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**Community awareness regarding the páramos: an
exploratory study on Colombian eco-social
organizations.**

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ABSTRACT

This qualitative study explores how eco-social organizations in Colombia work with the communities to protect the páramos, and the issues affecting the páramos. Workers, volunteers, and advisors of the organizations were interviewed to examine the issues affecting the páramos and how they work with the communities to protect this ecosystem. Results of this study were analyzed through the environmental justice framework and the eco-social approach and by applying thematic analysis. The findings identified that issues such as climate change, agriculture, and mining are affecting the ecosystem of páramos. The study results also reflected that the community-based conservation approach, community prior knowledge, educating and raising awareness, and the role of eco-social non-governmental organizations play a fundamental role when working alongside the communities to protect the páramos.

Keywords

Rural and urban communities, eco-social work, environmental justice framework, eco-social approach, eco-social organizations, páramos, Colombia.

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1. Introduction

Páramos are globally strategic ecosystems in which the freshwater that millions of people drink is generated, in addition, it is a natural repository that supports the control of carbon dioxide as it retains it in its subsoil, helping to avoid global warming (WWF, 2012). Due to its natural water provision and its role in mitigating climate change, the importance of the páramos for society and the ecosystem is imperative. Moreover, in the context of South America, the páramos are the main provider of water for the Andean highlands of Venezuela, Colombia, and Ecuador, large parts of the adjacent lowlands, and the arid coastal plains of northern Peru (Buytaert et al., 2006). Many cities and communities obtain their daily water through this ecosystem. For instance, Bogotá, the capital of Colombia, almost exclusively uses water from the páramos (Buytaert et al., 2006). Furthermore, Molina Benavides et al. (2019) explained that Colombia has an area close to 3% of its continental area, which represents 50% of the páramos of the world classified, according to biogeographical criteria. In this sense, the páramos represent a paramount part of the biodiversity of ecosystems in South America. In addition, Arbeláez-Cortés (2013) pointed out that Colombia's biodiversity is not just a matter of policy conservation attached to international threats; it also means Colombia's culture and history, thus being a source of pride for the population.

Moreover, the problems that affect the páramos are extensive. Human activities, such as cultivation, cattle grazing intensification, pine plantations, and tourism, have recently increased in the páramos (Buytaert et al., 2006). Thus, influencing the effective and natural development of the páramos and the communities that benefit from it. As Luteyn (2000) expressed, despite the páramos being considered the richest in high mountain flora in the world, they are ecologically fragile. It is thus more sensitive and vulnerable to anthropocentric activities. At the same time, protecting the páramos may be a positive factor in taking care of biodiversity and society since the páramos prevent flooding, landslides, and water shortages (World Bank, 2022). Therefore, promoting social action is imperative to fight or mitigate the effects of climate change in the páramos since it may have consequences such as impacting agricultural practices, human health, and economic activities (World Bank, 2022). For instance, an alteration on the ecosystems that provide water to society might impact on the wellbeing of the

individuals, as the WHO (2018) explained, the lack of safe water can compromise hygiene and increase the risk of diarrheal and other sanitation-related diseases.

Furthermore, the páramos are high mountain ecosystems that are relatively open and characterized by the dominance of grass and plants such as “frailejones” (native plants in the páramos), and due to the elevation, the abundance of lakes, and the thick mattresses of moss, the páramos are considered the natural water factories of Colombia (Rangel,2000). Nevertheless, one of the effects of global warming on páramo-fed rivers would be that warmer temperatures would dry out páramos and compromise their role as slow discharge to rivers (Anderson et al, 2011). Due to the risk factors surrounding the páramos and their water production, the social and active promotion of the importance of the páramos for society is paramount. Thereby, as in other environmental conflicts in Latin America, social organizations are and were key to mediating the effects of large-scale investment on territorial change around the páramos (Ungar, 2021).

Subsequently, eco-social organizations work with the communities in Colombia to improve the quality of life of the vulnerable population by being careful with natural resources and the environment. Having as its main axis the development of the human being and their relations with the environment, through educational workshops, environmental talks, expeditions, planting, and long-term projects with the communities. Finally, in this study, the work of eco-social organizations plays an essential role to comprehend in depth the problems affecting the páramos. Furthermore, how the eco-social organizations work together with the communities in favor of environmental and social justice in Colombia in order to explore the efforts to mitigate the impacts of climate change and human activities on the páramos and society. Additionally, this study also seeks to contribute with relevant information on the work of eco-social organizations with the communities in Colombia for ecological and social protection—in this precise case, the protection of the páramos and water for the communities.

1.3 Aim and the Research Questions

Aim

The aim of this study is to explore how eco-social organizations in Colombia work with the communities to protect the páramos.

Research questions

1. What are the issues affecting the páramos?
2. How do the eco-social organizations work with the communities to address the issues and protect the páramos?

1.4 Disposition of this study

In general, this study contributes relevant information on the work and interventions of eco-social organizations related to the protection of the páramos in Colombia. Chapter 1 explores the significance of páramos and how it is affected by human activities; it is a detailed explanation about the background of the problem. Chapter 2 of this study used to show earlier research and literature on páramos. It helped to recognize the themes to address the analysis. Chapter 3 discusses the theoretical framework used throughout this study. Chapter 4 describes the methodology used in this research study, including research design, data collection, ethical considerations etc. Chapter 5 shows the results under several themes that we recognized during the process and explains the analysis. Chapter 6 discusses the methodology further and gives suggestions for further research focused on the "community awareness regarding the páramos" and the list of the references used in the research is included afterwards. Finally, the appendices wind up the paper.

2. Literature review

2.1 Community-based conservation

An area addressed throughout earlier research is Community-based conservation, which is an approach that helps eco-social organizations to work with the communities to protect the ecosystems and, such as in this precise study, the ecosystem of páramos. Community-based conservation is a term used to describe a variety of approaches that fall under the general heading of conservation efforts in developing countries that generally try to consider the interests and viewpoints of the local communities (Brooks et al., 2013). In this sense, the emphasis of community-based conservation is on the vital part that local groups play in the management of natural resources. This approach might be described as a set of "principles and practices" that highlights the need of including local inhabitants in decisions regarding natural resources (Mahajan et al., 2020).

Furthermore, Barrow and Murphree (1998) described that a nation's biodiversity conservation efforts and land use planning should be strategically linked to the idea and practice of community conservation. In addition, the community or resource users form the basis for conservation and natural resource management. In this sense, the communities together play an important role when it comes to the conservation of the páramos. In addition, Barrow and Murphree (1998) explained that protection is by individuals to oversee dependably in a manner that is "supportable" and beneficial. In this context, Community Based Conservation aims to encourage local people to sustainably manage their own resources, develop the enabling legal and policy instruments, create mechanisms for local ownership and responsibility, and guarantee that benefits accrue responsibly and equitably (Barrow and Murphree, 1998).

