XV WORLD FORESTRY CONGRESS
Building a Green, Healthy and Resilient Future with Forests
2–6 May 2022 | Coex, Seoul, Republic of Korea

Government and Stakeholders Engagement in the Social Forestry Program in Indonesia Supporting SDGs Achievement

Didik Suharjito[1], Soni Trison[1], Ahmad Aulia Arsyad[2]

[1]Lecturer at the Faculty of Forestry and Environment IPB University Bogor, Indonesia. Email: didiks@apps.ipb.ac.id; sonitrison@apps.ipb.ac.id]
[2]Lecturer at the Vocational School IPB University Bogor, Indonesia. Email: ahmadaulia@apps.ipb.ac.id]

Abstract

Since 2015 the Government of Indonesia (GOI) has accelerated the social forestry program. Previously the total forest areas allocated for social forestry were less than 0.6 million hectares, while during 2015 to 2021 it increased more 4.0 million hectares. It was much faster than the previous social forestry program for 20 years before 2015. Why could it be achieved? Firstly, this paper would like to explain the process of the social forestry program during that time.

Secondly, this paper would like to propose a new approach of government and other stakeholder engagement for supporting the social forestry programs. Digital based-government services are needed because when entering the industrial revolution 4.0 the forestry sector in Indonesia encounters new tradition of the communities living around forest areas, as well as in larger society. By implementing a new approach, the social forestry program in Indonesia would be enhancing and strengthening the community welfare and sustainable forest, and SDGs as well.

Keywords: Adaptive and integrated management, Sustainable forest management, Economic Development, Policies, Governance

Introduction, scope and main objectives

Since 2015, the Indonesia government has launched an equitable economy policy to reduce inequality which forestry sector particularly concerning with state forestland utilization is part of that policy. The government commits to do state forestlands distribution much more to local communities through the Social Forestry (SF) Program during period of 2015-2019. The portion of state forestlands utilized by local communities will be increased from 7 % to 33 %.

The objectives of the SF program in Indonesia are mainly to enable local communities to participate in managing forests and enhance income generating activities. Furthermore, the outcomes of the program are to alleviate poverty and sustain forests. The local communities manage the forests for timber, non-timber, and environmental services as well. The program is also a way to overcome conflict over forest areas raising deforestation.

The SF program will supposedly be enhancing household income and alleviating number of poor people. According to Statistics Indonesia (2021) number of poor people in rural area Indonesia in 2021 are of 15 million people or 13.1 % of total population in rural area Indonesia. The number and percentage of poor people decrease during period of five years from 2014-2020, and increase during the last two years 2020-2021 because of Covid-19 pandemic in Indonesia and throughout the world limiting economic generating activities. The poor people are spread evenly throughout regions of Indonesia, where Kalimantan region including East Kalimantan,

West Kalimantan, South Kalimantan, Central Kalimantan, and North Kalimantan Provinces shows the smallest by percentage, while Papua region including Papua and West Papua Provinces shows the biggest by percentage (see Table 1).

Table 1. Comparison of Number and Percentage of Poor People in Rural Area Indonesia by Region in 2014 and 2021

No.	Region	2014		2021	
		Number*	Percentage	Number*	Percentage
1.	Java	8,349.8	13.5	6,540.3	12.3
2.	Bali, NTT & NTB	1,430.3	14.6	1,477.7	14.7
3.	Sumatera	4,084.2	11.9	3,739.4	10.9
4.	Kalimantan	701.1	8.0	635.0	7.9
5.	Sulawesi	1,767.0	15.5	1,570.0	14.6
6.	Maluku	336.7	17.4	340.7	17.3
7.	Papua	1,103.7	37.5	1,063.1	34.6
8.	Indonesia	17,772.8	14,2	15,366.2	13.1

Source: Statistics Indonesia (BPS 2021). *x1000 people

The difference among region on number and percentage of poor people (see Table 1) is related to community based-natural resource management and utilization and non/off agricultural activities mainly oil palm and rubber plantation in Kalimantan, while communities in Papua are still depended on natural resources extraction (see Table 2). In Kalimantan oil palm and rubber plantation managed by communities (household) are of 38.0% and 90.9% respectively from number of households cultivating estate crops as main subsector, while in Papua are of 4.0% and 10.0% respectively.

