

# **Environmental justice and women empowerment in the protected areas of Nyungwe National Park: Case of women handcrafts cooperative**

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## **Abstract**

Environmental justice refers to the process by which environmental actors and the community work together to identify needs, shared values, challenges and setting up measures to address them as well as implement together different activities and projects that affect their lived environment. This concept is relevant in the context of Rwanda, especially for communities surrounding national parks. The aim of this study was to investigate women's experiences about their empowerment through environmental justice (distributive and procedural justice). In doing so participants were purposively selected in women handicraft cooperative in Kitabi sector. With regards to data collection and analysis semi-structured interviews and content analysis were used. The findings of this study show that women are economically and socially empowered through capacity building, savings, access to loans likely to improve their socio-economic development including food security, children's education, health insurance and raising environmental awareness among members of the community. However, the participation of women in decision-making process is still limited, hence the dominance of top-down approach in environmental justice which hinders the sustainable empowerment of women in the protected areas of Nyungwe National Park. Therefore, the partnership approach is recommended so as to consider women's needs and voices in the implementation of natural resources conservation policies.

**Keywords:** environmental justice, procedural justice, distributive justice, Nyungwe National Park, women empowerment



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## **1. Introduction**

This study concerns women's experiences about their empowerment through environmental justice. The concept of environmental justice is relatively recent. It was born in the United States in the late 1970s. By the 1980s, the environmental justice movement in the USA was fast recognized when people of color began to organize environmental campaigns to contest the use of pesticide and the dumping of toxic wastes in North Carolina. (Di Chiro 1998, Schroeder 2008). It is recognized that environmental injustice is not only related and occur from human activities that harm the nature but also occurred in other forms such as gender and class discrimination (Beretta 2012). Environmental justice deals with the inequities perceived and experienced by diverse stakeholders as they are subjected to activities that affect their lived environments. This is very relevant especially when certain communities are subject to inequities in the distribution and consumption of environmental 'ills' and 'benefits' (Banerjee 2014).

In the context of improving natural resources conservation policies and practices, people living in the adjacent to protected areas have to abandon some of the activities such as hunting, firewood collection, mines exploitation, traditional medicine collection, bee-keeping which had been long their source of income. In return, the former income has to be compensated by conservation revenue sharing through social and economic empowerment. The question might be the equity as far as distribution of benefits among beneficiaries as well as how the latter are empowered to be part of the decision-making process.

The present paper seeks to explore how women are empowered through environmental justice. I first describe the context and problem of the study as well as research objectives. Additionally, the theoretical and conceptual frameworks guiding the study are reviewed in the literature review. More on that, I explain the research methodology for empirical part of this study before presenting and discussing the findings and concluding.

## **2. Context and problem**

In the context of the scarcity of natural resources, the government of Rwanda attaches high importance on natural resources conservation by creating protected areas likely to increase tourism revenue income. Tourism has been among the top priorities in political debates whereby it has become the first sector contributing to the GDP (RDB 2017). For example, 12.7% of GDP is generated from tourism (RDB 2017). However, communities living adjacent to protected areas with the richest biodiversity are the poorest (Masozera 2002, Scherl 2004, Plumptre 2004).

Since 1998, Rwanda has adopted a decentralization policy to ensure democratic governance, accountability and community participation in the decision making process (Chemouni 2014). In the same orientation, Rwanda adopted a new approach of reconciling environment and community needs through eco-tourism. The tourism Revenue sharing has been adopted as means of empowering local communities surrounding protected areas including but not limited to national parks. In this regard, the rate of contribution from income generated in tourism activities has increased from five to 10% of the total gross revenue earned in each national park (GoR 2018). RDB usually donates a portion of revenue

from wildlife-based tourism to assist local communities based projects living adjacent to national parks in socio-economic development. On the one hand scholars have done scientific studies on the impact of revenue sharing on social and economic development of local communities (Tusabe and Habyalimana 2010, Kamuzinzi *et al.* 2015). It is indicated that tourism revenues contribute to socio-economic development through construction of infrastructures like schools, health facilities, water supplies, and benefit trainings related to environment protection, receive funds for food security related project as well as other income generating activities (Tusabe and Habyalimana 2010, Kamuzinzi *et al.* 2015). On the other hand, empirical studies indicate that community based projects are failing to achieve their goals due to insufficient of revenues, top-down governance system, unfair political capital gains, lack of business skills, conflicting stakeholder interest (Archabald and Naughton-Treves 2001, Reddy 2002, Tosun 2002, Briedenhann and Wickens 2004, Dixey 2008, Munanura *et al.* 2016, Munanura *et al.* 2018). Therefore, the implementation of the aforesaid strategy might be an issue of debate in scientific discourse especially the voice of local communities.