Moreover, Brooks et al. (2013) expressed that community-based conservation advocates the notion that interacting with and benefiting local communities is necessary for long-term conservation success. Regarding the páramos Riveros et.al (2015) informed that communities consider that preserving the páramos implies protecting and caring for its environment, its buffer zones - "all the mountain" - since it is in permanent interaction with the surrounding lands, the production areas downstream, and the towns and cities that benefit from its services. In the developing world, especially in very

diversified regions where local communities still rely on goods and services they consume directly from the natural environment, there is a tremendous degree of ecosystem stress and deterioration. (Vargas & Díaz, 2014). Therefore, the greater involvement of local communities in conservation programs (sometimes based on procedures created by outside actors) and the use of the relational values of local communities to promote desired conservation outcomes are both the results of the recognition and the significance of local communities in conservation (Guibrunet et al., 2021).

2. 2 Educating and raising awareness

Educating and raising awareness were identified in previous literature, as they are two essential points for eco-social organizations to work with communities. Roberts (1998) considers that community empowerment techniques should assume a conspicuous part in any environmental justice strategy. In addition, educating communities through environmental education is estimated as a mechanism to reduce environmental problems in relation to achieving positive results in conservation issues. It is recommended by professionals in several countries around the world, since it is considered a fundamental pillar to achieve positive results in the environment. Through environmental education, the objectives proposed in relation to conservation are met and environmental problems are minimized (Rojas and Raigoso, 2022). Moreover, encouraging the knowledge and research of the communities about their own environmental problems guides toward awareness and self-management (Porras et al., 2014). In addition, Ardoin et al. (2020) also consider that research and practice in environmental education contribute to a transformative activity that can have a variety of effects on environmental quality—and, in fact, we can all benefit from those effects in the short and long term. It is also discussed that environmental education is more than just passing on information in one direction. Instead, this set of tools improves environmental attitudes, values, and knowledge, as well as develops skills that enable communities and individuals to work together to improve the environment (ibi d).

Furthermore, Zikargae et al. (2022) pointed out that skills and knowledge imparted through environmental education are important for implementing community projects, helping to improve community participation in raising environmental quality, thus improving environmental performance, farming methods, and livelihood situations. In

this sense of environmental education to implement community projects, Riveros et.al (2015) indicated that the implementation of a pedagogy that promotes necessary values for páramo communities such as solidarity, reciprocity, co-responsibility, and care for the environment works for the conservation, value and sustainable use of páramos. Zikargae et al. (2022) also argue that project-based interventions help to expand community participation, strengthen individual community skills and competencies, promote a shared understanding and vision of the environment, and lead to community engagement. Strengthening individual community skills and competencies in the páramo, Buitrago et al. (2018) considers that a fundamental aspect of managing processes of environmental deterioration that take place in the páramo, lies in undertaking tasks aimed at strengthening local and regional capacity, in joint actions of dialogue and work for the conservation and sustainable management of the territory. Furthermore, educating the community and sharing their perspectives of the environment and the impacts of human activities is imperative.

2.3 Issues affecting the páramos.

Another area addressed through the literature reviewed was human activity as a main factor that contributes to the deterioration of the páramos. According to Greenpeace (2013) these include the increase in temperature which over time will cause the entire ecosystem to migrate to the higher parts of the mountains due to climate change. For instance, the snow-capped peaks will be displaced or disappear and the páramo also will lose part of its original extension. Besides that, the large population settled on the Andes Mountain range has caused the progressive decline of the natural conditions of mountain ecosystems, to adapt the lands to livestock farming practices. Moreover, deforestation also contributes to the deterioration of the páramos. Due to the expansion of the agricultural frontier, grazing and burning (Greenpeace, 2013).

Furthermore, mining is also considered as a contributing factor to the deterioration of the páramos and even the communities. As Stemmler (2022) pointed out, mining activities are frequently considered one of the most environmentally invasive industries there are. In this sense, McIntyre et al. (2018) expressed that the mining activity onto the páramos creates a potential risk to its water supply value from air-borne dust and

contaminants from mining and coking. In addition, mining is recognized as an activity with socio-environmental impacts that affect people and territories (Roa-García, 2017).

2.4 The role of eco-social non-governmental organizations

In the context of this study, the role of eco-social non-governmental organizations is paramount. As Tristão and Tristão (2016) explained, environmental education practiced by social organizations introduces itself as another technique, pointed toward working on attitudes, perspectives, and social practices which demonstrate an answer for social-environmental degradation tormenting the contemporary world. On the other hand, environmental non-governmental organizations (NGOs) are organizations that participate in social and environmental issues and have nonprofit public purposes and some volunteer participation. Its primary goals are to prevent environmental degradation and encourage sustainable development (Tristão and Tristão, 2016). Besides, NGOs add to worldwide ecological administration in various ways and to various degrees by offering information and skill, moral contentions, and novel thoughts, and by making a move on executing strategies and expecting the job of partners (Nasiritousi, 2019).

Moreover, In the case of this study, the work of eco-social organizations plays an important role when it comes to providing interventions to the communities to raise awareness, encourage and educate individuals. Additionally, social workers struggle to balance both societal and environmental aspects. Social workers need to give attention to and take necessary measures for climate change. After all, it is insufficient to have only knowledge regarding climate change (Gray et al., 2013). Furthermore, Riveros et.al (2015), expressed that páramo communities are highly exposed to the effects of climate change and are sensitive to its impact. In this sense, the work of NGOs can provide help and support to public communities in and outside of the páramo areas. Since environmental protection non-governmental organizations greatly facilitate public participation, in addition, NGOs constantly empower, engage, and resource the public; In addition, ecological associations have allowed people in general to assume an important role in the administration of the natural resources that surround them (Riveros et al., 2015).

3. Theoretical Framework

3.2 Environmental Justice Framework

The term environmental justice began to be used in the 1980s as a social movement after the conflicts of ecological distribution and injustices towards African American individuals in the United States, these injustices for instance, were disproportionate dumping of toxic waste in African American areas (Martinez-Alier et al., 2016). Furthermore, environmental justice in social work is the study and practice of ensuring that all people are protected from environmental burdens and can live, work, learn, and play in safe and healthy communities (Rogge, 2013). Moreover, the environmental justice framework concerns the rights of indigenous peoples, issues or property rights, land acquisition, and pollution. (Carruthers, 2008). To this extent, according to Kato-Huerta & Geneletti (2022), environmental justice addresses the unequal distribution of environmental goods and damages and promotes the right of people to participate in environmental decision-making. In the context of this study, using the environmental justice framework the authors intend to identify and understand that all individuals have the right to be protected from environmental hazards and to live in a healthy environment, thus providing an understanding on how important the water provided by the páramos is for the individuals.

