Private participation in establishing a product certification body of seed and breeding stock poultry in Indonesia

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Abstract. The era of global trade is a political system based on international rules and agreements that encourage and stabilize economic exchanges between countries. One of the impacts is the demand for a shift in government role to the private sector. The poultry sector plays an important role in providing 65% of the need for animal protein consumption in Indonesia. A product certification body of seed and breeding stock poultry is a tool used in global trade to increase product competitiveness in the global market. By applying standards in trade, it is expected to improve the performance of producers so that they can produce quality products, fair competition in trade, and provide protection to the public and consumers. Unfortunately, the existing seed and livestock certification institutions are still fully initiated by the government. Meanwhile, private participation in establishing a seed and poultry seed product certification body through public-private partnerships (PPPs) is still far from expectations.

1. Introduction
Globalization is described as a process of greater integration in the world economy through the movement of goods and services, capital, technology, and (to a lesser extent) labor, which is increasingly leading to economic decisions influenced by global conditions [1]. The development of globalization that is happening at this time causes fundamental changes in the order in various aspects of life, including the economy. One of the obstacles that hinder Indonesia’s current economy is the slow pace of infrastructure development -- this is indicated by the lack of quality and quantity of infrastructure. Thus, the development of infrastructure that connects the production area with the distribution area is one of the five development targets in the current government of President Joko Widodo.

Global trade causes differences in the national regulations of each country, both more liberal and more protectionist, so international agreements are agreed to limit the capacity of countries to interrupt international trade. The poultry industry can supply 65% of Indonesia’s animal protein, provides employment for 12 million people, and is estimated to be worth more than US$ 34 billion [2]. Globally, poultry production has an important role in the agricultural industry. In the 2015-2025 period, the combined annual growth rate of protein derived from poultry is estimated to be over 2.4%[3].

Globally, Indonesia ranks 7th globally as a country with chicken meat production of 3.316 million tons (Table 1) [4]. The opposite condition in terms of consumption of chicken meat, Indonesia is relatively lower than other countries in ASEAN, which is still below 9 kg/capita based on data from the Organization for Economic Co-operation and Development (OECD).

Several problems that then arise in this sector include a decrease in the number of livestock farming households, dependence on imported raw materials, fluctuations in the price of chicken meat and eggs...
as well as the low competitiveness of products in supplying the global market and the threat of entry of chicken meat and egg products into the domestic market [5]. Solving increasingly complex problems in the poultry sector requires the involvement of various stakeholders. Among other things, through private sector participation in developing a product certification body of seed and breeding stock poultry within the framework of public-private partnerships (PPPs).

**Table 1. Poultry meat consumption in 2016-2020 (kilogram/capita)**

| Country      | 2016 | 2017 | 2018 | 2019   | 2020   |
|--------------|------|------|------|--------|--------|
| Indonesia    | 7.900| 7.901| 8.288| 7.764  | 7.903  |
| Thailand     | 8.883| 7.901| 8.288| 7.825  | 7.902  |
| Philippines  | 12.541| 12.782| 13.180| 13.487 | 13.742 |
| Vietnam      | 13.502| 11.894| 15.361| 16.208 | 16.521 |
| Malaysia     | 50.182| 48.522| 48.792| 48.748 | 49.333 |

*Source: https://data.oecd.org/chart/6qQF*

2. Methods
This article uses a literature review with the main sources of national and international journal articles, including books and several news or articles in online media with the relevance of articles to the research theme. The literature search was conducted in July-August 2021 through Google, Google Scholar, Directory of Open Access Journals (DOAJ), and Mendeley. The article has been published in a journal so that the level of validity can be known. The year of publication is not limited.

3. Literature review

3.1. Public-private partnerships (PPPs)
Public-private partnership (PPPs) approaches are increasingly commonplace in developed and developing countries [6]. PPPs as collaborative efforts in which private actors pool their resources with public sector organizations in long-term collaborative engagements to provide added value for all parties involved [7]. PPPs are defined as optimization tools—a set of voluntary structures and processes for optimizing the application of public and private resources to meet common goals in a given context [8].

The term was initially popularized in 1982 by the British Government, which is interpreted as an agreement between the government and private companies to manage infrastructure related to finance and operations. Another definition is a joint commitment between public sector organizations and outside the public sector, including the private sector in employment arrangements (implied in a contract) [9].

In general, PPPs are an alternative financing method aimed at overcoming the limitations of the public sector and a way to increase efficiency in construction, operation, and service delivery [10]. Implementation became a bipartisan policy adopted by many countries, including international organizations, to provide much-needed infrastructure, develop local economies and provide public services. This definition concerns three points—partnership, benefit-sharing, and risk sharing—to reduce the financial burden of public sector organizations through several models: building, operating and transferring (BOT), building, transferring, and operating (BTO), building, owning, and operating (BOO) designing, building, financing, and operating (DBFO). The goal is to accelerate infrastructure development. Each also includes elements for realizing sustainable social change [11].

Not all public demands can be met by the government (public sector) due to the limited budget and resources. So, involving the private sector in the provision of public facilities or services is necessary, considering they have several advantages in terms of financial strength, creativity, managerial resources that can be optimized [12]. Involving the private sector in providing public facilities and services will help reduce the burden on government budgets, cut bureaucratic chains, increase market competition, reduce government dependence, help stimulate the economy, and create jobs [13].
3.2. Product certification body

Product standardization is often an obstacle in global trade, so implementing standards is needed to reduce these barriers. As part of the implementation of this policy, Indonesia, as a member of the World Trade Organization (WTO), has agreed on regulations related to the Agreement on Technical Barriers to Trade (TBT) and the Agreement on Sanitary and Phytosanitary Measures (SPS), which are the policies of the WTO [14]. Standards are measures by which products, processes, and manufacturers are judged [15]. Product standardization as an operating mechanism for agricultural and food production and marketing systems has an important role in the increasingly globalized agriculture and food economy. First, there is a shift from commodity-oriented markets to markets characterized by highly differentiated products and niches. Second, there is a shift in the role of values and standards from an emphasis on outcomes (i.e., product attributes that can be measured) towards processes (e.g., how products are produced, processed, handled) [16].

