https://doi.org/10.17170/kobra-202201195573



## Mechanisms and consequences of benefit sharing from oil palm agribusiness plantations establishment in South Comoé Region, Côte d'Ivoire

Kablan Antoine Effossou<sup>a,\*</sup>, Moses Azong Cho<sup>b,c,d</sup>, Abel Ramoelo<sup>a</sup>, Matilda Azong Cho<sup>d</sup>

<sup>a</sup>Centre for Environmental Sciences (CFES), Department of Geography, Geoinformatics and Meteorology, University of Pretoria, South Africa <sup>b</sup>Precision Agriculture Group, Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa <sup>c</sup>Department of Plant and Soil Science, University of Pretoria, South Africa <sup>d</sup>School of Agricultural, Earth and Environmental Sciences, University of KwaZulu-Natal, South Africa

## Abstract

One of the main difficulties facing agribusiness development in Cote d'Ivoire, is the issue of benefit sharing. Although communal land is expected to be equitably beneficial to all who have a stake on the land, unclear benefit sharing principles and modalities affect the implementation of benefit sharing to the disadvantage of the rural communities. Using a qualitative research approach, the study investigates if the benefit sharing approach practiced by oil palm plantations investors in South Comoé align with globally established standards of access and benefit sharing (ABS). To this end data for the study was collected from 50 participants: rural community members (N = 36), agribusiness developers (N = 6) and local government authorities (N = 8). The results revealed inequality in the land acquisition and benefit sharing negotiation process in favour of local elites. Lack of fairness experienced in the benefit sharing approach in the districts of Aboisso, Bonoua and Adiaké was attributed to the lack of institutional, policy and legal frameworks to guide a fair benefit sharing. Inequality in benefit sharing scheme affects the working relationship between the parties thus generating tensions with consequences on the stability of commercial farming. The study contributes to the debate on the marginalisation of smallholders in the distribution of benefits from agribusiness investments. Therefore, the designing of policies and practical measures that bring together rural communities and agribusiness developers to negotiate fair benefit sharing terms in line with international standards including honesty, inclusive participation of rural community in land acquisition process are recommended.

Keywords: agribusiness, access and benefit sharing, land tension

## 1 Introduction and background

Agriculture is the mainstay of the economy of many African countries (Amungo, 2020). According to Balié *et al.* (2019) the agricultural sector in sub-Saharan Africa (SSA) generates about 25 % of the gross domestic product (GDP). For example, the agricultural sector contributes to about 21 % of the GDP of Kenya, 24 % in Uganda (Mwadzingeni *et al.*, 2020), 18 % in Ghana (Akrong *et al.*, 2020), and 3 % in South Africa that represent 14.6 % of South Africa trade value (Mwadzingeni *et al.*, 2020). The agribusiness sector (agriculture global -value chain) involves 65 % to 70 % of the rural community in farming activities (Balié *et al.*, 2019; Warinda *et al.*, 2020). With more than 60 % of the world's uncultivated arable land in Africa (Oxford Business Group, 2021), Africa has a huge potential for land acquisition and investment in agriculture (Mdee *et al.*, 2020). Nevertheless, challenges associated with land acquisition for largescale farming and lack of suitable benefit-sharing mechanisms are affecting the slow growth of commercial agriculture (agribusinesses in the production sector of the agri-value chain) in Africa (Mac Clay & Feeny, 2018; Tshidzumba *et al.*, 2018). This paper discusses benefit-sharing mechanisms

<sup>\*</sup> Corresponding author- Email: kablanef@gmail.com

(BSM) as related to the establishment of large commercial farms in Africa from multiple stakeholders' perspectives.

Benefit-sharing in agribusiness sector is considered as any action designed to ensure equitable distribution of benefits derived from the investment on land for agribusiness (Cock et al., 2010). Similarly, Schroeder (2007) defines benefit sharing as a compensation mechanism where "each party gives one thing and receives another, with a focus on the equivalence of the exchange". The definitions of benefit sharing emphasise the promotion of equity in benefit sharing. Tysiachniouk & Petrov (2018) and Dutfield (2002) caution that agribusinesses or other natural resource exploiters and land developers must agree on a BSM before the land is acquired for large-scale farming or for resource exploitation. However, Koutouki et al. (2011) reported that most often land acquisition processes for agribusiness development do not adequately result in equitable compensation of the local communities. This is to a large extent due to the lack of national legal frameworks which define the mechanisms by which benefits are distributed between local communities and agribusiness investors (Rabitz, 2017; Cernea, 2008; Abubakari et al., 2020).

The nature and form of benefit sharing vary across different sectors and are interpreted differently by various actors. The variations in the interpretation and implementation of benefit sharing approaches hinge on the financial strengths of companies' utilising genetic resources (Laird & Wynberg, 2008). Benefit sharing packages could be in the form of monetary or nonmonetary (infrastructural development, transfer of skills, technology transfer, capacity building, distribution of shares in the business or distribution of equipment such as farming equipment) in a rural setting (Sholihah & Chen, 2020). Within the context of this research, parties involved in benefit sharing may include companies that want to carry out commercial investment within a community, the government, traditional authorities, and the local communities at large.

Collaborative planning and equitable benefit sharing are encouraged in the conservation sector in order to regulate the exploitation of natural resources. Equitable and fair benefit sharing approach for the use of genetic resources constitutes one of the three key objectives of the United Nations convention on biological diversity (CBD) (Buck & Hamilton, 2011). The CBD defines standard practice and legal requirements for benefit-sharing known as "access and benefit sharing (ABS) of genetic resources" (Buck & Hamilton, 2011). Various governments have formalised ABS through the adoption of articles relating to ABS drafted in the CBD and through the Bonn Guidelines on ABS (Tully, 2003). The Bonn guidelines provide specific requirements for benefit sharing which includes: 1.) the obtainment of informed consent before accessing genetic resources, 2.) reciprocal agreement on the terms and conditions for accessing and using genetic resources, 3.) equitable benefit-sharing for the use of genetic resources. Although the Bonn Guidelines outlined general guidance on access to genetic resources and benefit sharing practice under the CBD, individual organisations or companies are required to develop tools and approaches that will enable them to comply with the Bonn Guidelines (Tully, 2003). The 2014 Nagoya Protocol to the convention on CBD also defines how benefits accruing from the use of genetic resources should be equitably shared amongst the targeted beneficiaries, and the mechanisms for local resources actors to benefit from external entities' exploitation of the biological resources (Morgera *et al.*, 2014).