Furthermore, environmental justice within the social work field is considered an important area. Nesmith & Smyth (2015) argues that environmental justice is like any other social justice issue that social work has dealt with. Additionally, Gray et al. (2013) also discuss that in recent years, the growing concern for environmental justice in social work, particularly the effects of deteriorating ecological conditions on marginalized human populations, has increased rapidly. Thus, it is also highlighted that in response to the concerns of environmental injustices, social work has broadened its theoretical considerations and practice interventions to place a greater emphasis on the physical environment to the planet and all life (ibid). In this study, the environmental justice framework has been used to analyze the ongoing deterioration of the páramos and those who rely on it.

3.3 Eco-social approach

The eco-social approach arises through the need for social work to respond to socio-environmental issues. As McKinnon & Alston (2016) discuss, the ecocritical perspective changed how social work responded to contemporary industrial society and ecological criticism of new ecological movements. In this sense, Närhi & Matthies (2016) informs that particularly during times of societal crisis, it has become evident that social work approaches that go beyond individual and family-level issues and solutions are required. Thus, Wang & Altanbulag (2022) consider the eco-social approach to be a shift from the old social work paradigm that emphasizes social systems and social justice with a human-centered focus. Moreover, Payne (2021) explains that eco practice seeks to make a role for social work in responding to disasters and emergencies and to direct that response towards a new form of collective economy. An economy that connects working for human well-being with sustaining the environment. Subsequently, the eco-social approach is an umbrella concept; the reciprocal relationship between the living environment and human welfare from the perspective of sustainable development (McKinnon & Alston, 2016). Besides that, it also provides a conceptual tool for approaching environmental issues in social work, studying ecological and social sustainability, and emphasizing the reciprocal relationship between human welfare and the living environment (ibid). Eventually, the eco-social approach focuses more on the social, cultural-ecological, and interdisciplinary aspects of social work, as well as practice paths that encourage interdisciplinarity (Wang & Altanbulag, 2022). Also, eco practice teaches people how to deal with environmental injustice and transitions, as well as how to become more aware of and resilient in the face of environmental disasters, difficulties, and transitions (Payne, 2021). Regarding communities, this approach brings individuals together in united awareness and feeling (ibid). Furthermore, in the context of this study, the eco-social approach is used to provide a basis for analysis on how the protection of the páramos is impacted to the wellbeing of both humans and nature. Besides, in this study, this approach illuminates and contributes to a better understanding on how the eco-social organizations and the communities raise awareness of environmental protection in order to defend or protect their ecological interests or rights.

4.Methodology

4.1 Research Design

It is important to identify the eco-social ideas from the perspective of workers who work within organizations where projects and activities are carried out to educate people on how to encourage and raise awareness in communities, through environmental education in rural and urban areas. This qualitative methodology gave space for the participant to share views and experiences in working with the community and the páramos. Using qualitative research methods helped to acquire more data and a complete idea of the research problem. Qualitative research methods focus on human experiences and create conceptual enriched data that cannot be calculated (Rubin & Babbie, 2010).

Moreover, qualitative methods focus on the human experiences at a higher level and the surrounding content of the participants (Rubin & Babbie, 2010). Therefore, to achieve the aim and the research questions of this thesis the authors focused on different eco-social organizations' experiences..

4.2Database search

To gather more information focused on this thesis the authors used HIG Library and Google scholar.

Search Words: climate change, community awareness, páramos, eco-social work, environmental justice, environmental injustice, attitude change, community conservation, eco-social approach.

4.3 Data Collection

The data collection of this research is based on the topic of how eco-social organizations in Colombia work with the communities to protect the páramos and what are the issues affecting this ecosystem. The authors focused on the perspectives of the workers who work at eco-social organizations. For the purpose of collecting data, the authors reached out to three organizations whose work concerns the same goal, which is working with the community to secure the páramos.

Data collection was done through interviews. Many participants are more comfortable answering orally than writing in a questionnaire. Moreover, the interviewer can ask more questions to get additional details and can remove unnecessary questions while interviewing. (Grinnell & Unrau, 2017). The data was collected through a semi-structured interview guide as it is more helpful to have two-way communication and the interviewer can ask open-ended questions to widen the knowledge area, instead of following a strict and formalized list of questions. As the research is based in Colombia the means of conducting the interview were via Zoom and phone calls.

4.4 Sample, sample method and selection of the participants

For the purpose of this research using a non-probability sampling method is more appropriate as the research is mainly based on the eco-social organizations in Colombia. The non-probability sampling method is mostly used for qualitative research, which helps the researchers to limit their ability to generalize the results. The authors of this thesis selected a purposive sample as it was convenient to carry out the study. However, the focus of this sampling is more theoretical rather than numerical and this sampling is more action-based with a shared experience of interest by the sample (D’Cruz & Jones, 2004).

To reach the participants, the researchers contacted non-governmental eco-social work organizations in Colombia through emails and phone calls and with the help of family members as one of the research authors is originally from Colombia. The authors sent consent letters before the interviews since the participation must be voluntary and informed of all the consequences of the study and consent to participate in it. (Rubin & Babbie, 2011).

All the participants were selected concerning their background of experiences in working related to the páramos and communities. The chosen population is the staff members, volunteers, and advisors of the organizations. To this extent, purposive sampling describes the sampling process that was developed in this thesis, as Grinnell & Unrau (2011) explained, this kind of sampling may involve studying the entire population of some limited group or a subset of a population.

Eco-social non-governmental organizations

Organizations A, B and C are non-profit organizations with the focus of promoting the protection and conservation of the ecosystem of páramos for a sustainable society.

Participants

Organization	Participant number	Gender
Organization A	P1	Male/Staff member
Organization A	P3	Female/Staff member
Organization A	P6	Male/ Carried out projects for & with the organization
Organization B	P4	Male/Staff member
Organization B	P5	Female/Staff member
Organization C	P2	Male/Volunteer

4.5 Analysis of data

Data Transcription

The six interviews were transcribed from Spanish into English by one of the authors since Spanish is their mother tongue. The translation of the interviews was quite time-consuming as the authors collected two hours of recorded interviews. In the case of this study, word-processing programs have facilitated the task of transcribing large amounts of data easier (Grinnell & Unrau, 2011). Microsoft Office was used as a tool

for data transcription, then we used ATLAS.ti to code the transcripts. Additionally, the recordings were listened to three times each to ensure the veracity of the data collected.

Thematic Analysis

In this study, a thematic analysis was carried out through the software ATLAS.ti. The authors sought to identify the key themes that would provide an understanding of the subject of this study. Identifying key themes helps to understand how a phenomenon under study was framed at a particular moment and by certain individuals or groups (Rubin & Babbie, 2011). The themes collected were identified through the interviews carried out, in addition to the literature review, connections were found with the key themes already revealed from the data collected.

