Are Market-Based Forest Conservation Initiatives Effective?
Forest Stewardship Council Certification and High Conservation Value Surveys in East Kalimantan, Indonesia

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Contents

[Abstract]
This paper explores whether market-based certification programs improve sustainable forestry management in producing countries of forestry products, and if not, what prevents such programs from succeeding. The authors present examples of surveys conducted by a third party to identify High Conservation Values as part of the Forest Stewardship Council's (FSC) certification requirements in the province of East Kalimantan, Indonesia. Based on the presented evidence, the authors argue that timber certification programs present opportunities for investing companies to improve their environmental and social impact standards. However, because it is voluntary, FSC certification does not fundamentally address official state development policies that prioritize development goals over conservation, societal, and human rights, nor does it reflect changes in the business model embedded in the state's authority to issue concession rights without obtaining the local population's consensus. Hence, the criticism that regulations serve only to increase companies' ability to exploit natural resources and do not lead to truly democratic forest management still applies.

Introduction

The Forest Stewardship Council (FSC) was established in the early 1990s under non-governmental, transnational and multi-stakeholder initiatives to address the issue of world-wide forest destruction which had occurred in the process of timber production. FSC gives certificates to timber products which satisfy the requirements of its environmental standards, hoping to create market incentives for timber producers to apply environmentally sustainable practices in their production processes. The initiatives reflect long-standing frustration that government regulations in producing countries do not properly function to prevent forest depletion.

There have been debates on whether such market-based certification programs of forestry products could improve sustainable forestry management in producing countries, and if not, what the obstacles are. Some question the normative intentions of such private regulatory schemes as representing global neo-liberal corporate agenda that enable their long-term natural resource exploitation for long-term use (Arsel and Buscher, 2012; Borras Jr. and Franco, 2014). In their argument, such regulations may improve the manner in which business interests

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exploit natural resources, but would not fundamentally change their business models. Some also point out the government policies of producing countries that prioritize economic revenues over environmental standards as the factor that renders the private regulations ineffective (McCarthy, 2012; Klassen et al., 2014). Their effectiveness also depends on the manner in which the regulatory frameworks are accepted in producing and consuming countries. The complex interactions between the regulatory framework and domestic regulations and political contexts come into play (Bartley, 2014; Overdevest and Zeitlin, 2014; Espach, 2006). Meanwhile, according to Meidinger et al., despite the limitations, FSC has positive social and environmental impacts and could be a tool to realize sustainable forestry management (2006, also see Muhtaman and Prasetyo, 2006).

The purpose of this paper is to contribute to this discussion by presenting examples of surveys conducted by a third-party to identify High Conservation Values (HCV) which are part of the FSC requirements. Based on the presented cases, the authors argue that timber certification programs present opportunities for investing companies to improve their environmental and social moral standards. However, being voluntary, the FSC does not fundamentally question the state development policies that prioritize developmental goals over conservation and human rights agenda, nor changes the business model embedded in the state authority to issue concession rights without obtaining the consensus of local populations. Hence, the criticism that the regulations only improve the manner in which the companies exploit natural resources and do not lead to truly democratic forest management still applies.

1. Delays in Indonesian National Regulation on Forest Conservation

Since the late 1960s, timber export has been Indonesia's major source of foreign exchange, but also has caused extensive deforestation. Due to the depletion of timber resources, the number of timber concessions and production have sharply dropped since the late nineties.[1] In its place, the areas allocated for industrial forest plantations, especially for pulpwood plantations, have sharply increased from about 29,000 hectares in 1989 to about 200,000 hectares in 2006 (Center for Forestry Planning and Statistics, 2009: 17-8). Forest areas have also been converted to large-scale oil palm plantations, which increased from 3.5 million hectares in 1998 to 11.3 million in 2015 (Badan Pusat Statistik, *Statistik Kelapa Sawit Indonesia 2015*: Table 1.1). According to the Ministry of Environment and Forestry in Indonesia, the deforested area increased between 2013 and 2014 by more than 170,000 hectares (Kementerian Lingkungan Hidup dan Kehutanan, 2016: Table 1.18), contributing to the emission of greenhouse gases and loss of biodiversity.