Nevertheless, BSM are not well formalised in the agribusiness sector in SSA. Therefore, benefits from the investments in agribusiness do not adequately trickle down to communities in compensation for the loss of their land (Adonteng-Kissi, 2017). Several studies have pointed to the fact that benefits from the acquisition of communal land for various development projects and the deviation of local livelihoods, are hardly equitable (Robertson & Pinstrup-Andersen, 2010; Zoomers, 2011). Particularly in agribusiness, the lack of equity in benefit sharing approaches may be attributed to the marginalisation of local resources actors and poor systems of governance. For example, in some parts of Brazil, agribusiness is negotiated through a neo-liberal approach, and through a top-down approach across various SSA countries (Loris, 2018). Suyanto (2007) and Debonne et al. (2018) argue that the guiding principles for agribusiness influence the kind of BSM adopted. De Jonge (2011) argues that the failure of government investment policies, and clear definition of what is termed as "fair" and "equitable" in international treaties lead to discrimination against local communities. According to Chamberlain & Anseeuw (2019), commercial farming negotiation processes in many parts of Africa are dominated by high-level government administrative officials and very often exclude grassroots stakeholders. Martin & Rice (2019) provided insights into benefit sharing arrangements in the process of acquiring communal land for the exploration of coal Seam gas. Using a theoretical model in their analysis, Martin & Rice (2019) identified a flaw in the landholder compensation policy and regulation. According to Alemagi & Kozak (2010) public institutions and rules of law are reasonably inefficient, and that translates into inadequate benefits earmarked for community members. Moreover, Sone (2012) argued that the acquisition of communal land by agribusiness investors is often fraught with irregularities due to unclear and ineffective mechanisms applied.

The inequitable benefit sharing tendencies have incited conflicts (Cernea, 2008; Rist *et al.*, 2010; Luttrell *et al.*, 2013). For instance, in the Southwest of Cameroon, land disputes arose between an American oil palm producing company, Herakles, and the natives, when the Cameroonian government ambiguously allocated 73,000 hectare of land to Herakles (Pemunta, 2018). Similarly, in Southern Ethiopia, disputes emerged between state-owned agribusiness Kuraz Sugar Development Project and the native people of the Lower Omo Valley when the Project acquired 245, 000 hectare for producing sugar cane (Kamski, 2016).

The growth of cash crops in Côte d'Ivoire (cocoa and coffee) in the early 1920s, and 1930s under colonialism, encouraged an influx of immigrants interested in large-scale agriculture (Chauveau, 2000). Cash crop investment in the Southern and Western Côte d'Ivoire was also encouraged by President Houphouët-Boigny in the 1960s (Langer, 2010). Since the 1960s there has been an evolution in the land acquisition arrangements. At the very early stage, negotiations to gain access to land was done verbally between foreign investors and local communities (World Bank, 2017). The negotiations involved mechanisms governing the sharing of benefits in order to stabilise social and economic relationships between the parties. Eventually, the land arrangements between the local and the foreign investors became complicated due to a number of reasons: (1) the foreign investors registered massive success in cash crop business which generated resentment from the local communities; (2) the return of youths from the city who intended to access land for production fuelled competition over access to land; (3) the tension brewing from the competition over land was exacerbated by political debates on the fact that nationality should be the basis for the ownership of land (World Bank, 2017). As far back as the 1950s, there has been tension arising from discontent local groups in protest against the large influx of foreign agribusiness investors (Chauveau, 2000). The underlining cause of local resistance to foreign investments in agribusiness is not clearly articulated. Although benefit sharing has been identified by researchers in the field of biodiversity and conservation, it has received little attention in the agribusinesses sector. The question is whether benefit sharing approaches practiced in sub-Saharan Africa promote equity and affects the sustainability of agribusiness. In other words, is benefit sharing one of the limiting factors to the growth of agribusiness in South Comoé? This paper seeks to assess the consistence of benefit sharing approach practiced in Cote d'Ivoire with globally established ABS frameworks.

The alignment of BSM in South Comoé to the ABS Bonn guidelines were evaluated along the following axes:

- i. Obtaining of consent by agribusinesses before land acquisition for large-scale/long-term commercial farming of oil palm e.g., in the form of reciprocal agreement on the terms and conditions for access and use of land.
- ii. Equitable benefit-sharing from the use of land for largescale/long-term commercial farming of oil palm assessed from the perspectives of the communal landowners. E.g. are the local community users satisfied with the benefits emanating from the establishment of oil palm plantations in South Comoé?
- iii. Policies guiding benefit sharing from the establishment of oil palm farming in South Comoé?

This study investigated the above BSM criteria mainly from the perspectives or views of the stakeholders including community landowners, agribusiness developers and local government authorities. The study employed focus group discussions (FGDs), and key informant interviews for the data collection in South Comoé Cote d'Ivoire.

### 2 Materials and methods

#### 2.1 Study area and research context

The research was conducted in the districts of Bonoua (5.2712°N, 3.5959°W), Adiaké (5.2858°N, 3.3036°W), and Aboisso (5.475°N, 3.2031°W) in South Comoé, Côte d'Ivoire. South Comoé is located in the southeast corner of Côte d'Ivoire and covers an area of about 800 km<sup>2</sup> (Amon et al., 2015) as shown in the study area map (Annex Fig. A1). The three districts consist of indigenous and migrant communities. South Comoé has a population of 642,000 inhabitants (Zahouli et al., 2017). More than 60% of local households in the districts depend for their living on communal land for agriculture purposes both for subsistence and cash crop production (Aka, 2007). The study area offers optimal conditions for cash crop agribusiness development, including high annual rainfall (between 1,250 and 2.400 mm) (Worou et al., 2019). The main problems in the districts include poverty, corruption practices in land lease negotiation, lack of clear land tenure policies, high vulnerability to unequal power relations in land acquisition negotiation process, unequal access to and control over land resources by all stakeholders. In the lease market (Domientche, language from Ghana) rural land users bring the land to the investor and receive a rent proportional of the value of the land after deduction of the production costs (Colin, 2004). In some places local land users are not happy because of lack of access and control to land by both agribusinesses and rural communities in BSMs in place in South Comoé. However even though land users are now able to own communal land through land certificates under the rural land Act No.98-750, it is still the state backed by national officials which stipulate how communities should use and control communal land. Therefore, BSMs in communal land in Cote d'Ivoire are far from being truly well implemented.