So far, the studies are more quantitative and lived experiences of local communities in regard to their participation in the implementation of community conservation policy including tourism revenue sharing are missing in the context of scientific research in Rwanda. The population of Rwanda has more women compared to men. Women count 51.8% of the total population mostly living in rural areas including protected areas (NISR 2014). In addition, women's roles brought them into close everyday contact with their environment. They are materially adversely affected by environmental degradation due to disproportionately assigned caring and provisioning roles and obligations (Resurrección, B. P. 2017). It has been recognized that engaging sustainable development initiatives without women is an empty gesture as women are more likely to interact with environment in their daily basis (Dobson 1998, Momsen 2007, Hausmann *et al.* 2012, OECD 2014). Therefore, sustainable involving development cannot be achieved if they are left behind. It is worth to investigate how women are empowered in the context of conservation of natural resources through environmental justice in the protected areas of Nyungwe National Park with the case of women handicraft cooperative.

### **3. Research objectives**

The general objective of the study was to examine women's experiences about their empowerment through environmental justice in protected areas of Nyungwe National Park. Specifically, the study seeks to explore how distributive as well as procedural justice contribute to women's empowerment in Women Handcraft association in Kitabi sector.

### **4. Literature review**

The purpose of this study was to investigate women's experiences about empowerment through environmental justice. It is under this background that the researcher first explained theoretical understanding of the concept of environmental justice, community's empowerment and the link between environmental justice and women's empowerment.

#### **4.1. Environmental justice**

Protected areas are worldwide recognized as important to host the biodiversity considered as living and economic resource. In this regard, the management of the protected areas is likely to face conflicts between policy makers and surrounding communities. In the context of Africa, protected areas are delimited and placed under state control with highly monitored human impact. Moreover, local people are excluded from the use of natural resources and customary rights are ignored (Jones 2006). On the one hand, conservation measures only put emphasis on achieving natural resources conservation goals without considering the well-being of the communities that usually rely on them. Local community's knowledge and experiences in conservation are sometimes ignored and have no right to use their own natural resources on the basis of the perceptions that they are ignorant and destructors of environment. However, over the last 25 years, the image of conservation in Africa has shifted from wildlife protection to people-centred conservation. People-centred conservation approach came up with another concept of environmental justice that seeks for better conservation outcomes by involving all people and treats them fairly in all activities regarding the environment (Leciejewski and Perkins 2015). It refers to the process by which environmental actors and the community work together by identifying needs, shared values and challenges and setting up measures and goals to address them as well as implementing together different activities and projects by considering a full respect of human rights by involving everyone in the process (Resham 2015). Interaction among different stakeholders in the conservation process is a key driver for not only the achievement of conservation goals but also empowering communities.

#### **4.2. Community empowerment through participation**

Participation of surrounding communities in regard to natural resources has been a concern in the discourse of natural resources management. For participation to be effective, local communities have to be empowered in term of knowledge, income, trust just to name few. The understanding of community empowerment can differ from one to another depending on different perspectives that may lead to a variety of approaches.

Empowerment can be considered as mean of enabling a social environment in which one can make decisions and make choices either individually or collectively for social transformation. It strengthens the native ability by way of acquiring skills, knowledge, power and experience (Chambers 1994, Hashemi, Schuler, and Riley 1996). The authors highlight two important dimensions of empowerment. First, the creation of conducive environment enabling responsible individual and collective decision-making. The good environment is not enough if people are not individually empowered. Therefore, individual capacity building is a necessity for successful participation with regard to natural resource management.

