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# **Toward a more sustainable coffee production: the implementation capacity of Indonesian Standard Coffee (ISCoffee)**

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## **Abstract**

This paper contributes to the literature on the emerging trend of Southern sustainability standards and certifications as a reaction to the Northern-based private standards by businesses and NGOs. It particularly analyzes the implementation capacity of ISCoffee as a public standard and certification initiated by the Indonesian government. We analyze the opportunities and barriers in the process of implementing ISCoffee and examine whether ISCoffee can become a viable alternative to Northern-based private standards and certification. We first conclude that the implementation capacity of ISCoffee is low, because of weak administrative structures, and communication and coordination deficiencies. Second, we conclude that ISCoffee will unlikely being able to solve smallholder-related problems in the coffee sector such as limited access to market, insufficient capital, and underdeveloped farmer organizations. Finally, we conclude that ISCoffee - on the short term - will not manage to become a viable alternative to Northern-based private standards and certifications.

Keywords: implementation capacity; Indonesian smallholders; Indonesian sustainable coffee production, ISCoffee

## **1. Introduction**

The Indonesian coffee sector is fully liberalized, which means that actors can operate in the sector with a very little state intervention. The coffee sector is open to investments from both local and international businesses. Some multinational corporations invest in the Indonesian coffee sector as exporters, and some of them also as roasters. Exporters have quickly adapted to the increase in demand for certified coffee in the global market in the United States (US) and Europe by participating in global private certification schemes such as Fairtrade, Utz, Rainforest Alliance, and 4C. These schemes, although governing coffee production in the South, are generally initiated by Northern-based businesses and NGOs (Arifin, 2010; Bitzer et al., 2013; Bitzer & Glasbergen 2015). They claim to regulate agricultural production and processing methods in order to achieve better environmental and social conditions, and to open opportunities for market access, to improve rural livelihoods and the competitiveness of Southern farmers, and to alleviate poverty in rural areas (Hoffmann & Grothaus, 2015). Many studies have tried to evaluate the claim by examining their impacts especially on smallholders' livelihoods and welfare (see for example Carlson & Palmer, 2016; Ibanez & Blackman, 2016; Ruben & Fort, 2012; Valkila, 2009; van Rijsbergen et al., 2016). However,

the studies' results are not conclusive yet and the debates regarding the impacts are still ongoing (Blackman & Rivera, 2011; Ibnu et al., 2015; Loconto & Dankers, 2014). In the meantime, the Indonesian government through the Ministry of Agriculture responded to the Northern standards and certifications by initiating a public standard and certification for coffee called as the Indonesian Standard Coffee/ISCoffee (Media Perkebunan, 2013).

Other examples of emerging public sustainability standards and certifications include the Indonesian public standards for sustainable palm oil (ISPO), and cocoa (ISCocoa), the Brazilian standards for sustainable soy ("Soja Plus") and coffee (Certifica Minas Café), India's Trustea standard for the tea sector, and South's Africa's standards for fruit and wine production (SIZA and WIETA). According to Schouten & Bitzer (2015), public standards and certifications reflect Southern actors' attempt to establish counter-initiatives to the Northern standards and certification. In the literature, we can identify different reasons underlying the attempt to establish counter-initiatives. Smith & Fischlein, (2010) for example, argued that counter-initiatives emerge because certain groups of stakeholders in the South feel dissatisfied with or disadvantaged by the outcomes of the Northern standards and certification. According to Wijaya & Glasbergen (2016), however, the counter initiatives emerge because the Southern government considers the regulation of the agricultural sector to be its own responsibility. The Indonesian government uses the national standards and certifications as a way to assert a national identity through national standards and certifications and pride that goes along with it. In addition, Sughandi (2014) argued that, through the national standards and certifications, the government tries to expand the market of agricultural commodities.

However, the doubt regarding the Southern public initiatives is that whether they can attain international recognition, including enhancing their shares in international markets. According to Giovannucci et al. (2014), Schouten & Bitzer (2015), and Wijaya & Glasbergen (2016), the Southern standards and certifications have some relevance for their domestic whereas Northern standards and certifications will be more demanded in international trade. The Southern state's authority to ensure the enforcement of the standards may also be problematic (Glasbergen & Schouten, 2015). Moreover, as they are relatively recent initiatives, the impacts of the Southern standards' are still unknown, particularly at a smallholder level.

Although ISCoffee has not yet been formally implemented, the Indonesian government has socialized the public initiative to stakeholders in some coffee producing regions already (e.g., Lampung and Nusa Tenggara Barat). This socialization includes pilot projects setting and verifying criteria for associations of traders, local governments, and farmer organizations (Media Perkebunan, 2013). The government expects to fully implement ISCoffee in the near future and it may become a prospective standard and certification in international trade, particularly in new emerging coffee markets in Asia and Africa that have recently overtaken Europe as the primary destination for Indonesian coffee export (the Indonesian Ministry of Agriculture, 2015; SCP, 2014; Sughandi, 2014).

Although the new coffee markets seem to be promising for ISCoffee, the expectations will not be easily realized neither will it be easy to certify millions of smallholders. In other words, the implementation capacity of ISCoffee is still uncertain and little attention has been given so far to this issue. This paper aims to contribute to our knowledge about the new Southern trend of public sustainability regulation, answering the research questions: (1) what are the barriers and opportunities in the process of implementing ISCoffee? (2) What contribution can we expect from

the implementation of ISCoffee regarding problems in the coffee sector? And (3) to what extent may this public regulation become a viable alternative to private certification?