### 2.2 Methodology

The data used in this study were obtained from primary and secondary sources. Primary data were collected through fieldwork from July to August 2019 in the districts of Aboisso, Adiaké and Bonoua, South Comoé. The researchers aimed to analyse the communal land users' benefit from agribusiness development. In this study, 50 participants were selected to participate in the interview by using snowball and purposive random sampling methods. The snow-ball sampling approach is also referred to as a referral approach which allows identified participants who know other people with characteristics that are suitable for the research aims, to refer these for selection (Biernacki & Waldorf, 1981). Thus, out of the 50 participants, 36 community members who depend on the communal land for their livelihood and are knowledgeable about the investments and issues with the establishment of agribusiness in their district were selected through the snowball sampling technique to participate in a FGD.

On the other hand, eight local government authorities and six agribusiness developers were selected using purposive or targeted sampling technique to participate in the key informant interviews. The selection of the participants was facilitated by rural community liaison persons who introduced some key community members who further referred potential participants. All participants were made to understand that the research was done purposefully for knowledge generation to assist in identifying the issue related to land acquisition and benefit sharing and to make recommendations for the mitigation of conflicts emanating from unfair benefit sharing. Involving the different groups of stakeholders in the study was key to obtaining diverse perspectives and opinions on the BSM applied by the oil palm plantation investors in the districts of Aboisso, Bonoua and Adiaké. Participants were placed in three categories: (i) communal land users (N = 36), (ii) the implementing local government authorities (N = 8), and (iii) agribusiness developers (N = 6).

Five FGDs were conducted to obtain in-depth information from rural community members as described by Joshi *et al.* (2017). The discussions were carefully planned and designed to gather data in a permissive and non-threatening environment. The groups included a maximum of six to ten participants as suggested by De Vos (2011) so that each participant could fully participate. The FGDs were audiotaped and lasted 45-60 minutes. FGDs were conducted in an open-ended method, allowing the participants to express their views on how benefits from agribusiness establishment in their area, are distributed. This method was used to allow the researcher to better capture deeper insight into the participants' real perceptions and opinion on benefit sharing of agribusiness development (MacMillan *et al.*, 2002). (Annex Table B 1 for the FGD interview guide).

The key informants representing the agribusiness developers were drawn from three oil palm plantations operating in the districts of Aboisso including company X located in Toumanguié (national private company), and two companies represented as Y and Z located in Ayénouan and Soumié, respectively, which are transnational corporates. While the local government authorities were representatives of the District Department of Agriculture and local administrators. The key informant interviews were done to assess the benefit sharing approach from an institutional, policy and practical point of view. Each key informant interview was conducted for about 30-45 minutes, following participants' consent.

Secondary data was drawn from existing literature that shows dynamics in agribusinesses and benefit sharing. Furthermore, an existing benefit sharing framework was adopted from the field of biodiversity management to guide the assessment of the effectiveness of benefit sharing approach employed by agribusiness developers in the study area. The available literature enabled the researchers to understand the views of different stakeholders (rural community, local government authorities, and agribusiness developers) on the ABS of oil palm plantation investment in South Comoé.

The views of the various stakeholders that were recorded (with their permission) during the key informant interviews and FGDs were transcribed and coded manually for data analysis (Bailey, 2008; Saldana, 2009). A folder was created for each area where the data collected was stored. Dates and names were assigned to each folder. The identities of agribusiness investors who participated in the research have been concealed to maintain confidentiality. Furthermore, pseudonyms have been assigned to participants in this paper to mask their real identifications. The findings which emerged from the interviews and FGDs have been presented in the form of descriptive narratives. The data were presented using primary quotes in the analysis of results section. The following themes emerged from the analysis of results: the involvement of grassroot communities in land acquisition and benefit sharing negotiations process, and the integration of equity in benefit sharing policies.

#### **3** Results

The field data collected is presented and analysed in this section under broad themes with respect to the alignment of the BSM in the establishment of oil palm plantation in South Comoé to the ABS Protocol. These include assessing (i) attainment of consent, (ii) participants' satisfaction with the benefits derived from the establishment of large oil palm plantations and the modalities of benefit sharing and (iii) the policy framework guiding benefit sharing with respect to the acquisition of communal land for large-scale commercial farming.

## 3.1 Prior informed consent before accessing land for large-scale/long-term commercial farming of oil palm

The feedback of FGDs participants (N = 36) indicated that the ABS criteria were largely ignored with respect to the establishment of oil palm plantations in South Comoé across the 10 villages visited within the districts of Aboisso, Bonoua and Adiaké. Participants generally agreed that the consents of community members were seldom obtained before the acquisition of land for the establishment of oil palm plantations by the agribusiness corporates in South Comoé region. On the other hand, the participants revealed that the investors of oil palm plantations rather preferred to obtain consent from community leaders and locally elected authorities. In fact, the participants raised the issue of the general lack of transparency in the land negotiation process and the terms of the contract were only known by the community leaders and the elected local authorities. For instance, Harouna, a community member of Bonoua mentioned that not all smallholders who owned a plot of land were consulted in the process of land acquisition for oil palm plantations.

"In Bonoua, communal lands were traditionally allocated to rural communities. However, agribusiness developers usually only sought the consent of lineage elders to access the communal land to establish their plantations." (Harouna, interview in Bonoua, July 2019).