Scholars show different approaches of community participation that are likewise relevant for natural resources management. Among others, there are top-down, bottom-up and partnership approaches. The top down approach describes the situation where the government provides and decides for the

community everything. Consequently, sense of dependency and lethargy among the people are developed. Though it can be quick and less expensive, the top-down approach does not consider contextual realities and needs of local communities likely to engender conflict between different stakeholders. The needs of the local communities are the starting steps for policymaking in bottom-up approach. Despite the relevance of local needs, communities are not well equipped to critically analyze contextual realities as well as appropriate solutions. In this regard, a partnership approach is proposed so as to mitigate the limitations of the previously mentioned other approaches. This is because local communities and policymakers closely collaborate and their respective needs are discussed and shared (Reddy 2002, Paudel 2009).

#### **4.3. Environmental justice and community empowerment: Gender perspective**

Environmental justice and community empowerment are closely interlinked. In this regard, it is worthy to describe how scholars conceptualize the previously mentioned terms before showing how they are related. Moreover, a model of analysis of this relationship is given and briefly explained.

Environmental justice is a concept which can be defined in different perspectives by different scholars. It can be seen as a process of dealing with all justice related issues in environmental management through distributive and procedural dimensions (Ikeme 2003). On the one hand, distributive dimension is concerned with equity as regard to dealing with people's outcomes in social exchanges (Brashear *et al.* 2002). It concerns mainly by distribution of cost and benefits among communities living in the protected areas. Procedural justice concerns with procedures and processes (Sheppard *et al.* 1992) on the other hand. This is concerned by the extent to which community is involved in the process of decision-making (Svarstad *et al.* 2010). With regard to community participation, Pretty (1995) gives a model of participation indicating different forms of participation. They include manipulative (through unelected representatives), passive (receptive of information), consultation, material incentives, functional (by serving to achieve external project goals) and interactive participation. Though no form can fit all contexts, interactive might be important as regard to taking into account the needs of concerned people and organizations or systems (Reddy 2002). In the context of conservation, procedural environmental justice regards how people living in protected areas are empowered to make decisions regarding conservation policies as well as their own development projects.

So far as community empowerment is concerned especially women, it is the process through which traditionally underprivileged groups of people like women especially in developing countries are uplifted for more improved economic, social and political status (Dandona 2015). It is the process of guarding them against all forms of violence. It involves the building up of a society, a political environment, wherein women can breathe without the fear of oppression, exploitation, apprehension, discrimination and the general feeling of persecution that goes with being a woman in a traditionally male dominated structure (Ferguson and Alarcon 2015). Protection should go hand in hand with empowering women through education, access to loan, savings, employment, to name few (Hashemi,

Schuler, and Riley 1996, Anderson and Baland 2002, Agarwal 2002,). In the context of conservation of natural resources, empowering women is a key to the sustainability of policies and programmes in achieving conservation goals without compromising socio-economic development initiatives (Uphoff *et al.* 1979, Belshaw and Chambers 1993).

As indicated earlier, environmental justice is closely related to community empowerment especially women. The relationship is described based on two dimensions of environmental justice. First, equity in cost and benefits from natural resource management is a mean of socially and economically empower communities (Walpole and Thoules 2005). For example, tourism revenue sharing is a tool for not only engaging surrounding communities but also contribute to their socio-economic development (Kamuzinzi *et al.* 2015). In the context of Rwanda, gender-oriented studies with regard to environmental justice are missing in scientific discourse. Community participation is considered as a tool for empowerment, building beneficiary capacity, increasing effectiveness in the desire to share costs, and improving the efficiency and success of the projects. People should have the relevant assets and instrumental freedoms (representation and consultation) to achieve different needs, including human assets (health and education); natural assets (having access to resources); and physical assets by access to the infrastructure (Chong 2010). Community empowerment in its inception seeks to improve the wellbeing of neighborhood communities women in the present study through the creation of jobs; expanding their infrastructure and providing education as well as capacity building in the form of trainings.

Second, communities are not only empowered by providing incentives but also through involvement in decision-making process (Svarstad *et al.* 2010). With procedural environmental justice, women are empowerment to become agents of change. They are expected to be independent and make decision on their own by building trust in such a way that they can empower themselves (Willis 1999: 73, O'Neil and Domingo 2015). It is important to note that women participation in decision-making is a crucial element to ensure sustainable development processes and create an influence on their norms and value (Cheryl *et al.* 1999). The involvement of the locals including women is a driver to the success of development initiatives to avoid social injustices at intersecting scales that can occur and lead to the social exclusion of the global poor (Fraser 2010).