Coding

To have a more specific idea of how the research questions were answered and how the research aim was accomplished by identifying the themes was done as per the existing literature related to this research title. It helped to get a clearer idea about the study area. While analyzing the literature, four important themes arose that play a significant role in environmental awareness and education.

As stated by Rubin and Babbie (2010), qualitative research data can be analyzed by computer programs which is very helpful to the researchers. to analyze qualitative data available for researchers. As the authors of this research, we used qualitative data analysis and research software, named ATLAS.ti to do the coding. The authors used the program with the knowledge gained from a demonstration session given by a research supervisor. However, the ATLAS.ti program made the coding easier than the authors expected. It helped to identify the repeated words which are useful to build up connections to the themes. The codes and memos were inserted manually into ATLAS.ti. The interview data were categorized, and the categorized data was used to write this study accordingly.

4.6 Ethical Consideration

As social work researchers, it is important to consider ethics in the research process. A major research ethic is that participation must be voluntary and informed of all the consequences of the study and consent to participate in it. Similarly, the research should never injure the people studied (Rubin & Babbie, 2011). Therefore, when conducting our research interview, we made sure to ask for consent which allows us to record and take notes of the interview for our study purposes, and as the authors we made sure the participants being interviewed would feel comfortable with the kind of questions that were being asked and that no bridge or boundaries were being broken when it comes to ethical considerations.

Similarly, it is ethical to secure the confidentiality of the participants by removing personal information such as name, address, and organization from the research paper. So that it is difficult and impossible to link a situation or facts to a specific individual (Vetenskapsrådet, 2017). Therefore, in our research paper we ensured not to reveal the participants' identities as it is unethical and harmful to the participants.

4.7 Validity and credibility

Conducting the interviews and researching the background of the research focused on the research questions helps to identify and acquire the fullest answers for researchers to assess the validity and credibility of the research. Therefore, as the thesis research authors, we conducted interviews with the six participants taking time and days to collect the necessary data which is relevant to the background of our research questions. We were able to acquire answers when we were looking for our research questions as the participants were flexible in answering them and concerned about the background of the research itself.

According to Robson and McCartan (2015), the validity and credibility of research rely on the preciseness of conducting and reporting the relevant research. Fulfilling a higher range of answers within the interviews is important for the validity of the results. (Robson & McCartan, 2015) Adding to the same as the authors, we have succeeded in reporting the results of the thesis questions which is important to have greater validity and credibility.

4.8 Limitations of the study

As mentioned by Grinnell and Unrau (2018), most of the qualitative research shows different kinds of limitations that can affect a research. These limitations can be unavoidable and unseen whereas some can be identified during the process of the research. Time limitation is one of the limitations that we identified as the authors of this research. Therefore, to get an effective result we interviewed six interviewees which is a considerably small sample. Moreover, the authors could identify language as a limitation of this study. As the research is based in Colombia, the interview was conducted mostly in Spanish which made the interviewees more comfortable and shared rich content to achieve the aim of this research. On the other hand it took more time and efficiency to translate for the other author which is another limitation. Additionally, it was not easy to search previous studies written in the English language as this research is based in Colombia. In the same way authors also identified some issues in explaining the background of the research problem and writing the essay in English because English is not the authors' first language.

5.Results

5.1. Theme 1

Issues affecting the páramos; Climate change and human activity.

The participants of this study revealed different issues that are affecting the páramos, which are posing a threat to the quality of the water coming from the páramos that is consumed by the individuals. The participants explained that activities such as mining, the intensification of livestock, and the use of páramos areas for the cultivation of different foods are harmful activities not only for the páramos but also for the population that consumes its water, since these activities contaminate the soils of the páramos, thus polluting the waters. As P2 mentioned, the most evident issues that are affecting the páramos are, *“cultivation, livestock, and mining. Because in addition to damaging the ecosystem, these activities also damage and impact the development of water and the provision of it to the population.”*. According to most of the participants, the effects of the pesticides that are used during farming in the páramos and the chemicals that are used for mining can cause irreversible damage to the water that is generated by the páramos. P4 pointed out, *“the chemicals that are used during the mining process in the páramos cause serious damage to the páramos and to human health, because the páramos absorb these chemicals and mix with the water that ends up being consumed”*. In addition, P1 explained in further detail, *“there are companies that extract gold and other minerals in páramo areas, and when they carry out this type of activities they use something called cyanide, which is harmful to human health, what I mean is that substances such as cyanide are mixed in the water generated by the páramos, so people who live in neighboring communities in páramo areas and consume the water may be at risk of getting sick, as well as the population in urban areas such as Bogotá.”*

Furthermore, climate change was an issue mentioned by most of the participants. P6 mentioned *“with the change in temperature due to climate change, the páramos are being affected, since their usual temperature changes, thus changing the structure of it, and although it is not certainly known what will happen to the páramos, it is known that the the provision of water to the population will change, because these ecosystems are vulnerable to any change in temperature”*. Moreover, P2 informed *“Climate change impacts the ecosystem since it deregulates the creation of clean water. It also affects the*

crops, the soils of the páramos and the health of citizens are damaged". Additionally, P4 expressed the other risks that can harm communities if climate change increases the temperatures in páramo areas *"people need to know what the risks would be if temperatures in páramo areas raise, risks such as lack of water, floods, landslides, destabilization of the climate, droughts, and so on."* Furthermore, the participants considered that taking care of the páramos is helpful to mitigate the effects of climate change due to its function when retaining CO₂. P1 pointed out, *"the páramos are important for the whole world because they help to mitigate climate change. Because the sub-soil has the shape of a sponge, so at the same time the páramo is capturing and building drop by drop the water that is consumed, the sub-soil of the páramo also begins to retain CO₂."*

5.2 Theme 2

Community Based Conservation Approach

The second theme informs how community-based conservation approaches work for the organizations to promote conservation and disseminate the importance of the páramos for the communities. In this sense, through the different strategies, initiatives and projects, the organizations seek to promote the conservation of the páramos, and also promote awareness within the communities. As P4 explained *"the organization works with elderly and single mothers as a target population to give them support and a guide so they can take care of their lands and the páramos"*. Other community-based conservation interventions used by other organizations to raise awareness and protect the páramos have to do with youth and children. P1 explained how they do activity-based education with the children to educate them on how important it is to protect the páramos, and how this ecosystem works. One of the activities they do is an experiment that helps the children to experience and have a greater perception of the ecosystem. P1 further explained that they take the individuals to expeditions out in the páramos *"One of the activities that we carry out in these expeditions is to ask if someone brought sunscreen, and if they say no, then we take out the gel from a plant without harming it and we put it on the children's skin. This technique has shown that those who have natural gel do not have such great damage to the skin compared to those who only used sunscreen or did not use it. Besides, we also talked about the fact that plants have been found are being studied because it is known anciently that they produce elements that serve to control cancer. So, it's not just about the water, it's not*

just climate change, it's also the genetic information that's there to control diseases". Other initiatives were the planting of native trees, this initiative is meant to raise awareness among individuals in urban areas. Then, some of the organizations take the individuals to páramo areas where they can plant the native trees. According to P2, these activities generate a feeling of bonding between individuals towards the páramos, *"I Believe that people change their perception and create a connection between the importance of the water and the páramos"*.

