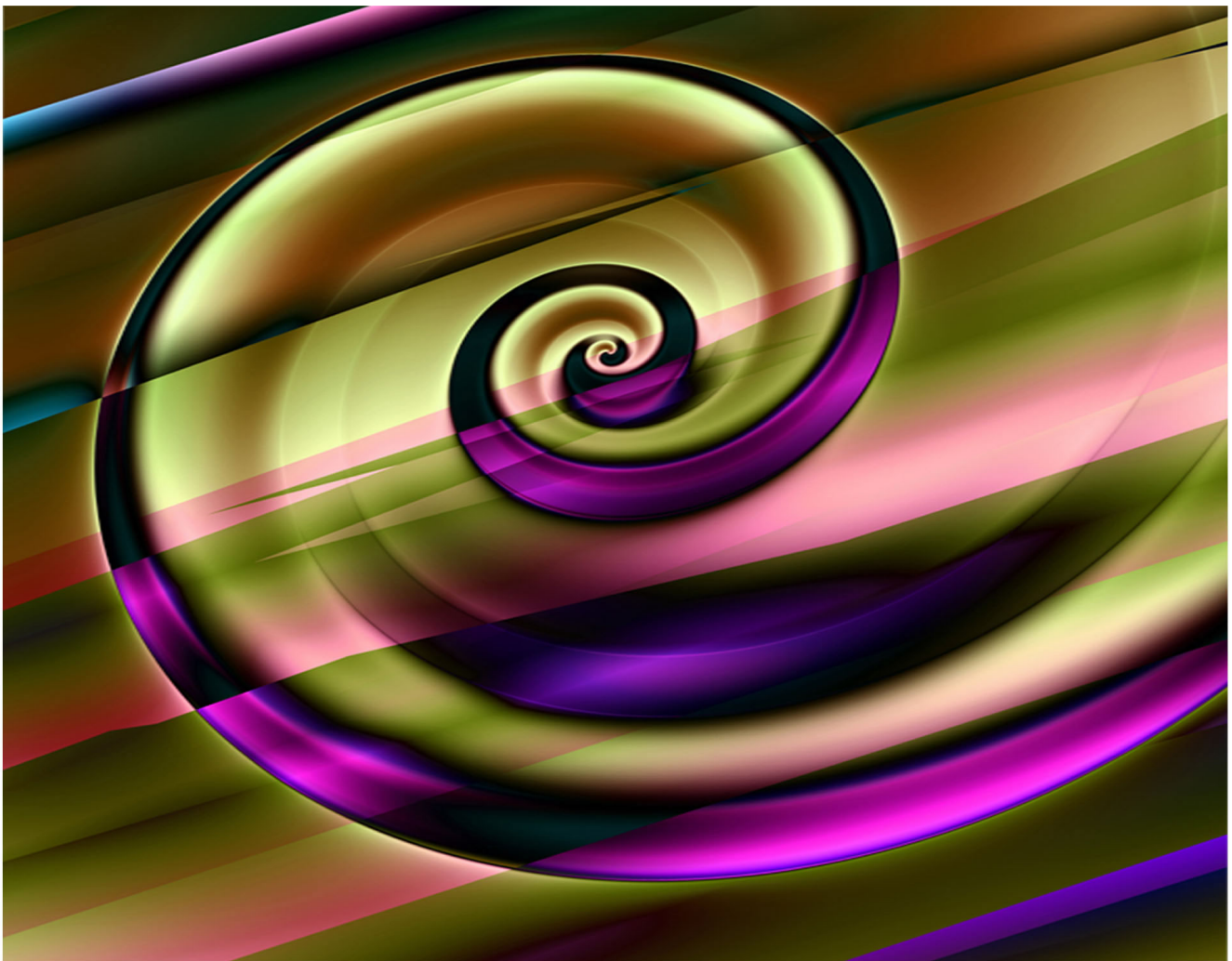


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Table of Contents

- 1 **CONSERVING INDONESIA'S NATURE AND CULTURE THROUGH
EMPOWERMENT OF INDIGENOUS TECHNOLOGY IN CREATIVE INDUSTRY
SMES**
ELZAVIRA FELAZA, Universitas Indonesia, Indonesia
- 9 **COALBED METHANE - AN UNCONVENTIONAL - CLEAN ENERGY. THE
FORMING, EXTRACTION, AND POTENTIAL OF INDONESIA'S COALBED
METHANE AS FUTURE SOURCE ENERGY FOR INDONESIA**
LUCY KARTIKASARI, Institut Teknologi Bandung, Indonesia
TRISNA SUNTARA, Institut Teknologi Bandung, Indonesia
- 18 **INDONESIAN MARINE BIODIVERSITY AS A SUSTAINABLE RESOURCE TO
SUPPORT INDONESIAN PHARMACEUTICAL INDUSTRY IN ASEAN
PHARMACEUTICAL MARKET**
ANDIKA PUTRA RIANDY, Sriwijaya University, Indonesia
ALVIONITA HANDAYANI, Sriwijaya University, Indonesia
- 23 **RUMAH TAHU MANDIRI ENERGI (RTME) : NEW PATTERN ON TOFU
PRODUCTION WITHOUT FOSSIL FUEL CONSUMPTION IN SENTRA TAHU
CIBUNTU, BANDUNG, WEST JAVA**
AGUS RAMELAN , Indonesia University of Education , Indonesia
NOVIA ANGGRAENI , Indonesia University of Education , Indonesia
- 32 **APPLYING NANO-CARBON AS COATING MATERIAL FOR SLOW-RELEASED
FERTILIZER TO INCREASE INDONESIAN RICE YIELD AND TO REDUCE
NITROGEN LOSS IN SURFACE WATER OF PADDY SOIL**
ANDIKA PUTRA RIANDY, Universitas Sriwijaya, Indonesia
DINI FUADILAH SOFYAN, Universitas Sriwijaya, Indonesia
- 39 **IMPROVING WADUK JATILUHUR'S FISHERIES PRODUCTS TOWARDS
ASEAN GLOBAL MARKET BY ESTABLISHING AQUACULTURE
COOPERATIVE**

DIMAS GELAR PAMUNGKAS , University of Indonesia, Indonesia
KARTIKA SUKMATULLAHI, University of Indonesia, Indonesia
HAFIQI AMHARIPUTRA, University of Indonesia, Indonesia

- 47 **CONTROLLING WINDU SHRIMP QUALITY USING APRIORI ALGORITHM THROUGH SMARTPHONE-BASED APPLICATION**
FIRDAUS K. GANI, Telkom University, Indonesia
RAHMAD HIDAYATULLAH S, Telkom University, Indonesia