The paper is structured as follows: We first provide some information regarding ISCoffee and its underlying principles and criteria. We present the main principles and criteria; some of them show the differences between the public initiative and the existing private standards. We then present our analytical framework (section 4) to analyze the implementation capacity of ISCoffee. After that, we present our findings in section 5. In the final section (section 6), our conclusion, reflection, and recommendation regarding the implementation capacity of ISCoffee can be found.

## 2. Indonesian Standard Coffee (ISCoffee): the main principles and criteria

The government took a rather passive role in the coffee production for a long time, but it now explicitly acknowledges the economic value of coffee in its regulations (Pepres No. 45, 2015; UU RI No. 39, 2014). The establishment of the National Standard of Indonesia or *Standar Nasional Indonesia* (SNI)<sup>1</sup> also fits into this trend, but SNI only covers the quality of coffee beans and processed coffee. ISCoffee is the first attempt of the government to more comprehensively pay attention to the sustainability coffee production.

Similar to Northern private standards and certifications, ISCoffee contains principles and criteria covering three sustainability pillars (i.e., economic, social, and environmental aspects) of coffee production. Overall, ISCoffee is built on 23 principles and criteria and 87 indicators. Producers who comply with the criteria become eligible for certification. Although ISCoffee to some extent duplicates the principles and criteria of Northern standards and certifications, it can also be considered as a cumulative set of already existing government regulations, including SNI (Media Perkebunan, 2013). Given this background, we see some differences between the Northern standards and certification and ISCoffee. For example, ISCoffee more strongly emphasizes the legality aspect such as the requirement of a certificate of land-ownership, a recommendation for land location (from the Indonesian Geospatial Information Board), and a SNI-based criterion (e.g., the defect values of coffee beans).

Table 1. Principles and criteria of ISCoffee

Principles and criteria	Indicator
1. Legality and plantation	
➤ Legality of farmers' land	<ul style="list-style-type: none"> <li>land certificate, or document of land-lease agreement</li> <li>letter of permission to cultivate coffee</li> </ul>
➤ Location of plantation is environmentally and spatially appropriate	The availability of recommendation from The Indonesian Geospatial Information Board ( <i>Badan informasi geospasial</i> )
➤ Individual farmers must join farmer groups	<ul style="list-style-type: none"> <li>document of farmer group establishment</li> <li>document of operational planning</li> <li>document of group activity</li> </ul>
2. Farming, harvest, and post-harvest	
➤ Seed must be from breeders that are recommended by the government	Seed are from breeders that have been certified by certification bodies accredited by the government
➤ Harvest is done with the right technique and the right schedule	Farmers record their harvest activity

<sup>1</sup> SNI is a national standard set by the Indonesian National Standardization Agency, specifying the classification, the labelling and the packaging of coffee green beans (PP RI No. 102, 2000).

➤ After harvesting, farmers sort the cherries according to their quality (size, maturity, and defects)	Farmers record their sorting activity
➤ Farmers dry (the sorted cherries) and then remove the cherries' flesh and skin	<ul style="list-style-type: none"> <li>• Farmers dry the cherries no more than 12 hours since picking them</li> <li>• Farmers record these activities</li> </ul>
➤ Farmers sort the coffee beans according to size and defect	<ul style="list-style-type: none"> <li>• Farmers record the sorting activity</li> <li>• The defect value is based on national standard of SNI 01-2907-208</li> </ul>
➤ Farmers sell all their coffee production to cooperative/companies based on an agreement of minimum price	<ul style="list-style-type: none"> <li>• Document of selling agreement between farmer groups with cooperative /companies</li> <li>• The availability of a document that explains the mechanism of price formation</li> <li>• Record of selling activities (including quantity and coffee price)</li> </ul>
3. Organization	
➤ Cooperative establishment	<ul style="list-style-type: none"> <li>• Farmer groups join to form cooperatives</li> <li>• Local government facilitate the cooperative establishment</li> </ul>
➤ Coffee farmer's association	<ul style="list-style-type: none"> <li>• Farmers join the Indonesian coffee farmer association (<i>Asosiasi petani kopi Indonesia/APEKI</i>)</li> <li>• APEKI exists at provincial level</li> </ul>
4. Social aspects	
➤ Farmers prioritize health and safety conditions of workers	<ul style="list-style-type: none"> <li>• Farmers do not employ under-age children for doing high risks jobs such as applying pesticides, and pruning coffee trees.</li> </ul>
➤ Farmers participate in improving public facilities	<ul style="list-style-type: none"> <li>• Farmers involve in every activity to improve facilities in rural areas (by communal work or <i>gotong royong</i>)</li> </ul>
➤ Appreciation of local wisdom and local culture	<ul style="list-style-type: none"> <li>• Farmers make an agreement to list local wisdom/culture that need to preserved</li> <li>• Farmers make schedule of activities to preserve the local wisdom/culture</li> </ul>
5. Environmental aspects	
➤ Farmers open new lands without burning the forest	<ul style="list-style-type: none"> <li>• Farmers make a documentation that they open the lands without burning the forest</li> <li>• Buffer zone is area between coffee plantation and their neighboring environments.</li> <li>• The area must be planted with annual trees that can conserve soils and enhance biodiversity.</li> <li>• Farmers recognize protected flora and fauna, and do not kill or hunt them.</li> </ul>
➤ Farmers make buffer zone	
➤ Farmers improve biodiversity	
➤ Farmers protect water sources	<ul style="list-style-type: none"> <li>• Farmers protect water sources by not opening coffee plantation near the water sources</li> <li>• Farmers protect river banks by planting trees along the banks.</li> </ul>
➤ Farmers improve soil fertility	<ul style="list-style-type: none"> <li>• Farmers use fertilizers recommended by competent agency</li> <li>• Farmers increase the use of organic fertilizers</li> </ul>

