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INDIGENOUS PEOPLES AND CLIMATE CHANGE: THE YANESHA PEOPLE'S CASE FROM A PARTICIPATORY JUSTICE PERSPECTIVE

Abstract: This paper analyses the main results of the fieldwork conducted by the author for the purposes of determining the impacts of climate change in traditionally living Yanesha communities of the Palcazu, Peru. It gives an overview of the relationship between the Yanesha people and their sacred territory before delving into the data gathered during the fieldwork carried out in November 2018. It concludes by linking the Yanesha people's case to the broader issue of climate justice, arguing that Indigenous peoples' participatory rights should be at the centre of a fair and inclusive international and national climate governance regime that recognizes both their vulnerability and their role as agents of environmental conservation.

Nosotros necesitaríamos hacer reforestaciones. Creo que esto es la base de alguna manera para combatir este cambio. La deforestación es masiva y el desconocimiento de la gente sobre este. A mí me gustaría reforestar. Pero necesitamos algunos proyectos de ayuda. Ese es lo que más requerimos (Representative of the Yanesha community in Shiringamazu, November 2018).

Summary: 1. Introduction. – 2. Fieldwork methodology. – 3. The sacred landscape. – 4. Climate change in the Palcazu: implications for Yanesha communities. – 5. Discussion: decolonizing Indigenous participatory rights in climate governance. – 6. Concluding remarks.

1. — Introduction.

Climate change is already impacting the lives of vulnerable people around the globe. These impacts are particularly significant for traditionally living Indigenous communities, who rely on the preservation of the environment and its natural resources for their survival.

Climate disasters are increasingly resulting in diminishing crop yields,

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change of rainfall patterns and resource scarcity, just to mention few of the effects⁽¹⁾. Moreover, it has been estimated that climate change will increase by 100 million the worldwide number of people living in poverty by 2030, while climate disasters will exacerbate inequality and diminish economic growth⁽²⁾. Indigenous peoples already make up 15% of the poorest of the poor, even though they represent 5% of the global population⁽³⁾. Crucially, the dramatic impacts of climate change on Indigenous peoples raise important questions of justice and ethics, primarily because they are carrying the burden of a phenomenon they did not contribute in causing because of their sustainable lifestyle. But Indigenous peoples are not just to be considered as victims to the effects of climate change. On the contrary, their ancestral knowledge and practices contribute in preserving forests, reducing emissions and conserving biodiversity⁽⁴⁾.

Secondly, the lack of fair, equitable and meaningful participation of Indigenous peoples in national and international climate governance is one symptom of a broader governance problem that relates to the misrecognition of Indigenous peoples as powerful agents of change ⁽⁵⁾. Misrecognition of Indigenous cultures and exclusion of Indigenous peoples' groups and alliances in international and national talks has led to imbalances of power and apathy in addressing the problem of climate change ⁽⁶⁾.

⁽¹⁾ S. HALLEGATTE, M. BANGALORE, L. BONZANIGO, et al., *Shock waves: managing the impacts of climate change on poverty*, Climate Change and Development Series, Washington DC, World Bank, 2016.

⁽²⁾ World Bank website, available at worldbank.org.

⁽³⁾ World Bank, Implementation of operational directive 4.20 on indigenous peoples: an independent desk review, Washington DC, 2003.

⁽⁴⁾ L. ETCHART, The role of indigenous peoples in combating climate change, Palgrave Commun 3, 17085, 2017.

⁽⁵⁾ A.A. DOOLITTLE, The Politics of Indigeneity Indigenous Strategies for Inclusion in Climate Change Negotiations, Conservation & Society, Vol. 8, No. 4 (2010), pp. 286-291.

⁽⁶⁾ C. Comberti, T.F. Thornton, M. Korodimou, M. Meghan Shea, K. Ole Riamit, Adaptation and Resilience at the Margins: Addressing Indigenous Peoples' Marginalization at International Climate Negotiations, Environment: Science and Policy for Sustainable Development, 2019.