Despite the wide-spread concerns on rapid deforestation, effective national regulations to achieve sustainable forest management were not created. Indonesia's forest areas cover approximately 126 million hectares in total, and are classified into three categories: 27 million hectares of conservation forest (*hutan konservasi*), 29 million hectares of protection forest (*hutan lindung*) , and 69 million hectares of production forest (*hutan produksi*). The production forest

includes 13 million hectares that can be converted to industrial plantation areas for the production of pulp and paper (*hutan produksi dapat dikonversi*) (*Kementerian Linkungan Hidup dan Kehutanan*, 2016: Table 1.7). The areas allocated to active concessions for logging to produce timber products amounted to 25 million hectares in 2011 (Klassen et al.,2014). Although oil palm plantation areas are to be developed in "non-forest planted areas (*Non-Kawasan Budidaya Kehutanan*, NKBK)," most of the large-scale oil palm plantation areas are developed in former logging sites which still provide valuable habitats for unique flora and fauna and a source of livelihood for local forest dwelling populations. In fact, the expansion of large-scale oil palm estates has been the major source of deforestation.

The Basic Forestry Law (BFL) of 1967 had been the legal basis for regulating the forest industry under the authoritarian Suharto government. Article 5 of the BFL stipulated that the central government owned the authority to control all forest areas in Indonesia. Based on this law, the central government leased forest areas for specific periods to private companies upon payment of concession fees for harvesting logs. In 1990, the central government introduced a forest plantation scheme in which the central government gives private companies the rights to use land for thirty-five years to develop forest plantations for pulp and paper production (Banergee, 1997). In the centralized decision making of forest policies, the land tenure of forest dwelling populations was neglected and their participation in forest management denied for the sake of production of forestry products.

In the era of political reform after the resignation of President Suharto in 1998, the BFL was replaced by Law No.41 of 1999 on Forestry Affairs, which recognizes the existence of "customary (*adat*)" forest of local populations. But neither the state of forest conservation nor the rights of forest dwelling populations have significantly improved since then. The destructive exploitation of forestry resources has persisted even after major democratic political reforms started in 1998. Under the expectations that administrative and fiscal decentralization would bring about democratic resource management by local populations, provincial and district heads were given the authority to issue small-scale logging permits.[2] However, the regional governments possessed neither the necessary capacity nor willingness to properly regulate logging activities, and the process of deforestation accelerated even more.[3] In many cases, local strongmen (*putra daerah*) and local elites took advantage of the new local government-based forestry regime for their personal gains. In response to the problem, the central government started to recentralize forestry administration, and restricted the authority of regional governments over allocation of logging concessions. But many regional governments ignored the policies to recentralize the forestry regime, and the regional regulations have proliferated. The provincial and district governments in forest-rich areas have been enthusiastic to change the status of forest areas from production forest to conversion forest and "other use (*Areal Pengunaan Lain*, APL)", over which they have authority to provide permits for large-scale oil palm plantation development.

In the backdrop of democratic reform, local communities also strengthened their claims over their customary rights of land use and ownership. Such claims have resulted in district regulations that require advancing companies to negotiate with and pay compensation to local

communities. However, such recommended practice of "free, prior, and informed consent" was often utilized by the limited numbers of village elites to secure their benefits and resulted in accelerating the rate of deforestation (Barr et al., 2006)

The Indonesian government has developed domestic regulations to deal with deforestation since the beginning of the domestic logging industry in the 1970s. Yet, throughout the rule of the Suharto government and even after the political reform, the regulations have not been effective in slowing down the rate of deforestation or enabling the participation of local populations. Under the centralized forest policies, concession holders were required to provide for a reforestation fund (*Dana Reboisasi*, DR) and pay royalties (*Provisi Sumber Daya Hutan*, PSDH) based on the amount that they extract. In 1971-2, the government instituted the Selective Cutting System (*Tebang Pilih Indonesia*, TPI), which was later reframed as the Selective Cutting and Planting System (*Tebang Pilih Tanam Indonesia*, TPTI) in 1989. In 2009, contrary to the recommendations of researchers over decades, TPTI was revised in a way that would allow more intensive logging practices.[4] The work plans that the Ministry of Forestry required the concession holders to submit did not provide for sufficient detail so that logging practices remain destructive to this day. Plan approval is often politically motivated and inadequate for realizing sustainable forestry management (Klassen et al., 2014: 257).

