Enhancing Sustainable Management of Public Natural Forests Through Public Private Partnerships in Kenya

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Abstract

Many countries are fast implementing forest conservation Public Private Partnerships (PPPs) as an innovative conservation approach. However, with the growing human needs, forest management challenges, especially limited funding for forest conservation are increasing the need for lessons on Public Private Partnerships (PPPs) in many developing countries. This study addressed this challenge from the perspective of sustainable forest management using literature review and document content analysis. Results from Kenya substantiate that despite the complex development challenges, public natural forests provide many benefits that can be delivered to citizens through Public Private Partnerships (PPPs). Toward actualizing these partnership possibilities, the government has developed policies and established institutions to coordinate and enhance their implementation. These results imply the presence fairly stable conditions required for building trust and confidence amongst private partners involved in the governance of public natural forests. However, there are some significant challenges that should be addressed if PPPs are to be applied in forest management as truly a transformative conservation approach.

Keywords

sustainable forest management, public goods, Public Private Partnerships, social contracts, value for money

Introduction

Public Private Partnership (PPPs) typically defined as long-term agreements between the government and a private entity to provide goods and services to the public in an arrangement where both parties share management responsibility and risks are gaining recognition around the globe over the classically structured institutions of forest management as momentum toward sustainable forest management builds. These agreements are also increasingly being applied in the management of natural forests which provide many public goods and services (Bäckstrand, 2006; Bernstein & Cashore, 2012; Bitzer, 2010). In a typical partnership arrangement, the skills possessed by both the public and private sector entities are shared in order to deliver public goods to citizens. Most public private partnerships are funded through partnerships between the government together with one or more private sector companies. Contractual arrangements between the public and private sector for service delivery have a long history of implementation, especially in large scale infrastructure projects across the world, with their implementation increasingly being supported by clearly developed guidelines, including risk sharing criteria. As a result, public private partnerships have gained recognition and adaptability, especially after the United Nations World Summit on Sustainable Development of 2002 where the need for collaborative approaches was emphasized (Sathaye et al., 2007). In fact, the World Bank (2005) is rather deliberate on the need for collaborative arrangements and has called for mobilization of private sector investments in infrastructure as a way of boosting sustainable development.

Unfortunately, in many developing countries, forest-based public private partnerships remain largely unexplored. Moreover, research reports show that existing forest-based partnerships have only been sparsely examined with evidence on their long-term implementation remaining largely theoretical and inconclusive (Popoola et al., 2020). Consequently, policymakers and forest managers in most developing countries are unable to effectively apply forest-based public private partnerships in their contexts (Popoola et al., 2020). It is on this backdrop that there is the need for studies to support the advent the private sector as a key enabler for sustainable forest management in the context of natural forests.

In Kenya, there is a laid down legal and policy framework on implementation of public private partnerships. The
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Public natural forests are increasingly gaining public attention as vital sources of public goods and services (Ghosh & Sinha, 2016; Keenan et al., 2015; Schnell et al., 2015). Forests resources are home and food to about 80% of all terrestrial species of flora and fauna. Forest resources provide raw material for many human activities which generate and sustain livelihoods (Assessment, 2005; Kubiszewski et al., 2013). The Millennium Ecosystem Assessment report of 2005 is rather overt on the beneficial aspects of forests and establishes a link between forests and the promotion of human well-being and happiness in view of their significant “safety net” and “gap-filling” role. Other studies have supported these findings by highlighting the recreational, cultural, spiritual, and esthetic services provided by forests (Li et al., 2019; Nilsson, 2007; Ohtsuka et al., 1998; Tryvainen et al., 2014). Furthermore, forests provide compounds that are used in pharmaceuticals and nutraceuticals (Holmbom et al., 2007; Lindequist et al., 2005; Uhari et al., 1996). Forest food adds nutrients that people might not get and may help people survive in famine, war, or drought (Colfer et al., 2006; Häkkinen et al., 1999; Johns & Maundu, 2006; Knekt et al., 2002 & Vinceti et al., 2008). These health benefits have a role in fulfilling certain domains of human well-being, as listed by McGillivray and Clarke (2008), Hagerty et al. (2001), Cummins et al. (1994), and Cummins (1996). Forests are thus central to the socio-economic development of many countries supporting some 1.6 billion people (IISD, 2021). However, deforestation and the unsustainable forest resource utilization occasioned by governance failures and other challenges continue to threaten the ability of these forests to contribute to livelihoods in the process of sustainable development. Thus, there is the need for exploring the emerging forest management approaches with the aim of testing their applicability in a wide range of conditions.

Public private partnership (PPP) is one of the emerging approaches that is increasingly being promoted as a way of enhancing the delivery of forests benefits to citizens and as a solution to many forest management challenges. Even though globally there is no single universally accepted definition for public private partnership, but as indicated earlier, these partnerships are long term contractual arrangements for service delivery between a public and a private entity (Park et al., 2018; World Bank, 2017). In these arrangements, the principle functions associated with the private party may include to design a project, to build or rehabilitate, to finance, or to maintain. The contract nomenclature is linked to these highlighted functions. For example, Design-Build-Operate-Maintain (DBFOM), Design-Build-Finance-Operate (DBFO), Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), Build-Transfer-Operate (BTO), Rehabilitate-Operate-Transfer (ROT), concession, management contract...
where the state retains asset ownership and capital expenditure is the public responsibility whereas operation and maintenance is handled by the private party and last 3 to 5 years (Park, 2018; World Bank, 2017). In order to deliver services or goods, the private party creates a partnership company called a Special Purpose Vehicle (SPV) as shown in Figure 1. In this arrangement, the payment for provided public goods can be achieved in two ways; either the user pays mechanism or government pays. However, the user pays mechanism has been largely discounted as it may encourage free-riders if property taxes are not adjusted accordingly (Park, 2018; World Bank, 2017).

