COMPLEMENTING THE ACCESS THEORY BY COLLABORATIVE APPROACH IN INDONESIA'S SOCIAL FORESTRY CONTEXT

MELENGKAPI TEORI AKSES DENGAN PENDEKATAN KOLABORATIF DALAM KONTEKS PERHUTANAN SOSIAL DI INDONESIA

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ABSTRACT

Previous studies examining social forestry in Indonesia from 2016-2020 mostly described factors relate to its implementation. Additionaly, this paper tries to clustering and map these factors of social forestry implementation by using the theory of access (ToA) with collaborative approach. Qualitative desk research is used to examine 39 papers with Nvivo 12. The result show there are two of four structure-relational access mechanism (SRAM) elements that have positive effects on social forestry implementation, while three of the five SRAM elements that gives a negative effect. In turn, there are various unclustered factors which not a part of SRAM that gives positive and negative effects on social forestry implementation. These unclustered factors are the gap of access theory which complemented by a collaborative approach. These are "participation" and "equity" that supported by "effective communication". Collaborative approach widen the scope of analysis beyond individual, but extend it to groups scope. The benefit can be seen by outside stakeholders through community contribution in social forestry implementation.

Keywords: access theory, collaborative approach, social forestry

ABSTRAK

Penelitian-penelitian sebelumnya mengkaji tentang perhutanan sosial di Indonesia dari 2016-2020 yang menggambarkan faktor-faktor terkait pengimplementasian. Tulisan ini mencoba mengelompokan dan memetakan faktor-faktor melalui teori akses dan pendekatan kolaboraif di dalam konteks perhutanan sosial. Penelitian studi literatur digunakan untuk mengkaji 39 studi dengan menggunakan aplikasi Nvivo 12. Hasilnya menunjukan terdapat dua dari empat elemen strucure-relational access mechanism (SRAM) yang berdampak positif pada pengimplementasian perhutanan sosial, disamping tiga elemen dari lima elemen SRAM memberikan dampak yang buruk. Pada gilirannya, terdapat banyak faktor-faktor di luar SRAM yang berdampak positif atau negatif pada perhutanan sosial. Faktor-faktor tersebut yang merupakan celah dari teori akses yang dilengkapi oleh pendekatan kolaboratif, faktor-faktor itu adalah "partisipasi" dan "equity" yang didukung oleh "komunikasi yang efektif". Dengan pendekatan kolaboratif cakupan analisis menjadi lebih luas tidak hanya menganlisa pada tingkat individu, tetapi juga dapat menganalisa tingkat kelompok. Manfaat dapat dilihat dari pihak luar komunitas melalui kontribusi yang diberikan oleh komunitas dalam implementasi perhutanan sosial.

Kata kunci: Teori Akses, Pandangan Kolaboratif, Perhutanan Sosial

INTRODUCTION

Social forestry in Indonesia became a priority program in 2015 to alleviate poverty near the forest area which give access with 12,7 million hectares for people to manage forest resource (Rakatama and Pandit, 2020; Suparno et.al, 2018; Santika et.al, 2018; Fisher et.al, 2018; Moeliono et.al, 2017). There are institutitional (lack of accountability of bordering, mapping,

administrative fulfillment), social-economi (poor of benefit distribution, not lack of participation, amd relucant of local aspect), and environment aspect (lack of community capacity with obscurity of rights and responsibilities social forestry program in community level) as challanges factors of social forestry implementation (Rakatama and Pandit, 2020; Pambudi, 2020; Asmin et.al, 2019; Pujo et.al, 2018; Fisher et.al, 2018; and Moeliono et.al, 2017). In the otherside, they identified severals positive factors that is believed could create effective social forestry implementation. Bassicly Moeliono et.al (2017) said the essence of access between the group and their members that align with Rakatama and Pandit (2020) in "social relation" term. Where, others positive factor are recognition, collaboration, participation, and benefit (Pujo et.al, 2018; Asmin et.al, 2019; and Rakatama and Pandit, 2020). Based on the result from previous studies, this paper focuses on examined and mapping the factors of social forestry program implementation in Indonesia through access theory and collaborative approach.

Theory of access (ToA) had been used in many studies across the world in wide range research subject to explain and examine about natural resources (Myers and Hansen, 2019), where one of the gap of ToA is to examine natural recource utilization problem in collaborative form (Peluso, and Ribot, 2020). Based on that postscript statment from Peluso and Ribot (2020), so I use ToA with collaborative approach to analyze social forestry program implementation in Indonesia context.

Despite the flexibility and wide range subject of ToA, it still has weaknesses to explain about social forestry without Collaborative Approach. So, different from previous studies I try to add some of elements from the collaborative approach (CA) to access theory that will be explained in later paragraph. After research method section, I will be slightly highlight the access theory mechanism to reveal and cluster the factors of social foresrty implementation. The factor will be clustered between positive and negative factors, then the access theory and its development will be described. Subsequently, elements of CA on forest management will be explained in several

cases. I use these cases to gather more reflection how social forestry implementation. In the end, I discuss how ToA can be extended by CA

RESEARCH METHOD

I use qualitative desk research to examine 39 papers[1] explaining about social forestry program during the period of 2016-2020 through Nvivo 12 application. Twenty-eight papers specifically explain about social forestry in Indonesia, five papers explain about social forestry in United State of America, and the rest are six papers explain social forestry or same notion program as social forestry in Africa, South Asia, East Asia, Europe, and Southeast Asia. From these papers, I try to find and figure out the factors that can affect the implementation of social forestry program in Indonesia context through SRAM and non-SRAM factors.