RAHMAT FAISAL WAHYUDI , Telkom University, Indonesia
SATRIA NUR HIDAYATULLAH, Telkom University, Indonesia
- 53 **DEVELOPMENT OF VOCATIONAL MARINE SCHOOLS IN INDONESIA AS A STRATEGY FOR REDISCOVERING INDONESIA'S MARITIME POTENTIAL**
IRFAN TEGUH PRIMA, Universitas Indonesia, Indonesia
M. HAZMI ASH-SHIDQI, Universitas Indonesia, Indonesia
OPI ARISTYA, Universitas Indonesia, Indonesia
- 61 **THE UTILIZATION OF TECHNOPRENEURSHIP TO DEVELOP INDONESIAN GEOGRAPHICAL INDICATION PRODUCTS**
MONICA DWIYANTI, University of Indonesia, Indonesia
HANS TOPRIL, University of Indonesia, Indonesia
ANTONIUS SATRIA, University of Indonesia, Indonesia

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THE UTILIZATION OF TECHNOPRENEURSHIP TO DEVELOP INDONESIAN GEOGRAPHICAL INDICATION PRODUCTS

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ABSTRACT

Indonesia will enter ASEAN Economic Community (AEC) in 2015. Domestic industries including Small-Medium Enterprise (SME) should be able to compete with foreign goods and services to survive in AEC. Higher competitiveness can be reached by utilizing technology and manufacturing unique products. However, only few SMEs have utilized technology. Moreover, many Geographical Indication products have not been registered to The General Directorate of Intellectual Property Rights. This is a descriptive scientific paper using literature review and interview as method to collect data. There is a possible solution to this matter which is the utilization of technopreneurship to develop Indonesian Geographical Indication products with several steps as follow: (1) exempt machinery companies from tax; (2) compel CSR in form of industrial machine aid to SMEs producing Geographical Indication products; (3) require in agreement that SME should register their Geographical Indication to The General Directorate of Intellectual Property Rights before receiving the aid.