Historically, public private partnerships have long been advocated as organizational solutions to societal problems that call for the joint action of government, business, and civil society (Brinkerhoff & Brinkerhoff, 2011). Globally, they were widely established (particularly in the 1990s) as key collaborative arrangements to meet governmental obligations while reducing public sector expenditure through delegation of responsibilities for supplying public goods and services to the private sector (Khanom, 2010; Osborne, 2000). Increasingly, these contractual arrangements are promoted as a means to enhance governance effectiveness with increased fiscal flexibility for the public sector, increased efficiency gains, provision of quality service, and reforming the public sector (Bashar et al., 2021; Park, 2018; World Bank, 2017). The type of contractual partnership established often depends on government priorities at a given time (Bovaird, 2004; Osborne, 2000). Public private partnerships are increasingly becoming popular because through collaboration with the private sector, the government acquires access to established networks for complementary resource sharing. Moreover, studies show that the governments may choose to collaborate with particular types of actors for specific reasons related to the substantive purpose of the partnership (Brinkerhoff & Brinkerhoff, 2011).

Interestingly, existing literature suggests that more contractual arrangements between the public and private sector are increasingly emerging in natural resource management, especially in forestry where these arrangements are being applied to supply public goods and in efforts to meet global environmental challenges (Bäckstrand, 2006; Bernstein & Cashore, 2012; Bitzer, 2010). However, in the context of this paper, we observe that many forest-based public private partnerships have emerged in response to the problems posed by combining public and private interests, which are strongly manifested in efforts to protect forests and allied natural resources. Studies show that there are two forms of public private partnerships in forestry; the top-down and bottom-up models (Bäckstrand, 2006).

Nevertheless, for any partnership activity to be implemented successfully, including forest-based public private partnerships, there are five steps of development and implementation which should be met. They include proper definition of context (policies strategies, structure of discretionary powers, and past experiences with existing arrangements), establishing mechanisms of trust building by understanding motives and shared interest amongst partners, realizing and amplifying the collaborative advantages from the partnership process, open deliberation processes on constitution of the rule system (funding, determination of rules, and leadership), and the existence of a proper process of changing the political order as a result of the new partnership in forest management (Glasbergen, 2011). Emerson et al. (2012) agrees with the above findings and summarizes the five steps above as shown in Figure 2 which presents the above preconditions for successful partnerships as a ladder of steps in the partnership process.
This paper agrees with Emerson et al. (2012) as shown in Figure 2 on the importance of context as the most crucial step of the ladder. Context supports the trust building process and the emergent collaborative arrangements between parties engaged in a partnership agreement. In fact, existing literature indicates that contextual factors may encourage or discourage collaboration amongst actors involved in a partnership (Hardy & Koontz, 2010; Wondolleck & Yaffee, 2000). There are several contextual factors that affect the establishment of PPPs. Moon and Cocklin (2011) identified biophysical characteristics, policy and legal frameworks (Bingham, 2008), and prior failure to address emerging issues through responsible agencies (Bryson & Crosby, 2008). Other studies have identified the appropriateness of policy strategies for forest protection, the history of collaboration amongst actors and agencies with discretionary powers; the notion of choice and power within a structure of rules as the most important element for constructive partnerships (Ansell & Gash, 2007; Blicharska et al., 2014; Cinque, 2011). It is important to emphasize here that contextual conditions are the prerequisites for the successive steps in partnership development and implementation (Ansell & Gash, 2007). Furthermore, existing literature demands that if partnerships are to be applied in sustainable natural forests management, successful implementation dictates that the actors involved should define the common purpose in order to agree on the form of forest conservation, objectives and implications of the partnership (Emerson et al., 2012; Glasbergen, 2011). It is also essential to note that in the course of trust building, literature suggests that a deliberative and democratic process must emerge and be anchored on some sound principles. Equity and equality are the fundamental principles underpinning the implementation of successful partnership arrangements (Zachrisson, 2009). Empirical evidence on trust building from partnerships in forest protection PPPs have established that if contractual actors develop contrary views rather than reaching consensus, or if differences in power amongst the actors result in perceptions that the partnership process is unfair, conflict can still occur (Booth & Halseth, 2011). With this hindsight, literature shows that it is absolutely critical to establish a regulatory framework that supports the process of partnerships and their outcomes. The rule system should be established through a deliberative process through nationwide formal structures that underpin partnerships. This brings to the fore the centrality of the role of government in ensuring successful collaboration for effective public private partnership implementation. Furthermore, literature shows that partnerships that entirely rely on mutual trust rather than formal structures (contracts) may be less specific and less enforceable.

Other studies related to the preconditions that spur private investment and which could be related to contextual factors affecting public private partnerships shows how macro-economic policy regime in a country impedes or promotes vigorous growth in the private sector and by extension the associated partnerships. Skulska et al. (2020) indicates that sometimes the macro-economic policy regimes may grant special temporary benefits for new investments, without altering much the general macro-economic and institutional environment or making those benefits permanent. According to Skulska et al. (2020), this encourages the pursuit of short-term investment advantages, but hardly promotes long-term growth or investments. This situation affects private investments and the growth of genuine public private partnerships because such contractual agreements are supposed to signify long-term investment and commitment for actors involved in implementation (Glasbergen, 2011). Therefore, the government has a critical role to play by unequivocally defining the objectives of a partnership and showing true commitment to its implementation by providing real incentives for the growth of partnerships.

However, as more empirical data continues to be gathered, studies on successful implementation of public private partnerships are increasingly recommending that besides establishing proper institutional framework for participation of relevant stakeholders, the government should establish a unified process of PPP project selection where a candidate project goes through three phases of evaluation as shown in...
the Figure 3. The unified system of project selection should insist on the importance of value for money test as the criteria for evaluating successful projects for implementation through public private partnerships.