5.2.1 Subtheme: Community prior knowledge

According to most of the participants, individuals from rural communities tend to have prior knowledge regarding the importance of the páramos, and the activities that damage this ecosystem. This subtheme was perceived by the participants as an advantage and disadvantage when working with the local communities since they know to a certain extent the importance of the páramos, but they cannot really do something about protecting them. This is because they do not have the technical knowledge or the means to properly secure the páramos. As P4 described *"when we approach the peasants/farmers or the people of the local areas in the páramos, we realize that they have knowledge about the things that are affecting the páramos and the water, such as livestock activities, and agriculture. They understand the problem from their experience with the páramos"*. Additionally, P3 expressed *"we have worked with local communities that already know the importance of the páramos as their livelihood. However, we work together with them to develop more knowledge and improve or develop projects or opportunities that can help the communities"*. To add up, P6 considered that *"farmers/peasants understand the issue that not protecting the páramos brings. But, their perception is the same, even when they receive information about how harmful human activities can be"*. P6 also considered, *"the people who live in páramo areas continue to grow potatoes or continue doing their livestock activities because it is their farm, and it is what they do for a living despite the fact that they are aware that these things damage the páramos"*. Moreover, through the interviews, a persistent paradigm emerged, although rural/local communities are aware of the importance of the páramos, many times the government or strategies of other eco-social organizations are lacking to motivate, support and help local communities to avoid the misuse of the páramos. P2 pointed out *"In rural areas, peasants do not have the means to obtain their*

basic needs, such as food, so they are forced to continue exploiting these ecosystems in some way. I consider that it is a process that goes hand in hand with government institutions and non-profit organizations.”

5.3 Theme 3: Educating and raising awareness.

In this section, the results showed how the eco-social organizations educate the communities and raise awareness to encourage and work with the members to protect the páramos. The participants revealed the different approaches used by the organizations in order to provide education and awareness. Firstly, as P1 explained, the organization works with the children on páramos issues, as educating the younger generation helps to guide them easily to protect the páramos. The organization educates the children that live around the páramos by going to their schools, holding activity-based conversations, and taking them on field tours around the páramos. P1 explained more about how they educate the children about the páramos, *“what I mean is that we invite the children from these rural areas. We take them on walks guided by local guides and also when we do these expeditions, generally the children who live in the area of the páramos also have a great knowledge of what a páramos is and how it works. So, when we have talks and walks around or in the páramos they also provide us information that can help us to inform people from the urban areas”*. Moreover, it was also revealed that some organizations besides giving environmental education interventions, they also seek to support the communities in other dimensions, such as providing the means to improve their buildings. This is the case of P4 who explained in further detail, *“the projects we carried out sought to encourage the target groups and other individuals to protect the páramos through a monetary incentive or we helped them to improve the structure of their farms or houses that are in páramo areas as a way of helping them to help us to protect the páramos”*. Furthermore, P2 informed that the organization follows another approach. In addition to the environmental talks, they also take the people living in urban areas to areas of páramos to plant native trees. According to the participant, this strategy helps people to understand and connect with the páramo *“the planting of different native trees of the high mountains in the páramos, such as the frailejón, is an initiative that seeks to give back to the ecosystem and the people”*.

Subsequently, awareness and encouragement for the organizations are important steps in order to guide communities, and raise awareness about the importance of the páramos, so the individuals also become agents of change. In this context, P1 expressed *“young people or children discover that they are actors in the actions that can be taken, they also understand that they can be actors of change and can become actors for the care of the páramo and we look for them to create projects together that help to take care of the páramos”*. It was also mentioned by the participants how important it is for urban communities to visit, and have a close experience in páramo areas. This is because a bond might be created that can actually lead individuals to be aware. As P3 mentioned *“when people from different communities experience visiting or being in the páramos, and understand the importance of this ecosystem they become agents of change”*. Regarding visiting the páramos in order to create a bond for urban communities P2 commented, *“I believe that a positive change is generated when people come to experience the páramos, make expeditions together with the organization, and hear the importance of the páramos for the development of human and ecological life”*. Additionally, it was highlighted by the participants that some rural communities are creating strategies to protect the páramos. P3 added, *“local communities are being empowered to make a change and they are doing their own projects to protect the páramos also”*.

5.3.1 Subtheme: The role of eco-social non-governmental organizations

The majority of the participants expressed that they believe in the importance of these organizations in order to educate the communities to protect the páramos. In addition, they believe in the power of these organizations to encourage individuals to understand what are the issues affecting the páramos, and how they can address these issues. In this sense, P2 expressed that *“in the urban area, after these interventions, I believe that people change their perception and create a link between the importance of water and the páramos”*. In addition, P3 said *“As an organization we believe and we have seen that environmental awareness does make a change”* Moreover, P5 claimed that the organization always advocates for the páramos, and the communities that live there to be protected; *“as an organization we’ve always asked for the active presence of the government in issues that have to do with the páramos and the communities”*. Furthermore, P4 mentioned that the educational interventions and projects of the

organization are important for the communities, since they do not have access to proper institutions that can support them, or provide the education; *“if there is no education or knowledge then there is no awareness, and then the projects that we do won't have an impact on the communities and the páramos. Besides we are the ones who try to advocate for these communities”*.

6. Analysis

6.1 Issues Affecting the Páramos: Human Activity and Climate change

According to the results, the participants agreed that issues such as mining, agriculture and climate change impact the healthy development of the páramos and their provision of water to the communities. Through the environmental justice framework, one could understand that these issues are increasing environmental harm and are creating an unequitable distribution of environmental goods, such as the protection of clean water (Gray et al., 2013). Based upon the environmental justice framework, it is understood by the participants the importance of protecting this ecosystem in order to protect human's health. As the findings revealed, these issues might not only affect the páramos but also the population's health that consume water from the páramos. Nesmith & Smith (2015) pointed out, the greatest threat to people's health, access to life-sustaining resources, and fundamental human rights may come from environmental degradation and climate change.

Moreover, the findings describe the impact that climate change could have on páramo areas, because not only would the ecosystem be destabilized, but it could also expose citizens to landslides, droughts and/or floods. Within the environmental justice framework the first task for those who advocate is to preserve the integrity of the natural environment and its resource potential for the benefit of human welfare (Gray et. Al., 2013). In this study, the participants comprehended and embodied the importance of environmental justice for the protection of the páramos, and the benefit of human welfare through the work they do together with the communities.