The Indonesian government set up the system of Analysis of Environmental Impacts Assessment (*Analis Mengenai Dampak Lingkungan*, AMDAL: EIA process) under the Basic Environmental Law No.4 of 1982. Under the AMDAL system, companies in certain sectors that potentially exert adverse social and environmental impacts, such as logging, pulp and paper plantations and oil palm plantations, were required to prepare AMDAL documents, which included an environmental assessment and a monitoring plan with institutional arrangements. All documents were evaluated by the EIA Processing Commission. Since 2000, AMDAL implementation has been conducted primarily at the district level, reflecting administrative decentralization in the Indonesian political reform (ADB, 2012). In fact, however, the standards adopted in AMDAL have been known to be problematic, specifically due to lack of competency of the government agencies in charge (World Bank 2006; Asian Development Bank 2012). According to the Ministry of Environment and Forestry, in 2015, 57% of the total AMDAL documents submitted to the Ministry scored between 0-50 points, 18% were rated between 51-60, and only 25% rated between 61-100 (Kementerian Lingkungan Hidup dan Kehutanan, 2015: 7-8). This finding suggested that the majority of AMDAL documents were problematic, and therefore inadequate for correctly assessing the extent of environmental destruction that would arise from company operations.

2. Development of FSC Certification Systems and HCV Requirements in the Indonesian Context

Growing concerns on world-wide deforestation and encroachment on the land rights of local communities related to the production of forestry products led to the establishment

of the Forest Stewardship Council (FSC) in 1994. The members of FSC are international institutions, including business interests such as producers and retailers of forestry products, as well as environmental NGOs. FSC provides certification for forestry products if the member organizations recognize that the products meet their social and environmental standards in the process of production. According to FSC, over 190 million hectares in more than eighty countries are certified as of 2013 (FSC website, HCV, 6).

In response to domestic and international pressure to improve forest management practices and also stimulated by the establishment of FSC, the Government of Indonesia instituted in 1993 a forest certification scheme, Indonesian Ecolabel Institute (*Lembaga Ecolabel Indonesia*, LEI), which later became a foundation in 1998. In order to obtain international confidence, in 2000, LEI and FSC developed a Joint Certification Protocol (JCP) (Muhtaman and Prasetyo, 33-5, 47).

However, the certification system of forestry products developed in Indonesia has faced many difficulties, including inconsistent government policy, poor law enforcement, and corruption.[5] According to Klassen et al., as of 2013, the FSC certified area makes up only four percent of the area of active concessions, due to complex administrative requirements (Klassen et al., 2014: 256)[6].

The effectiveness of FSC in protecting forest resources has been hotly debated internationally. According to Muhtaman and Prasetyo, the adoption of the certification program has not led to a large-scale reform of the forestry policies in Indonesia, but has only brought about a partial effect of improving forest management at least at the field levels of certified concessionaires. The improvements include better cooperation between the company managers and local communities, training of employees and community participants relating to sustainable development, and prevention of illegal logging practices. Meanwhile, economic cost and benefit analysis of certification yields mixed outcomes on the part of concessionaires. The companies feel less market incentives because the certified products are less appealing to growing markets in China, Korea, and the Middle East than they are to advanced economies, such as North America and Europe. Many companies that have received certification assessment have, in fact, a low score on environmental indicators, but the process helps them to acquire knowledge and skills to meet the criteria and indicators (56-62). In their research of five companies holding industrial plantation concessions in East Kalimantan, Klassen et al. found there were six factors that deter concession holders to participate in certification programs: high cost, lack of market incentives, lack of effective government incentives, lack of technical capacities, unrealistically high requirements of FSC, and confusion over land tenure and forest access (268-9).

3. HCV Recognition Surveys: What Are Being Done in the Survey

One of the indispensable requirements in FSC certification is the conservation of High Conservation Values (HCV) in its forest management. The HCV approach was first developed by FSC (Principle 9), but since then has been adopted by many certification standards, including the Roundtable on Sustainable Palm Oil (Principles 5 and 7). If a corporation wishes

to obtain FSC certification, it must identify HCV areas by means of a survey conducted by an independent third party that has the technical knowledge and skills for the purpose. The survey will investigate the following aspects: species diversity; landscape-level ecosystems and mosaics; ecosystems and habitats; ecosystem services; community needs; and cultural values. Based on the information, the companies are required to conduct proper monitoring and management of HCV areas.