Generally, besides value for money, the PPP project development and implementation process involves the analysis of up-to six stages; the identification of private sector and the development project where the basic PPP structures are laid for solicited and unsolicited projects, for example, appointment of transaction advisor and setting up of project implementation committees; conducting project development and due diligence where project risks are evaluated; analysis of the implementation arrangements and pre-procurement; procurement processes; contract award and management; and dispute resolution mechanisms (Bashar et al., 2021). Depending on context, the number of these analytical stages may vary in terminology from one jurisdiction to the other. Therefore, it is important to have explicit PPP guidelines that comprehensively highlight the details in the basic stages of implementation and the centrality of value for money test.

Unfortunately, there is also an emerging body of knowledge that appears to suggest that public private partnerships have their limitations as well. For instance, some partnership models have been contested on the account of diluting political control of decision making (Bovaird, 2004) while other studies have reported that the term itself is sometimes used to avoid political controversy over other strategies such as privatization (Khanom, 2010). Moreover, other studies indicate that PPPs may also reduce government responsiveness to its citizenry (Rhodes, 1997). In addition, there are also questions regarding the balancing between private and public benefit (Brinkerhoff & Brinkerhoff, 2011). Also, some studies note that in essence “partnerships” between public and private parties is “battle in the form of negotiation.” Therefore, without the requisite technical capacity on PPPs, the public sector cannot out-perform its private counterpart (Park, 2018). We observe that the government’s capacity to engage in tough PPP negotiations largely depends on existence of a PPP unit. Moreover, some studies show that PPP are contested because there appears to be lack of a clear definition of key concepts and terminologies for PPPs (Brinkerhoff & Brinkerhoff, 2011). For example, the difficulty to find a categorization of different forms of PPPs despite several attempts at categorizing in research (Hodge, 2004; Khanom, 2010; Van Huijstee et al., 2007). Furthermore, studies by Klijn and Teisman (2003) suggest that in most cases partners have difficulty with joint decision-making and organizations and tend to revert to traditional forms by contracting out and by separating responsibilities. However, in this paper, we observe that studies are increasingly linking these criticisms to failure by parties involved in PPP to properly analyze their context factors. For instance, Bashar et al. (2021) identifies major obstacles to global PPP projects implementation as difficulties, risks, and errors. The study identifies 23 variables which affect the performance of PPP projects. Difficulties identified include high transaction and bidding costs, lack of competition, public opposition to projects, lack of flexibility, high service charge to end users, and lack of financial partners. Amongst the key risks, the study identifies unfair allocation of risks, general legislative change or governments deciding to invest in a similar

Figure 3. Unified Framework for PPP Project Selection showing the centrality of value for money (VfM) assessment as a tool to scrutinize if PPP is an appropriate procurement option is supplying public goods and services by comparing the government burden of PPP projects against conventional government procurement.

Source. Adapted from Park (2018).
project, cost overruns, trust variation, time overruns, and procedural delays. Bashar et al. (2021) also identifies lack of innovation, appropriate skills, wrong expected returns due to optimism bias, lack of sound legal framework, and indirect control of standards as key errors. It will thus be interesting to explore Kenya’s context and find out whether some of these difficulties, risks, and errors may affect the implementation of PPPs in management of natural forests.

Nonetheless, the main objective of most PPPs is to deliver services and/or produce public goods (Khanom, 2010). This objective appears to respond well to the needs of sustainable forest management by facilitating the direct participation of public agencies and non-state actors involved in political steering (Schäferhoff et al., 2009). In addition, we observe that PPPs as a procurement model appear to be encouraged due to their multi-objective capabilities and project financing guarantees provided by equity lenders. However, literature has emphasized on the role of government in providing the enabling conditions and that only PPP projects with the highest value for money should be selected for implementation in order to achieve the highest win-win situation for the government, the private entity and the society. Therefore, understanding the context within which PPPs are implemented is the most important step toward exploring the application of PPP in forest management.

Materials and Methods

This study aims at exploring public private partnerships in Kenya to explain why their implementation has been slow in the sustainable management of public natural forests and to suggest policy improvements. The process entailed eight steps which included gathering textual data, sorting and organizing the data, making back-ups of original documents, assessing the veracity of data, evaluating the document for biases, exploring contextual information such as the tone of the textual data, asking investigative questions about the data (e.g., who produced it?) and eventually based on the research questions there was consolidation of results leading to generation of themes that were discussed in the paper.

Document content analysis was the most appropriate methodology for this study because obtaining and analyzing documents was far more cost and time-efficient rather than conducting a completely new study using other data collection methods on the topic. During the process of data collection, the following key policy documents were consulted in order to provide additional contextual information to this study. They included the Constitution of Kenya (2010); the Forest Conservation and Management Act (2016); the Draft Forest Policy (2020), the Public Private Partnership Act (2013), the Natural Resource Benefit Sharing Bill (2014), the National Strategy for Achieving and Maintaining 10% tree cover, the Participatory Forest Management Guidelines (2015), the Environmental Management and Coordination Act (1999) with focus on evaluating whether or not their objectives and implementation mechanisms supported the advancement of a robust long-term forest conservation partnerships.

Later, based on the research questions, results from these information sources were compared with findings from reviewed global level literature in particular the preconditions for successful partnership development and implementation as suggested by Emerson et al. (2012) in Figure 2. This analytical framework was chosen because many similar studies on PPPs in other countries have referred to it in the course of understanding ad explaining the application of partnerships in forest conservation. Moreover, this framework has been chosen because it is simple and yet comprehensive enough to capture all the requisite preconditions for successful implementation of partnerships. It is thus interesting and appropriate to try it in Kenya’s context.