6.2 Community-based conservation

Based on the eco-social approach and according to the interviews with the participants, the organizations use different interventions, and strategies to promote environmental awareness on the páramos and the importance of their protection in the communities. In this sense, interventions in social work should influence social behavior, the social environment, and their relationship to one another as a whole (Matthies et al., 2001). The results suggested community-based conservation as an approach used by the organizations to promote awareness, and encourage protection of the páramos through the different interventions. Additionally, the results described some interventions that organizations provide to raise awareness in communities and encourage, both rural and urban communities. Some of the participants described "experience" activities where individuals have the opportunity to create a bond with the páramos and the relationship of these ecosystems with life. In addition to these strategies, educational talks, planting of native trees, and monetary aid or aid for the improvement of infrastructure of the houses or farms of people in rural communities are also carried out. As Rambaree (2020) explained, from their professional ethics, social workers have a mandate to work for the protection of the planet and the well-being of everyone, including non-humans. Therefore, for the workers of the organizations it is essential to disseminate the importance of the páramos for the communities to encourage and raise awareness about the páramos.

On the other hand, the findings revealed the subtheme of “community prior knowledge”, this subtheme allowed us to understand how the communities and organizations can work together and educate each other. As Nash et al. (2019) explained, communities seem to be aware of the many ways in which their immediate environment is changing, but it is important to extend this awareness beyond the local communities. According to the results, the fact that individuals from local communities have previous knowledge about páramos, helps organizations create strategies together with individuals from these communities to disseminate the importance of páramos in communities in urban areas. However, rural communities continue to follow the patterns that deteriorate the páramos, this due to the lack of commitment from the government and eco-social organizations in Colombia to provide full assistance and fulfill the basic needs of these communities.

6.3 Educating and raising awareness.

Regarding the education and awareness theme, the eco-social approach works to understand the various dimensions of social work which reflects on social sustainability and ecological crises (Matthies et al., 2001). To this extent, constructive environmental education given by the eco-social organizations provides the communities with the knowledge to understand in depth the importance of protecting the páramos. In addition, effective environmental education distributes and widens the environmental attitudes of the community, values, and knowledge. Moreover, it forms skills that prepare the surrounding communities to collectively act towards the environment and take positive actions (Ardoin et al., 2020). In this sense, the communities together play an important role, when it comes to conservation of páramos. In addition, the findings explained how the organizations provide educational talks and expeditions to children in both rural and urban communities, besides, it was shown that the organizations not just carry out environmental talks, but also other projects are carried out from the organizations to different communities to encourage and educate them more.

Moreover, the social and active protection of the páramos is paramount, since they provide water and help to prevent global warming by storing carbon in the páramo's soils. In Colombia, people are still unaware of this natural heritage, its characteristics, and the services that they provide to rural, indigenous, and urban communities, to industries and companies, hydroelectric, etc. (Vazquéz & Buitrago, 2011). In this sense, as McNamara (2013) pointed out, awareness should be raised all the time by sharing with community members the current and long-term impacts of climate change on their communities and what it means when it comes to safeguarding livelihoods in the future. Therefore, the authors consider the work of environmental workers, and activists in the organizations paramount when spreading awareness regarding the importance of taking care of the páramos to preserve the duality of ecological, and human life.

Furthermore, when it comes to the findings on raising awareness, the participants consider awareness as an imperative factor to encourage and work with the communities to protect the páramos. In this context, social workers can educate individuals, families, and groups about environmental issues and advocate on their behalf. As local and international communities begin to realize that their reorganization must include an environmental focus, these are all skills that are required (Muldoon,

2006). Within the environmental justice framework of this study, Stamm (2023) explained, that not only are the social and environmental issues facing already marginalized and vulnerable groups getting worse as a result of the environmental crisis, but it is also posing new challenges for numerous individuals, groups, peoples, and species both now and in the future. Thus, for the organizations raising awareness is an important factor in order to guide and work with the communities, and raise awareness on the importance of the páramos, so the individuals also become agents of change. In this context, the findings suggested that the individuals of the communities might become agents of change when they observe and receive the interventions of the organizations.

Finally, the findings revealed “the role of eco-social non-governmental organizations” subtheme, as an important part of educating and promoting awareness to communities. In this sense, under the eco-social approach in social work is paramount the social assessment and social action. When it comes to the role of these organizations, the eco-social approach helped us to understand how they work in a general framework that highlights the significance of both ecological, and social sustainability for the creation of sustainable social work practices, and sustainable living environments (Matthies et al., 2001). The findings demonstrated that for the participants, non-governmental eco-social organizations are essential since they promote environmental knowledge as a tool for communities to exercise their role as agents of change in favor of sustainability and protection of the páramos. In addition, the organizations also fulfill their role to advocate and promote the well-being of the communities and the páramos.

7. Discussion

7.1 Summary of the findings

The aim of this study is to explore how eco-social organizations in Colombia work with the communities to protect the páramos. The research questions focused on identifying the issues affecting the páramos, and how the organizations work with the communities to address these issues. The results of this study have revealed three main themes which are issues affecting the páramos: human activity and climate change, community-based conservation, and educating and raising awareness. Along with these three themes two sub themes were found, community prior knowledge and the role of non-governmental eco-social organizations.

Research question 1: What are the issues affecting the páramos? Based on the results of the study, three main themes were identified as being the main issues affecting the páramos. Activities such as mining and agriculture have a big impact on the quality of water produced by the páramos. Surprisingly, it was also discovered that the reason why these human activities affect the páramos is because the chemicals used to carry out these activities create a great impact on the ecosystem and on the water provided by the páramos to the communities. In addition, the findings pointed out that polluted water not only harms the páramos but the individual's health of the communities that drink the water.

Furthermore, the findings indicated that another main issue is climate change. It can destabilize the healthy development of the páramos as an ecosystem, and its water production. Moreover, climate change affecting the páramos is a threat that could put the well-being of entire communities at risk, since events such as droughts, landslides, and floods would probably be triggered. This might occur because the páramos are ecosystems that prevent those natural disasters.

Finally, it could be seen the significant impact that human activities and climate change have on the páramos. Additionally, as the findings showed it can have a negative impact on the communities' wellbeing as well. Besides, if these activities continue to be carried out and if climate change does not cease, it might harm deeply the páramos as a provider of clean water to the communities in Colombia and the ecosystem itself could be destabilized.

Research question 2: How do the eco-social organizations work with the communities to address the issues and protect the páramos?

According to the results, two main themes and two sub themes appear to be paramount when working with the communities to address the issues that harm the páramos, and how the communities can protect the páramos. Firstly, the organizations use community-based conservation as an approach to encourage the communities to be aware of the importance of páramos for the wellbeing of the humans and the ecosystem. The organizations use diverse strategies to protect the páramos such as hikes, educational talks, and planting trees. In addition, the findings pointed out that local communities in páramo areas have something called prior knowledge. This kind of knowledge helps organizations to work closer with the communities to generate strategies to disseminate and promote awareness to protect this ecosystem.