Environmental justice (distributive and procedural) is a means through which population surrounding protected areas is economically and socially empowered including women especially in the context of Rwanda where the number of women outweighs men (NISR 2014). With effective environmental justice that leads to population empowerment, the conservation goals are likely to be achieved. The following model summarizes the relationship between environmental justice, population empowerment and conservation (Figure1).

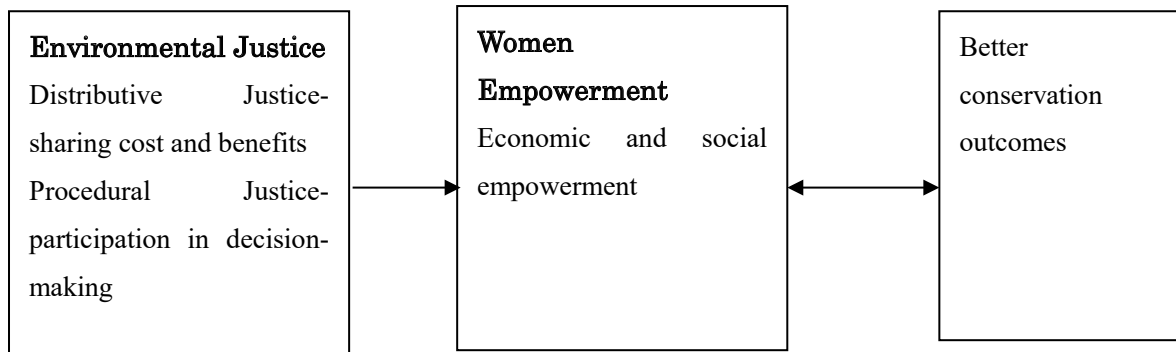


Figure 1. Relationship between environmental justice, women empowerment, and natural resources conservation.

Source: Adapted from Svarstad *et al.* (2010), Pretty (1995).

## 5. Methodology

The purpose of this study was to investigate women's experiences about their empowerment through environmental distributive and procedural justice. When one seeks to explore how individuals interpret their experiences and views (Savin-Baden and Major 2013:12-14, Silverman 2014:5), qualitative approach best fit the purpose of the present study. With regard to sampling, theoretical and purposive sampling were used to progressively selected participants who are members of the Kitabi handicraft cooperative as well as key participants from decision-making bodies including local administration (two executive secretaries of cells) and Rwanda Development Board (RDB: park chief warden and head of tourism in Nyungwe National park). Participants were progressively identified purposively during data collection that is concomitant with data analysis (Savin-Baden and Major 2013, Silverman 2014, Creswell 2014).

While collecting data through individual interviews, saturation point was reached at the eighth interview. Interviewed respondents from the cooperative as a saturation point because no new information was coming out. Therefore, the sample size of this study was 12 respondents including 8 respondents from the cooperative and 2 key informants from RDB and 2 respondents from local government administration.

So far as data collection is concerned, semi-structured interviews were used to gather individual' experiences with regard to women empowerment through environmental distributive and procedural justice. Semi-structured interviews are a viable means of learning about peoples' views especially due to flexibility and openness during data collection process (Patton 2002, Bryman 2012). All respondents were selected in Kitabi women handcraft cooperative. All semi-structured interviews were conducted in Kinyawanda, transcribed and translated back in English. The collected information was then analyzed using content analysis by identifying deductive codes derived from existing literature and supplemented with inductive categories that emerged from collected data. The results were discussed in light of environmental distributive and procedural justice (Pretty 1995, Reddy 2002, Paudel 2009, Svarstad *et al.* 2010).

For ethical consideration, before starting the interview participants were briefed about the aim of the research and the possible benefits of the research. The researcher also clearly stated that the



interviews would be audio recorded and that participants have the right to decline to participate and withdraw from the study irrespective of the extent of data collected. The researcher clearly informed the participants that they are free to request clarification at any moment and would receive answers. The researcher clarified that their true names would appear in neither data analysis nor publication of results. For anonymization of participants I used alphabetical letters to ensure the confidentiality during data analysis and presentation of results.