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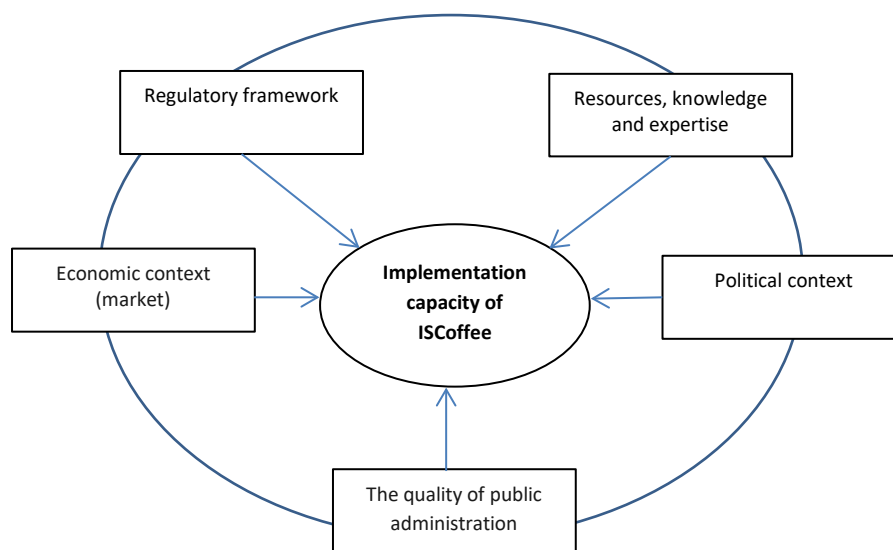
Source: The Directorate General of Plantations of Indonesia (2013)

### 3. Analytical framework

The extent to which ISCoffee will be well implemented to induce sustainability change in the coffee sector strongly relates to its implementation capacity. In this paper, we define the implementation capacity of ISCoffee as the capacity of stakeholders (farmers, different government levels, businesses etc.) to implement the public standards and certification. Based on the literature in the field of government and/or national policy, standardization and/or certification, business and/or organizational management, public administration, and innovation study, we recognized five essential 'conditions' for the implementation capacity (Figure 1). First, **regulatory framework** that

refers to explicit formalized policies and rules on different government levels, imposed on all stakeholders by top-down decision-making procedures (Agterbosch et al., 2009; Dieperink et al., 2004; Guijarro, 2007; Kironde, 2006; Smit et al., 2011; Vermeulen & Hovens, 2006). Second, **resources, knowledge and expertise** refer to the availability of assets, infrastructure, and facilities as well as competent (human) personnel with knowledge and expertise on both technical aspects (e.g., tools, diseases, pests, soils, seeds etc.) and managerial/non-technical aspects (e.g., communication and organization) (Amit & Schoemaker, 1993; Butler, 2003; Devas, 1997; Guijarro, 2007; Intarakumnerd et al., 2002; Stapel & Schneider, 2012). Third, **the quality of the public administration** that refers to the extent to which public administration can be trusted and considered satisfactory by a community; the indicators are transparent processes, administrative procedures, and the coordination of different public institutions that serve the community (Comfort, 2007; Gray & Jenkins, 1995; Indraningsih et al., 2015; Kelly, 2005; Löffler, 2001; Porter, 2000). Fourth, **the economic context (market)** refers to the extent to which market conditions (e.g., supply, demand etc.) can push or influence actors (e.g., local and international traders) to adopt the standards (Smit et al., 2011; Trienekens, 2011; Vermeulen & Hovens, 2006; Wijaya & Glasbergen, 2016). Fifth, **political context** refers to political conditions and/or motives that drive the government to develop and to further implement the public initiative (Agterbosch et al., 2009; Patterson et al., 2016; Thow et al., 2015). These conditions are assumed to affect decisions made by stakeholders through determining the barriers and opportunities for the stakeholders to actually implement the public standards and certification. Although each condition is necessary, it is not in itself sufficient for implementation. It is the way the stakeholders deal with the conditions that finally determine (actual) implementation (Agterbosch et al., 2009).