Results

The Development Context for Public Private Partnerships in Kenya

The Republic of Kenya is a unitary state with a multi-party-political system. The country has a devolved power structure composed of one national government and 47 devolved units. In this arrangement, the two levels of government have clearly defined roles and responsibilities, and they are expected to operate in a mutually interdependent manner. Devolution permitted devolved units to establish institutions that allow a citizen to participate in development decision-making (SID, 2011). A review of the literature confirms that devolution has enhanced equitable resources distribution using some weighted formulas, improved economic and social development, increasing citizen inclusion and participation in decision making, promoting accountability, transparency, national unity (Ambrose, 2017; Cornell & D’Arcy, 2016; Hope, 2014; Institute of Economic Affairs [IEA], 2015; Kenya School of Government and Ministry of Devolution, 2015; KIPPRA & NGEC, 2017; UNDP, 2017). However, devolution has also been blamed for being expensive to implement, mismanagement of funds allocated to devolved units and corruption, duplicating roles, fostering uneven development, insufficient budgetary allocations from the national Treasury, insufficient public participation, corruption, lack of capacity to facilitate service delivery (Ngigi & Busolo, 2019). The other development parameters are as shown in Table 1. From Table 1, Kenya is largely an agricultural country with rising Human Development Index.

Studies on the economic outlook of the country appear contradictory. While other studies show that Kenya is a good destination for private investments and partnerships (African Development Bank [AFDB], 2013; World Bank Website, 2020), others for instance, PD Online (2020) indicate a weak
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Forestry is a major land use in Kenya with an estimated 7.2% forest cover (FAO, 2018). Table 2 highlights the land use change in Kenya between 2010, Kenya between 2015. From Table 2, it can be revealed that from 2005 to 2015, the country improved its forest cover significantly compared to the period before. However, increased competition from other land uses remains a real threat.

Forests in the country are broadly divided into natural and plantations. Natural forests constitute up to 95.3% of the forest land in the country (Table 3). The closed canopy natural forests account for about 1.4 million hectares (Wambungu et al., 2018; Wass, 2000). The montane forests are key water towers in the country and form the largest forested blocks of recent volcanic origin and have relatively few species (Cheboiwo et al., 2018).

Natural forests provide many goods and services which forms the basis of many economic activities in the country that contribute to socio-economic economic development (Cheboiwo et al., 2018; Kenya Forest Service Website [KFS], 2020). Besides providing ecological niches for over 7,000 indigenous plant species, natural forests are the foundation of other productive sectors in the country, including water, energy, health, wildlife, tourism, and agriculture. For instance, an assessment, of Mau Forest Complex, Cherangany Hills, and Mt. Elgon forest ecosystems established that the three forests provide 33 million m³ of water valued at KES 3.4 billion per year for irrigation, industry, and commercial uses by various stakeholders. In total, it is estimated that forestry, including natural forests, contribute 3.6% of Kenya’s GDP (Draft Forest Policy, 2020). Many studies show that non-wood forest products (NWFPs) extracted from natural forests may include edible fruits, leaves on the forest floor, bark from trees, gums from some important trees, and resins. These non-wood forest products are used to provide livelihoods to many forest adjacent communities under the community involvement in forestry management programs (Cheboiwo, 2014; Chikamai & Casadei, 2005; Cunningham, 2011; Cunningham et al., 2007; Dawson et al., 2014; Mutua et al., 2014; Wekesa et al., 2013) Cheboiwo et al., 2018; Ochanda, 2014). However, ecotourism activities in natural forests have been identified and promoted by KFS as a potential investment opportunity for PPPs. Kenya Forest Service (KFS); the state forest manager has identified some seemingly strategic forest sites as a prospective ecotourism destination that could be developed through conservation PPPs (KFS, 2020).

Public natural forests are managed within participatory forest management framework that allows the private sector
and communities to participate in forest management. Also, the policy recognizes the existence of professional societies as key ingredients of sustainability in natural forest governance. The existing legal framework provides for concessions where a private party can obtain a lease to manage a state forest over a long period of time. This partnership is subject to agreements between the government through Kenya Forest Service and the concerned private entity. Before such an agreement is reached, the Kenya Forest Service is required to develop a forest management plan for the forest to be leased out. The private party is required to provide an environmental protection bond whose amount shall be specified in guidelines prepared by the Cabinet Secretary responsible for forestry. However, there appear to be no specific guidelines and regulations for implementing forest-based PPPs (Cheboiwo et al., 2018). But given the prevailing forest governance challenges, Kenya is increasingly witnessing some forms of forest partnerships and a growing need for information on the partnership processes by various stakeholders. However, organizations are still in the formative development stages and require capacity building. There are some PPP alternatives under the participatory forest management framework with an integration of some aspects of Corporate Social Responsibility initiatives (Cheboiwo et al., 2018). Moreover, as a result of deviation, public natural forests which are designated as state forests are managed by the national government through Kenya Forest Service (KFS) while community and trees on farms are under the jurisdiction of county governments. Some county governments have established institutions for forest management whereas others still rely on the national government for support in forest management due to capacity challenges. Across the two levels of governance, natural forests are managed through the participatory forest management approach where forest adjacent communities establish community forest associations as forums for partnering with Kenya Forest Service or the relevant county government in sustainable forest management through a formal management agreement. The objectives of PFM are twofold; to improve forest cover while delivering livelihood benefits to forest adjacent community. As of 2017, there were 325 registered CFAs across Kenya’s ten (10) forest conservancies out of which 99 had signed forest management agreements.