Moreover, the education and raising awareness theme provided an understanding on how organizations provide environmental courses, and projects to communities, in order to guide individuals in the communities to become agents of change in the protection of páramos. Additionally, the subtheme of the role of eco-social non-governmental organizations demonstrated that these institutions also work alongside communities to advocate for the environmental and social well-being of the communities, and the páramos. This collaboration is made through different projects, talks and environmental education.

7.2 Comparison to earlier research

Compared to the first theme found in earlier research, community-based conservation was seen as an important factor when it comes to working together with the communities, and the organizations to protect, and conserve the páramos to become agents of change. Moreover, the second theme was educating and raising awareness, for both, the earlier research and the results, it was imperative to use education as a method of raising awareness within the urban and rural communities. Since the implementation of pedagogical methods promotes community engagement. Furthermore, regarding the issues affecting the páramos, in comparison to the earlier research relevant information was found, however when conducting the interviews, the data collected did not provide a wide range of information about this theme as in the earlier research. In addition, according to the participants, the role of eco-social non-governmental organizations in

providing interventions and practices are an important factor to advocate for the local communities and to encourage the individuals to become aware of the meaning of the páramos. However, in the context of earlier research, there was not much information provided about the role of these organizations in advocating for both the páramos and the communities.

7.3 Discussion of theory

The environmental justice framework helped the authors to reflect on what the issues affecting the páramos are and how the organizations work through the promotion of awareness, environmental education and interventions for the protection of the páramos and the communities. Through this framework was possible to analyzed that environmental injustices are part of social injustices as well, in the sense of how communities still need to understand and be encouraged by non-governmental organizations through their interventions in order to protect their natural resources such as the water from the páramos and the ecosystem itself, thus leading the communities together with the organizations to advocate for their own right of living in a clean environment and to obtain clean water.

On the other hand, the eco-social approach allowed the authors to understand the concept of environmental interventions and environmental awareness through the ecological and social approach provided by the organizations to the communities. Moreover, the eco-social approach provided the authors a deeper understanding on how the organizations raise awareness and encourage the communities to protect the páramos through different interventions that seek to change the perspective of the communities towards a more sustainable and aware one. In addition, this approach explains from a sustainable perspective the relationship between the living environment and human welfare. Thus, in the context of this study, the organizations have used strategies that provide a better comprehension on the duality of the importance of the páramos as an ecosystem that provides natural services to a whole population and educating the communities to encourage the bond attached to human welfare and human development in order to protect the páramos.

7.4 Implications for International Social Work

The research explores how the eco-social organizations in Colombia protect the páramos through educating and raising awareness, so the communities understand even more the issues and the importance of this ecosystem. As explained by Coates & Gray (2011), in earlier years social workers were hesitant to accept environmental related issues, but at present it is inevitable to neglect environmental problems as it is an increasing issue. Due to the raise of environmental issues and the impacts that those issues have on humans, social workers are obliged to work towards justice and give their service for the wellbeing of both humans and the environment (Coates & Gray, 2011).

Social workers have been increasingly coming across the challenges of environmental injustices. For instance, Jane Addams, the social worker, advocated heavily for environmental reform for the urban poor. Addams linked environmental justice and municipal reform in her fight for safe drinking water, a functional sewage system, garbage disposal, and clean, safe play spaces for children' (Nesmith & Smyth, 2015, p.485). Another example is the case that referred to the polluted drinking water problem in Flint city, Michigan. It shows how environmental injustice took place and how environmental racism affected the population in Michigan (Campbell, Greenberg, Mankikar & Ross, 2016).

These environmental issues can affect humans. Therefore, as eco-social workers it is important to provide knowledge on facing environmental challenges. Social workers can motivate society to keep the environment clean, support with advocacy skills, give knowledge on different organizations not only in local level but also with the help of international organizations such as United Nations Environment Programme, Green Cross International, etc. or institutions that help with environmental problems and helping to bringing justice (Dominelli, 2011).

Furthermore, regarding the importance of this study to international social work, the authors also seek to provide more information about the interventions of non-governmental organizations at different levels, whether macro, micro or meso level. Thus, spreading the importance of multidimensional eco-social activities and practices in the branch of ecological social work and its expansion. As Boetto et al. (2022) explain, a multidimensional approach to practice is used in eco-social work.

7.5 Suggestion for further research

The need for more information on this subject is imperative, as numerous writers have urged researchers to examine the intricacies and practical realities of eco social work, and this is reflected in the very small number of studies that concentrate on practice interventions and, within this, an even smaller number on micro-level practice (ibid). As the authors of this research, we specially see a necessity for more studies in the English language on the eco-social organizations working with the community for Colombian ecosystems as in this case the páramos. Hence international researchers would have the opportunity to access the literature to do studies on how to work with communities to raise awareness and protect the páramos in a more satisfactory way.

When seeking publications that cover our research title, it is obvious that there is less research done in the English language regarding this topic but still there is much research done in Spanish. However, as one of the authors has knowledge in Spanish language the study was completed successfully. Moreover, the participants gave their fullest support in answering the questions in the interview sharing their experiences in how they educate and make aware of protecting the páramo. The authors believe that this thesis research will help future researchers to gain knowledge on the work of Colombian eco-social organizations working for the communities and the páramos and emerge with successful studies in the future.

7.6 Conclusion

In conclusion, this study provided some insights into how ecosocial organizations in Colombia work with communities to protect páramos. Some of these insights describe the use of different environmental education or monetary support strategies to guide communities and provide them with knowledge to understand the importance of the páramos, and why they should be protected. Thus, eco-social organizations seek to work hand in hand with communities to create a network of individuals seeking the protection of the páramos through environmental awareness.

In addition, this study identified the issues that deteriorate the páramos, which involve human activities, such as mining and agriculture. In addition, it was also identified that climate change is an issue that can trigger a negative impact not only at an ecological level in páramo areas but also an impact on health and water provision to individuals.

Finally, this study also identified that local communities understand the importance of the páramos for life and social and ecological well-being. However, these communities still depend on the agriculture they carry out in the páramos to survive and since their basic needs have not been met they keep on following the same patterns that harm the páramos.

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APPENDICES

APPENDIX I Information letter in Spanish and English

Information letter

Dear XXXX,

We are Marie Malshani and Mariana Caviativa. Currently, we are studying International Social Work at the University of Gävle in Sweden. This is an information letter that explains the process during and after the interviews. First, the aim of this study is to explore how eco-social organizations in Colombia encourage and raise awareness in communities through environmental education in rural and urban areas to understand the importance of páramos and protect this ecosystem.