Figure 1. Conditions influencing the implementation capacity of ISCoffee



#### 4. Method

The main research methods employed in this study are in-depth interviews and document analysis. We took a qualitative research approach and did interviews in 2016. To understand the reasons of the Indonesian government developing ISCoffee, we interviewed actors involved in ISCoffee at the national level, including those from the Ministry of Agriculture (i.e., the Directorate General of Plantations), the Ministry of Trade (i.e., the Department of Domestic and Export trading) and the

Ministry of Industry (i.e., the Department of Food and Beverage). At the local level, we interviewed local government officers at provincial and district levels, including those from the plantation department, the department of trade, and the government extension office. As the province of Lampung is the main coffee producing region in the country, and ISCoffee has been socialized to stakeholders in this region, the interviews at the local level were also conducted in the province (i.e., Tanggamus and the West Lampung District). Next to the government officials, we also interviewed informants outside governmental institutions such as exporters and actors from AICE (the association of Indonesian coffee exporters), farmer organizations, and researchers from national universities, NGOs, and village leaders. In total, we conducted 30 interviews, covering 11 interviews with government agencies (at the national and local level), eight interviews with farmer organizations (i.e., farmer groups and KUBEs), two interviews with village leaders, and nine interviews with exporters and the association of coffee traders and exporters, NGOs, and researchers (see Table 2).

Besides the interviews, a variety of written materials (printed and online) was analyzed. We consulted scientific articles, published and unpublished documents from governmental and non-governmental institutions, news-articles from the Indonesian online media (e.g., Ditjenbun, Perkenbunannews, and Sinar Tani), and magazines such as 'Media Perkebunan' and 'Agro Industri' that present the Indonesian government's policies and programs on coffee. In addition, we also used materials from a roundtable workshop focusing on developing a road map for the coffee sector in Indonesia. This workshop was held on 4 February 2014 and was organized by the Indonesian Ministry of Trade and the World Bank to discuss opportunities, barriers, and development strategies for Indonesian coffee and comprised of speeches and presentations on topics related to sustainability standards and certifications.

Table 2. List of informants

Categories	Number of informants
<b>A. Interviews -2016</b>	
NGOs	2
National government officials	6
Local government officials	5
Researchers (from university and research institute)	4
Village leaders	2
Exporter and association of Indonesian coffee exporter (AICE)	3
Farmer organizations	8
<b>Total interviews</b>	<b>30</b>
<b>B. Printed and online documents</b>	
Unpublished document of government body*	2
Published document of government body**	1
Unpublished document of non-government body***	2
Online Media	3
Magazines	2
Material presentations from a roundtable workshop	3
<b>Total Documents</b>	<b>13</b>

\* including unpublished report of local government on ISCoffee field testing, and ISCoffee draft

\*\* including published strategic planning of the Directorate General of Plantation

\*\*\* including unpublished documents of AICE (i.e., AICE's report and letter)

## 5. Results

Coffee is considered one of the most important agricultural commodities in Indonesia. The commodity has been exported for decades and therefore has contributed significantly to the national GDP. In the coffee sector, land conflicts and other clashes are relatively rare; these are favorable conditions for two million farmer households (or more than five million individuals) in rural areas who depend on coffee as their main source of income (the Directorate General of Plantation, 2015; Wahyudi & Jati, 2012). The favorable conditions, however, do not imply that a more sustainable coffee production can automatically be achieved and the problems smallholders have to face are solved, such as low coffee productivity and quality, environmental degradation, forest destruction, smallholders' limited access to market and capital, lack of government support, and weak farmer organizations.

### **Regulatory framework conditions**

To understand the legal procedures underlying ISCoffee, it is important to realize that the Indonesian government consists of two levels: the national and local level. The national government resides in Jakarta, including the Ministry of Agriculture. The ministry has some directorates that include the Directorate General of Plantation. This directorate manages the coffee sector and has local, decentralized units called *dinas* that exist at the provincial level (i.e., *dinas provinsi*) and district level (i.e., *dinas kabupaten*). At local levels, the governments are divided in more echelons. The highest level is the provincial one (led by a *gubernur*), followed by the district level (led by a *bupati*), the sub-district (led by a *camat*), and the village level (led by a *kepala desa*).

ISCoffee is initiated by the Directorate General of Plantation of the Ministry of Agriculture. It is therefore a national program implemented in, and delegated to, the local units. The bureaucratic lines will start from the directorate to the *dinas provinsi* and then to the *dinas kabupaten*. At the same time the law of regional autonomy suggests that the development of the coffee sector is the shared-responsibility of national and local governments. This brings even more reasons for local governments to participate in developing the coffee sector. As *dinas* operate inside the regional authority of local governments, they should cooperate with the local governments. This theoretically will bring more opportunities for ISCoffee to be well implemented and supported along the different government levels.

However, we also found barriers related to the regulatory framework that potentially constrains the implementation of ISCoffee. These barriers include lack of clear supporting regulations for ISCoffee implementation. First, a regulation imposed on all stakeholders to implement ISCoffee has not yet been determined. As a respondent from the Directorate General of plantation states:

*For ISCoffee, the directorate prefers a regulation higher than ministerial level (e.g., a presidential regulation), but until now such a regulation has not yet been determined because apparently the government still focuses on ISPO.*

Second, the relationship between national and local government is still rather ineffective in the era of regional autonomy. On the one hand, the national government seems to lose some control over the local government because of ineffective framework of power allocation (Devas, 1997). On the other hand, the local government often show inactive attitude to national policies and/or mandates that will likely increase difficulties concerning the implementation of ISCoffee. The inactive attitude may be resulted from the feeling of limited economic benefits or income opportunities from the



implementation of the national policies/mandates. For example, the local government is mandated to actively play a role in supporting the implementation of the certification of geographic indication (CGI). The CGI is established by the national government to formally assure that certain agricultural commodities originate from particular regions, including Robusta coffee from Lampung province. However, the CGI certificate is held not by the local government, but by *Masyarakat Perlindungan Indikasi Geografis* or Geographical Indication Protection Society (Wahyudi & Jati, 2012). As a consequence, not all local governments are active to play the mandated role. As a respondent from AICE stated:

*In this province, the local government does not active in the CGI. I found that no noticeable activities or significant outputs are realized by the government related to the certification.*

### **Resources, knowledge and expertise**

Institutions that specialize in coffee research are available in Indonesia, either managed by the Directorate General of Plantation (i.e., as one of its operational units) or as an independent organization (i.e., the Coffee and Cocoa Research Institute). These institutions provide supports for farmers in the form of good quality seeds and coffee production techniques. These supports are essential for farmers and can be regarded as opportunities enabling the farmers to be able to participate in ISCoffee. However, we found that ISCoffee will likely meet more barriers than opportunities in the context of resources, knowledge and expertise. At a local level, the government has limited personnel with knowledge and expertise on the implementation of strategic programs. A representative of *dinas kabupaten* stated:

*Many government personnel have inadequate capacities to implement programs. They are often included in ad hoc teams for a relatively short period and therefore lacking time to improve capacities.*

We found two main issues that explain why the government personnel (especially at local levels) have low relevant knowledge and skills. First, the recruitment processes are rather poor. According to Yullyanti (2009), the recruitment processes generally fail to measure the competencies of applicants in relation with the job requirements. Second, we observed that the existing personnel are being burdened with various tasks related to not only coffee but also other agricultural commodities and spend most of their time on routines, handling data or information to make reports to their superiors. The implication is that most of government personnel tend to develop administrative skills much more than to improve their managerial skills required to run a program like ISCoffee.

Moreover, budgets will be a challenging issue for ISCoffee because the standards require farmers to use coffee seeds produced by credible seed centers. These seeds then need to be certified by agencies acknowledged by the government. Because of budget constraints, however, infrastructures related to the distribution of certified coffee seeds will be remain difficult to be accessed, especially by farmers in remote regions. The risk is then that famers in remote areas keep using uncertified seeds. As a representative of the Directorate General of Plantation stated:

*Budget is clearly challenging for running government programs. The allocation of state budget is only five percent to agriculture and plantation sectors. The budget needs to be shared by*

*many commodities. Agricultural programs cannot run well without supporting infrastructure, for example, seed infrastructures. However, credible seed centers are currently limited, which may not guarantee the availability of certified seed in disperse locations.*

In managing their coffee plantation, farmers typically rely on knowledge and expertise acquired from their parents as well as their own experiences. The knowledge and expertise, however, may not thoroughly cover all criteria of good agricultural practices. Farmers therefore need to improve their knowledge and expertise in technical and organizational domains. Through providing agricultural extension services, the government can facilitate the knowledge improvement. The problem is that government extension services barely exist in the coffee sector. In addition to a lack of personnel (Sinar Tani, 2016), we found that extension workers mostly specialize in staple food production rather than in coffee production and organization. As an extension officer stated:

*I think it rarely happen extension officers specialize in coffee or organization. Extension officers mostly have knowledge and expertise in the production of paddy, maize, and other staple foods.*

Other institutions (e.g., NGOs, research institutes, universities, and businesses) could potentially contribute to improving farmers' knowledge, but institutional mechanisms to link knowledge and expertise providers to farmers are rather weak. For example, linkages between universities and the coffee sector are often based on personal connections (between individual researchers and farmers) rather than institutional-based commitments. The case of *klinik pertanian keliling* may reflect the situation. *Klinik pertanian keliling* is a unit within a local university providing knowledge and expertise to farmers through trainings, demonstrations, seminars, and field visits. The life-span of such a unit is relative short although researchers, on an individual basis, still connect to farmers during fieldwork. The others rarely work together with the government often due to the government's negative perceptions, especially on NGOs (Iqbal, 2008). These situations limit the institutional support to the conveyance of knowledge and expertise and therefore we cannot expect much from these institutions regarding the implementation of ISCoffee and other governmental regulations/programs. As a consequence, ISCoffee will considerably depend on the capacity of the government to handle the process of providing knowledge/information and communication to the millions of coffee farmers and the auditors. The process will involve government personnel from various departments and various levels.

Many national programs have been implemented prior to ISCoffee, and channels and media for information-flow and communication as well as knowledge transfer have been established already. ISCoffee may use the available channel and media such as website, email, audio/video conference, and other communication channels/media supported by information technology. At a government level, these channels and media can speed up the conveyance of knowledge and information. At a farmer level, potential supports for the information flow and communication of the public initiative can be provided by farmer organizations, extension services, and village leaders. However, potential barriers can also be identified. First, farmers are unlikely to use channels and media used by governmental agencies because they are unfamiliar with it. Government personnel therefore need to meet farmers in person to convey information and share knowledge. This will be challenging for the personnel as most coffee farmers live in rural areas, and many of them live in remote villages with relatively difficult access to public services and poor infrastructural conditions. Many farmers

are also still unorganized, even further challenging the provision of information to all farmers. Second, many farmer organizations as the agents of communication at a farmer level are not well-developed or not even exist yet (see also Arifin, 2010) and extension officers are struggling with limited support from the government and a limited number of personnel, and the fact that coffee is generally not considered a priority in their work (Sinar Tani, 2016). Village leaders may also have agendas or priorities that are not in line with ISCoffee. Regarding extension officers, a representative of extension officers stated:

*This government extension agency will no longer be an independent organization, but will be combined with agricultural departments as one of its operational units. We are now lacking supports as independent organizations, and this may become worse after merging. Regarding extension services, we currently have less extension officers who routinely visit farmers. Ideally, one officer covers one village with four or five farmer groups. At the moment, extension officers mostly cover more than three villages. Incentives and facilities for extension officers to perform their duties are also limited.*

Regarding village leaders, our respondent (a former village leader) stated:

*To be honest, a village leader is more a political position than a governmental agent. Village leaders may not effectively communicate ISCoffee to farmers. They have their own agendas in the villages.*

### **The quality of public administration**

The reformation of bureaucracy in Indonesia aims to establish good governance that is free of corruption, collusion, and nepotism (Anggraini, 2014). This is an opportunity for ISCoffee as corruption, for example, to some extent, has been controlled by KPK<sup>2</sup> (Anggraini, 2014; Sudibyo, 2012). However, we found that other issues related to the public administration are still unaddressed, which result in low satisfaction and trust of the farmers in the government. The issues are transparency and/or fairness problems, administrative problems, and coordination deficiencies. Regarding transparency and/or fairness problems, we can learn from PUAP or *Pengembangan Usaha Agribisnis Pedesaan*. This is a financing scheme from the government to help farmers (i.e., distributed through farmer groups) with credits to improve their agricultural production and agribusinesses (Indraningsih et al., 2015). However, farmer group selection is found to be problematic because of the subjectivity of selection method (Indraningsih et al., 2015; Sudaryanto & Wijayanti, 2013). Our interview results further clarify the problem, as a farmer respondent stated:

*I and my farmer group were not involved in PUAP. I don't know the other groups could be involved in the program. I think the selection method (of village leader) was very subjective.*

Learning from PUAP, addressing the fairness issue regarding farmer group selection will contribute positively to the implementation capacity of ISCoffee. Furthermore, apparently farmers are hesitant to deal with the public administration because of the perceived difficulty in administrative procedures, and also unfriendly manner of the public administrations' personnel. As a farmer respondent stated:

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<sup>2</sup> KPK (*Komisi Pemberantasan Korupsi*) is an independent state institution that works to eradicate corruptions in the government bodies (UU RI No. 30, 2002).

*I believe that the majority of farmers have lands without certificate from the government. They only have a proof of ownership acknowledged by their village leaders and elderly people. I think farmers are now hesitant to get their land certified because of the perceived difficulty of administrative procedures and 'extra' costs. I once tried to get an explanation about the costs, but I received unfriendly responses.*

As ISCoffee require farmers to certify their land, farmers' hesitancy to do so can adversely contribute to the implementation capacity of the public standards. Moreover, an unpublished report of *dinas provinsi* on ISCoffee field-testing revealed that most of the difficulties that farmers felt in complying the public standards will relate to administrative requirements. For individual farmers, it will be difficult to fulfil the requirements (e.g., handing over land certificates, and documents related to seed and pesticides) and therefore they will rely on farmer groups. However, farmer groups also feel that the administrative requirements will be burdensome. As a leader of a farmer group stated:

*Financial incentives for people who manage farmer groups are relatively small. Basically, these people are volunteers because they are also farmers. Their main duties are managing their own plantations to support their families. ISCoffee will burden farmer groups, especially these volunteers to handle many administrative requirements. I do not think these volunteers will be willing to do the task with the current incentives.*

The last aspect of public administration concerns weak coordination among government agencies. For example, the Directorate General of Plantation that initiates ISCoffee feels that the standard is less supported by other ministers' directorates. As a government officer from the Directorate General of Plantation stated:

*We feel we get less support from others. We struggle alone for ISPO, ISCocoa, and now for ISCoffee. The others seem to consider that these standards are only the responsibility of our directorate.*

Agro Industri (2016) stated that weak coordination among directorates (from different ministries) are resulted from their different views on how to involve in the coffee sector, which in turn determines the strength of their motivations to be involved in ISCoffee. Our interviews further reveal that the directorates have different perceptions on the importance of coffee vis-à-vis other agricultural commodities, which may even more clarify the reasons why they are rather uninterested in ISCoffee. For example, a government officer from the Directorate General of Trade illustrates that his directorate prioritizes staple foods above coffee:

*The main concern of our department is trading. We support marketing of any agricultural commodities, but the most important ones are rice, maize, and other staple foods. Compared to these staple foods, we do not interfere too much in coffee.*

### **Economic context (market)**

Most coffee that is being produced in Indonesia is exported. Supply and demand conditions in international markets therefore greatly influence the Indonesian coffee sector, affecting quality exported, and also coffee prices. The required export quality may also touch upon the way in which smallholders produce the coffee (i.e., in a sustainable way through private standards and

certification). In recent years, markets in Asia and Africa seem to become more attractive to Indonesian coffee exporters. According to Sughandi (2014), around 56% of the total Indonesian coffee has been exported to these new markets. ISCoffee therefore has the opportunity to be exported to these new markets which, different from the European and American markets, do not require the generally more strict private standards. At the same time, the demand for Indonesian coffee from the domestic market is increasing by more than five per cent per year (Agro Industri, 2016; SCP, 2014; Sughandi, 2014). For farmers, this diversification of market opportunities can be beneficial; and ISCoffee might have the opportunity to improve sustainable coffee production and to promote certified coffee, especially in the local market and upcoming markets.