THE POSTIVE AND NEGATIVE FACTOR OF SOCIAL FORESTRY IMPLEMENTATION THROUG ACCESS THEORY AND BEYOND

Theory of Access Highlight and The General Explanation of The Social Forestry Implementation Factors

ToA developed by Ribot and Peluso (2003) offers the structure-relational access mechanisme (SRAM) contains eight elements. These are 1) access to technology; 2) access to capital; 3) access to market; 4) access to labor and labor

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1 Herlina et.al (2016); Salam (2017); Candraningsih et,al (2018); Henri et.al (2018), Nath et.al (2016), Voo et.al, (2016); Weissberg et.al (2018); Wright et.al (2016); Hayashi et.al (2017); Kaskoyo et.al (2017); Mahdi et.al (2017); Massiri et.al (2020; Moeliono et.al,(2017); Mohammed et.al (2017); Sardjono and Inoue (2017); Toscani and Walter (2017); Fisher et.al (2018); Garcia-López and Antonori (2018); Kelly (2018); Kuncoro and Cahyani (2018), Pujo et.al (2018); Royer et.al (2018), Asmin et.al (2019); Wulandari and Kurniasih (2019); Wulandari and Inoue (2018); Essougong et.al (2019); Nurrochmat et.al (2019), Qurniati et.al (2019), Raihanah et.al (2018); Sinapoy (2018); Niman (2019); Norsidi (2019); Uju et.al (2019); Santika et.al (2018); Setiajiati et.al (2019); Suhardjito and Wulandari (2019); Humphries et.al (2020); Pambudi (2020); and Rakatama and Pandit (2020

opportunities; 5) access to knowledge; 6) access to authority; 7) access through social identity; and 8) access via the negotiation of other social relations of friendship (Ribot and Peluso, 2003; see also Shohibuddin, 2018; Salampessy et.al, 2020).

Before we start to see how SRAM can map the factors in the social forestry context, there is *access of identity* which will not be explained. Because the identity from previous social foresrty studies tends to specifically defined and not compare with others identity, they tend to focus on one group of farmers based on geographical, cultural, or other attribute. So, we start with the Figure 1.

Based on the data in figure 1 the social foresrty program tends to has positive outcome in Indonesia context such as the social forestry certificate opens the opportunity for forest community to get accompaniment or training from outside stakeholders (Kuncoro and Cahyani, 2018). Contrary, several studies said the social forestry implementation in Indonesia are ineffective implementation (Moeliono et.al, 2017; Fisher et.al, 2018, Massiri et.al, 2020) and it is important

to assest the process and the characteristic of the community (Pujo et.al, 2018; Wulandari and Inoue, 2018). In addition, there are 21,4% (six from 28) previous studies which take location in Indonesia said there are weak local institution which effects on social forestry implementation (Herlina et.al, 2016; Mahdi et.al, 2017; Asmin et.al, 2019; Wulandari and Kurniasih, 2019; Pambudi, 2020; Rakatama and Pandit, 2020).

This result, line with Rakatama and Pandit (2020), mentions that the implementation of social forestry in Indonesia has diverse outcome. Beside of the similar finding of previous studies about diversity of outcome in Indonesia social forestry, the institutional aspect that effect on social foresrty is in line with Sikor and Lund's writing in 2009, and Asaba's in 2013 who examine access theory (Myres and Hansen, 2019). Then let we continue to examine social forestry context through access theory by SRAM with Figure 2.

Figure 1. General Conclusion of Previous Studies which Examine Social forestry
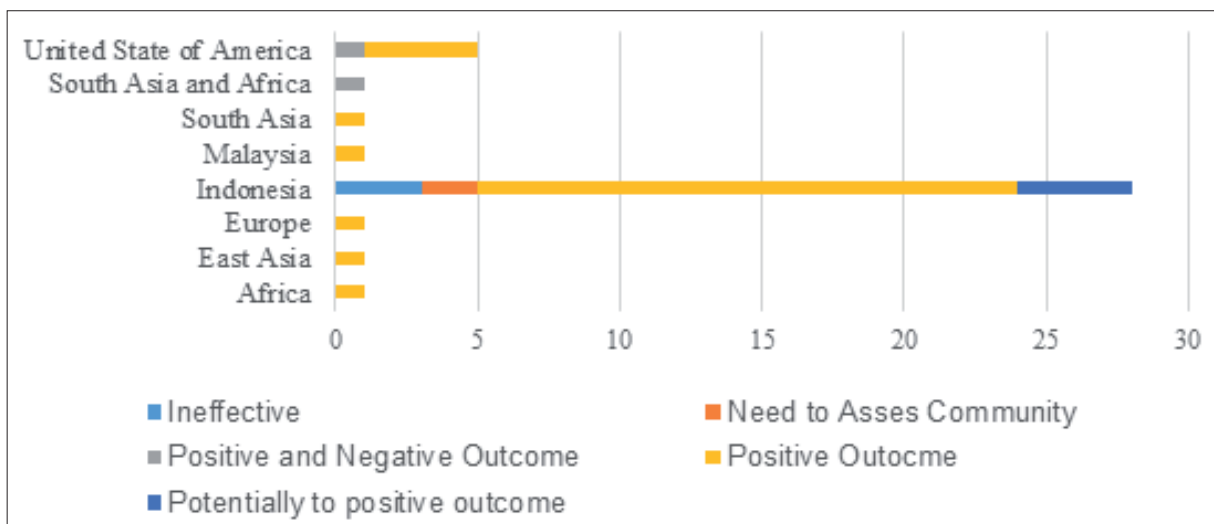
Source: Processed by author

Figure 2. Hierarchy Chart of Access Theory to Examine Social Forestry Context
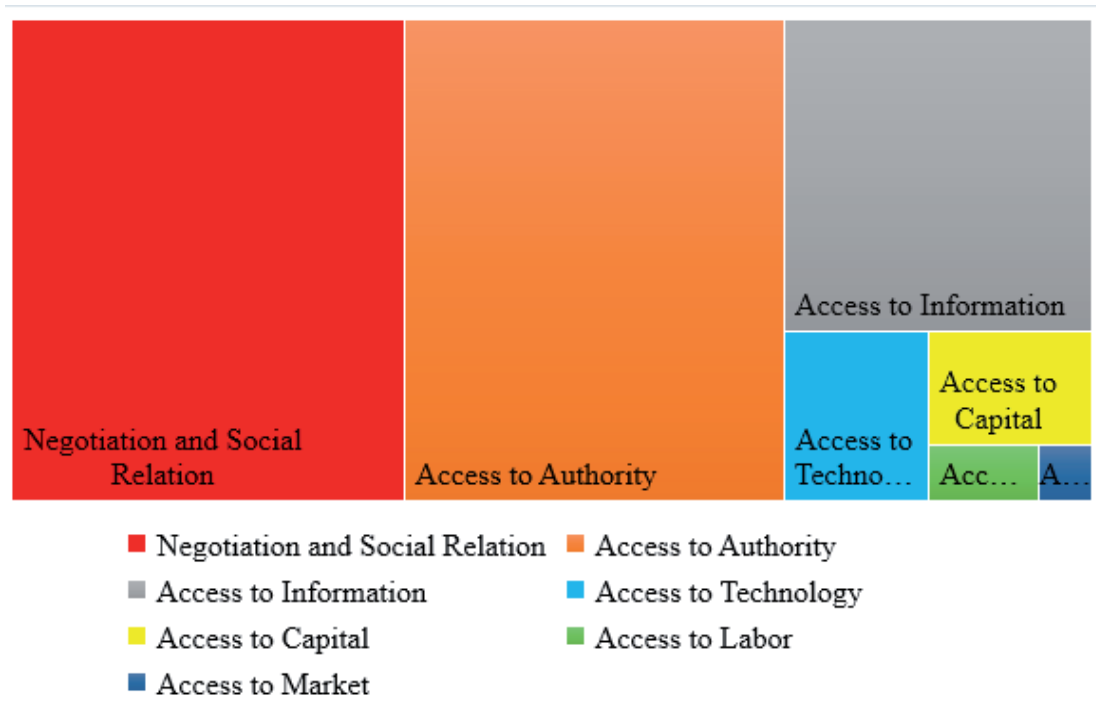
Source: Processed by author