Table 2. Number of Households Cultivating Estate Crops as Main Subsector by Province, 2018

No.	Region	Number of Households Cultivating Estate Crops as Main Subsector	
		Number	Percentage*
1.	Java	2,022,470	14.5
2.	Bali, NTT & NTB	325,057	17.3
3.	Sumatera	3,873,196	55.8
4.	Kalimantan	828,148	48.3
5.	Sulawesi	798,204	33.6
6.	Maluku	187,895	59.0
7.	Papua	26,926	5.7
8.	Indonesia	6,861,896	24.8

Source: Statistics Indonesia (BPS 2019). Note: *Percentage of households cultivating estate crops to total of agricultural households

Some villages in Indonesia are located inside or near the state forest areas (see Table 3). Almost all (95 %) of villages inside the forest areas are categorized as underdeveloped, while among villages near the forest categorized as underdeveloped are of 25 %. Underdeveloped village means insufficient basic needs, lack of basic services, and lack of infrastructure. Main source of income of households in almost of villages inside and near the forest areas (more than 90 %) are agriculture. Their community livelihoods are heavily dependent on forest resources. For long time their access to state forestland are restricted because almost all state forest around them are under forestry companies control.

This paper focuses on government and stakeholder engagement supporting the objectives achievement of the Social Forestry (SF) program in Indonesia in reducing poverty and sustaining forest resources as part of SDGs.

The main objective of this paper is to describe and explain how government and stakeholder engagement in SF program in Indonesia could accelerate the objectives achievement of the SF program.

Table 3. Number of Villages Inside and Near the State Forest Areas by Region

No.	Region	Total Villages	Villages inside the Forest	Villages near the Forest	Villages outside the Forest
1.	Java	25,266	1	7,117	18,148
2.	Bali, NTT & NTB	5,212	9	2,650	2,553
3.	Sumatera	25,473	245	13,222	12,006
4.	Kalimantan	7,236	140	4,189	2,907
5.	Sulawesi	10,600	40	6,134	4,426
6.	Maluku and Papua	9,937	2,889	5,835	1,213
7.	Indonesia	83,724	3,324	39,147	41,253

Source: Statistics Indonesia (BPS 2020).

Methodology/approach

This paper is firstly based on data collected from field visits to SF practices in Java (Kalibiru, Kulon Progo Regency; Jayagiri, Bandung Barat Regency; and Gunung Puntang, Bandung Regency), Bangka Belitung (Juru Seberang, Belitung Regency), Nusa Tenggara Barat (Batudulang, Sumbawa Regency), and Sulawesi Tenggara (Muna Regency) Provinces in 2018, 2019, 2020 and 2021. Data were actually as "side notes" collected during conducting researches for other purposes. Data collection in the fields were conducted by doing interview (individual and group) and observation. Interviews were done by using semi-structured and in-depth questions. Data from the field were enriched and deepened by doing discussion with community leaders or local champions via zoom meeting. The Secondly, we use secondary data to show SF program in Indonesia at national level.

Data are mainly analyzed by using qualitative approach. The analysis is intended to describes and explains relation of government and stakeholder engagement to the objectives achievement of the SF program.

Results

The SF program being implemented in the fields until September 2021 cover 4.7 million hectares of state forestlands consisting of five schemes namely Village Forest (VF), Community Forest (CF), People Plantation Forest (PPF), Forestry Partnership (FP), and Adat (customary) Forest (AF), and distributed to more than one million households (see Table 4). Vallage Forest is SF managed collectively by village organization; its benefits belong to organization and used for village development. Community Forest is SF managed by individual houshold, but should obey to organization or forest farmers group rules; its benefits belong to individual household. People Plantation Forest is like CF, but especially on plantation forest areas. Forestry Partnership is SF managed by partnership between forestry company and local community; its benefits shared among participants. The last, Adat Forest is forest managed by Adat community. State forestland that has already been stipulated for Adat Forest it means the forestland belong to Adat community and no longer as state forestland.