Certain rural community leaders in Aboisso expressed similar opinions as the rural community member of Bonoua regarding the exclusion of smallholders in the land negotiation process. For instance, a community leader who was interviewed in Adaou in the district of Aboisso during the FGDs confirmed that land acquisitions of land for oil palm production were negotiated with lineage elders only. In addition, Amalaman, a community leader stated:

"Agribusiness for oil palm production was welcomed on communal lands due to the potential benefits it brought in Aboisso. You know the agribusiness developers promised to construct hospitals, schools and roads such that we did not have to worry. The agribusinesses also supposed to play a role in supplying young palm trees, and fertilisers to grow palm plantations. That was when the lineage elders ceded land for commercial farming to them". (Amalaman, FGDs in Adaou, July 2019).

## 3.2 Participants' satisfaction with the benefits derived from the establishment of large oil palm plantations and the modalities of benefit sharing

Community members were questioned about their satisfaction with the benefit sharing approach. Local communities in the districts of Aboisso, Bonoua, Adiaké and other neighbouring villages indicated that they were not satisfied with how the benefits from the investment of oil palm plantation in their region were shared, despite the fact that some of them had individual land contracts with agribusiness investors. Such contracts in the region were called "domientche" practices, literally interpreted as "plant and share". According to participants the smallholders brought land to agribusiness developers and received money proportional to the value of the land after deduction of the production costs. Many participants interviewed also expressed their dissatisfaction in terms of the benefit sharing arrangements on the fact that local community members were excluded from the negotiations. Bohoussou for example mentioned:

"Smallholders were not able to clearly participate in the benefit sharing arrangement from the establishment of oil palm plantation. You know if the situation persisted, smallholders' households would have been affected negatively". (Bohoussou, interview in Bonoua, July 2019).

Even Adjéi, Koffi and Adoubi, community members in Bonoua, Yapokro and Assalékro noted during a key informant interview and FGDs that the benefits obtained from oil palm plantations were only enjoyed by a few elected elites and lineage elders who had access and control over land. The views of Adjéi, Koffi and Adoubi were explained in the quotes below:

"There was no benefit from oil palm investments. Very often agribusiness development benefited a few elected authorities and community leaders, while many smallholders were suffering. Such injustice generated negative attitudes among local community members of Aboisso, Bonoua towards agribusiness developers. As they represented the main users of communal land with more than 30,000 hectare of palm oil production." (Adjéi, interview in Bonoua, July 2019).

"Some family leaders, elected authorities and village leaders selected members of communities to benefit from the oil palm investments based on lineage". (Koffi, FGDs in Yapokro, July 2019). "Sometimes only households who were directly involved with agribusinesses could benefit. For example, selling their produce to large scale agribusinesses received benefits from agribusiness investors through incentives, training and access to fertilisers". (Adoubi, interview in Assalékro, August 2019).

In addition, Assoa mentioned that there were issues with marketing regulations that affected smallholders adversely. For instance, when market prices collapsed because of excess supply of palm oil, smallholders did not get compensated for any loss.

"Through privatisation of state-owned companies, the palm oil sector experienced overproduction which led to a drop in prices. Smallholders did not receive any compensation from agribusiness investors for the loss of our palm produce". (Assoa, interview in Aboisso, July 2019).

Niamian and Tamikolo (community members of Assouba and Toumanguié villages) gave more insight on the local communities' dissatisfaction with the benefit sharing approach. Both of them related the issue as far back as the colonial era. Niaman talked about the persistence of injustice in the benefits sharing from agribusiness in South Comoé as follows:

"Rural communities were ignored in the benefit sharing from land acquisition for commercial farming under the colonial administration. The arrangement was made behind closed doors and that was disturbing to the community members. If communities around palm plantation production could get better financial support, they would support the plantation investment initiative". (Niamian, FGD in Assouba, July 2019).

Tamikolo mentioned," many smallholders' livelihoods depended on 'domientchie' practices. Most of the communities in Ayénouan, Yapokro, Soumié, and Assalékro and Toumanguié villages around the plantation estates received a little financial support from the oil palm investors that only benefited local elected authorities and few family heads. It also remains a question whether financial support towards few family heads could make up the loss of land". (Tamikolo, interview in Toumanguié, August 2019).

The expression of local communities' dissatisfaction because of the unequal benefit sharing approach was evidence in the situation of conflict that was experienced in the South Comoé region. For instance, Prégnon in Adiaké noted that when community members realised that they were cheated in the benefit sharing process, they built up resistance against the agribusiness investors.

"During oil palm production, many smallholders under contract realised that they earned less money than expected. The situation led to conflicts because agribusiness developers with bank loans tried to make profit at the expense of smallholders. This made smallholders to start delivering their products to other agribusiness developers with whom no contracts existed". (Prégnon, interview in Adiaké, August 2019).

It could therefore be said that the exclusion of community members in the negotiation process for land acquisition and establishment of oil palm plantation in South Comoé and poor benefit sharing structures caused a general dissatisfaction amongst community members.

# 3.3 The existing policy framework guiding benefit sharing from the exploitation of land resources

The local government authorities and agribusiness investors that were interviewed noted the absence of a legal framework that defined provisions and modalities for benefit sharing with respect to land acquisition for agribusiness development. According to agribusiness developers in the district of Aboisso, policies had to encourage inclusive participation during negotiation of both individual and communal land holders for agribusiness development. The participants were interrogated on the existence of laws that govern land acquisition and benefit sharing and how they were implemented. The following responses were captured:

"There was the need of clear laws on how land was transferred to agribusiness investors. The sharing of profits had to be done through a well signed document in the name of each community member or the family who owned the land. Having a clear contract would enhance investor's commitment towards respecting the terms of the benefits sharing". (Agribusiness Developer, Interview in Aboisso, July 2019).

Similarly, a government official highlighted the lack of policy in land acquisition guiding benefit sharing as a hindrance to agribusiness development:

"I think that rural communities were not getting fair benefits because the benefits were largely skewed in favour of the agribusiness corporates. The distribution of benefits needed policy that was viable taking into account the interests of smallholders". (Interview with government official in Bonoua, July 2019).