However, PFM implementation has been slow and outcomes have been both positive and negative with hot contestation around equity outcomes. For instance, Agevi (2014), Ngatia and Thuita (2017), and Matiku et al. (2013) reported improved forest cover and positive social equity outcomes, whereas Thygesen et al. (2016), Abuto (2014), Mutune et al. (2017), Okumu and Muchapondwa (2017), and Chomba et al. (2015) have reported negative social equity outcomes and proliferation of community elites in their studies on implementation of PFM (Table 4). From Table 4, it is evident that the PFM model has significant challenges, especially the lack of financial resources to implement planned forest management activities, managerial and financial knowledge amongst implementing community partners, limited business knowledge and skills to deal with complex investment issues, limited basic research capabilities and a high degree of heterogeneity amongst community members (Agevi, 2014; Matiku et al., 2013; Mbuvi et al., 2009; National Strategy for Achieving and Maintaining 10% Forest Cover, 2019; Nthuku, 2018; Partnerships, 2010). Hence, there is the need to explore alternative models for delivering forest goods and services to citizens such as PPPs and hence the need for this study.

Nonetheless, there have been increasing efforts to reform the forestry sector through legal and policy mechanisms with

| Table 2. Land-Use Area Changes in Kenya ('000 Ha), 1990 to 2015. |
|-----------------------------------------------|
| Land use         | 1990 | 2000 | 2005 | 2010 | 2015 |
| Forest land      | 4,724 | 3,557 | 4,047 | 4,230 | 4,413 |
| Crop land        | 9,258 | 9,661 | 9,868 | 10,072 | 10,276 |
| Grassland        | 41,522 | 41,654 | 41,496 | 41,080 | 40,664 |
| Settlement       | 57 | 87 | 109 | 126 | 143 |
| Other lands      | 1,004 | 1,574 | 1,035 | 1,044 | 1,053 |
| Wetlands         | 1,472 | 1,504 | 1,482 | 1,485 | 1,488 |
| Total area       | 58,037 | 58,037 | 58,037 | 58,037 | 58,037 |
Source. FAO (2018).

| Table 3. Forest Types. |
|-----------------------------------------------|
| Forest type         | Forest sub-types | Approximate area (Ha) | % of total forest area |
| 1. Western rainforest | Natural forest (mixed indigenous) | 144,615 | 3.5 |
| 2. Montane forests   | Natural forest (mixed indigenous trees) | 1,359,860 | 32.9 |
|                      | Bamboo | 85,693 | 2.1 |
| 3. Coastal forests   | Natural forest (mixed indigenous trees) | 295,871 | 7.2 |
|                      | Mangroves | 48,522 | 1.2 |
| 4. Dryland forests   | Natural forest (mixed indigenous trees) | 1,875,316 | 45.4 |
|                      | Riverine forest | 135,231 | 3.3 |
| 5. Forest plantations | Public and private forests | 186,716 | 4.5 |
Source. National Strategy Towards Achieving and Maintaining 10% Tree Cover by 2022.
focus on improving partnerships in forest management. Table 5 summarizes the key outcomes from the review of key documents. The need for robust guidelines on partnerships is critical for successful partnerships.

The highlighted legal and policy reforms in Table 5 have led to the emergence of new partnerships with the private sector under a new framework of collaboration also called the “adopt-a-forest model” (National Strategy for Achieving...
“Adopt-A-Forest” entails adoption of a portion of a forest by partners for rehabilitation, protection and management for a period of 3 to 5 years. The concept was developed by the Ministry of Environment and Forestry and Kenya Forest Service to ensure that all partners’ tree planting initiatives in the public forests are carried out in a sustainable manner. The scheme has been lauded for helping to bridge the funding gap in forest conservation and management. To date, over 49 institutions have joined the “adopt-a-forest” scheme as shown in Table 6. Non-governmental organizations and private sector actor have had a significant contribution in this model as shown in Table 6. This increasing interest amongst the private sector is an indication of the evolving need for partnerships and hence the need for this study.

Moreover, there has been some political support for forest adoption in the country as witnessed by the recent high level discussions on forest management partnerships involving senior government officials, diplomats, renowned athletes (Ministry of Environment and Forestry [MEF], 2019, the

Table 5. Legal and Policy Provisions for Sustainable Management of Natural Forests in Kenya.

| Document                                      | Findings                                                                 | Lead implementing government agency | Tier of government | Analysis                                                                 |
|-----------------------------------------------|--------------------------------------------------------------------------|-------------------------------------|--------------------|--------------------------------------------------------------------------|
| The Constitution of Kenya 2010                | Grant and enforces natural forest land rights to promote sustainable forest management. | All arms of Government              | National and County governments | Robust and supports PPPs                                                 |
| The Forest Conservation and Management Act (2016) | Recognizes PFM and Framework of collaboration with the private sector | Kenya Forest Service (KFS)          | National and County governments | Robust and supports PPPs, but needs regulations Article 44 does not define the period of forest concession. It simply states “long period” |
| The Draft Forest Policy (2020)                | Has robust provisions on partnerships for natural forest management       | Kenya Forest Service (KFS)          | National and County | Robust and supports PPPs, but needs full endorsement by the Government   |
| The Public Private Partnership Act (2013)     | Establishes institutions that support the implementation of conservation PPPs | The PPP Unit in the Treasury of Kenya | National and County | Robust and supports PPPs, but requires full implementation                |
| The Natural Resource Benefit Sharing Bill, 2020 | Establishes a framework for sharing the ecosystem services generated by natural forests | The Ministry of Environment and Forestry and KFS | National and County | Robust and supports PPPs, but needs urgent enactment                     |
| The National Strategy for Achieving and Maintaining 10% tree cover | Establishes the institutional framework for maintaining the vitality of natural forest ecosystems | The Ministry of Environment and Forestry and KFS | National and County | Robust and supports PPPs, but lacks cost-benefit analysis on conservation initiatives |
| The Participatory Forest Management Guidelines, 2015 | Supports the implementation of the Forest Act, 2016 by elaborating how communities could be enjoined in natural forest management | Kenya Forest Service                | National and County | Supports PPPs, but there is Weak enforcement.                              |
| The Environmental Management and Coordination Act, 1999 | Provides for Environmental Social Impact Assessments as tools for natural forest management and establishes institutions that promote forest management | National Environment Management Authority | National and County | Robust and supports PPPs, but enforcement on lack of field visits after issuance of EIA licenses |
| The Wildlife Conservation and Management Act (2012) | Establishes the institutional framework for the management of natural forests in the game and national parks | Kenya Wildlife Service              | National and County | Supports conservation PPPs                                                |
| Water Act (2016)                              | Establishes the institutional framework for sustainable water resource management | Water Resource Management Authority (WRMA), Kenya Water Towers Agency (KWTA) | National and County | Supports PPPs, but there is perceived weak collaboration amongst stakeholders. |