Table 4. The State Forestland Distributed for Social Forestry by scheme until September 2021

No.	Scheme	Area (Ha)
1.	Village Forest	1,869,656.36
2.	Community Forest	836,874.05
3.	People Plantation Forest	349,981.58
4.	Forestry Partnership	517,166.16
5.	Adat (customary) Forest*)	1,159,902.00
6.	Total	4,733,580.15

Source: Directorate General Social Forestry and Environmental Partnership MoEF (2021). Note: *) Adat Forests have been already stipulated = 69,147 Ha; Indicated Adat Forests = 1,090,755 Ha

Distribution of the state forestland for Social Forestry has been realized throughout regions, mostly in three regions namely Sumatera, Kalimantan and Sulawesi (see Table 5). That is related to availability of the forestland areas which are ex-private forest concessions.

Table 5. The State Forestland Distributed for Social Forestry by Region until September 2021

No.	Region	Area (Ha)	Percentage (%)
1.	Java	271,534.14	5.7
2.	Bali, NTT & NTB	115,000.19	2.4
3.	Sumatera	1,363,372.96	28.8
4.	Kalimantan	1,686,611.00	35.6
5.	Sulawesi	736,770.07	15.6
6.	Maluku	354,143.61	7.5
7.	Papua	206,148.18	4.4
8.	Indonesia	4,733,580.15	100

Source: Directorate General Social Forestry and Environmental Partnership (2021).

Suhardjito and Wulandari (2019) explained that acceleration of SF program during period of 2015-2018 was able to be done through strengthening working together among government, civil society organization (CSOs), and academicians supported by funding organization and or business organization. This approach could be stated as a new way in implementing SF program in Indonesia so far. However, this approach has still been initiated and generated or moved at central/ national, shortly centralistic approach.

The SF program does not only distribute or legalize the state forestland areas for communities, but also facilitate the SF holders to develop forestry business on-forests as well as off-forest based economic activities. According to the level of forestry business development, majority of the SF (63 %) are categorized as blue, it means SF business has not been developed yet. The platinum (advance) category is still quite small (1 %).

The relatively success SF practices are showed as cases. The SF holders (Forest Cooperative or Forest Farmers Group) in Kalibiru Kulon Progo Regency, Gunung Puntang Bandung Regency, Jayagiri Bandung Barat Regency, and Batudulang Sumbawa Regency have managed and utilized the forest resources for producing non timber forest products (NTFPs) such as forest honey, coffee, rattan, ginger, and grass; and utilizing environmental services for ecotourism. The NTFPs are processed become finished products or ready to be consumed. So they do not sell the NTFPs in raw materials. The NTFPs have been sold to local, national, and international market. The ecotourism sites have been visited by domestic and foreign tourists as well. They have promoted the NTFPs and ecotourism objects through social media (FB, IG, websites, you-tube, marketplace) and direct contact (WhatsApp, telephone) and taken access to widespread market. For example: UD. Hutan Lestari: https://instagram.com/batudulang?utm_medium=copy_link; https://youtu.be/e0_vHq6mza4; https://www.facebook.com/batudulang.ekowisata; https://www.facebook.com/wisata.alam.kalibiru; https://www.youtube.com/KalibiruWisataAlam; https://instagram.com/lmdh.bukitamanah?utm_medium=copy_link.

Furthermore, the SF holders in Kalibiru and Batudulang have already integrated ecotourism with environmental education (called edu-ecotourism). The tourist guide provides information about history and function of forest, trees, birds, bees, water fall, etc. The information creates tourist awareness about forest and environment functions. They provide also NTFPs as gift (free of charge) for the tourists or to be bought.