Keywords: technopreneurship, Geographical Indication, SME

1 INTRODUCTION

The formation of ASEAN Economic Community (AEC) indicates the existence of free flow of goods, services, investments, skilled labours, and capitals within ASEAN region. Indonesia, as one of ASEAN member countries should have strategies in facing AEC. Unfortunately, Indonesian government has not been strategic enough to determine the focus point in developing the most potential industry. Besides that, the technopreneurship has not been optimally developed. Another major problem is government's insufficient attention to SMEs although SMEs are one of the most impacted actors in future AEC. This does not mean that other types of enterprises are not affected. However, this paper specifically talks about SMEs. It is because SMEs should compete with foreign companies whose market segment is same with SMEs.

The offered solution of described problems is the utilization of technopreneurship to develop Indonesian Geographical Indication products with several steps as follow: (1) exempt machinery companies from tax; (2) revise government policy to compel CSR in form of industrial machine aid to SME which manufactures Geographical Indication products including but not limited to *Dodol Garut*, *Kopi Wamena*, etc.; (3) require in agreement that SMEs should register their Geographical Indication products to The General Directorate of Intellectual Property Rights (GD IPR) before receiving the aid.

1.1. The Research Framework

Our research attempts to explain how technopreneurship and Geographical Indication products can be the strategic move for Indonesia to face AEC. To answer this question, others must be posed. Why should Indonesia rely on technopreneurship and Geographical Indication products? How can Indonesia utilize technopreneurship? How can technopreneurship improve the production of Geographical Indication products? The goal of this paper is to offer the solution that can empower SMEs producing Geographical Indication products to face AEC.

1.2. Literature Review

1.2.1. Technopreneurship

Technopreneurship is derived from two concepts, technology and entrepreneurship. Foucault (1988) in Rooney (1996) asserted that technology of production is instrument deployed to transform components in production process. Schumpeter (1965) in Eroğlu and Piçak (2011) defined “entrepreneurs as individuals who exploit market opportunity through technical and/or organizational innovation”. Technopreneurship is implementation of technical science in business sector (Dolatabadi and Meigounpoory, 2013). In other words, technopreneurship can be described as combination of entrepreneurs’ skills and technology. Some governments in Southeast Asian countries like Singaporean government started to pay attention to technopreneurship. It initiated technopreneurship-21 to encourage local and foreign talents to start technological-based business in Singapore (Chang Boon Lee, 2002). Moreover Malaysian government built Multimedia Super Corridor (MSC) which functions as technology parks (Malaysia National ICT Initiatives n.d.). The technopreneurship has long been fostered in developed countries like United Kingdom (UK). A technology-based company named Autonomy HP which resides in Cambridge is world-wide known for its successful business (HP Autonomy, n.d.).

Technopreneurship is a new concept in Indonesia especially in SME sector. According to Law of The Republic of Indonesia No.20 of 2008 SME is an independent productive economic entity which is built by individual(s) or enterprise(s) and has annual sale of IDR 300,000,000.00 to IDR 50,000,000,000.00.

What is missing from the current concept of technopreneurship is that it is always associated with sophisticated technology. In this paper, technology used in technopreneurship does not always have to be sophisticated. The essence of technology in technopreneurship is it makes the production process become more efficient where the SMEs can produce certain outputs with minimum inputs (Farrell, 1957).

1.2.2. Geographical Indication

The term Geographical Indication had been put into use in several international agreements; one of which exerts the most dominating influence is WTO's TRIPS Agreement, where Geographical Indication in Article 22.1 defined as indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. According to Law of The Republic of Indonesia No.15 of 2001, it is described as a mark indicating the origin of a product whose unique characteristic and quality are gotten from either geographical, natural, human factors or the combination of aforesaid elements. The registration of Geographical Indication products consists of several steps as follow: (1) the society who owns Geographical Indication product agrees to register their product; (2) producers association or local government register the product to The GD IPR and attach requirements book; (3) Geographical Indication Experts Team checks the suitability between real product and product's characteristic written in requirements book; and (4) if the product satisfies the characteristic and quality written in requirements book, The GD IPR will grant certificate.