## **6. Findings**

This paper aimed at investigating women's experiences about their empowerment through environmental justice in Kitabi women handcraft cooperative operating in the surroundings Nyungwe National Park. In addition to a short description of the cooperative, data are analyzed under three themes namely distributive and procedural justice in relation to women empowerment as well as challenges faced by women in regard to their empowerment in the context of natural resources management.

### **6.1. Description of Kitabi women handcraft cooperative**

Kitabi Women Handcraft Cooperative started in 2011 with 30 active members, 28 females and 2 males. The cooperative operates its activities in the surroundings of protected areas of Nyungwe National Park in Kitabi sector in Nyamabage District. The cooperative is composed of women whose husbands had been involved in harvesting Nyungwe National Park through timber, traditional medicinal plants, agricultural activities, firewood, poaching, mining, bee-keeping and grasses for making handcraft products especially before Nyungwe was recognized as National Park in 2005. Additionally, women themselves used to rely on resources found in the park like firewood, water and traditional medicinal plants. The cooperative was then established to reduce the reliance to natural resources rather create other sources of income for their survival and development.

The mission of the cooperative is to protect Nyungwe National park through raising environment awareness among community members. In addition to making handcraft for increasing their income, members of the cooperative initiate and undertake different activities to protect Nyungwe National park. The latter include but not limited to building public latrines, sensitization and mobilization of local community about the importance of the park to their welfare as well as country development. More on that, members of the cooperative were trained and started projects of knitting bags which replaced baskets made before from traditional materials<sup>1</sup> collected in Nyungwe, construct the public toilets as a way of protecting the park, they built Mushabarara center which host tourists and other travelers. Mushabarara is known as a centre made of traditional houses with grasses which host tourists in National Park of Nyungwe. Rwanda Development Board and its' partners supports the cooperative through income from tourism. The following parts show the findings regarding how women in the previously mentioned cooperative are empowered.

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<sup>1</sup> Imigwegwe (Traditional grasses, herbs that were harvested in Nyungwe national park by the local community to make baskets).



## **6.2. Environmental distributive justice and women empowerment in Kitabi handcraft cooperative**

So far as women empowerment through distributive justice in Kitabi women handcraft cooperative is concerned, the following data shows how women are socially and economically empowered as a result of environmental distributive justice. With regard to economic dimensions, access to loans, employment, income generating projects are major indicators emerged from the findings. Moreover, improved family relations, capacity building are major concerns of social women empowerment in the context of the present study. More on that, the findings about self-reported improved welfare are presented.

With regard to economic empowerment, participants indicated that gathered in cooperative, it gave them opportunities to have access to financial loan. In collaboration with USAID, Wildlife Conservation Society (WCS), Rwanda Development Board (RDB) facilitated the cooperative to purchase sewing machines for weaving and connected them to lending financial institutions including Saving and Credits Cooperatives (SACCO) working in each sector and Réseau Inter-Diocésain des Micro-Finances (RIM) of Roman Catholic (Gikongoro) to ease access to loan. However, loans that are offered by aforesaid microfinance charge a higher interest rate 19% compared to average interest rate of 17% in other financial institutions). In addition to loans offered to cooperative so as to enhance handcraft business, individual members have access to the same kind of loan through cooperative which later contributes to their income generating activities. One respondent says thanks to loan she got through the cooperative, she started a small business of farming (WA). It is indicated by participants that loan contacted through their cooperative allowed starting different projects including small agricultural projects, livestock and small trading business. Moreover, participants reported to have started other income generating projects which include tailoring, knitting uniform sweaters for surrounding schools and shopping bags for tourists and the rest of the community. For example, one participant indicated that through loan she got from bank through cooperative, she initiated the projects of small farming projects of pigs and goats (WB). Knitting bags which replaced baskets made before from traditional materials collected in Nyungwe, construct the public toilets as a way of protecting the park, they built Mushabarara center which host tourists and other travelers.

Furthermore, access to loan has created opportunities of jobs. Having been trained to making handcraft and given loan boosted the access to employment. In this context, members of Kitabi women handcraft cooperative are regularly workers for handcraft business and get paid for it. It is worth to mention that handcraft products are sold to tourists and share benefits on annual basis. Additionally, they have opportunities to initiate their own generating income projects. More on that, children initiated traditional dancing club that entertains tourists especially during school holidays.