Through the SF program the benefit of the forest for the communities are much bigger than before. For instance, ecotourism in Kalibiru provides income reaching five billion rupiahs up per year (before Covid-19 pandemic), average at least two billion rupiahs per year; meanwhile, ecotourism in Jayagiri and Batudulang provide income much less than Kalibiru, hundreds and tens million rupiahs per year respectively, but higher than before they manage the ecotourism. Integrated education and ecotourism on coffee (*Eduwisata Kopi*) in Gunung Puntang is still on establishment progress.

The SF holders in Kalibiru, Jayagiri, Gunung Puntang and Batudulang have been supported by government (Ministry of Forestry and Environment, Forestry Agency at Provincial and Regency level, and Forest Management Unit level; Industry and Trade Agency, Tourism Agency), the State Forestry Enterprise, the State Petroleum Enterprises, financial institution (Bank), NGOs, academicians, and funding organization concerning institutional strengthening, appropriate technology application, financial and business management.

Mangrove ecotourism in Juru Seberang is still struggling in strengthening local institutional capacity, even though local government (public affair services, tourism services, forestry services) has supported for improving infrastructure and promotion.

The SF holders are no longer falling trees now, otherwise they maintain the forest to remain green; they manage the forest sustainably. The outcomes of the SF program are the sustainable forest management providing products and services; and livelihood development creating jobs, enhancing household income and villages revenues, reducing poverty.

Discussion

Why was the acceleration of the SF program during period of 2015-2018 able to be done? Suhardjito and Wulandari (2019) explained that considerable change has undergone in government's attitude and behavior. The government (Ministry of Forestry and Environment) has been more inclusive and collaborative. The government has involved CSOs (including non-government organizations and academician) in formulating, implementing, monitoring and evaluating policies and regulations of the SF program. The government also actively invites participation of funding agencies.

Even though there was acceleration of the forestland distribution and legalization for the SF during period of 2015 to 2021, this achievement is still much less than targeted forestlands of 12.7 million hectares or 37 %. This approach also has not been able to develop forest based-business managed by community. Hence, since the last semester, coordination and synergy among ministries and between ministries and provincial/regency government in term of their development program have been done to support the SF program.

The SF program in Kalibiru, Jayagiri, Gunung Puntang, and Batudulang are relatively success. Shortly, the objectives of the SF have been achieved, namely economic activities created and forest condition improved. Furthermore, number of poor people reduced, health improved, and forest sustained. These support the SDGs achievement. Why do that work?

The role of local champions, local government and stakeholders are quite important. The local champions are community members who are creative, enthusiastic, and spirited to get some things new, and supportive to others. They would like much to participate in training, discussion, study tours for getting and sharing values, knowledge and skills. They facilitate other community members. As the SF manager they have developed forest business with continuously improvement. For instance, they asked to and accommodated feedback or suggestion from visitors and researchers into the ecotourism development.

The local government (at regency and province level) supporting technical services and budget (forestry, industry and trade, tourism etc.) have strengthened the SF development. The stakeholders including NGOs, universities/ academicians, business actors (private and state), and donor agencies have also strengthened the SF development.

Youngster have supported the social media for their parent business. The young generation are interested in agricultural/ forestry business. This is "a new phenomenon" or "turning point", since the last 20 years, majority farmers are oldster, youngster are not interested in agricultural practices.

Youngster are much more literate in using information technology. According to Statistics Indonesia (BPS 2021), total population using mobile phone during the last three years (2018, 2019 and 2020) are of 62.4 %, 63.5 % and

57.5 %. Based upon age category, 15-24 years old does have biggest proportion of population who are using mobile phone, namely 86.4 %, 87.6 %, and 87.8 % respectively. Productive population category (15-64 years old) tends to be the main users of mobile phone (see Table 6). Furthermore, internet/ mobile phone signal is available in almost all villages (95 %) in Indonesia. Internet (Wi-Fi) availability in village office for free of charge is of 40 % up. They support villagers access to internet. This fact shows that there are potential generating economic activities to be created by utilizing available technology, mobile phone/smart phone.