Source: Authors compilations from multiple sources.
Star Newspaper of 15th May 2019; KFS, 2020). Nonetheless, in general, studies show that insufficient forestry funding, exclusionary management approach by KFS, deforestation arising from the growing human demands, especially energy needs remains the biggest threat to the sustainable management of natural forest ecosystems in the country (Cheboiwo et al., 2018; Draft Forest Policy, 2020; Gatsby, 2020; Langat et al., 2016; Wambugu et al., 2018).

Discussion

Natural forests provide many goods and services that are important for many lifeforms (Assessment, 2005; Ghosh & Sinha, 2016; ISID, 2021; Keenan et al., 2015; Kubiszewski et al., 2013; Li et al., 2019; Nilsson, 2007; Ohtsuka et al., 1998; Schnell et al., 2015; Tyrväinen et al., 2014). However, the management of these forests for sustainable delivery of public goods and services continues to face unique challenges in developing countries largely due to the continued reliance on classical institution of forest management (Popoola et al., 2020).

Similarly, in Kenya, studies show that natural forests are exploited for multiple benefits, including subsistence, trade, and their contribution to other productive sectors of the economy (Cheboiwo et al., 2018; Draft Forest Policy, 2020). Many studies demonstrate that natural forests are sources of livelihoods for marginalized communities (Cheboiwo, 2014; Chikamai & Casadei, 2005; Cunningham et al., 2007; Dawson et al., 2014; Mutua et al., 2014; Ochanda, 2014; Wekesa et al., 2013).

However, with the growing development challenges, especially the increasing human demands on land and competition from other land uses appear to be limiting the potential of forests to effectively contribute to the economy (Cheboiwo et al., 2018; Chisika & Yeom, 2020; Draft Forest Policy, 2020; Gatsby, 2020; MEF, 2018). This is further compounded by forest governance challenges in the existing classical institutions, especially inadequate funding leading to poor provision of public services from forests and unsustainable forest resource management despite the deployment of key policy interventions such as PFM (Table 4; Draft Forest Policy, 2020; Langat et al., 2016; Matiku et al., 2013; MEF, 2018; Ngatia & Thuita, 2017). Unfortunately, if status quo remains, reviewed literature shows that forest utilization pressure is likely to increase as the demand for forest products grows with the rising population now estimated at 47 million people increasing at an annual growth rate of 2.3%. Furthermore, with the implementation of devolution, the 47 counties will become new centers of growth which will spur urbanization which will lead to increased demand for goods and services, including those from forests. Therefore, in view of the sector challenges, especially lack of financial resources, this study notes that the application of PPPs in natural forest management is the most feasible management approach that could remedy the aforementioned development challenges. This is because reviewed literature shows that PPPs could be applied in solving environmental challenges similar to the ones present in the Kenyan context (Bäckstrand, 2006; Bernstein & Cashore, 2012; Bitzer, 2010). PPPs are favored over other forms of partnership because they foster good governance, transparency, accountability, equity, and they solve financial challenges by expanding the fiscal space for governments through their association with private equity lenders who have direct agreements with the government’s implementing agencies (Bäckstrand, 2006; Bernstein & Cashore, 2012; Bitzer, 2010; Brinkerhoff & Brinkerhoff, 2011; Park, 2018; World Bank, 2017). The highlighted advantages are likely to resolve most of the outstanding challenges of PFM identified in Table 4. In fact out of the recent realization of these collaborative advantages, there are increased calls from the Kenyan government on the need for more public-private partnerships in forest management in order to promote delivery of public goods (MEF, 2019, the Star Newspaper of 15th May 2019; KFS, 2020). Whereas these calls are laudable, they are in line with findings from reviewed literature which has shown that the type of PPP established often depends on government priorities (Bovard, 2004; Brinkerhoff & Brinkerhoff, 2011; Osborne, 2000). In addition, even though we agree with these government calls on the need for sustainability which is for the common good of the Kenyan people, caution should be exercised because reviewed literature has established that sometimes governments invoke PPPs strategies in order to avoid political controversy and reducing government responsiveness to citizens (Khanom, 2010; Rhodes, 1997).

### Table 6. Restoration of Forests Through the “Adopt-A-Forest” Initiative.

| No. | Category of institutions                        | No. of institutions | Area (Ha) | No. seedlings | Financial contribution (Kshs.) |
|-----|------------------------------------------------|---------------------|-----------|--------------|-------------------------------|
| 1   | Government Ministries, Departments and Agencies | 27                  | 2,255.00  | 373,825      | 12,520,290.00                 |
| 2   | NGOs and Private Sector organizations          | 22                  | 16,131.10 | 368,410      | 24,342,498.00                 |
| Total|                                                | 49                  | 18,386.10 | 742,235      | 36,862,788.00                 |