The Ecology and Conservation Center for Tropical Studies (Ecositrop), based in Samarinda, the province of East Kalimantan, is an independent research institute. The Provinces of East Kalimantan and North Kalimantan, which became separated from East Kalimantan in 2015, hold approximately 14 million hectares of forest areas, more than one tenth of the total forest areas of the nation (Kementerian Linkungan Hidup dan Kehutanan, 2015: Tabel 1.7). The provinces hold large areas of logging and industrial plantation concessions, as well as oil palm plantation estates.

Ecositrop was contracted by Santan Borneo Abadi Ltd. (hereafter abbreviated as SBA) and Mahakam Persada Sakti Ltd. (hereafter abbreviated as MPS) in 2016 to identify HCVs in their concession areas on their behalf. The companies planned to receive FSC certificates for their products. The following outlines the findings of research conducted by Ecositrop (Gunawan et al., 2016a and 2016b).

SBA and MPS held 37,825 and 25,410 hectares of concession areas respectively, both of which were located in District of East Kutai, Province of East Kalimantan. The research findings of Ecositrop indicated that both own areas identified as HCV: 11,718 hectares by SBA and 3,148 hectares by MPS in total. The HCV areas in the SBA concession area were itemized as follows: 7,252 hectares of areas that were significant in “species diversity”, 6,866 hectares of “landscape level ecosystems and mosaics”, 6,812 hectares of “ecosystems and habitat”, 10,761 hectares of “ecological services”, and areas along the river identified as necessary for “community needs”. The HCV areas in the MPS concession area were as follows: 1,976 hectares of “species diversity”, 1,173 hectares of “ecological service”, and areas along the river identified as necessary to meet “community needs”.[7]

In the area of SBA identified to be significant in species diversity, 190 species of trees, 29 of mammals, 56 of birds, and 9 of amphibians were identified. In the MPS area, 177 species of trees, 27 of mammals, and 10 of amphibians were identified. Of these, 26 and 28 species in the SBA and MPS areas, respectively, were designated as endangered and in need of protection by the International Union for Conservation for Nature (IUCN) Red List, the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and also Indonesian national regulations. In concession areas of MPS, they also found customarily protected species such as the *Banggeris* tree, which was known to be a honey tree and has economic significance to the local populations.

SBA owned 6,866 hectares of karst ecosystem area which was an important natural habitat of orangutans, and thus was identified as significant under “landscape level ecosystems and mosaics.” Furthermore, the karst forest area existing on limestone was an important

Itemization of HCV areas found in SBA concession area

HCV Item	Exists	Does Not Exist	Area (ha)
Species Diversity	X		7,252
Landscape level Ecosystems and Mosaics	X		6,866
Ecosystems and habitat	X		6,812
Ecosystem Services	X		10,761
Community Needs	X		Along tributaries of local rivers
Cultural Value		X	
Total Area of HCV			11,718 (approximately 30% of total concession area of 37,825 hectares)

Itemization of HCV areas found in MPS concession area

HCV Items	Exists	Does Not Exist	Area (ha)
Species Diversity	X		1,976
Landscape level Ecosystems and Mosaics		X	–
Ecosystems and habitat		X	–
Ecosystem Services	X		1,173
Community Needs	X		Along tributaries of local rivers
Cultural Value		X	
Total Area of HCV			3,148 (approximately 12% of total concession area of 25,410 hectares)

habitat for orangutans which needs large area of habitat, and thus identified as significant as "ecosystems and habitat".

In addition, 10,761 hectares in the SBA concession area and 1,173 hectares in MPS were found to offer "ecosystem services". Satellite images and field research indicated the existence of reservoirs along the tributaries of major rivers flowing in the concession areas. The reservoirs functioned to prevent erosion and forest fires. Several spots within the area were found particularly susceptible to erosion if deforestation occurred. The 10,761-hectare SBA concession area also contained several hot springs that could be developed as tourist resorts.