In general through SRAM elements used to identify the factors of social forestry implementation, show that the biggest number of node, from previous studies, relates with social forestry through SRAM element are identified firstly in "negotiation & social relation" (35,88%), then the second is access to authority (34,71%), afterward is access to information (19,41%). There are very little portion from previous studies who explained about "access to labour" (1,18%) and access to market (0,59%). This chart only identifies SRAM element in general on social forestry studies context, but not really explain its kind of relation between positive or negatif effects on the implementation of social foresrty. So, the more specific and detail explaination will be described in next section.

The Positive Factors through SRAM Elements in Social Forestry Context

There are just four elements of SRAM which have positive effect in social foresrty context, the four elements of SRAM are negotiation and social relationship (55,95%), access to authority (40,48%), access to labour (2,38%), and access to market (1,19%). The proportion can be describe in hierrachy chart (Figure 3).

Collaboration become an essential elements in social forestry (Suhardjito, 2019) that relate with negotiaton and social relation of SRAM. Because it needs to invovle various actors in their social network (Pujo et.al, 2018; Sardjono and Inoue, 2017) by recognising especially local communities (Royer et.al, 2018) through facilititation in partnership relation include with non-government organization both local or international scope (Kuncoro et.al, 2018; Humphries, 2020). This partnership relationship help to reduce cost and strengthening business for local community (Humphries, 2020).

With cooperation (Wulandari and Inoue, 2018) and group activity (Weissberg et.al, 2019) such meeting or something activity in the field which can be seen to community member (Kelly, 2019) can build trust within for community members even to outside satkeholder. Trust building

Figure 3. The Positive Factors through SRAM in Social Forestry Context
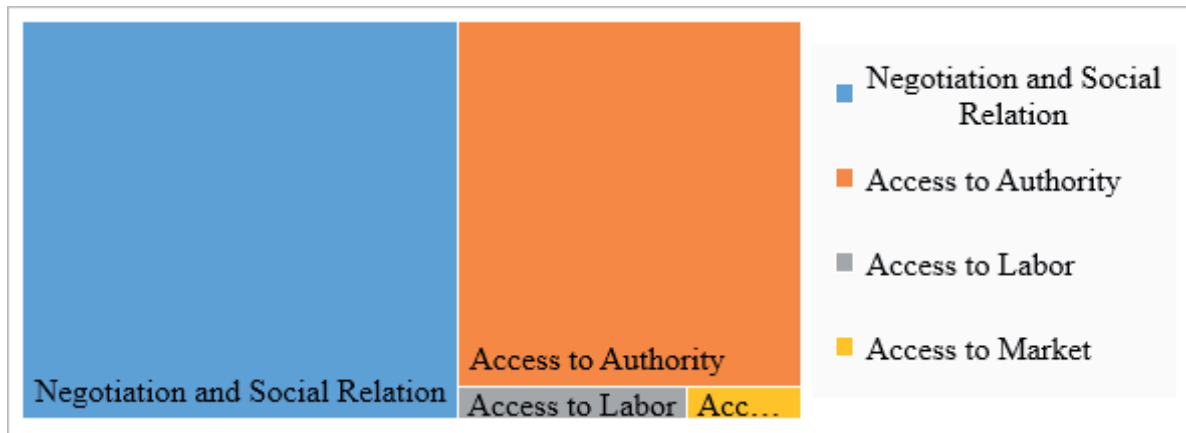
Source: Processed by author

and cooperation can integrate all stakeholder in forest management (Wulandari and Inoue, 2018). Furthermore, with trust-building with reciprocity behavior between stakeholder potentially to minimize the current inequalities or conlfit (Rakatama and Pandit, 2020). This negotiation and social relation element has positive relation with access to authority, because not only negotiation and social relation has effects to authority, but also access to authority has effets to negotiation and social relation element.

For instance, CBFM in West Sumatera that supported by clear regulation from Central Government of Indonesia as part of decentralization forest management create positive atmosphere to implement social forestry program, local government become more committed with program to facilitate local forest community (Asmin et.al, 2019). Strong local institution is prerequisite to successful implementation and good performance decentralization forest management (Mahdi et.al, 2017), because it determine situation and structure (rule and resources) and furhter it effects on power relation, and behaviour shape (Massiri et.al, 2020). In turn, local institution not only in local government, but also include the institution in village scope or community scope that would stimulate community participation (Setiajiati, 2019).

Furthermore, strong instition give more opportnities for community to increase their capacity and capability through permit or right (Pambudi, 2020) as legal certainty in forest management context. This is a crucial aspect for local community as legitimacy to manage forest which determine community collaboration in social foresrty (Pujo et.al, 2018). Ensuring tenur security as forest right has significant legal aspect to create sustainable forest management (Kuncoro et.al, 2018) which has proved can reduce illegal logiong and forest encroachment by people from outside the village (Santika et.al, 2019). But, in the begining is important to make clear of boundaries for area which will be managed by community (Fisher et.al, 2018; Setiajiati, 2019).

From these explanation, this relation are poorly explained by Ribot and Peluso (2003) between negotioation and social relation to access to authority or vice versa, access to capital, and access to information that relate with "capabilities". This gap of SRAM from CA will be discussed in the next sections. So lets see the negative facotrs by SRAM in social forestry context.