Source. Office Records, Kenya Forest Service.
Kenya appears to have a conducive environment for implementing public private partnerships for conservation of natural forests. Firstly, the country has a wide range of highly diverse natural forest ecosystems (Table 3) providing ecological niches for over 7,000 indigenous plant species besides being the foundation of other productive sectors (Cheboiwo et al., 2018; Draft Forest Policy, 2020; KFS, 2020). However, the current forest utilization policy for natural forests does not allow for the consumptive use of natural forest resources such as timber extraction, only non-consumptive uses are allowed, including but not limited to bee keeping, collection of medicinal herbs and other nature-based enterprises are promoted. Interestingly, ecotourism appears to feature prominently as the most compatible activity for natural forest management. In fact, according to the Kenya Forest Service, ecotourism is identified as a potential project for PPPs (KFS, 2020). However, whereas the Kenya Forest Service should be lauded for informing the public about the opportunities present in the conservation of natural forests through ecotourism, it should be highlighted that besides the need for huge capital outlay which cannot be met by partners in other forms of partnerships such as PFM, the basis of choosing ecotourism as the most suitable activity for PPPs from the multitude of other activities is not clear in the absence of PPP guidelines for the forest sector. Park (2018) has demonstrated the centrality of value for money as the basis of choosing projects for successful PPP implementation. In Kenya’s scenario this paper doubts if the choice of ecotourism for PPPs was informed by the value for money test highlighted in Figure 3. Therefore, there is need for more rigorous evaluation and prioritization on the most appropriate activities in natural forests that should be implemented through long-term contractual arrangements.

Secondly, the general environment for implementing public private partnerships in sustainable management of natural forests is hugely conducive in view of the favorable legal and policy framework outlined in Table 5 which largely agrees with Emerson et al. (2012) as shown in Figure 2, but there are some regulatory gaps that require urgent attention from policy makers. Reviewed literature has shown that the government of Kenya has spearheaded a number of institutional and policy reforms which include the enactment of the Public Private Partnership Act (2013) and a host of enabling legislation (Cheboiwo et al., 2018). This clearly demonstrates the centrality of the role of government in establishing the requisite platforms for implementation of successful PPPs as has been widely acknowledged (Glasbergen, 2011; Park, 2018; World Bank, 2017) and Figure 1. These institutional and policy reforms represent the most important milestone in promoting PPPs for natural forest management in the country. These have been acknowledged in reviewed literature which has shown that contextual factors may encourage or discourage collaboration amongst actors (Hardy & Koontz, 2010; Wondolleck & Yaffee, 2000). Many other studies have emphasized the importance of these favorable contextual conditions and the history of collaboration amongst actors and agencies with discretionary powers (Ansell & Gash, 2007; Bingham, 2008; Blicharska et al., 2014; Bryson & Crosby, 2008; Cinque, 2011). Kenya has demonstrated the conduciveness of these contextual conditions for partnerships in natural forest management through a number of documented studies presented in Table 4 and the policy instruments shown in Table 3. According to Table 4, the implementation of PFM partnership has demonstrated immense opportunities for partnerships which could be extrapolated to conservation PPPs for natural forests in Kenya. However, there is need to review the mechanics of equity since reviewed literature has also pointed out that equity is the building block of successful PPPs (Zachrisson, 2009). Emerson et al. (2012) in Figure 2 has also emphasized equity as the building block of successful partnerships. Whereas this paper agrees with Zachrisson (2009) findings in Figure 2, in Kenya’s context, this paper decrises the need to strengthen systems and institutions in favor of enhancing equity in view of the significant number of studies in Table 4 which have pointed at the social equity challenges in PFM. Therefore, there is need for more studies on equity in forest management because, firstly, most studies in Table 4 were conducted using the single case study methodology and as such the findings may not be fully generalizable to the whole country. Secondly, PFM is a relatively new concept in the country and therefore, these case results represent a small fraction of the early lessons and as such should not be universally accepted as the true status of PFM. Thirdly, PFM is affected by other factors beyond the forest sector itself, such as lack of a benefit-sharing policy (Cheboiwo et al., 2018). Therefore, there is for full implementation of the PFM guidelines and enactment of the benefit-sharing policy which will also support the implementation of public private partnerships.

Elsewhere, reviewed literature shows the country has made significant strides to improve democracy, the rule of law and improved opportunities for the public to participate in development, including non-state actors as a result of the promulgation of the 2010 constitution (Ambose, 2017; Cornell & D’Arcy, 2016; Hope, 2014; IEA, 2015; Kenya School of Government and Ministry of Devolution, 2015; KIPPRA, 2018; KIPPRA and NGEC, 2017; UNDP, 2017). In addition, the country has a rapidly growing population with a HDI that is improving. AFDB (2013) and World Bank Website (2020) have also alluded to these socio-economic improvements. In order to cope with these development challenges, the government is re-evaluating the country’s development policies and programs with the aim of creating partnerships in forest management as a way of sustaining the delivery of public goods (Draft Forest Policy, 2020). However, we observe that the most radical reforms that took in place in support of partnerships for development was the promulgation of the 2010 constitution. The constitution devolved the governance of the country by introducing 47
devolved units under one national government thus simplifying the decision-making processes in favor of experimenting PPPs.

Moreover, the accompanying democratization guided by the rule of law and the growing opportunities for the public to participate in development projects sets a good platform for creating conservation PPPs in the country are favorable conditions for PPPs. Unfortunately, Ngigi and Busolo (2019), have termed devolution as expensive to implement. Moreover, on private sector development which relates to conservation PPPs, AFDB (2013) underscores the need for addressing political uncertainty caused by disruptive elections which they call a “the main handbrake” to private investments in the country. Other studies, including UNDP (2017), the Central Bank of Kenya (2017) survey, KNBS (2017), and Kenya Association of Manufacturers (2017) have also reported the need for political reforms. In the same breath, Mutuku and Kinyanjui (2018) have pointed the crowding out effect of public investment as a cause of slow private investment in the country. However, in the forest sector, devolution introduced some governance and institutional challenges where counties manage community and private natural forests whereas national government through KFS manages state natural forests. Unfortunately, there are claims that the forest sector is now centralized in favor of KFS, despite the existence of other agencies involved in forest management such as Kenya Wildlife Service, Kenya Water Towers Agency, Water Resource Management Authority, National Environment Management Authority and other stakeholders (Draft Forest Policy, 2020). The net effect of “centralization” has been corrupt practices, weak law enforcement, and plunder of forest resources due to exclusion of some partners resulting into some form of tragedy of the commons when incentives to preserve common pool resources do not exist (Draft Forest Policy, 2020). It is with this hind sight that this paper calls for further reforms and strengthening of all organization involved in natural forest management through capacity building on PPP processes in efforts to improve the collaborative environment for meaningful partnerships.