In addition to economic benefits, findings show that women in Kitabi Women handcraft cooperative are socially empowered through capacity building that leads to improve welfare. During interviews, participants indicated that they benefited from different training on different topics. Among others, they have been trained on handcraft making, project planning and management, environmental conservation and family planning. With training on handcraft making, cooperative members have been equipped with

skills to make handcraft products that are sold to tourists. Instead of traditional use of resources from the park, they alternatively use other locally found materials. As indicated earlier, members initiated income generating projects as a result of training on management of small projects including small environmental projects. Members have been likewise trained on environmental conservation and management to become agents of change among communities. Moreover, participants reported to have benefited from other trainings on different issues concerning the wellbeing of the family including but not limited to family planning and gender-based violence. The question might be about the benefits of social and economic empowerment of women in Kitabi women handcraft cooperative.

With regard to the impact of social and economic empowerment, participants indicated that their lives have improved thanks to taking part in cooperative. Before joining the cooperative, participants indicated that women did not have formal jobs and this cooperative has become their main employment and source of income as they are struggling to maintain small and inconsistent sources of income sometimes through illegal practices in the park. All participants showed that they were not able to start new small projects and had economically the problem of paying land and other fixed assets, shelter as well as inaccessibility to loan. It is clear that the living conditions of cooperative members were not promising. However, participants indicated positive changes thanks to participation in the previously mentioned cooperative. Participant from local government (ESK) said that, economically, cooperative members had not the capacity of having shelter. They had no cattle and could not open an account in Umurenge SACCO microfinance. However, he said: *‘After joining the cooperative, the socioeconomic situation of cooperative members was improved because today, they are able to get food, to get money for medical insurance payment, they are able to pay education fees for their kids’*. Being in cooperative help women to satisfy some basic needs through selling handicrafts materials to tourists. As respondent from RDB (RDBCT) said, the programmes funded by the Revenue Share Programme improve people’s lives: *‘This program show our commitment to protect biodiversity while contributing to improving the livelihoods of people living adjacent to our national parks and the overall development of the country’*. In the same orientation one participant (WB) said: *‘My husband was a hunter in Nyungwe forest where he used to kill animals and sell meat. In women handcraft cooperative, I learnt knitting sweaters, bags and baskets, which are sold to make money. Today I encourage my husband, sons, surrounding communities not to hunt, and other prohibited activities in Nyungwe national Park. Today, I can afford health insurance and small animals such as pigs and goats from the associations’ benefits’*. This shows that life of women as well as their households has improved as a result of participating in cooperative in regard to satisfaction of basics, social and economic needs such as food, shelter, health insurance and education of children. Moreover, this led to satisfaction of other human needs like self-esteem. More on that, participants reported to have become agents of change in the process of increasing awareness about environmental protection for their family members.

### **6.3. Environmental procedural justice and women empowerment**

With regard to participation of women members of the cooperative in decision-making process, the

findings are controversial. On the one hand, four women participants out of eight are not happy with their participation in decision-making process (WD, WF, and WG, WA). They said that leaders are the ones who decide and come to population especially the one working in cooperatives and tell them what to do. In addition, they complain about their suggestions never considered in deciding. For example, participants indicated that women, through cooperative, decided to protect animals coming out of the park to raid crops. They had found ways to bring them back into the park. However, participants reported that their decision was not encouraged. Moreover, they indicated to have asked mobile phone for easy communication and information dissemination. Unfortunately, they reported that the proposition was not welcomed. In this orientation, one participant indicated: *'It is annoying to keep saying this without it ever being considered. We need communication facilities and we want our voice to be heard as we are very actively involved in the conservation of the Park'* (WA). This shows that some participants are not happy with the process of communication and decision-making that they perceive as passive. They reported that their voices are missing in decisions made.

In the same vein of ideas, collaboration of stakeholders in regard to conservation might be problematic. One participant ESK indicated that community members are almost absent in the monitoring and evaluation processes. For example, women are missing in some strategic meetings and local government administration entities are not well informed of who the RDB invites in the meeting and on which basis. Moreover, the management of finance related Tourism revenue sharing is not transparently clear to all stakeholders. What they receive and how it has to be managed rest in the secret hands of decision-makers.