The Negative Factors through SRAM Elements in Social Forestry Context

Different from postive factors that dominate by two elements of SRAM between negotiation and social relation and access to institution. The negative factors come from five elements of SRAM but dominate by three elements, there are access

to information (36,14%), access to authority (30,12%, and negotiation and social relation (16,87%). The rest elements come from access to technology (9,64%), and access to capital (7,3%). From these percentages author try to describe in hierrarchy chart in Figure 4.

The main sub factor from access to informations as negative factor come from "community capability" (33,33%) and "less understood and unapropriate implementation" (30%). This happen because farmer groups tend to not have capability or skill to preprare short or long term management plan and periodic report to government (Royer et.al, 2018; Qurniati et.al, 2019; Essougong et.al, 2019). Especially in the propose of lisence of social forestry that is needed to attach map with contain boundaries and map (Fisher et.al, 2018).

In second sub factros have happen because government or ouside stakholders have little effort to help communities to understand their rights and responsibilities on managing the forest (Moeliono, 2017) or giving community with minimum support on technical capability (Royer et.al, 2018). Other intance happen in Jambi furhter community faced limit resources to manage the village forest, there were new rule which not allowed community to use the forest as

they wished and it made them frustation (Royer et.al, 2018). Beside there are limited human or capital resource from the government or outside stakeholder (Sardjono and Inoue, 2017).

The second factor is access to authority which consisted by policy planning and implementation of policy. For the planning policy the main negative sub factors are top-down factors (42,86%), the top-down policy that mean the policy created by central government or local government which implemented in community context. This notion tunes in with Moeliono et.al (2017) that said "… In Indonesia, the state designates forest area…by the state…", and it has proved such in member of Community Forest (HKm) or People Plantatation Forest (HTR) in Gorontalo who were appointed through hasty process. Then the second sub factor of negative access of authority factor is "long process" for propose the permit which can take up to two years (Royer et.al, 2018).

While in the implementation of policy, the main negative sub-factor of social forestry come from administrative emphasize (36,36%) which supported by strict rule (27,27%) and government view (18,18%). Even Massiri et.al (2020) said social forestry in Indonesia "…is more of administrative liability obligation fulfillment… than performance based…" with numerous

Figure 4. The Negative Factors through SRAM in Social Forestry Context
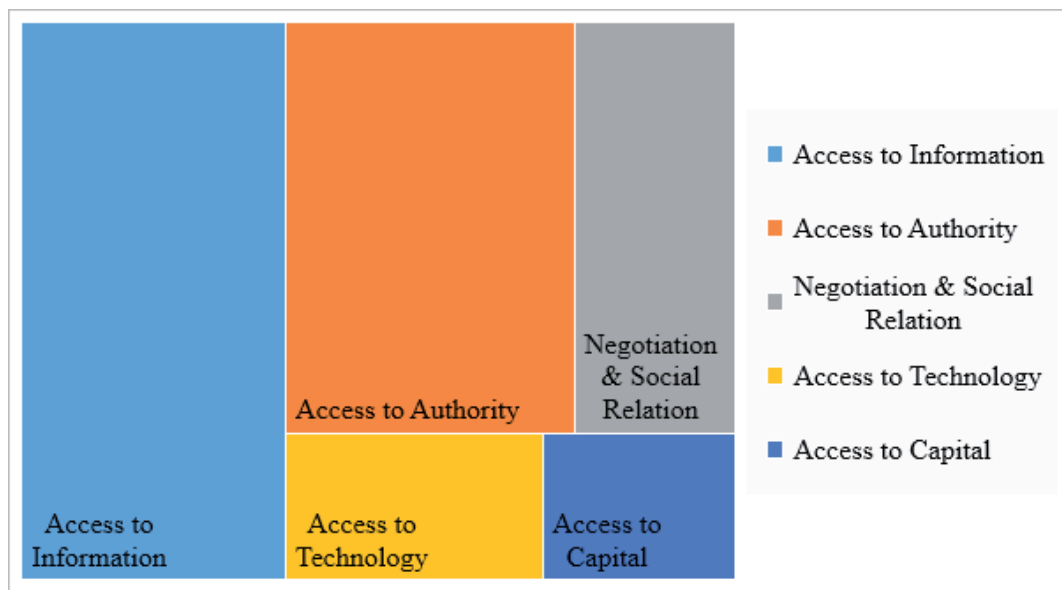
Source: Processed by author with Nvivo12

administrative procedures which potentially becomes an ineffective forest management with high transaction cost (Maryudi, 2017). In other side as a sub-factors of policy implementation, the government has simplification view that see "empowerment" as participation or involvement of local community.

Third negative factor of SRAM in social forestry context is negotiation and social relation, it composed by mainly by poor collaboration (50%), and neglection (35,71%) (Nath et.al, 2016; Sardjono and Inoue, 2017). Collaboration between stakeholder is great aspect wich not received much attention (Suhardjito, 2019) where the government tend to establish new institution than strengthening existing institution (Asmin et.al, 2019).

So, it makes sense if access of information especially for sub-factors "less understood and inappropriate implementation" would happen, it because there are several problems in the access of authority. For instance long process with administrative emphasize and complemented with

simplification view from outside stakeholder to define empowerment as involvement. This reveal the relation between access to authority effects on access to information which not clear explained by Ribot and Peluso (2003). Other facts about neglection of existing institution with tend to establish new institution strengthen and prove the relation between access to auhtority effects on negotiation and social relation. For the factor with access to capital and technology caused on poor planning on financial and data which made worse by lack of data.

The Extension Factors of Access Theory in Forest Management Context through Collaborative Approcah

It is true that ToA can explain forest management with SRAM, but access theory still has its blank spaces. From previous studies, there are several aspects that are poorly explained by Ribot and Pelusi (2003) with SRAM that described in the figure bellow.