Geographical Indication is protected on the basis of territoriality; registration in Indonesia would solely provide safeguard in Indonesia. In order to get protection in other countries, Indonesian government should register Indonesian Geographical Indication products in destination countries. In welcoming AEC, there are two steps that should be taken: (1) registering of Geographical Indication in Indonesian territory; and (2) registering those products in all ASEAN member countries. These are three means as to be benefitted from the deployment of Geographical Indication: (1) commercial use by its owner; (2) selling to other party; and (3) preventing the use of other.

1.2.3. Tax Break and Corporate Social Responsibility

The mechanism of tax break is given by exempting the value added tax of imported machine to encourage the industrial production of machines in Indonesia. There are several prerequisites before a machinery company can enjoy tax break as follow: (1) becoming the Official Taxable Entrepreneur; and (2) not transferring the imported machine that got tax break to another party in five years (Direktorat Jenderal Pajak 2012).

The tax break is strongly linked to Corporate Social Responsibility (CSR) because the companies that get the tax break will pay less tax and gain more profit. CSR is a moral obligation for all companies in Indonesia because they affect not only the environment but also the society. However, the implementation of CSR both by domestic companies and multinational companies that gain the tax break from the government is not significant enough to support SMEs in Indonesia. This is supported by the fact that the CSR rate in Indonesia is the second smallest number in Asia after Philippines. There is only 24% CSR companies devote to its CSR reporting. It is assumed that the higher the rate of the reporting, the more that company engages in implementing CSR (Chapple, 2005). Moreover, there is not special allocation of CSR to SMEs producing Geographical Indication products.

2 RESEARCH METHODS

Research strategy used in this paper was inductive strategy. Inductive strategy was a method where a theory emerged during the data collection and analysis phase of the research (Creswell, 1994). It means that some specific data collected in research would result to a bigger conclusion. In conducting the said strategy, there were several steps: (1) interviewed The GD IPR and producer of Geographical Indication products; (2) analysed the data; and (3) reviewed the data to check the offered solution's feasibility. Authors used purposive sampling as the sampling strategy. Earl Babbie (2010) defined purposive sampling as "a kind of sampling where the units to be observed were selected based on the researcher's judgment about which ones will be the most useful or representative." The data collection methodologies employed in this paper was depth interview. The interview analysis method used on this paper was narrative summary analysis technique. It was used to gain valuable insights by putting the data back together in re-ordered form to tell stories from the points of view of different participants (Interactive Textbook on Clinical Symptom Search n.d.). There were several ethic codes applied on this paper such as avoiding biased writing, avoiding plagiarism, and keeping confidential information. The approach that was employed in this paper was qualitative approach. R.L. Barker (1999) in Thyer (2001) explained that qualitative approach is "...systematic investigations that include inductive, in-depth, non-quantitative studies of individuals, groups, organizations, or communities."

3 RESULTS

3.1. Geographical Indication Development in Indonesia

In order to gather the information related to offered proposal, the interview with Mr. Gunawan, S.Si (The Head of Sub Directorate for Geographical Indication) had been done. Several things have been performed by The GD IPR to optimize Geographical Indication products such as giving socialization, providing technical aid, and providing the Geographical Indication Experts Team. However, society's awareness to register Geographical Indication products is still low because society often simply focuses on production activities (planting, harvesting, processing, and selling). Consequently, the ideas to expand market, increase quality control, and create high quality product are often not there. Moreover, the shortage of government fund and support discourages society to register Geographical Indication products.

In facing described problems, The GD IPR has not granted special incentive for society so that they want to register Geographical Indication products. Nonetheless, The GD IPR provided technical assistance and Geographical Indication Experts Team. The technical assistance fund is allocated for those who have submitted their registration application but have significant flaws in arranging their requirements book. The Geographical Indication Experts Team has the duty to check the compatibility between the information in the requirements book with the real events on the field regarding Geographical Indication. Incompatibility above 50% will not pass the examination. The experts will conduct inspection once in two years to ensure the quality of the registered products; since the protection would only last as long as its unique character persists.