Table 6. Number of population using mobile phone by age category and sex category during 2018-2020 in Indonesia

Age Category (year)	2018 (%)	2019 (%)	2020 (%)
15-24	86.4	87.6	87.8
25-64	71.5	72.3	72.4
Sex Category	2018	2019	2020
Male	67.6	68.7	62.2
Female	57.2	58.4	52.7

Source: Statistics Indonesia (BPS 2021).

Conversely, the SF program in Juru Seberang and Muna have relatively not been success yet. Forest based household economic activity has not been generated yet, even so forest condition improved. Why did the SF program in these sites not work? In both sites there is no local champions and Youngster, even though local government (public affair services, tourism services, forestry services) has supported for improving infrastructure and promotion. Business player who has present there did not facilitate and support local community (farmers), conversely his business for his own interest.

Conclusions

The success of the SF program is affected by local champions, local government, and stakeholder participation. The role of youngster is very important to sustain the business.

Other ministries have to be adequately participating in the SF program to ensure the objectives achievement of the SF program. They have had related or connected program at local level already to the SF development.

Acknowledgements

We thank to the Center of Financial Support for Forest Development (BLU-Pusat P2H) Ministry of Environment and Forestry Republic of Indonesia, ASEAN Working Group on Social Forestry (AWG-SF), the State Forestry Enterprise (Perum Perhutani), and ACIAR (Australian Center for International Agricultural Research) who give us opportunities for visiting the Social Forestry practices in Java, Nusa Tenggara Barat, Sulawesi Tenggara in 2018 and 2019 (before the Covid-19 pandemic), 2020 and 2021, in which the “side notes” from the field visits are used for this paper.

References

Chaffey D., Ellis-Chadwick F. 2016 (Sixth edition). Digital Marketing. Pearson Education Limited, United Kingdom

Directorate General Social Forestry and Environmental Partnership, Ministry of Environment and Forestry (MoEF). 2021. Paper presented in a Limited Discussion of Coordination for Accelerating the Social Forestry Program. Jakarta.

Kotler P., Kartajaya H., Setiawan I. 2017. Marketing 4.0: Moving from Traditional to Digital. John Wiley & Sons, Inc., Hoboken, New Jersey.

Ministry of Environment and Forestry Republic of Indonesia (MoEF-RI). 2018. The State of Indonesia's Forests 2018. Jakarta.

Popkova EG., Ragulina YV., Bogoviz AV. (Eds). 2019. Industry 4.0: Industrial Revolution of the 21st Century. Springer International Publishing AG.

Ryan D. 2014 (Third edition). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation. Kogan Page, London, Philadelphia, New Delhi.

Schwab K. 2016. The Fourth Industrial Revolution. World Economic Forum, Geneva Switzerland.

Suhardjito D., Wulandari C. 2019. Reflection of Social Forestry in 2019: Towards inclusive and collaborative government approaches. Forest and Society, Vol. 3(1): 137-140.

Statistics Indonesia (BPS). 2019. Keadaan Angkatan Kerja di Indonesia Februari 2019 (Labor Force Situation in Indonesia February 2019). Jakarta.

Statistics Indonesia (BPS). 2020. Identifikasi dan Analisis Desa di Sekitar Kawasan Hutan Berbasis Spasial Tahun 2019 (Spatial Based Identification and Analysis of Villages Surrounding Forest Areas). Jakarta.

Statistics Indonesia (BPS). 2021. Available at: http://www.bps.go.id/tab_sub/view.php?kat=1&tabel=1&daftar=1&id_subyek=23&notab=1; https://www.bps.go.id/indicator/23/185/1/ number-of-poor-people-by-province.html. Access Time: October 28, 2021, 8:37 pm

Wahyu A., Suharjito D., Darusman D., Syaufina L. 2020. The Development of Community-Based Forest Management in Indonesia and Its Contribution to Community Welfare and Forest Condition. IOP Conf. Ser.: Earth Environ. Sci. 528 012037. https://iopscience.iop.org/article/10.1088/1755-1315/528/1/012037