The concession areas of SBA and MPS were both found to be significant for meeting "community needs". The local populations engaged in subsistence agriculture, producing rice and vegetables, and also produced cash-crops, specifically oil palm in the SBA area and rubber in the MPS area. They also engaged in hunting and gathering. Moreover, the tributaries of local rivers were a source of water on which the populations depended.

There were eight villages located near the concession areas of SBA. One of these was inhabited by native Dayak Basap, who lived isolated from the other villages. The populations of the other seven villages were migrants of multi-ethnic origins. In the 1970s, a timber company called Sangkulirang Ltd. (PT Sangkulirang, PTS) operated in the area, but retreated in 1998 due to depletion of timber resources. According to the research finding of Ecositrop, the Dayak Basap were subsistence farmers, mostly producing rice by themselves. Meanwhile, most of the other local populations made their living from oil palm, either employed at large oil palm estates or being owners of their own small-scale oil palm plantations. A part of the populations still engaged in hunting and gathering, but many also purchased their food. Importantly, the populations were dependent on water obtained from local tributaries as a source of drinking water and other uses. Therefore the local tributaries were recognized as indispensable for "community needs".

Two villages were located within the concession area of MPS, and four villages were close

by. The logging company Georgia Pacific International operated in the area in the 1970s, and Kiani Hutani Lestari Ltd. (KHL) later took over its concession and operated until 2010. A large population migrated to the area under the HTI Transmigration project, which was instituted by KHL in cooperation with the government to meet its employment needs. Sixty percent of those who worked at KHL were migrants from outside of East Kalimantan, including Javanese, Buginese, Timorese, and Sundanese, and the remaining forty percent were Kutainese, native to the area. When KHL Ltd closed its operation in 2010, some migrants returned to their homes, and others chose to stay and engaged in small-scale agriculture. The populations perceived the MPS operation as an opportunity to generate income, but also as a source of conflict over local natural resources. The populations obtained water for bathing, washing and toilet from local rivers, well, and dams built by KHL Ltd. But for drinking, most of the populations were dependent on refilled water sold by a private company, which obtained the water from the local Telen River, because the quality of the water taken directly from local rivers, dams and wells was considered to be unfit for drinking particularly during the dry season. The local populations also obtained timber such as ironwood, *meranti*, *kapur*, etc. for use as building material for their houses and boats, and for firewood. Due to forest depletion, they were increasingly having difficulty finding sufficient timber resources for building houses and boats.

In both cases of SBA and MPS, the results of the research were presented in public meetings, attended by researchers from Ecositrop, representatives of local communities, company and local government officials, and academics. In the meetings, the research findings, factors that would threaten local HCVs, and recommendations for land management and monitoring were presented. The major findings discussed in the public meeting of SBA were as follows. The upstream areas of the local Rapak River should be conserved because it was an indispensable source of water for the local populations living downstream. The areas around the hot springs existing in the concession area had the potential of being developed for eco-tourism, and therefore should not be opened. The HCV areas should be managed with participation from local populations.

The major findings discussed in the public meeting of MPS were as follows. There are many *Banggris* trees, which need to be conserved. Land clearing by MPS could be improved by leaving a zone fifty to one hundred meter-wide along the river bank intact. The local Beno River was an important source of water for the local population, but the water was polluted from the activities of both the local population and company. MPS had already prepared conservation areas which amounted to 13% of the total concession area. Management of the HCV areas could be done in cooperation with the local government office for environmental protection.

In the above cases of SBA and MPS, the information obtained by the independent third party, Ecositrop, and provided to the companies was indispensable to properly monitor and manage their concessions to meet the goals of conservation and local participation.

4. Discussion and Conclusion

The cases of the SBA and MPS concessions suggest that HCV studies can provide the companies with opportunities to improve their environmental and social standards, if the obtained information is properly reflected in their monitoring and management activities in their future operations. Thus, as Muhtaman and Prasetyo point out, the requirements necessary for FSC recognition potentially contribute to improve forest management. When the HCV studies were concluded, the findings were presented at public consultations with the participation of representatives of the local communities, local government officials and academics. Such opportunities can thus provide local communities with additional information about the potential environmental impacts resulting from the concessions, and give the companies a channel to improve future relations with local communities. Close working relations with the local communities could result in community development programs. The research findings may identify environmental issues with which the companies may not possess suitable skills to deal. But Muhtaman and Prasetyo point out that some companies under the recognition programs receive technical assistance from NGOs or other relevant organizations to improve their knowledge and skills. Thus the certification system may encourage the companies to acquire new knowledge and skills in order to meet the criteria.