Although the diversification of markets seems to be promising, we can also identify potential barriers to the implementation of ISCoffee. The barriers relate to the limited power of the markets to convince traders (i.e., national-based and international-based companies) to adopt and follow the ISCoffee standard. National-based companies play dual roles as collectors and traders. They collect (uncertified) coffee beans from smaller local collectors (middlemen) and trade them to domestic and (new) international markets. These companies, however, seem to be less interested in improving sustainable coffee production. This is a potential barrier to ISCoffee implementation as the national-based companies are not easily convinced to change their practices, and - at the same time- need to make new investments for adopting the standard. As a representative of AICE stated:

*Most national companies have little experience with certification guidelines. These companies need significant changes in their operations to implement ISCoffee, including the establishment of a sustainability division. This division needs to work with farmers, helping them to fulfil certification requirements. This can be problematic for these companies because they do not have stable connections with farmers. They collect coffee beans from local traders or collectors in various areas.*

Certified coffee is not considered important in the domestic market as relatively few consumers are aware of standards and certification. The new emerging markets (e.g., China and India) are similar to the local market and do not prioritize certified coffee (Wijaya & Glasbergen, 2016). Thus, it will not be a problem for the national companies to continue selling uncertified coffee to the domestic and upcoming markets, and it can therefore be doubted whether ISCoffee can realize the national companies' compliance to the standard principles.

Compared to the national-based companies, internationally-based businesses have more experiences in implementing sustainability standards and certification. An international-based company usually has partners in other coffee producing countries. Together, they are called as multinational corporations, supplying coffee predominantly to the old markets in which buyers prioritize (Northern) sustainability standards and certification. The multi-nationals that operate in Indonesia, at some point, have to decide on the adoption of ISCoffee as a credible and alternative standard for the private standards. Companies' decision to adopt ISCoffee can be a barrier to the implementation of the standard. As a representative of a multinational exporter stated:

*The company's policies are not fully independent, but are related to partners in other countries. It is unlikely that the company's partners adopt ISCoffee in their operation in Vietnam or in other countries because they may have other priorities and/or preferences. Our company may not be able to adopt ISCoffee and at the same time pushing the partners to adopt it.*

## Political context

Globalization enhances international trade among countries. Trade tends to become more liberal and trade-barriers are decreasing. A country may be able to export products via less complicated procedures. The Indonesian government however, especially the Directorate General of Plantation, views the current trade-system to be unfair. The market is not considered to be truly liberal as trade-barriers still exist, for example in the form of private standards and certifications. The government also feels that the attractiveness of local agricultural products in the domestic markets is threatened by subsidized, relatively cheaper products from abroad and it fears that the agricultural sector is susceptible to monopolistic behavior of a few actors, especially foreign investors.

The government further takes some steps to protect the agricultural sector in the area of food sovereignty, and in the area of land tenure and foreign investments. Regarding food sovereignty, the strategic planning of the Directorate General of Plantation 2015-2019 page 50 stated that government's interventions are viewed to be necessary:

*Food sovereignty includes the right to protect and regulate national agricultural policies and to protect the domestic market from dumping and overproduction from other countries. Therefore, small farmers and farm workers should be given access to land, water, seeds and other agricultural sources. Thus, food sovereignty should take precedence over the interests of the market.*

Furthermore, the government considers that more control on land tenure and foreign investments is necessary to protect the agricultural sector and to provide reasonable benefits for local actors. As stated in the strategic planning (page 100):

*In the future, it will need clear, realistic regulations and policies on the amount of plantation land to be exploited by foreign companies and how much investment can enter Indonesia with equitable benefit sharing with the government (central and local) and gardener's community.*

In the coffee sector some local actors support the agricultural protections, urging the government to intervene by establishing regulations on foreign capital investment and export. An (unpublished) letter of AICE <sup>3</sup> stated that:

*Local companies cannot compete with large multinational companies. Their number has declined significantly, from 234 to only twenty local companies... We propose the government to reconsider the regulations on foreign capital investment and export.*

Based on the forgoing, the formulation of ISCoffee seems to be largely influenced by 'protectionist' thoughts. ISCoffee can therefore be linked to the government's efforts to protect the agricultural sector in general and the coffee sector in particular. According to the government, in order to be protected, the coffee sector must follow government regulations, including the legality of land and SNI-based criteria embedded in ISCoffee principles and criteria. We can further see that although the government has the authority to implement the public standards and certification, the motivation

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<sup>3</sup> The proposal letter of AICE to the national government for reconsidering the allowable amount of foreign capital investments in Indonesia

underlying the standards formulation was not to improve the sustainability of coffee production (at least was not the strongest motivation).

## **6. Conclusions**

This paper contributes to the literature on sustainability standards and certification with the analysis on the implementation capacity of ISCoffee, which is a public standards and certification initiated by the Indonesian government. The paper is the first attempt to analyze the opportunities and barriers in the process of implementing ISCoffee, contributions that we may expect from its implementation and whether the public standard can be a viable alternative to Northern-based private standards and certification. Our first conclusion is that ISCoffee is likely to have a low, insufficient capacity to be implemented in the Indonesian coffee sector. This is mainly inferred from the potential barriers to ISCoffee implementation that will be challenging to address, compared to the advantages that can be taken from the opportunities available. In other words, the barriers can undermine opportunities offered by the current coffee system. The barriers include weak coordination and communication among government agencies and administrative problems (i.e., institutional related barriers), the absent of/weak regulations related to ISCoffee/regional autonomy (i.e., regulatory related barriers), and limited budget and poor infrastructure (i.e., resource related barriers).