Figure 5. Factors which Poorly Explained by Access Theory
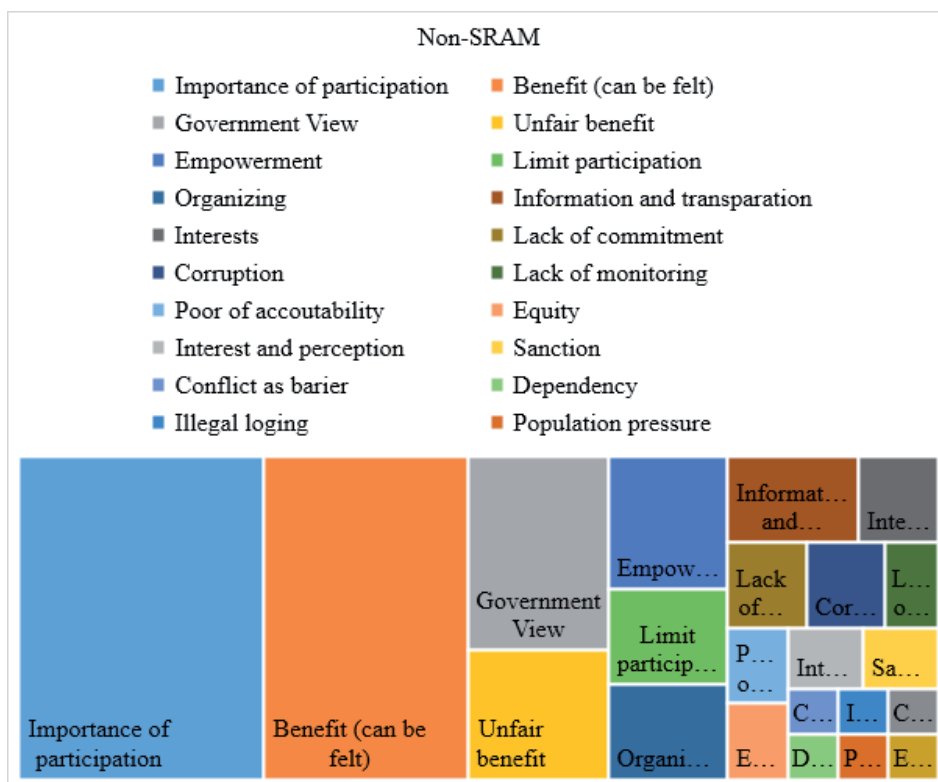
Source: Processed by author

From figure 3 we can see several main factor, further the author try to make it more simple become several factors which composed by several sub-factors. Such as term of "participation", it has relation with "limit participation", "information and transparancy", and so on. So, we can see the simple of extension factor of access theory in the table bellow.

Table 1. Simple Extension Factors for Access Theory From Collaborative Approach

Factor	Sub-Factor	Proportion	Effects
Participation	Importance of participation	27,13%	Positive
	Commitment	0,78%	Positive
	Limit participation	3,88%	Negative
	Organizing	3,88%	Positive
	Poor of accoutability	1,55%	Negative
	Lack of commitment	2,33%	Negative
	Lack of monitoring	1,55%	Negative
	Dependency	0,78%	Negative
	Efeciency	0,78%	Positive
	Empowerment	5,43%	Positive
	Information and transparation	3,88%	Positive
	Conflict as barier	0,78%	Negative
	Government View	7,75%	Negative
	Interests in implementation	2,33%	Negative
	Interest and perception	1,55%	Positive
Fairness/ justice	Equity	1,55%	Positive
	Benefit (can be felt)	22,48%	Positive
	Unfair benefit	6,20%	Negative
Authority	Sanction	1,55%	Positive
Etc	Corruption – implementation	1,55%	Negative
	Corruption – planning	0,78%	Negative
	Illegal loging	0,78%	Negative
	Population pressure	0,78%	Negative

Source: Processed by author

Based on the data from previous studies, term of participation not clearly explained by Ribot and Peluso (2003), in their SRAM concept the emphasize is individual entity or institution. On the collaborative approach in social forestry context, the mechanism become wider not only emphasize on individual but aslso a with group as one entity.

Then we can see, participation are the broad concept that composed by activity as observed object and unobserved object. Observed object such organizing, or other activity which involve people in various name activity such facilitation, empowerment, ect. Furhtermore participation which include facilitation or empowerment can become a something which can include other type of SRAM. Participation also has unobserverd object such commitment, accountability, efeciency, transparation of information, interest, or conflict. The medium of this unobserved object is "communication" through experience, perception or view from people who conduct in social forestry program.

The other factor that can fill the blank of access theory is "justice" or "fairness" especially on benefit can felt (22,48%) or unfair benefit (6,2%). Access theory can desribe of ability to use something or to gain benefit from somehting, but it did not state about "fairness" or "equity". Different with access theory, CA more influenced by inclusion concept so benefit become a matter thing for "member" not just for individual interest to collaborate in social forestry program. Others sub-factor that relate with access to authority is sanction, and the rest which lack of explanation of access theory are corruption, illegal logging and population pressure.

Based on this explanation and author's finding, so the author want to complemented access theory from these factor mainly with participation and equity factor. It will be explained later, and before it explained, author want to describe the access theory, its development, and then how the CA can complement the access theory which described in scheme in the next section.

ACCESS THEORY: DEVELOPMENT, SCHEME, AND THE GAP

The Recent Development and the Critics of Access Theory

Access theory is developed from other the notion about the bundle of right by Henry Maine in 1917 and this theory extends of the idea about property and market access from Tawney in 1978 (Ribot and Peluso, 2003). After that in 2000, Geilser and Daneker created the "the bundle of owner" theory, in turn Ribot and Peluso (2003) extend the theory which emphasize on power of social relation in material, cultural, and political-economic aspects. They defined access not only about legal or own something. Wider of that, access as a bundle of power to gain, to control, and to maintain the benefit from "something" (material, people, institution, even symbol) (Ribot and Peluso, 2003). So, the implication Ribot and Peluso (2003) explain about illegal access after the right-based access.

ToA adventage's is integrating structure and agency aspect and this theory had been cited by 1.1144 papers around the world (Meyrs and Hansen, 2020). Meyrs and Hansen (2020) who review ToA recently, identified around 79% of theses papers explained about natural resources, land, and agriculture. Where 25% of these papers discuss land, 22% discuss the forest, and 18% discuss about livelihood. The rest of 31% of these paper which used access theory explain about geographic study in Sub-Sahara Africa and Southeast Asia (Meyrs and Hansen, 2019).

Even many scholars had been inspired by ToA, some of them had criticized ToA because of the individualism emphisize. The critic of ToA by Koch in 2008 is highlight the "individualism", blur to differ structure and relation, and not explain about the source of power which negotiable or proceeced in individual way (Meyrs and Hansen, 2019:158). For instance such in this quotation "... *Access to authority shapes an individual's ability to benefit from resources...*" (Ribot and Peluso, 2003:170).