Representing The GD IPR's point of view, Mr. Gunawan confidently stated that Indonesian Geographical Indication products can compete with other products in international market such as Arabica Coffee. There are some of challenges faced by Indonesia relating to the products hygiene and packaging. Mr. Gunawan conceded that the hygiene standard of processed Geographical Indication products is still low because it is made by home industry. Another challenge is about international community acknowledgement. Indonesia once had problem with European Union (EU) when the Netherlands prohibited Indonesian to sell Arabica Coffee under the name of Gayo Mountain Coffee because it has been registered as a brand name in EU. The settlement has been done through diplomatic means with EU resulting in soon-to-be fruitful cooperation *vis-à-vis* Geographical Indication. In the near future, products registered with Geographical Indication in Indonesia altogether would be protected in EU territory as well.

Mr. Gunawan gave a very positive comment regarding the solution offered on this paper. Giving machines to SMEs producing Geographical Indication products can help the producers to make better outcome especially in packaging and hygiene aspects. He added that the involvement of company in Geographical Indication development by providing machines as their CSR is very helpful. The good packaging will enable products to last longer. For example, good packaging in Arabica Coffee will avoid the coffee to oxidize quickly. This shall be a strategy to face the AEC.

3.2. SMEs Producing Geographical Indication Products' Condition in Indonesia

The interview with *Dodol Garut* producer was held to know the comments and views of Geographical Indication product producer about proposed solution on this paper. The interviewee of mentioned interview was Mr. Insan Rakhman (the head of Public Relations division of PT Herlinah Cipta Pratama – *Dodol PICNIC*). PT Herlinah Cipta Pratama was chosen because this company started its business as SME in 1949 with 5 employers. *Dodol Garut PICNIC* is sold in Java Island, Sumatera Island, and Kalimantan Island. It even has penetrated Malaysian and Singaporean market.

Machine to produce *Dodol Garut PICNIC* is a must for PT Herlinah Cipta Pratama. He stressed that machines are highly required for hulling, mixing, and cooking process. At the moment, there are 6 machines in the factory to equip efficient production activity and it will be increased in the future. It is because the company needs to produce more *dodol* to expand its market. In regards of packaging process, Mr. Insan admitted that PT Herlinah Cipta Pratama still uses human resource. He added that the packaging process done by human resources is not flawless. There are some common mistakes committed by the employers such as untidy packaging and unsuitability between *dodol* size standardized sizes. Mr. Insan stated that hygiene is an extremely important aspect in production process; it demands serious and special attention.

On the topic of AEC, Mr. Insan said that PT Herlinah Cipta Pratama is aware that Indonesia will enter AEC in 2015 but there is not any special strategy to face it. The company desires to build stronger domestic market before it goes further to foreign market. He confidently believes that *Dodol Garut* can be one of Indonesia's outstanding products in ASEAN market.

As soon as Mr. Insan was asked about Geographical Indication matter, he replied that he has never heard about Geographical Indication term before. Having heard short explanation of Geographical Indication, Mr. Insan seemed to be reluctant to say that *Dodol Garut* must be registered to The GD IPR. Unawareness of *Dodol Garut* producers results to reluctance to register Geographical Indication products. However, Mr. Insan had a positive response to offered solution on this paper although he still insisted that PT Herlinah Cipta Utama needs to learn more about Geographical Indication. He expressed that machines aid will be useful to run more efficient production process.

The similar case where enterprises producing Geographical Indication products need machines to maximise the production also happens to *Gula Semut Kulonprogo*. An exporter of *Gula Semut Kulonprogo* from CV Menorehpolititan named Suparyono said that the production of *Gula Semut Kulonprogo* experiences three tons surplus per week. This surplus can generate benefits if all farmers can possess dryer oven. The dryer oven can be the place for *Gula Semut Kulonprogo* to be stored. However, *Gula Semut Kulonprogo* cannot be stored in the longer period since the farmers do not own dryer oven. (Harian Jogja, 2013)

4 DISCUSSION

Since the primary aim of this paper is to offer solutions, the discussion section will be divided into two major parts namely problems and solutions. The discussion section compares the data with the proposed solution. The limitation of this research is small number of sample which was studied. Thus, the generalization for broader scope cannot be used based on this research alone.