Our second conclusion is that ISCoffee, with the current level of implementation capacity, will unlikely to be able to thoroughly solve problems in the coffee. Most of technical problems (e.g., low quality and productivity, problems relate to disease and pest etc.) may in large extent relate to smallholders, and generally can be solved through trainings, better inputs used and better production techniques. However, the problems that touch upon institutional, regulatory and resource are relatively more challenging for ISCoffee to address than the technical one because their barriers are interrelated and will require collaborated solutions at a policy level. For example, administrative problems may not be effectively addressed without addressing coordination deficiencies among government bodies. Furthermore, our third conclusion is that—on the short term— ISCoffee will unlikely to be viable alternative to Northern private standards and certification in the old markets in Europe and US. The Northern standards and certifications have established their legitimacy in the markets and at the same time have become marketing gears of multinational companies. Therefore, even if ISCoffee is mandatory, the public standards and certification is unlikely to be strong enough to motivate the companies to discontinue their participation in the private standards and certification. The best strategy for the companies will be adopting both public and private standards and certification concurrently. For the companies, ISCoffee adoption is a matter of their obedience to the national regulation, but maintaining the private standards and certification is necessary for retaining their access to the old markets.

Currently, the government's focus seems to be on developing standards and certifications for different commodities (e.g., coffee (IScoffee), palm oil (ISPO), and cacao (ISCacao)). However, less attention is given to the implementation capacity of the standards by thoroughly addressing their implementation barriers to boost the available opportunities. In our view, there are five recommendations that can be considered to improve the current conditions and therefore enhancing the implementation capacity of ISCoffee. First, coherent regulations on ISCoffee and its supporting conditions must be established through enhanced collaboration of relevant ministries, including the Ministry of Agriculture, the Ministry of Home Affairs, and the Ministry of Rural and

Underdeveloped Regions. The coordination, mediated by the Ministry of National Development Planning, is intended to firstly synchronize the planning of the different ministries because they work on interrelated sectors: rural areas, local governments, and coffee sector. After that, a regulation and/or a standard operating procedure (SOP) should be established to guide the ministries and their subordinate levels to effectively share responsibilities. Second, ISCoffee need to have a better place in bureaucracy, managed by a national-level secretariat run by people with relevant expertise. The national-level sustainability secretariat needs to manage ISCoffee from a (strong) position in bureaucracy that has a power to enforce ISCoffee implementation at both national and local levels. Third, the quality of public administration needs to be improved by addressing the issues of administrative procedures and coordination deficiencies. One of plausible ways to do that is by involving relevant government institutions that either directly or indirectly will involve in ISCoffee. For example, to address the issues of farmer's land certification, the Ministry of Agriculture should take the lead, in collaboration with the Ministry of Agrarian and Spatial Planning/National Land Agency, to proactively help farmers with the land certification procedures and/or administrative requirements.

Fourth, extension service in coffee sector should also be improved through changed policies and enhanced investments. The issue is that in Indonesia plantation sector and agricultural sector are considered different that the former relates to annual crops trees (e.g., coffee, cocoa, coconut and oil palm) whereas the latter refers to mainly staple foods (e.g., paddy, maize, and soybean). However, both the sectors are managed by the Ministry of Agriculture that seems to prioritize the agricultural sector more than the plantation sector. Extension agency (that also a unit of the Ministry of Agriculture) is subsequently mandated to focus on improving agricultural production rather than to working on plantation sector. Therefore, to enhance the implementation capacity of ISCoffee, the ministry's policy on the extension service need to be reformed to give more attention to the coffee sector. After that, investments need to be increased for the extension service to expand the number of extension workers working on coffee sector, to enhance the knowledge and skills of the workers (especially on coffee production and organizational development), and to improve necessary facilities and incentives for the workers. Next, all of these investments need to be legalized or manifested in a regulation (e.g., to provide commitments on supporting resources, and who will provide the resources).

Furthermore, we noted that the aforementioned problems (e.g., weak farmer organizations, low quality in public administration, and lack of agricultural extension<sup>4</sup>) have long been occurring. Efforts to address the problems, however, should not be solely attributed to the responsibility of the government. Instead, all stakeholders' participation is required to overcome the problems and/or to help the government to address the problems. Therefore, in the fifth and final recommendation, we endorse the enhanced collaboration between government and non-government actors to provide, for example, sufficient quality and quantity of extension services in the coffee sector. As ISCoffee is the government initiative, the implication is that the government should take the lead to invite other actors to contribute and to facilitate favorable conditions in which the actors' contribution can be

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<sup>4</sup> Agricultural extension service in Indonesia has existed since 1905. The extension service was formed by the Dutch with the name *Landbouw Voorlichting Dienst/pusat informasi pertanian* or agricultural information service (Kusnadi, 2011).



significant. Overall, there is much to do for ISCoffee but addressing the barriers related to the five conditions can be considered as the standard's priority to improve the implementation capacity.

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