Aside to critized the ToA, several scholars had tried to integrate or interact the ToA with other frameworks or social concepts. The three frameworks are entitilement framework[2], sustainable livelihood approach[3], and power of exclusion[4], further it interaction with social concepts are gender[5], materiality[6], property and authority[7], and the power[8] (Meyrs and Hansen, 2019). Based on Meyrs and Hansen (2019:149-160) paper, author try to list it up the paper which has suggestion or critic for access theory through the table bellow.

Table 2. Critics or Suggestion to Access Theory from Previous Studies

Framework/ Concept	Author (Year)	Finding to Suggestion/Critic
Entitilements framework	Hicks in 2013; and Hicks and Cinner in 2014	Institution affect on "right"
	Calderon Contreras in 2011	There need for further explanation "how" institution can transform "right"
Power of exlusion (Framework)	Hall, Hirsch, and Li in 2011	*Structure-relational access mechanism* not enough to explain the exlusion especially in force form
	Fairbairn in 2013	There are several cultural aspects which can not be explained by access theory. There are: historical accumulation, and control.

2 by Amartya Sen in 1981, Leach, Mearns and Scoones in 1999, Contreras in 2011, Aguirre in 2013, Hicks in 2013 and Hicks and Cinner in 2014, and Weigelt in 2014

3 By Berg in 2008 and Besta in 2013

4 By Hall, Hirsh and Li in 2011, and Fairbairn in 2013

5 By Sultana in 2011, Elmhirst in 2011, Nightingale in 2011, Aguirre in 2013, Asaba in 2013, Besta in 2013, Khalid, Nyborg and Khattak in 2015, and Goldman, Davis, and Little in 2016.

6 By Dyke in 2006, Milgroom in 2012, Ginger et.al in 2012, Cardozo in 2013, Ribot in 2014, Myers in 2015, and Ellis in 2016

7 By Sikor and Lund in 2009, Milgroom in 2012, and Kroneburg Gracia in 2015

8 By Westermann in 2007, Koch in 2008, Dorendol in 2008, Kahwan in 2015, and Hein in 2016.

Gender	Elmhirst in 2011	Instituon can be stimulate by negotiation activity
Property and Authority	Sikor and Lund in 2009	Access theory has limitation to see the process of institution
Power	Hein in 2016	There are multi stakeholder who have different power which can not really be explained by access theory

Source: Meyrs and Hansen (2019) which is processed by author

These writing suggest to improve the ToA, especially on institution by entitlements framework, gender and property and authority concept, force form of exclusion and cultural accumuation by power exclusion framework, and the different power between multi stakeholders by power concept. In addition, Hall, Hirsch, and Li in 2011 said that structure-relational access mechanism is not enough to explain the reality in the field specifically on the emerge of the force as one of form that can exclude the people from their land in Southeast Asia context. So, firstly we need to understand what the structural-relational access mechanism that is offered by Ribot and Peluso (2003) as mechanism to understand of benefit distribution from access theory which will be explained in next section.

Structure-Relational Access Theory and The Gap of Theory of Access

Access theory can guide us to map, understand, and analyze "how" and "why" people or institution in power relation can gain or exluded to use resources (Ribot and Peluso, 2003). They had tried to explain about this SRAM include the effect to other aspect or other elements. Furthermore, Ribot and Peluso said that the "eight element" is negotiation from social relation as a main element relate with others element. Though this prepotition not really describes the relation between the "eight element" with other elements or others element to the others, so author try to reveal it up and stringing the SRAM elements in Table 3.

Table 3. The Relation of Strcture-Relational Access Mechanim Elements

Structural-Relational Access Mechanism	Affects to	Affected by
Access to Technology	More access (extractive) – not stated to other SRAM element	Negotiation by Social Relation (NSR), and access to authority (institution). Further implicit to access to capital
Access to Capital	Access to Identity, knowledge, authority, labor (implicit) and so on (not explained)	Not really explained
Access to Market	Access to capital (implicit) and labor	Access to capital (finance and equipment), authority (policy), identity, and NSR,
Access to Labor	Access to capital	NSR, access to market (implicit)
Access to Knowledge	Access to capital and market	NSR
Access to Authority	Access to capital, market, and labor	Access to identity
Access to identity	Access to capital, authority, market, and NSR	Access to knowledge
Negotiation by Social Relation (NSR)	In general all of the access mentioned before is social relation. In implicit the NSR affects to access to technology, market, knowledge and labor, while it is affected by access to identity	

Sources: Ribot and Peluso (2003) which processed by author

From the table 3, we can see which the element that affects to or affected by other elements. Access to market becomes the elements that affected by most of SRAM elements (access

to capital, authority, identity, and NSR). Where access to capital is second position as the most influental access after NSR that affects to four forms of other SRAM element (identity, knowledge, authority, and labor), because Ribot and Peluso (2003) all the form of SRAM is social relation. Furhter, there are several elements of SRAM that have reciprocal relation and it nodes at "access of capital" with access to authority, identity, and labor. Contrary with access to capital, there only one access that not really explained about its effect, it is the "access to tehcnology".

Based on the relation between the SRAM elements (Ribot and Peluso, 2003), they did not explicitly mention the relation between access to authority and NSR, access to authority and access of knowledge, access to knowledge and the access to technology, and relation between NSR and access to capital. These are the gap of ToA which Collaborative Apporach can fill in. I will explain these relation in the subsequent paragraphs.

First, collaboration based on social (relation) network has the role as "negotiation" process to reach access to authority then get "the permission" for the community. This situation has reflected one fact on the other side, that is access to authority through "the permission" effects on social relationship between community and government. So, from the permission the relation between the government and the community will more tight while the community gets the "access to authority" and the government gets closer or intimate with the community as "NSR".

Second, access to authority can affect access to knowledge. When the community is recognized by the permission from the government, so the opportunity for the community to improve their capability is increase. They could find or ask the government about empowerment or training programs, where the government can give it to the community based on their capability to make a policy as access to authority.

Third, Ribot and Peluso (2003) not explicitly explain the relation between NHS and access to capital or vice versa. It can be happen, such as the community facilitation (NHS) can give little income the members of community by the

facilitation activities (as access to capital). This little income or access to capital that felt by the members of community further can affect on "trust" to the government (as NHS) as As Asmin et al (2019) have proved through facilitation it make the community more committed with the program. Based on these gap of ToA, so sustainable development approach is used to fill these gap with participation concept that will be explained in the next section.