On the other hand, it is important to highlight that participation in this study is voluntary and the research will be carried out through interviews that will be carried out via Zoom or Microsoft Teams and with your authorization the interview will be recorded (only the voices) for Thus, study the data collected for the analysis of the study. The estimated time to conduct the interviews is 30 to 45 minutes and they will be conducted in Spanish. In addition, your well-being and safety is paramount to us, for this reason, we will not share any names or sensitive information with the public during and after the project. Therefore, all analysis of the interview information will be done privately, and we will ensure that the information is analyzed and reviewed solely by Marie and Mariana. In addition, all the information obtained in the interviews will be deleted at the end of the project.

Finally, for us it is important that you feel comfortable, for this reason you as participants have the right to refrain from answering any question that causes discomfort or withdraw from the interview if necessary. In addition, for us it is also essential that you understand that each participant has the right to request clarifications and more detailed information about the study and the interview beforehand if they wish. If you have any concerns or suggestions, do not hesitate to share them with us.

Kind regards,

Mariana Caviativa & Marie Malshani

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Carta de información

Estimados XXXX,

Somos Marie Malshani y Mariana Caviativa. Actualmente, estamos estudiando Trabajo Social Internacional en la Universidad de Gävle en Suecia. Esta es una carta informativa que explica el proceso durante y después de las entrevistas. Primero, El objetivo de este estudio es explorar cómo las organizaciones ecosociales en Colombia fomentan y sensibilizan a las comunidades a través de la educación ambiental en áreas rurales y urbanas para comprender la importancia de los páramos y proteger este ecosistema.

Por otro lado, es importante destacar que la participación en este estudio es voluntaria y la investigación se realizará a través de entrevistas que serán llevadas a cabo vía Zoom o Microsoft Teams y con la autorización de ustedes la entrevista será grabada (sólamente las voces) para así estudiar la data recolectada para el análisis del estudio. El tiempo estimado para realizar las entrevistas es de 30 a 45 minutos y éstas se realizarán en español. Además, es primordial para nosotros su bienestar y seguridad, por esta razón, no compartiremos ningún nombre o información delicada con el público durante y después del proyecto. Por lo tanto, todo el análisis de la información de la entrevista se realizará de forma privada y nos aseguraremos de que la información sea analizada y revisada únicamente por Marie y Mariana. Además, toda la información obtenida en las entrevistas será eliminada al final del proyecto.

Finalmente, para nosotros es importante que se sientan cómodos, por esta razón ustedes como participantes tienen el derecho de abstenerse a contestar cualquier pregunta que genere incomodidad o retirarse de la entrevista si es necesario. Adicionalmente, para nosotras también es primordial que ustedes comprendan que cada participante tiene derecho a solicitar aclaraciones e información más detallada sobre el estudio y la entrevista con anterioridad si así lo desean, si tienen alguna inquietud o sugerencia no duden en compartirla con nosotras.

Cordial Saludo,

Mariana Caviativa & Marie Malshani

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APPENDIX II

INTERVIEW GUIDE

Spanish

Información general:

Nombre

Edad

¿Cuánto tiempo ha trabajado para la organización? ¿Es usted un miembro estable del personal de la organización o voluntario?

¿Cuál es su responsabilidad en la organización?

Preguntas principales:

1. ¿Cuáles son los objetivos de la organización (ambientales y sociales)?

2. ¿Por qué los páramos son fundamentales para la vida y el desarrollo de la sociedad colombiana?

3. ¿Qué tipo de intervenciones/acciones utiliza la organización para crear conciencia entre la comunidad/sociedad?

4. ¿Cómo contribuye la organización a la conservación de los páramos y las comunidades que dependen de este?

5. ¿Cómo ideó o inició la organización las intervenciones/acciones para sensibilizar a la sociedad sobre la alta montaña y los páramos? ¿Cómo la organización guía a los individuos a conservar y proteger el páramo?

6. ¿Hay algún proyecto especial para educar o incentivar a la comunidad sobre la importancia del cuidado de los páramos y el agua?

Si es así, ¿en qué elementos se enfoca básicamente al realizar proyectos? (Por ejemplo ventajas de proteger los páramos, desventajas de dañarlos, etc.)

7. ¿De qué manera cree que las intervenciones/acciones utilizadas por la organización empoderan la comunidad?

8. Si la organización aborda directamente comunidades, ¿Cómo aborda y se relaciona la organización con los miembros de las diferentes comunidades (rurales, urbanas)? / ¿Qué desafíos enfrenta la organización al contactarse con comunidades rurales? ¿Cómo involucra la organización a las comunidades en las intervenciones y proyectos?

8. ¿Cómo pueden verse afectadas las comunidades por el cambio climático en los páramos? /Motivar

9. ¿Qué tipo de actividad humana perjudica el desarrollo efectivo del páramo?
10. Después de las acciones/proyectos de la organización, ¿cree que los individuos logran entender su papel como actores para la protección de los páramos y el agua?
11. ¿Observa u obtiene retroalimentación de la comunidad sobre cómo están actuando hacia los páramos después ejecutar las actividades de desarrollo ambiental?
12. ¿Cómo describiría la efectividad y beneficios de educar o insentivar a las comunidades/individuos sobre el cambio climático y la importancia de los páramos?
13. ¿Cree usted que la comunidad/individuos cambia su comportamiento hacia las actividades que pueden perjudicar los páramos y el agua después de las intervenciones y proyectos que la organización ha desarrollado?

English

General information:

Name

Age

How long have you worked for the organization? are you a member?

stable staff of the organization or volunteer?

What is your responsibility in the organization?

Main questions:

1. What are the objectives of the organization (environmental and social)?
2. Why are the páramos fundamental for the life and development of the Colombian society?
3. What type of intervention/actions does the organization use to create awareness among the community/society?
4. How can the organization contribute to the conservation of páramos and communities that depend on it.
5. How did the organization devise or initiate the interventions/actions to sensitize society about the high mountains and the páramos? How does the organization guides individuals to conserve and protect the páramo?
6. Is there any special project to educate or encourage the community about the importance of caring for páramos and water?
If so, what elements do you basically focus on when carrying out projects? (By example advantages of protecting moors, disadvantages of damaging them, etc.)
7. In what way do you think the perforations/stocks used by the organization empower the community?
8. If the organization directly addresses communities, how does it address and relate the organization with the members of the different communities (rural, urban)? / What challenges does the organization face when contacting rural communities? How does the organization involve communities in interventions and projects?
8. How can communities be affected by climate change in the páramos? / Motivate
9. What type of human activity harms the effective development of the páramo?
10. After the organization's actions/projects, do you think the individuals managed to understand their role as actors for the protection of páramos and water?
11. Do you observe or get feedback from the community on how they are

act towards the páramos after executing development activities environmental?

12. How would you describe the effectiveness and benefits of educating or encouraging communities/individuals on climate change and the importance of the páramos?

13. Do you think that the community/individuals change their behaviour towards the activities that can harm the páramos and the water after the Incident and projects that the organization has developed?