Another government official in Adiaké (Péléforo) opted that policy guiding benefit sharing was needed in Cote d'Ivoire to ensure fairness in the distribution of benefits:

"The lack of fair benefit sharing was because of unclear policy that created a network of relationship involving local elected authorities in land acquisition and distribution of benefits in a way that it gave them more advantages than rural community members". (Interview in Adiaké, August 2019). The quotes above highlight the absence of a clearly defined policy which guided land acquisition and benefits sharing between agribusiness developers and smallholders. Due to this lack of clear policies, agribusiness developers in oil palm plantations failed to engage with local communities appropriately to achieve equitable benefit sharing systems.

## 4 Discussion

The study revealed inadequacies in the engagement of communal landowners in the districts of Aboisso, Bonoua, Adiaké and other neighbouring villages in the land acquisition negotiations. The interview participants noted that mostly traditional leaders and elected authorities were engaged in land acquisition negotiation process which probably explained the general dissatisfaction of communal land users or owners about the benefit sharing approach in South Comoé. This outcome was of great concern since the terms and conditions which included how the owners of the land would be compensated were defined and negotiated at the level of land acquisition negotiation. Other studies (Toft, 2013; Holtslag-Broekhof et al., 2016) had highlighted injustices that resulted from poor and inequitable approaches adopted during the negotiation of land for agribusiness investment, thus corroborating the results of this study.

Participants' revelation suggested that social and cultural inequality and lack of policy framework were among the factors accounting for the unequal distribution of benefits. Social and cultural inequality which emerged from the study included lack of inclusive participation in the land acquisition and benefit negotiation phase. Participants' account illustrated how preferences for the negotiation of land and benefits were extended to a few elitist classes in South Comoé, traditional authorities and in some cases family heads. This approach appeared problematic because it was unlikely that the benefits would trickle equitably from those engaged down to the rest of the community members. The silence of the majority of the community members in the land acquisition and benefit sharing stage therefore increased the probability of them receiving unfair benefits from the investment (Hicks, 2020).

Challenges affecting equitable benefit sharing process which emerged from the findings include: institutional issues, poor governance, and lack of adequate policy. For instance, agribusiness developers noted that unsecured land tenure system poses a challenge to identify legitimate community members with tenure rights. Such situations generated conflicts between community members who felt sidelined in the benefit negotiation process and the agribusiness investors (Colin & Ayouz, 2006). Similarly, from the local government officials' perspectives unclear customary land rights generated tension between community members and agribusiness investors. According to the local government officials, weaknesses in the land acquisition policy accounted for fuzzy benefit sharing terms. In addition, the local government officials argued that their neglect in the benefit sharing arrangements and decision making, hindered their intervention to protect the rights of smallholders. The various accounts of the government officials and local community members therefore suggested that conflicting land tenure systems, policy issues, institutional arrangements, poor governance, and political manoeuvre constituted obvious challenges forestalling equitable benefit sharing. Hence, the field results concurred with the findings of Wangu et al. (2020) that benefit sharing from agribusinesses did not reach the most vulnerable land users in the community. Unequal benefit sharing could affect smallholders' food security as noted by Olounlade et al. (2020) in a study conducted in Benin. This study illustrated that agribusiness development may have contributed in widening the socio-economic gaps in Africa. The iniquity in benefit sharing experienced in the study area was not an isolated case since other developing nations including Mexico, South Africa and Nigeria had also undergone a similar experience with regard to ABS (Lucas et al., 2013). The trend in unequal benefit sharing experienced across developing nations therefore generated a concern about land acquisition systems and the implications for local communities' access to adequate benefits.

The findings further revealed that benefit sharing arrangements remained controversial because there was a lack of emphatic collaboration among stakeholders in land negotiations and distribution of benefits. Thus, the principle of good governance including accountability, equity and responsibility suggested by Machado et al. (2017) and Keping (2018) seemed not to be adequately practiced in the study area. Moreover, the mode of benefit sharing arrangements practiced in South Comoé contravened global and well recognised benefit sharing standards such as the Nagoya Protocol of 12<sup>th</sup> October 2014 which emphasised the necessity for an equitable benefit sharing approach (Morgera et al., 2014). However, the inequitable benefit sharing approach was not only detrimental to the disadvantaged communities but also affected the growth of agribusiness development in South Comoé since it spiked conflict. Therefore, resolving issues related to governance and equitable benefit sharing was key to mitigating conflicts between agribusiness investors and community actors.

Policy constraints emerged as a key obstacle to equitable benefit sharing in agribusiness investment in South Comoé. The land reform policies of Cote d'Ivoire did not clearly define community participation in land acquisition process and benefits distribution as such collaborative benefit sharing arrangements became problematic (Burnod et al., 2010). The results therefore indicated that though Cote d'Ivoire was a successful country in agribusiness establishment (cocoa, palm oil, and coffee product) most of the benefits were enjoyed by agribusiness operators. National land policies required the full consultation of rural landowners or occupiers over the expression of interest to acquire the land for investment purposes (German et al., 2013). These authors also showed that there were no legal laws in Ghana which defined the terms for compensation for the loss of livelihoods. The views of smallholders suggested that there may be a lack of adequate policy framework for equitable participation in land acquisition and benefit sharing as was noticed also in the study by German et al. (2013). Although the view of smallholders pertained to large scale and smallscale farmers it was necessary to understand how local communities benefited from the loss of land used for e.g. oil palm plantations. The findings therefore confirmed the assertion by Koutouki et al. (2011) that there was inequality in the benefit sharing approach in agribusiness establishment to the advantage of agribusiness developers. Grajales (2018) argued that although agribusiness investors had interacted with smallholders for so many years, they did not honour the promise to develop the land in a partnership arrangement, as well as their promise of the provision of infrastructural development such as the construction of roads and other social amenities.