On the other hand, two participants indicated a limited participation. WC said that sometimes they are invited to share information with RDB. The cooperative reports monthly to RDB and whenever needed they have meetings for deciding on which activities have to be done and revising measures of protecting the park as well as wild animals which come out of the parks and damage/destroy crops of the population. Payment procedures and amounts to be given to owners of those crops are decided in meeting with RDB staff. Moreover, local leaders show that elected peers represent members of the community including cooperatives. He said that when it comes to procedural decision making, the population is the one who select eligible persons for supports, they are mutually helping one another to protect the park and whenever there is a kind of deviation to laws, the population reports the bad doers and punishments are discussed in meetings. It might be that members of the community participate through meetings (with or without representatives) are more informative than interactive. This may be the reason why some participants claim that their ideas are not considered while others confirm the participation through meetings.

#### **6.4. Women's challenges concerning empowerment**

Despite the benefits from Nyungwe National Park, respondents revealed that there are some challenges that need to be reflected to enhance environmental justice as means of women empowerment in protected areas of Nyungwe National Park. Participants mentioned crop raiding, complicated

compensation process, high interest rate on loan, slow process of loan, mindset of local community, lack of communication facilities and lack of study trips.

First, chimpanzees escape the park and damage the surrounding community's crops. Participants indicated that crop raiding is a serious problem which slows down their welfare. Second, participants show that the process of compensation concerning crop raiding is very complicated and slow. In addition, participants reported that the fairness in calculations of money to be reimbursed is critical. This is because there are not yet established commonly shared criteria and standards in evaluating crop damages. Third, though members of Kitabi women handcraft cooperative acknowledge the access to loan and close collaboration with microfinance such as SACCOs, they still face the challenge of a high interest rate and short period of reimbursement compared to other financial institutions. In addition, participants indicated that the process of approving loan takes longer.

Four, communication between members of the cooperative and decision makers was rated to be problematic. On the one hand, members of the cooperative accuse decision makers not to value their requests of providing communication facilities. On the other hand, decision makers accuse them to poorly communicate by not sharing information on time. Five, participants appreciated the trainings they benefited as driving force for the success of cooperative management as well as their welfare. Unfortunately, they would like to be offered opportunities of study trips to learn from others' experiences.

Six, There are members of the community that are still reluctant to change as regard to environmental protection. For example, participants reported that there are members of the community who wish to continue earning their lives from Nyungwe National Park.

## **7. Discussion**

The present study has the purpose of investigating how women are empowered through environmental justice in the context of protected areas of Nyungwe National Parks, case of Kitabi Women Handcraft Cooperative. The findings as previously presented are discussed in relation to existing scientific discourse on distributive and procedural justice as related to women empowerment in the context of conservation of natural resources in Rwanda. With this regard, results about women empowerment through distributive and procedural justice as well as related challenges are discussed hereunder.

Firstly, the results of the study show that women in Kitabi handcraft cooperative are socially and economically empowered. Women who were grouped in cooperative and empowered economically through capacity building, access to loan, employment, had opportunities to improve their household status. Among others, women started income generating activities, improve family relations which lead to support RDB in the process of sensitization and mobilization of the local population about the role of the park and its conservation. Moreover, this sort of empowerment led to the satisfaction of cooperative members with regards to employment, health insurance, food security and environmental raising awareness. Women are influential in the process of change (OECD 2014, Ferguson and Alarcon 2015) and engaging sustainable development initiatives without involving them is an empty gesture

(Dobson 1998). Therefore, empowering women in protected areas of Nyungwe National park is likely to achieve better conservation outcomes. Furthermore, findings corroborated (Braidotti, Charkiewicz, Hausler and Wieringa 1994) point of view whereby increasing women participation and empowering them, lead to better conservation outcomes as they have privileged knowledge and experience of working closely with the environment. Furthermore, conservation of natural resources in the protected areas is quite impossible if surrounding people live in poverty (Scherl 2004, Plumptre 2004, Masozera 2002). In this orientation, once women are economically empowered, there is high probability that natural resources will be safeguarded. The findings of the study are in the same line of Banerjee (2014) who argued that as countries, especially developing ones, seek to increase revenues from tourism, communities living closer to tourist attractions, especially those surrounding national parks had to abandon some of the activities such as hunting, firewood collection, mines exploitation, traditional medicine collection, bee-keeping activities, and others that had been long their source of consumption and income. Therefore, environmental distributive justice is a key to sustainable conservation of natural resources.