COLLABORATIVE APPROACH: COMMUNITY BASED FOREST MANAGEMENT TO PARTICIPATION AS COMPLEMENT TO ACCESS THEORY

The Origin and the Principle of Community Based Forest Management

Forest, as one of the main subject of access theory, has its own conceptualization. The development of forest started in 18th century in Europe which had adopted in many countries even in third world countries in 20th century (Scott, 1998). Centralistic management with rigid technique aspect to gain "revenue" by the state was the main characteristic of forest management (Scott, 1998) until 1970s which known as top-down policy in forest management. As time goes by, the top-down policy that see the social aspect as complicated thing (Scott, 1998) could not handle the social-economic problem (Nath et.al, 2016).

Therefore in 1980s the emphasize of forest management shifted from top-down policy to decentralization forest management through bottom up policy (Nath et.al, 2016) because the stakeholders (the government, local government, non-government organization, and community) need to consolidate and discuss about more participatory forest management system (Mohammed et.al, 2017; Nath et.al, 2016). To consolidate dofferent stakeholders has same notion with "to collaborate" to reach agreement and gain benefit in socio-economic aspects (Weissberg et.al, 2018).

Then, the collaborative approach has been used in forest management developed in the concept of Collaborative Based Forest Management (CBFM) with six principles emerged to bridge between state and people on forest management. These six principles include empowerment and to increase people's walfare (Nath et.al, 2016; Pujo et.al, 2018). Beside CBFM, there are other terms which relate with collaboration in forest management such as Collaborative Forest Governance (CFG) (Sardjono dan Inoue, 2017), Collaborative Forest Management (CFM) (Mohammed et.al, 2017; Voo et.al, 2018), and Social Forestry (Asmin et.al, 2019; Fisher et.al, 2018; Pujo et.al, 2018; Kuncoro dan Cahyani, 2018).

The difference are, CFG has nine principles (Sardjono and Inoue, 2017) which emphasize on the process than rather the goal emphasizes by CBFM principles. In turn, CFM requre active local community's cooperation with outside stakeholders (Mohhamed et.al, 2017). In Indonesian context, collaboration approach poured in state program which named Social Forestry or SF (Asmin et.al, 2019; Pujo et,al, 2018; Kuncoro dan Cahyani, 2018), event the defintion of social forestry tend to close with the notion of CBFM which bridges the state and people to manage forest together to gain socio-economic and environment goals (Wulandari dan Inoe, 2018; Asmin et.al, 2019; Pujo et.al, 2018). In addition, there are five principles of SF in Indonesia (Pujo et.al, 2018).

The Essence of Collaboration which Observed by Participation to Fill the Gap of Theory of Access

Above all the differents principles between CBFM, CFG, CFM, or SF, all of them has the same basic notion and essence, which is "collaboration". In the simple definition, collaboration same as "partnership" (Pujo et.al, 2018). Furthermore, Suhardjito and Wulandari (2019) said collaboration has wider notion than partnership, it link not only to outside stakeholder, but in specific it relates with multilevel or multiscope stakeholder.

Collaborative means to involve all parties which relate with some specific issue (Pambudi, 2020) in this context is managing forest. Beside of this definition, at the same time, collaboration relates with the notion of inclusion that everyone have right to participate in society (Peters, 1999). Moreover, inclusion idea relates with equality and social justice (Hondkinson, 2011) and distribution of benefit (Reisch, 2002). These aspects make this notion of inclusion and equality in line with the principles that mentioned before in CBFM, CFG, and SF.

The collaboration becomes an essential aspect in forest management because it improves relationship. One example of this improvement can be seen from the relationship between United State Forest Service (USFS), Hergenfeinstein Quincy Library Group (HQLG), and their stakeholder to restoration 400.000 acres forest in Shasta County (Weissberg et.al, 2018). Furthermore, Weissberg et.al (2018) said inviting stakeholder and citizens into decision-making processes in forest management will increase accountability, effective activities, then positive outcomes. In addition transaction cost between stakholder can be reduced if the stakeholders strengthen their social network that include of social relationship among of them through effective communication and collaboration (Massiri et.al, 2020).

The common goal can be achieved by clarity of the role among stakeholder through collaborative activities, where the interests of stakeholders are accomodated (Pujo et.al, 2018). Therefore all of stakeholders need to see the others group as "equal entity" to minimize the gap of interest in decision making process of forest management (Pujo et.al, 2018; Voo et.al, 2018).

Same as Voo et.al (2016), Wulandari and Inoue (2018) said in bold statement that collaborative acitivity or program requies participation. Because in participation the stakeholders can interact to each others both in individual or group level which involve various actors (Pujo et.al, 2018). One of activities of participation such facilitation from external stakeholder to community can be given by government, researcher, policymaker, or others actor who could improve or complement community capability (Qurniati,

et.al, 2019). Moreover participation is an important aspect because from this activity stakeholder can transfer skill or cabability, knowledge, understanding, even mutual beneficial such money (Pujo et.al, 2018; Weissberg et.al, 2018).

Furthermore, the inclusion especially in equity or fairness become an important aspect which effects on participation from facilitation, job distribution, revenue, until to others form of benefit (Humphries, 2020; Qurniati et.al, 2019; Santika et.al, 2019; Essougong et.al, 2019; Mohammed et.al, 2017; Nath et.al, 2016; Fujiwara et.al, 2012). Because equity or fairness determine community "happiness" in their participation activities, so unequal resource allocation or distribution from access could create frustation among participants (Nath et.al, 2016) or maybe can create seed of envious which in the worst case it maybe explode to conflict.

This preposition confirms previous studies, such as Quarniati et.al (2019) who discussed social forestry in Lampung, Indonesia. In their writing individual members in community were offered new skills or knowledge, which make interet them to attend facilitation activities. In addition to livelihood issue participant also showed greater interest in fairness within the groups (Qurniati et.al, 2019). An opposite story of participation and equity or fairness discussed by Qurniati et.al (2019) come from Essougong et.al (2019) in Cameroon. Essougong et.al (2019) unfolds the limited right, unfairness, and little benefit for the community that makes community left the forest program activities.

In short, participation as the heart of collaborative process functions as capacity transformation process (Pujo et.al, 2018) that relates with "access to knowledge" as SRAM element by Ribot and Peluso (2003). Beyond from access theory, CA with participation concept can fill the gap where the negotiation & social relation has direct effects on access to information and ability to use. While ouside stakeholders such as government, researchers, or the other stakeholder which mentioned by Quarniati et.al (2019) can share or deliver some of konwledge, skill, or something to use by community as "access to authority" has

relation with "access to information" or "ability to use".