## 5 Conclusions

This study set out to investigate the alignment of benefit sharing mechanisms practiced in South Comoé with internationally recognised ABS frameworks. The rationale for the study was based on the argument that benefits from the use of communal or private land was not equitably distributed amongst the community members and those exploiting the land. Furthermore, knowledge on land acquisition and benefit sharing in agribusiness research was very limited thus leaving a lot of unanswered questions. Using FGDs and key informant interviews, the study investigated how land acquisition and benefits from the establishment of large-scale oil palm plantation in the districts of Aboisso, Bonoua and Adiaké were negotiated. The outcome of the research led to the following conclusions:

The findings revealed uneven benefits from agribusiness investment between agribusiness developers and rural communities. Empirical evidence denoted that mostly elected elites and lineage elders who own rights to land were engaged in land acquisitions thus sideling a vast majority of the members of local communities. This exclusive tendency turned to affect the compensation that local community members were entitled to in exchange for the loss of communal land which was their main source of livelihood. The unevenness in the distribution of benefits was largely attributed to a lack of institutional, legal or policy frameworks which should define the modalities for the distribution of benefits from agribusiness investments in rural communities. The exclusion of the majority of rural community members from the land acquisition negotiation process and subsequently of the distribution of benefits triggered conflict in different parts of SSA including South Comoé. The conflicts disrupted the smooth investment of agribusiness and the generation of profits, thus implying that unequal distribution of benefits from agribusiness affected both investors and rural communities adversely. Therefore, policies and practical measures should be put in place to ensure fairness in the negotiation of land and distribution of benefits. The study contributed to existing debates about the marginalisation of local communities in BSMs arrangements and implementation in the agribusiness sector.

The outcomes of the study have led to the following recommendations:

- Good governance practices including transparency, inclusive participation, honesty which were strongly advanced as constraints to equitable benefit sharing, should be strictly adhered to by all parties in the process of land acquisition and benefits negotiation.
- Concrete tenure arrangements should be made both culturally and administratively to ease the identification of the right parties to be consulted in land negotiation and benefit sharing processes.
- Government policies which served as frameworks for the sustainable management of land should clearly articulate the involvement of stakeholders in land acquisition and benefit sharing process at all levels.
- Government officials should ensure that policy guidelines on equitable distribution of benefits accruing from the use of communal land for the establishment of agribusiness were adequately implemented.
- Agribusiness investors should adhere to both statutory and customary laws in the negotiation of land and benefits during the initial planning phase of the business establishment.
- Community members should work with agribusiness investors and government officials in creating an enabling environment for the establishment of agribusiness in a manner that resulted in mutual satisfaction.

#### Conflict of interest

The authors declare that there is no conflict of interest.

## References

- Abubakari, M., Twum, K. O., & Asokwah, G. A. (2020). From conflict to cooperation: The trajectories of large scale land investments on land conflict reversal in Ghana. *Land Use Policy*, 94, 1–14. doi:10.1016/j.landusepol. 2020.104543.
- Adonteng-Kissi, O. (2017). Poverty and mine's compensation package: Experiences of local farmers in Prestea mining community. *Resources Policy*, 52, 226–234. doi: 10.1016/j.resourpol.2017.03.007.
- Aka, B. F. (2007). Gender, Land Access and Rural Poverty in Cote d'Ivoire.*International Journal of Applies Econometrics and Quantitative Studies*, 4(1), 21–36.
- Akrong, R., Mbogoh, S. G., & Irungu, P. (2020). Youth agripreneurship in the horticultural value-chain: The case of small-scale mango farmers in Southern Ghana.*African Development Review*, 3, 68–77. doi:10.1111/1467-8268. 12483.
- Alemagi, D., & Kozak ,R. A. (2010). Illegal logging in Cameroon: Causes and the path forward. *Forest Policy* and *Economics*, 12(8), 554–561. doi:10.1016/j.forpol. 2010.07.008.
- Amon, D., Soro, E. D., & Traore, D. (2015). Evaluation de l'infestation des Loranthaceae sur les ligneux des agroecosystems de la region du Sud-Comoe (Cote d'Ivoire). *International Journal of Biological and Chemical Sciences*, 9(4), 1822–1834. doi:10.4314/ijbcs.v9i4.8.
- Amungo, E. (2020). The rise of the African Multinational Enterprise (AMNE): The lions accelerating the development of Africa. Cham: Springer Nature. 298 p. doi: 10.1007/978-3-030-33096-5.
- Bailey, J. (2008). First steps in qualitative data analysis: transcribing. *Family Practice*, 25 (2), 127–131. doi: 10.1093/fampra/cmn003.
- Balié, J., Del Prete, D., Magrini, E., Montalbano, P., & Nenci, S. (2019). Does trade policy impact food and agriculture global value chain participation of sub-Saharan African countries? *American Journal of Agricultural Economics*, 10 (3), 773–789. doi:10.1093/ajae/aay091.
- Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling *Sociological Methods & Research*, 10(2), 141–163. doi: 10.1177/004912418101000205.

- Buck, M., & Hamilton, C. (2011). The Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization to the Convention on Biological Diversity. *Review of European Community & International Environmental Law*, 20 (1), 47–61. doi:10.1111/j.1467-9388.2011.00703.x.
- Burnod, P., Colin, J. P., Anseeuw, W., Cheyns, E. Clerc J., Faure, G., &. Vognan, G. (2012). Grands investissements agricoles et inclusion des petits producteurs: leçons d'expériences dans 7 pays du sud. Rome: FAO.
- Cernea, M. M. (2008). Compensation and benefit sharing: Why resettlement policies and practices must be reformed. *Water Science and Engineering*, 1 (1), 89–120. doi:10. 1016/S1674-2370(15)30021-1.
- Chamberlain, W., & Anseeuw, W. (2019). Inclusive businesses in agriculture: Defining the concept and its complex and evolving partnership structures in the field. *Land Use Policy*, 83, 308–322. doi:10.1016/j.landusepol.2019. 02.008.
- Chauveau, J. P. (2000). The land tenure question in Côte d'Ivoire: A lesson in history. *Issue Paper - Drylands Pro*gramme, International Inst. for Environment and Development, 95, 1–28.
- Cock, M. J., van Lenteren, J. C., Brodeur, J., Barrat, B. I., Bigler, F., Bolckmans, K., & Parra ,J. R. (2010). Do new access and benefit sharing procedures under the convention on biological diversity threaten the future of biological control? *BioControl*, 55 (2), 199–218. doi:10.1007/ s10526-009-9234-9.
- Colin, J. P. (2004). Le marché du faire-valoir indirect dans un contexte africain. Éléments d'analyse. *Economie Rurale*, 282, 19–39. doi:10.3406/ecoru.2004.5492.
- Colin, J. P., & Ayouz, M. (2006). The development of a land market? Insights from Côte d'Ivoire. *Land Economics*, 82(3), 404–423. doi:10.3368/le.82.3.404.
- De Jonge, B. (2011). What is fair and equitable benefitsharing? *Journal of Agricultural and Environmental Eth ics*, 24, 127–146.doi:10.1007/s10806-010-9249-3.
- De Vos, A. S. (2011). *Reserach at grass roots: for the social sciences and human sciences professions*. Pretoria: Van Schaik.
- Debonne, N., van Vliet, J., Heinimann, A., & Verburg, P. (2018). Representing large-scale land acquisitions in land use change scenarios for the Lao PDR.*Regional Environmental Change*, 18, 1857–1869.doi:10.1007/s10113-018-1316-8.