Secondly, women participation in decision -making, despite recognition of economic empowerment, is very limited. Results show that women in the cooperative are only informed decisions without their input. Additionally, their ideas are most of the time ignored. In view of the model of community participation as developed by Pretty (1995), it can be revealed that women participation in decision-making process is passive. With passive participation, relationship between community members and decision makers is quite asymmetric. Members of the community play the only role of receiving information which might be or not relevant to their needs. Moreover, the findings are in line with the top-down approach whose assumptions are to consider communities as passive in the process of decision-making (Paudel 2009). Though the findings of this study show promising economic benefits for women, the sustainability of the change in regard to their development and natural resources conservation is questionable if they do not own the initiatives undertaken by decision-makers. This is because the sustainability is a result of close collaboration between stakeholders i.e. government and the community in planning and making decisions for sustainable conservation and benefit sharing for development process (Reddy 2002).

On one hand some of the ideas from their association are not considered by decisions makers because they are the one who thinks and decides what is to be done. With this view women in the cooperative consider being part in decision making process by receiving reports and information from decision makers, this show that there is a passive participation where women participate only when receiving information from decision makers. This finding is in line with Pretty (1995) model of community participation that shows passive participation where communities participate in receiving information. On the other hand, findings revealed that a little partnership and bottom-up approaches are used where the local leaders and the community sometimes meet for deciding on different activities like payment for the damaged crops and punishment for people who violate law governing the park. This finding is in line with the idea of Paudel (2009) and Reddy (2002) who said that the government and

the community work together in planning and making some decisions for better and sustainable conservation and benefit sharing for development process. Participatory processes in decision making is a tool that promote trust between local community and decision makers (Pretty 1995, Reddy 2002, Paudel 2009, Hoverman *et al.* 2011) and reach to better conservation outcomes as well as promote the success of rural development goals (Belshaw and Chambers 1973, Uphoff, Cohen, and Goldsmith 1979) when there is an emphasis on the importance of local capacity building, knowledge ownership, and empowerment (Chambers 1994). With this regard, a partnership approach (Reddy 2002) needs to be reinforced as a tool to sustainable conservation outcomes.

Thirdly, the findings indicated that crop raiding, compensation process, high interest rate on loan, slow process of loan, mindset of local community, lack of communication facilities and lack of study trips are key challenges for the sustainability of environmental justice and then limits the process of women empowerment. These challenges are directly or indirectly related to implementation of decentralization policies whereby the voices of local communities are to be recognized. Additionally, the challenges might be reflected in relation to management approach used especially in involving local communities in natural resources management in the protected areas.

## **8. Concluding remarks**

The aim of this study was to investigate women's experience about their empowerment through environmental distributive and procedural justice. The study shows that environmental distribute justice leads to social and economic empowerment of women living in the protected areas of Nyungwe National Park. However, the sustainability of this empowerment is limited by the passive and top-down approaches dominating the implementation of policies regarding conservation of natural resources. Based on research findings, the researcher suggest that RDB in collaboration with local government to emphasize the partnership approach in empowering the communities especially women, hear their voices and build trust among the entire community members. RDB should organize more training and study trip for women in cooperatives in order to learn from others who have the same mission of making handcrafts while protecting natural resources. Regular meetings and consultation have to be increased as one way of gathering more information on time and encourage positive endeavors to protect and safeguard Nyungwe National Park. Moreover, sensitization has to be used as a continuous tool to change the mindset of resisting people and to show them different alternatives to the park destruction. In this regard, RDB in collaboration with financial institutions should ease the process of getting loan by reducing interest rate for community-based cooperatives. The study recommends other similar studies to other community-based cooperatives operating in protected areas in Rwanda. This is very compelling because it allows achieving at least three intertwined variants of Sustainable Development Goals (SDGs), namely gender empowerment, poverty reduction and environmental protection.

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