4.1. Problems

4.1.1. Technopreneurship

Based on the interviews, technopreneurship has not been fully utilized by companies in Indonesia. On the other hand, it cannot be denied that few of companies have started to use technology to support their business like PT Herlinah Cipta Pratama. Technology has a vital role in the development of this company. Back then in 1949 when it was SME, this business entity used human resource instead of machine. In line with the increment of consumers' demand to *Dodol Garut*, the company started to use machine for hulling, mixing, and cooking process to generate more outputs. This precedence shows that technology is able to assist business entity's transformation from SME to big company. This condition is expected to happen in other SMEs as well. SMEs should be capable to show significant progress and development so that the production process will be more efficient, product quality will be higher, and market will be expanded.

One of the most prominent problems faced by SMEs producing Geographical Indication products in technopreneurship is limited capital. Although government and banks have provided some programs to support SMEs such as capital lending, it is not sufficient to make SMEs use technology in their business. A start-up enterprise has many initial needs like building, raw materials, and employers. As the result, they rarely allocate budget for technology. Commonly, they are reluctant to use technology for works which can be done by manually. In other words, Indonesian entrepreneurs have not fully aware about technopreneurship. It is important that technopreneurship is developed in welcoming AEC because SMEs producing Geographical Indication products need to expand their market to ASEAN level. More importantly, their competitors come from countries where technopreneurship has been developed well like Singapore and Malaysia.

The aforementioned problem is being worsened off by the absence of government's incentive in technopreneurship. This circumstance is faced by PT Herlinah Cipta Utama. Since 1949, the government has never granted any machine aid for this company whereas PT Herlinah Cipta Pratama has succeeded to export its products to Singapore and Malaysia. If the big company that has contributed to Indonesian economy did not get government assistance, let alone SMEs.

Another problem experienced by SMEs producing Geographical Indication products is the lack of initiative to expand market and increase quality control. The problem exists because SMEs owners only produce and sell their products to fulfil daily needs. Furthermore, the quality control within SMEs producing Geographical Indication products is often poor especially in packaging and hygiene. The manual process done by human resources contributes to this problem. Packaging and hygiene are vital aspects because most of Geographical Indication products are edible goods.

4.1.2. Geographical Indication Realm in Indonesia

The primary problem of Indonesian Geographical Indication scope is the low society's awareness about Geographical Indication although The GD IPR had tried to give socialization. It happens because the socialization has not been very intensive. It is proven by the confession of *Dodol Garut* producer who concedes that they have not heard Geographical Indication term before. As the consequence, this unawareness leads to producers' reluctance to register the products because they think the process will be complicated. Besides that, effort done by The GD IPR has not been able to motivate producers to register Geographical Indication products. The last obstacle for Indonesian Geographical Indication products is acknowledgement from other countries. Gayo Mountain Coffee case which happened in EU can potentially happen in AEC as well. The similar incident can be prevented by registering Indonesian Geographical Indication products to all ASEAN member countries.

4.2. Solutions

4.2.1. Compelling machinery companies to allocate their CSR by giving machines to SMEs after obtaining tax break from government

Government's active involvement in triggering technopreneurship is very important. This strategy is justified because there is no particular restriction on government's tax break mechanism in AEC. Roadmap for an ASEAN Community which was determined in Cha-am Hua-Hin Declaration only specifically requires ASEAN member countries to eliminate its tariff and non-tariff barriers on goods.

In the status quo, machinery companies obtain tax break from government. Ideally, after obtaining tax break, machinery companies are obliged to give their good feedback to government in form of CSR. In regards of CSR, machinery companies will be obliged to allocate their CSR in form of machines to SME. Obliging CSR in form of machines is a reasonable step because machinery companies have gained advantages from tax break. Specifically, this step will address problem regarding the reluctance of entrepreneurs in using technology because the machines will be granted freely.

There will be an agreement between government and machinery companies. Part of government that is recommended to deal with the agreement is Ministry of Industry. The agreement will regulate the amount of machines that will be given to SMEs. The amount of machines will be adjusted with the production capacity of machinery companies. After reaching the agreement with companies, government will supervise machinery companies regularly. If machinery companies are proven not to give their machine as their CSR to SMEs, the amount of tax break that is given will be decreased.

