati in 2020 identified a weakness in RKG's lack of promotion through media.

Regarding revenue, RKG has contributed substantially to the Grobogan Regency Government through product sales and training. This indicates a significant potential for future development. According to Sangadah (2016), the business development strategy for increasing RKG product consumers involves four criteria: new product development, product quality, continuity of product availability, and consumer satisfaction. These criteria were derived from interviews and consideration of various factors, as described and classified. Munizu (2010), cited in Sangadah (2016), emphasized the importance of several aspects in business development: human resources, operational aspects, market and marketing aspects, government policies, and socio-economic and cultural aspects. Market and marketing aspects form the basis for formulating criteria for consumer satisfaction, product availability continuity, product quality, and new product development.

New product development can indicate how a business adapts to the market. Product quality and continuity of availability support consumer satisfaction, which can be assessed by the number of product consumers and the market reach. Operational aspects relate to the production process, with criteria including guaranteed product quality through the use of advanced technology and hygienic production processes. Socio-economic and cultural aspects underpin the criteria for product availability continuity. Products remain available if the raw materials are consistently supplied, which is feasible when raw material suppliers are satisfied with their social, economic, and cultural conditions, ensuring the sustainability of their business activities.



## **Analysis of the 'One Stop Learning' Innovation at Rumah Kedelai Grobogan (RKG) for Strengthening Food Security in Indonesia**

The innovation of the 'One Stop Learning' at Rumah Kedelai Grobogan (RKG) marks a significant advancement in agricultural education and practice, aimed at strengthening food security in Indonesia. This innovation aligns with principles outlined by Patrisia et al. (2022) and Sufi (2023), which emphasize that true innovation involves fundamental changes in principles, processes, and models of public service delivery. At RKG, these changes are evident through an integrated approach to soybean cultivation and processing, encompassing facilities such as seed centers, learning centers, and processing units for products like tempeh and tofu. This comprehensive approach ensures that stakeholders, including farmers, researchers, and the general public, receive holistic education and support from seed propagation to market-ready products. Such initiatives not only enhance the quality and sustainability of agricultural practices but also promote local soybean varieties, contributing to national food sovereignty.

In the context of food security, the 'One Stop Learning' model at RKG exemplifies the type of innovative governance highlighted by Sudrajat & Andhika (2021) and Wipulanusat et al. (2017). By fostering a culture of continuous improvement and innovation, RKG has created an ecosystem where local farmers can learn advanced techniques and best practices for soybean cultivation and processing. This model addresses internal factors such as operational efficiency and product quality, as well as external factors like government policies and market dynamics, to enhance food security. The structured learning environment and practical training provided by RKG ensure that participants can effectively implement these innovations, thereby increasing productivity and ensuring a stable supply of high-quality, non-GMO soybeans. The success of this model not only supports the economic well-being of local farmers but also contributes to broader goals of sustainable agricultural development and food security in Indonesia, as emphasized by Pérez-Escamilla (2017) and Anser et al. (2021).

### **Conclusion**

The 'One Stop Learning' innovation at Rumah Kedelai Grobogan (RKG) has significantly contributed to strengthening food security in Indonesia. By employing an

integrated approach encompassing the entire value chain from cultivation to processing and marketing of soybeans, RKG has successfully enhanced the productivity and quality of non-GMO local soybeans. Furthermore, the educational and training model implemented at RKG ensures that modern agricultural knowledge and skills are accessible to local farmers, thereby improving their economic welfare. This initiative not only supports national food sovereignty but also promotes sustainable agricultural practices aligned with the Sustainable Development Goals (SDGs).

The success of Rumah Kedelai Grobogan (RKG) in receiving the Outstanding Achievement of Public Service Innovation (OAPSI) award is attributed to its role as an integrated hub for enhancing the value and productivity of soybeans, a key commodity in Grobogan Regency. The Grobogan Regency Government, through the Department of Agriculture, has created a platform for various community members, including farmers, soybean product producers, shop owners, and small and medium enterprises (SMEs), to empower soybeans and market the processed products. This initiative has positively impacted the local economy and regional income. RKG has become a model for many other regions to adopt similar innovations

### **Research Limitations and Future Research**

This research has several limitations that need to be acknowledged. First, the data used primarily comes from secondary sources and internal RKG reports, which may not encompass all variables influencing the success of the innovation. Second, this research focuses more on technical and educational aspects without delving deeper into the social and cultural impacts of the innovation on the local community. Additionally, the limited data collection period may affect the research results, given the dynamic changes in agricultural practices and government policies.

For future research, it is recommended to conduct a more comprehensive longitudinal study using primary data collected directly from farmers, training participants, and other stakeholders at RKG. This research should also include a more in-depth analysis of the social and cultural impacts of the 'One Stop Learning' innovation on the local community. Furthermore, exploring how this model can be

adapted and implemented in other regions of Indonesia would be highly beneficial for expanding its benefits and strengthening national food security. Thus, future research can provide more holistic and practical insights for the development of similar policies and programs.

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