- Dutfield, G. (2002). Sharing the benefits of biodiversity: is there a role for the patent system. *Journal of World Intellectual Property*, 5(6), 865–898.
- German, L., Schoneveld, G. & Mwangi, E. (2013). Contemporary processes of large-scale land acquisition in sub-Saharan Africa: legal deficiency or elite capture of the rule of law? *World Development*, 48, 1–18. doi:10.1016/j. worlddev.2013.03.006.
- Grajales, J. (2018). L'agro-business au village. La notion d'accaparement de terres à l'épreuve du cas ivoirien. *Politique Africaine*, 3(151), 155–177.
- Hicks, J. (2020). Generating conditions of strong social support for wind power: insights from community-owned wind energy projects. *Australasian Journal of Environmental Management*, 27 (2), 137–155.
- Holtslag-Broekhof, S. M., Van Marwijk, R., Beunen, R., & Wiskerke, J. S. C. (2016). Perceived (in)justice of public land acquisition. *Journal of Agricultural and Environmental Ethics*, 29, 167–184. doi:10.1007/s10806-015-9594-3.
- Joshi, A. S., Ganjiwale, J. D., Varma, J., Singh, P., Modi, J. N.,& Singh, T. (2017). Qualitative assessment of learning strategies medical students using focus group discussion and in-depth interviews.*International Journal of Applied* and Basic Medical Research, 7 (1), 33–37. doi:10.4103/ ijabmr.IJABMR\$\textbackslash\$144\$\textbackslash\$17.
- Kamski, B. (2016). The Kuraz sugar development project (KSDP) in Ethiopia: between sweet visions and mounting challenges. *Journal of Eastern African Studies*, 10(3), 569–580. doi:10.1080/17531055.2016.1267602.
- Keping, Y. (2018). Governance and good governance: A new framework for political analysis.*Fudan Journal of the Humanities and Social Sciences*, 11(1), 1–8. doi:10.1007/ s40647-017-0197-4.
- Koutouki, K., & Von Bieberstein, K. R. (2011). The Nagoya Protocol: Sustainable access and benefits-sharing for indigenous and local communities. *Vermont Journal of Environmental Law*, 13(3), 513–536.
- Laird, S. A., & Wynberg, R. P. (2016). Locating responsible research and innovation within access and benefit sharing spaces of the Convention on Biological Diversity: The challenge of emerging technologies.*NanoEthics*, 10(2), 189–200. doi:10.1007/s11569-016-0268-z.
- Langer, A. (2010). Côte d'Ivoire's elusive quest for peace. No 11, Claverton Down: University of Bath, Centre for Development Studies (CDS), Bath.

- Loris, A. (2018). The politics of agribusiness and the business of sustainability.*Sustainability*, 10(15), 1–21. doi:10.3390/su10051648.
- Lucas, J. C., Schroeder, D., Chennells, R., Chaturvedi, S., & Feinholz, D. (2013). In *Sharing traditional knowledge: Who benefits? Cases from India, Nigeria, Mexico and South Africa.* In: Benefit Sharing. Springer, Dordrecht. pp. 65-93. doi:10.1007/978-94-007-6205-3\$\textbackslash\$4.
- Luttrell, C., Loft, L., Gebara, M. F., Kweka, D., Brockhaus, M., Angelsen, A., & W. D Sunderlin. (2013). Who should benefit from REDD+? Rationales and realities. *Ecology* and Society, 18 (4), 52. doi:10.5751/ES-05834-180452.
- Mac Clay, P., & Feeny R. (2018). Analyzing agribusiness value chains: a literature review.*International Food and Agribusiness Management Review*, 22(1), 31–46. doi:10. 22434/IFAMR2018.0089.
- Machado Filho, C. P., Caleman, S. M. D. Q., & Cunh, C. F. D. (2017). Governance in agribusiness organizations: challenges in the management of rural family firms. *Revista de Administração (São Paulo)*, 52(1), 81–92. doi: 10.1016/j.rausp.2016.09.004.
- MacMillan, D. C., Philip, L., Hanley, N., & Alvarez-Farizo, B. (2002). Valuing the non-market benefits of wild goose conservation: a comparison of interview and group-based approaches. *Ecological Economics*, 43 (1), 49–59. doi: 10.1016/S0921-8009(02)00182-9.
- Martin, N., & Rice, J. (2019). Coal seam gas projects: proposed policy model for compensation and benefits sharing. *Resources Policy*, 43(1), 1–10. doi:10.1016/j.resourpol. 2019.101458.
- Mdee, A., Ofori, A., Chasukwa,M., & Manda, S. (2020). Neither sustainable nor inclusive: a political economy of agricultural policy and livelihoods in Malawi, Tanzania and Zambia. *The Journal of Peasant Studies*, 48(6), 1260– 1283. doi:10.1080/03066150.2019.1708724.
- Morgera, E., Tsioumani, E., & Buck, M. (2014). Unraveling the Nagoya Protocol: a commentary on the Nagoya Protocol on access and benefit-sharing to the convention on biological diversity. Martinus. Brill/ Nijhoff publishers.
- Mwadzingeni, L., Mugandani, R., & Mafongoya, P. (2020). Localized institutional actors and smallholder irrigation scheme performance in Limpopo province of South Africa. *Agriculture*, 10(9), 1–17. doi:10.3390/ agriculture10090418.