Other aspect that are not properly explained in access theory in the process of participation as effective communication. This form of communication become one of aspect that can the gap of ToA. In addition, Sardjono and Inoue (2017) not only concern about communication activity, but also said form of communication by guideline for CFG, there are two-storied monitoring system, two storied sanction, nested conflict mechanism. In the end, participation concept that relates with equity or fairness explain the direct effects on "negotiation & social relation" from equity or fairness of revenue/benefit distribution. This fairness and effective communitation as the medium in participation concept that can effects on stakeholder sense of belonging (Setiajiati et.al, 2019), motivation (Moeliono et.al, 2017), and even the community give some contribution to activities (Nath et.al, 2016).

From this point we can see that access theory with SRAM offers enough mechanism to examine the complexity of forest management, event it must be complemented with CA because there are some relation of the elements that needed to be filled or explained in forest management context. Based on these relation between access theory and CA, author try to complement the SRAM with some elements from CA through a scheme in Figure 6.

Inspired from previous studies, author try to make the scheme of SRAM which complemented by several elements of CA. In this scheme, the seven of SRAM elements are writen with red colour, leaving out "negotiation & social relation". The reason for this because "negotiation by social relation" (NSR) transformed into red arrows. Then, the black arrows mean that one of the element has effects to pointed element. For the two directional red arrows means that the effects can influence each element or reciprocal. Such as when community members gain additional revenue from forest management activities for the first time, it would increase motivation or willingness to give contribution in participation of forest management activities to make it more revenue than before.

Figure 6. The Scheme of Strcture-Relational Access Mechanism (SRAM) which Complemented by Collaborative Approach
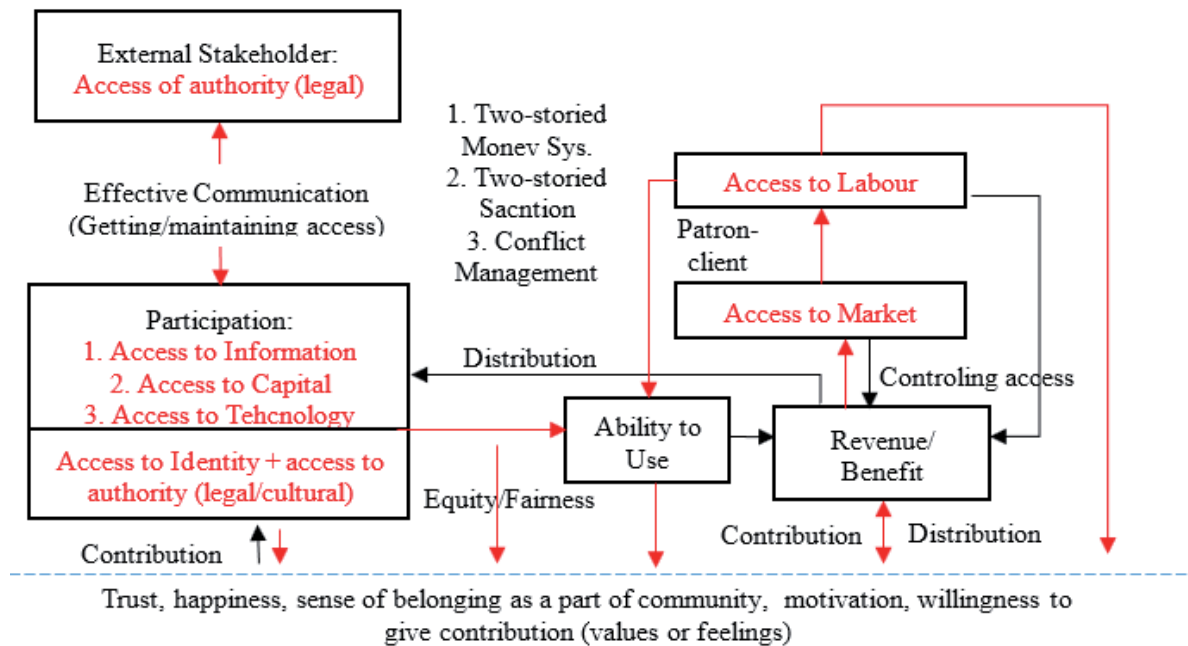
Note:
Red Arrow (→) = Negotiation by social relation (NSR) (relfects the effect)
Black Arrow (→) = reflects the effect

Source: Processed by author

Participation contains severals element of SRAM. These are access to information, access to capital, access to technology. While the social forestry context in Indonesia, the program has specific requirement for who want to propose forest area such as based on geographical identity as access of identity such farmers from one village near the forest or community, which based their identity by cultural aspects as access to authority. Other aspect of authorities come from outside the community.

The social relation both from outside stakeholder or inside the community depend on effective communication. Access of authority from outside stakeholder relate with getting or maintaining access for whole community by negotiation, while effective communication within the group relate with distribution and equity/fairness. Effective communication contain three things, there are monitoring, sanction, and conflict management.

So the basic different in this scheme on SRAM, is that we not only discus in individual level scope but also we try to understand in group scope. Then access not limited just to gain or benefit from something, we can see access in wider scope as attitude from community who want to contribution in the program. This preposition emerges because, value and feeling is a matter aspect that relate with CA in participation and equity concept. Moreover, access theory not really explain the process of transforming capabilities, so effective communication is the concept which can explain it from three aspects.

CONCLUSION

Eight elements of SRAM which developed by Ribot and Peluso (2003) are good framework to explore as to understand how it works and map the entity who can get the benefit from thing in this context is the social forestry implementation. This

article propose adding a collaborative approach to complement this ToA and framework in social forestry implementation context. Participation can be a bundle of transformation capabilities process which composed by access to information, access to capital, access to technology where the access to identity and access to authority such cultural authority can be emerge from local community.

Collaborative approach widens the scope of ToA beyond individual achievment or benefit. This approach adds "equity" or "fairness" concept on distribution of access. Equity or fair distribution need to be supported by effective communication that contain three mechanism, there are, 1. Two-storied monitoring evaluation system, 2. Two-storied Sacntion, and 3. Conflict Management that inspered by Sardjono and Inoue (2017) . At last the benefit from somthing for community not only comes from the outside-stakeholder, the benefit also can come from the member of the community through "contribution" which supported by "value" or "feeling".

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