Interestingly, the enactment of the Public Private Partnership Act (2013) is perhaps the most overt indication of the realization of role of PPPs in Kenya’s socio-economic transformation. The Act establishes key organs; including the PPP committee, the PPP unit as an administrative organ at national level to coordinate PPP activities in the country, PPP nodes and their functions, and procedures for identifying and implementing PPPs. The PPP unit has already prepared preliminary report showing projects at different stages of implementation in the country; a majority of them in the energy, transport and water and sewerage management sectors. These conditions that appear to enhance the rule of law by fostering the establishment of institutions that support creation of partnerships favors the implementation of conservation PPPs (Park, 2018). Furthermore, we observe that with the growing per capita wood demand in the country and the competing government budget priorities, policy makers are forced to re-examine the conventional forest management strategies that relies on exchequer financing in favor of conservation PPPs. The development of a seemingly robust draft forest policy 2020 and the accompanying legislation has demonstrated this trajectory and has shown the great emphasis on the growing opportunities for public participation in forest management through provisions for decentralized forest governance. These decentralized socio-ecological conditions in the country could hasten the implementation of conservation. Lessons from decentralized forest governance implemented under participatory forest management partnerships shows that forest management partnerships are increasingly transforming the society with immense opportunities further collaboration. Studies from Kenya (Table 4) have demonstrated many social, economic, environmental (Bio-physical), technological and policy opportunities that are linked to contextual conditions and support creation of meaningful partnerships for conservation. From these findings we observe that even though PPP projects are long-term compared to the short-term nature of participatory forest management agreements highlighted in Table 4, there are vital lessons that can be shared while implementing conservation PPPs because all of them are based of the five steps of developing partnerships as identified by Emerson et al. (2012) in Figure 3.

Moreover, even though the Draft Forest policy, 2020 recognizes the relative advantages of forest management partnerships including concessions as forms of PPPs in enhancing sustainable forest management in the country, we observe that the missing definition of the term “long period” and the lack of policy guidelines on natural benefit-sharing could slow down the implementation of these PPPs. Lessons from participatory forest management partnerships in Kenya have highlighted the emerging equity issues in Table 2 and called for a review of the participatory forest management partnerships. Similarly, the presence of robust policy and legal frameworks have been identified in reviewed literature as a critical contextual factor affecting the establishment of PPPs (Ansell & Gash, 2007; Blicharska et al., 2014; Bryson & Crosby, 2008; Cinque, 2011; Moon & Cocklin, 2011). However, the increasing political goodwill involving senior government officials, diplomatic missions, renowned athletes, faith-based organizations, local community associations and individual citizens is likely to spur partnerships and foster fast development of PPP guidelines sooner than later (MEF, 2019, the Star Newspaper of 15th May 2019; KFS, 2020). In-fact, Kenya Forest Service (KFS) has already developed a framework of collaboration with stakeholders and prepared a report on partnerships (Table 6). Up-to 10 organizations; both public and private corporate organization have expressed intention to ‘adopt a forest’ in various devolved units around the country. From these efforts, we concur with existing literature which asserted that political
goodwill is important for implementation of conservation PPPs (Emerson et al., 2012; Glasbergen, 2011; Greenhalgh et al., 2004). Furthermore, results show that policies, institutions and government’s role are the prerequisite for successful steps in partnership development.

In summary, reviewed literature has shown that there is no single universally accepted definition of PPPs, however, they generally refer to long-term contracts between a government entity and a private party where management responsibility and risk are shared. Moreover, PPPs occur in many forms depending on what the private party does. In the Kenyan context, there are unique forms of PPPs whose contract types range between the management contract PPP type and joint venture. The PPP contract types associated with public natural forests belong to the management contract type implemented under the participatory forest management. Nonetheless, in all these partnerships involves sharing of management risk and responsibility pegged on performance of the private party. The multi-objective capabilities of conservation PPPs fosters the compatibility in motives to provide opportunities for exploiting the relative advantages of conservation PPPs. Even though literature on the characteristics on Kenya’s conservation PPPs remain scanty, the evaluation of existing forest conservation partnerships may offer critical lessons for conservation PPPs and they indicate the need for assigning clear roles, rights and responsibilities amongst players, actors in order to foster social equity. In addition, there are various challenges affecting the successful implementation of PPP in forest conservation, but the lack of policy guidelines on benefit-sharing, limitation of studies on forest conservation PPPs, lack of capacity amongst PPP presumed partners, lack of definition regarding period of concessions in the Forest Act, and insufficient political goodwill appear to be the main challenges.

**Conclusion and Recommendations**

Results have shown that PPPs have the potential to address the emerging development challenges facing natural forests around the globe. Results from Kenya substantiate these findings and have shown that the country is also keen on implementing public private partnerships in conserving her natural forests. However, the application of PPP in sustainable natural forest management is lacking because PPPs in the forest sector remains largely understood and without clear definition of terms, clear operational guidelines, especially with regards to benefit-sharing amongst actors and insufficient political goodwill appear to be the main challenges.

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