- Olounlade, O. A., Li ,G. C., Kokoye, S. E. H., Dossohoui, F. V., Akpa, K. A. A., Anshiso, D., & Biaou, G. (2020). Impact of Participation in Contract Farming on Simallholder Farmers' Income and Food Security in Rural Benin: PSM amd Late Parameter Combined. *Sustainability*, 12 (3), 1–19. doi:10.3390/su12030901.
- Oxford Business Group. (2021). The report Agriculture in Africa 2019. January 28. Available at https://oxfordbusinessgroup.com/sites/default/files/blog/ specialreports/949525/africa\$\textbackslash\$2019\$\ textbackslash\$special\$\textbackslash\$report.pdf. Last accessed. 23.10.2020.
- Pemunta, N. V. (2018). The logic of benevolent capitalism: the duplicity of Sithe Global sustainable oils Cameroon land grab and deforestation scheme as sustainable investment. *International Journal of Global Environmental is*sues, 17(1), 80–109. doi:10.1504/IJGENVI.2018.090655.
- Rabitz, F. (2017). Access without benefit-sharing: design, effectiveness and reform of the FAO seed treaty. *International Journal of the Commons*, 11 (2), 621–640. doi: 10.18352/ijc.736.
- Rist, L., Feintrenie, L. & Levang, P. (2010). The livelihood impacts of oil palm: smallholders in Indonesia. *Biodiversity and Conservation*, 19(4), 1009–1024. doi: 10.1007/s10531-010-9815-z.
- Robertson, B., & Pinstrup-Andersen, P. (2010). Global land acquisition: neo-colonialism or development opportunity? *Food Security*, 2(3), 271–283. doi:10.1007/s12571-010-0068-1.
- Saldana, J. (2009). The coding manual for qualitative research. Los Angeles, London, New Delhi, Singapore, Washington DC: Sage.
- Sholihah, P. I., & Chen, S. (2020). Improving living conditions of displacees: A review of the evidence benefit sharing scheme for development induced displacement and resettlement (DIDR) in urban Jakarta Indonesia. World Development Perspectives, 20, 1–12. doi:10.1016/j.wdp. 2020.100235.
- Schroeder, D. (2007). Benefit sharing: it's time for a definition.*Journal of Medical Ethics*, 33 (4), 205–209. doi: 10.1136/jme.2006.016790.
- Sone, P. M. (2012). Conflict over landownership: The case of farmers and cattle graziers in the northwest region of Cameroon. *African Journal on Conflict Resolution*, 12(1), 83–102.
- Suyanto, S. (2007). Underlying cause of fire: different form of land tenure conflicts in Sumatra. *Mitigation and Adaptation Strategies for Global Change*, 12(1), 67–74. doi:10.1007/s11027-006-9039-4.

- Toft, K. H. (2013). Are land deals unethical? The ethics of large-scale land acquisitions in developing countries. *Journal of Agricultural and Environmental Ethics*, 26, 1181–1198. doi:10.1007/s10806-013-9451-1.
- Tshidzumba, R. P., Chirwa, P. W., & Babalola, F. D. (2018). Communities' perceptions of benefit-sharing mechanisms for forest-based land reform models in South Africa. *Southern Forests: a Journal of Forest Science*, 80 (4), 381– 389. doi:10.2989/20702620.2018.1463190.
- Tully, S. (2003). The Bonn guidelines on access to genetic resources and benefit sharing. *Rev. of European, Comparative & International Environmental Law*, 12 (1), 84–98.
- Tysiachniouk, M. S., & Petrov, A. N. (2018). Benefit sharing in the Arctic energy sector: Perspectives on corporate policies and practices in Northern Russia and Alaska. *Energy Research & Social Science*, 39, 29–34. doi:10.1016/ j.erss.2017.10.014.
- Wangu, J., Mangnus, E., & van Westen, A. C. M. (2020). Limitations of Inclusive Agribusiness in Contributing to Food and Nutrition Security in a Smallholder Community. A Case of Mango Initiative in Makueni County, Kenya. *Sustainability*, 12(14), 1–23. doi:10.3390/su12145521.
- Warinda, E., Nyariki, D. M., Wambua, S., Muasya, R. M., & Hanjra, M. A. (2020). Sustainable development in East Africa: impact evaluation of regional agricultural development projects in Burundi, Kenya, Rwanda, Tanzania, and Uganda. *In Natural Resources Forum*, 44(1), 3–39. doi:10.1111/1477-8947.12191.
- World Bank . (2017). Consensus, confusion, and controversy selected: Land reform issues in sub-Saharan Africa.World Bank Working Paper No. 71. Washington: The World Bank.
- Worou, O. N., Tondoh, J. E., Kone A. W., Gaiser, T., Guei A. M., & Edoukou, F. E. (2019). Conventional versus agroecological intensification:assessing the effect of conservation agriculture in maize cropping systems with DSSAT in Cote d'Ivoire (West Africa). *Regional Environmental Change*, 19(6), 1725–1736. doi:10.1007/s10113-019-015111-w.
- Zahouli, J. B., Koudou, B. G., Muller, P., Malone, D., Tano, Y., & Utzinger, J. (2017). Effect of land-use changes on the abundance, distribution, and host-seeking behaviour of Aedes arbovirus vectors in oil palm-dominated landscapes, southeastern Cote d'Ivoire. *PloS One*, 12(12), 1–26. doi:10.1371/journal.pone.0189082.
- Zoomers, A. (2011). Introduction: Rushing for land: Equitable and sustainable development in Africa, Asia and Latin America.One *Development*, 54(1), 12–20. doi:10.1057/ dev.2010.97.