4.2.2. Compelling SMEs producing Geographical Indication products to register the products to The GD IPR before receiving machines aid

The second step is carried out so that SMEs want to register Geographical Indication products to The GD IPR. It is considered that socialization to SMEs producing Geographical Indication products about the benefits that they will get is very essential prior to obliging them register their products. There are at least two benefits that they will obtain: (1) protection from The GD IPR; and (2) machines aid. The socialization should be done more than once and use approach which is easily understood by the SMEs. Visiting the SMEs directly is also feasible option that can be taken by The GD IPR officer. The information of future benefits will surely motivate the producers to register their products.

The subsequent step which can be taken by SMEs is forming an association to represent them in registering Geographical Indication products. The machines aid for production process (hulling, mixing, cooking, packaging, etc.) will be given after the products are officially registered in The GD IPR. After Indonesian Geographical Indication products are registered, Indonesian government will register them in all ASEAN member countries. Gayo Mountain Coffee case in EU can be solved because of EU-Indonesia cooperation. All registered Geographical Indication products in Indonesia will automatically be registered in EU soon. This cooperation can be the model to AEC. The cooperation model is reasonable since most ASEAN member countries are also World Trade Organization (WTO) members which highly appreciate intellectual property rights within their region. Therefore, the complicated process to register Geographical Indication products one by one can be avoided by this model; all Indonesian Geographical Indication products will be registered altogether in all ASEAN member countries.

The next step will be done by The GD IPR. The GD IPR will cooperate with Ministry of Industry to coordinate companies producing machines so that they know which associations can receive the machines aid. The machines will be supplied based on SMEs needs. For example, SMEs producing *Dodol Garut* will be given machines for packaging and hulling process. The machines are going to be granted through the association. Granted machines will be put by association in a production house which is reachable by SMEs. Therefore, SMEs which wish to use the machines should come to the production house according to the set schedules. The existence of shared production house has happened in Kulonprogo. The shared production house *Gula Semut Kulonprogo* "Mbok Tani" was opened in 2014. Machines aid is given this way so that all SMEs can enjoy the machines which are still limited. The given machines are used by SMEs to improve the quality and quantity of production so that they will be able to expand their market and compete with foreign products. There is a big possibility that the granted machines will be used by SMEs producing Geographical Indication products because of the thorough preliminary observation. The preliminary observation will give clear information about what kind of machines needed by the SMEs. Regarding quality control, the association is the vital actor to assist SMEs so that the hygiene and packaging will be much better.

The existence of machines in production process can enhance the productivity. Social service manager of *Lembaga Penelitian dan Pengabdian Masyarakat Universitas Gadjah Mada*, Adi Wibowo said that the farmers of Gula Semut Kulonprogo still use traditional instruments. In conventional production method, 15-20 litre *nira* (a sort of palm juice) will result to 3.5 kg *gula semut* in approximately 6-8 hours. On the other hand, 105-120 litre *nira* will result to 17.5-25 kg *gula semut* in 2-4 hours with the help of machines (Margaret Puspitarini, 2012) This example emphasizes the benefits of machines in production process.

In deciding which SMEs can receive machines aid, the Geographical Indication Experts Team will do the examination to determine which SMEs can produce Geographical Indication products in accordance to requirements book. Suitability between products and requirements book needs to be kept so that the quality will be maintained. The supervision to ensure such quality will be integrated to The GD IPR's once in two years supervision. However, all stakeholders including consumers can also supervise the quality and characteristic of Geographical Indication products.

5 CONCLUSION

Currently, government's support is not enough to enhance technopreneurship development towards SMEs. Machinery companies indeed have enjoyed their right from tax break but they have not given sufficient feedback to society by providing technology to SMEs. Government's role is needed to balance the companies' CSR by making agreements with the companies. Geographical Indication has not been renowned among producers of potential products. This marks the lack of government's endorsement. In fact, Geographical Indication can be well utilized to benefit from local products to face AEC. The Head of Sub Directorate for Geographical Indication himself has admitted its capability in facing AEC. Furthermore, those producers undeniably could do with better technology to manufacture better quality products.

Feasible solution to this matter which is the utilization of technopreneurship to develop Indonesian Geographical Indication products with several steps as follow: (1) exempt machinery companies from tax; (2) revise government policy to compel CSR in form of industrial machine aid to SMEs which manufacture Geographical Indication products; (3) require in agreement that SME should register their Geographical Indication to The GD IPR before receiving the aid.

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