Food safety is now a critical question that concerns politicians and consumers alike. The concern is global, not only because of the importance of public health but also the impact on international trade [17]. One of the steps taken by the government is to ensure that the quality of the seeds produced and circulated is guaranteed by increasing the Indonesian National Standard (SNI) as a competitive asset in the global market. Two key factors determine product competitiveness in the market, namely price and quality.

Product quality is a product or service characteristic that depends on its ability to satisfy customer needs [18]. Certification is an endorsement from a third party relating to a product, process, system, or person. Certification can be applied to all objects of conformity assessment, namely materials, goods, installations, processes, systems, personnel, or institutions that meet conformity assessment requirements [19]. Product certification is carried out from pre-market approvals and is a legal requirement for manufacturers of various products, components, and accessories. This process is an effort to see the extent to which producers comply with established regulations covering safety standards, product quality, and other product characteristics. The product certification agency is part of the quality infrastructure that has an important role in providing quality assurance according to applicable standards circulating in the community. Most product certification bodies are government institutions, but some are privately owned or state-owned enterprises (BUMN) [20].

4. Results and discussion

Various types of products on the market create the opportunity for certification bodies to provide services in accordance with their scope. In Indonesia, organizations that have the authority to carry out the product certification process are called product certification bodies (LSPro). The LSPro product certification process requires an accreditation permit issued by the National Accreditation Committee (KAN) [21].

![Figure 1. Relationship between KAN, LSPro and Suppliers or Importers](image)
The Minister of Agriculture established LSPro BBT in 2011 (Regulation of the Minister of Agriculture No. 75 of 2011 concerning Certification Bodies of Agricultural Products). The National Accreditation Committee (KAN) was accredited with the identity of LSPr-045-IDN in 2015. LSPro BBT plays a role in certifying and issuing Product Certificates of Use of Indonesian National Standard Marks (SPPT SNI) of seed products and livestock seeds, with a scope of 36 SNI. Four of them SNI about seed and breed poultry.

MoA has issued Permentan No. 32 of 2017 on the Provision, Circulation, and Supervision of Breed Chickens that require every seed in circulation to have a certificate issued by an accredited certification body or appointed by the Minister of Agriculture. There are several contributing factors to the lack of products that have SNI standards. Among them is no real difference in profit between certified seeds and those without certificates, weak awareness from businesses to take care of product certification and complexity factors in the application of product certification with SNI, and the high cost of management contributes.

Since 2015 Indonesia has been exporting seeds and poultry with breeds of chickens to several countries including Myanmar and East Timor. The export value of seeds and breeding livestock can be seen in Figure 2.

![Figure 2. Export Value of Seeds and Breeding Livestock (US$)](image)

Based on the Performance Report of the DGLAHS in 2020, the export value of seed and breeding livestock in 2020 decreased compared to the last 2 years: 27.18% when compared to the realization of exports in 2019 of US$ 2.19 million; and 61.16% compared to the export value in 2018 of US$ 976.89 thousand.

Hatching Egg (HE) and DOC chicks (Day Old Chicken) are seeds and livestock seedlings that have an important and strategic role in increasing the production and productivity of poultry commodities. Poultry breeding is divided into 3 strata, namely Grand Parent Stock (GPS), Parent Stock (PS), and Final Stock (FS). The life span of GPS chickens and PS chickens is about 65-68 weeks, while the life span of FS chickens is about 1 month. A GPS seed chicken can produce 40 PS hens during its lifetime, while a PS hen is designed to produce 140 FS chickens. Thus, one chicken seed GPS can produce 40 x 140 = 5,600 FS during its lifetime [23]. GPS chickens in Indonesia are still entirely derived from imports. The exported seeds are DOC PS or in the form of HE. Data of companies engaged in breeding broiler breed chickens can be seen in Table 2.

| Table 2. Number of broiler establishments by main activity 2016-2018 |
|---------------------------------------------------------------|
| **Main Activity** | **Number of Broiler Establishments** | **2016** | **2017** | **2018** |
| Breeding - GPS | | 7 | 7 | 7 |
| Breeding - PS | | 72 | 77 | 76 |
| Total of Establishment | | 79 | 84 | 83 |

Source: Statistics Indonesia

Indonesian Poultry Breeders Association (GPPU) is an association in poultry breeding formed in December 1970, and currently has a total of 35 members of the company. As a government partner in
development in the poultry sector, of course, its role is expected to develop LSPRo BBT, especially poultry. As a form of PPPs some GPPU member companies have initiated it in cooperation with several universities (public and private) through the help of close house cages for research purposes to support the academic activities of students and also used as a commercial effort to support the source of funding for faculty development programs. However, private participation in the certification of poultry seeds and seedlings should still be encouraged. Not only related to certification product of seed and breeding stock with SNI standard, but also the development of institutional infrastructure with several schemes, either through build, operate and transfer (BOT), build, transfer and operate (BTO), build, own and operate (BOO) and design, build, finance and operate (DBFO).

5. Conclusion
International market pressures require agricultural commodity producers to adhere to sustainability standards to enter the market. Multiplying Indonesian National Standard (SNI) is one of the competing capitals in the global market. The poultry industry will continue to grow in line with global progress. Therefore, the development of the poultry industry with high product competitiveness must continue to be carried out simultaneously and continuously by realizing harmonization of policies that are cross-sectoral/institutional.

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