Thus, FSC certificate schemes can potentially induce companies to improve their relations with local communities. Yet, they do not adequately address issues of land tenure, which result from national development policies that prioritize investment schemes. In order to resolve land tenure problems, Muhtaman and Prasetyo propose that the companies engage in participatory mapping activities with affected communities and initiate discussions to identify and protect sites of significant importance for communities (59). Such measures could decrease the number of potential conflicts, but many have observed that community decision making is often problematic particularly when land transfer is concerned. In the backdrop of democratic reform, local communities also strengthened their claims over their customary rights of land use and ownership. Such claims have resulted in district regulations that require advancing companies to negotiate and pay compensation to local communities. However, such recommended practice of "free, prior, and informed consent" has often been utilized by the limited numbers of village elites to secure their benefits and resulted in accelerated rate of deforestation (Barr et al., 2006). Even if the decision makings are not monopolized by local elites, local communities have no veto power against concession permits given by the state, so that there is no fundamental change in the power relationship between communities and companies.[8] It is imperative for the government to implement legal reforms so that concession permits given to companies to achieve national development goals would neither bring about land tenure issues, nor result in further impoverishment of local communities. When combined with national legal changes and economic policies that respect pro-poor outcomes, certification programs would have a greater potential to realize sustainable forest management.

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Note

[1] In 1993, there were 575 forest concessionaires with a total area of 61.7 million hectares, but the number decreased to 323 units with a total area of 28.8 million hectares in 2007 (Center for Forestry Planning and Statistics, 2009: 15). Log production in 2003 was 10,007,770 cubic meters, but 5,879,380 in 2015 (Badan Pusat Statistik, "Produksi Kayu Bulat Perusahaan Hak Pengusahaan Hutan 2003-2015"< https://www.bps.go.id/linkTableDinamis/view/id/863> Accessed on 27 July 2017).

[2] The central government authorized district governments to issue Forest Product Extraction Permits (Hak Pemungutan Hasil Hutan, HPHH) under Regulation 6/1999 in January 1999. There were a series of related decrees issued by the Ministry of Forestry such as Ministerial Decree 310/1999 and Ministerial Decree 317/1999 (Barr et al., 2006: 88-9). In 2000, the Ministry of Forestry issued Decree 05.1/Kpts-II/2000, which regulated but reaffirmed the authority of district and provincial governments over forestry regimes (Barr et al.,2006: 92-3).

[3] In Timber Use and Harvest Permit (Izin Pemungutan dan Pemanfaatan Kayu, IPPK) allocated by district governments, the companies were allowed to clear all standing forests, while in Commercial Forest Concessions (Hak Pengusahaan Hutan, HPH) allocated by the Ministry of Forestry they needed to obey regulations of the Indonesian Selective Cutting System (Tebang Pilih Tanam Indonesia, TPTI) (Barr et al., 2006:100-1).

[4] In the revised approach, the minimum cutting diameters were reduced by 10 cm, and the minimum cutting cycle was reduced by five years (Klassen et al., 257)

[5] According to Muhtaman and Prasetyo, FSC has led to partial improvements at the unit level, but not to large-scale changes in forest administration in Indonesia. From 1999 to 2003, thirteen logging concession holders applied for Smartwood, another certification program, or FSC, but until 2004, only one concession holder was certified (52-3). The small number of concession holders that applied and were eventually certified was due to the complex administrative requirements.

[6] In Indonesia, approximately 2.5 million hectares of forest have attained FSC certification, with 283 companies holding FSC Chain of Custody (CoC) certificates as of January 2019. FSC Indonesia website <https://id.fsc.org/id-id> Accessed on 24 June 2019.

[7] The total area of HCV in both SBA and MPS concession areas is smaller than the sum of all HCV items because the HCV categories overlap one another.

[8] Borras Jr. and Franco propose the inclusion of "human rights approaches" that ensure the local populations the rights to food and land in the measures intended to improve the "Code of Conduct" of investing companies (2014).

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