Therefore, the present paper serves a twofold purpose. First, it aims at sharing the results of the fieldwork investigation that the author conducted in the Peruvian Amazon in order to understand the impacts of climate change in Yanesha communities of the Palcazu district. After delving into the fieldwork methodology, the paper addresses the role of the landscape and the environment in the cosmovision of the Yanesha communities. Such understanding is paramount because on the one hand, it helps us in shifting our westernized conception of the environment to a more holistic appreciation for nature, and, on the other hand, it gives us a context that will ultimately help to frame the meaning of climate change impacts in Yanesha communities. As will be further discussed below, the investigation in the Amazon was based on the perceptions of climate change in Yanesha communities based on their Traditional Knowledge (TK) and not westernized scientific measurements. This is because the Yanesha have inhabited their ancestral lands since immemorial time. Therefore, their knowledge of the territory and its meteorological manifestations should be deemed relevant in determining the climate change impacts in the area.

TK is: «(...) the knowledge that we're born with, that we've inherited, that we contribute to in our lifetime and pass on to future generations. Its whole function is survival and the development of a culture, of a people» (7).

Second, the paper argues that, despite the fact that Indigenous TK is increasingly being recognized as a valid source of knowledge in climate change and environmental governance, and can help States reach their climate targets, there is still a lack of meaningful participation and recognition of Indigenous peoples in national and international governance. The use of Indigenous TK should follow criteria of ethics and justice that promote respect of Indigenous peoples' rights and legal entitlement to territories prior to the appropriation of their knowledge for scientific or academic purposes.

The paper argues that the Peruvian Climate Change Law Framework and its Regulation, adopted in 2019 after an extensive consultation with

⁽⁷⁾ Aohra Mead, Maori Leader, quoted in the exhibition The Genetic Revolution, 2006, website *tepapa.govt.nz*.

Indigenous peoples could constitute an example of this fair and inclusive approach, granting Indigenous peoples an essential role in the drafting of national adaptation and mitigation policies.

Overall, this paper seeks to give voice to the Yanesha people who are being affected by climate change notwithstanding their traditional, low-emissions lifestyle. It also seeks to highlight the issues of justice that are inherent to Indigenous participation within climate governance, calling for the need to re-think and redress the historical marginalisation and subjugation of Indigenous peoples in order to achieve their meaningful inclusion across different levels of decision-making.

2. — Fieldwork Methodology.

The hypothesis of my research project is framed as «Indigenous peoples living in the Amazon area in Peru, despite their minimal contribution to global greenhouse gases emissions, are being impacted by the negative effects of climate change. This constitutes a case of climate injustice». Such type of research follows the sociological *explicative model*, which traditionally leads to an explicative structure of the phenomena analysed. In other words, this model clarifies the given empirical conditions through existing theories (8). In practice, the result of the research can be simply framed as a confirmation of the interdependence between the variables "Indigenous peoples" and "climate injustice". The causal relationship between the two variables elucidates the general proposition asserting the connection and frequent dependence between the fact of "belonging to an Indigenous community" and "being affected by climate injustice". Thus, a research framed in this sense can be defined as a *verification* of the given hypothesis (9).

⁽⁸⁾ G. Statera, *Manuale di sociologia scientifica*, Collana di Scienze Sociali, Edizioni Seam, 2002, p. 319.

⁽⁹⁾ G. Statera, Manuale di sociologia scientifica, loc. cit.

As a method to verify my initial hypothesis, I decided to get in contact with traditional Indigenous communities which belong to the Yanesha ethnic group, also known as Amuesha, politically organized in the FECONAYA federation since 1981. The Yanesha hold legal title on territories since the 1970s, when the Ley de Comunidaded Nativas was enacted (10). I decided to use interviews framed as dialogues as a mean of engaging with Yanesha representatives. There are several reasons why I chose this method. First, for practical reasons. It would have been problematic to administer written questionnaires with closed answers. Indeed, the last available data regarding the literacy rates among Yanesha people affirms that almost 10% cannot read or write (11). Therefore, an oral interaction might have been the most appropriate mean of collecting information. Secondly, I was more interested in an approach to research based on dialogue and active listening to the words of people I met. This is because the purpose of the fieldwork was to collect information grounded on the representatives' perceptions of climate change based on their ancestral knowledge, and not framed in Western scientific terms. Although the anthropological approach of engaging with people's stories as a means of understanding their culture and reality is not widely accepted in legal research, I firmly believe that in an Indigenous traditional context this is the right path to follow⁽¹²⁾.

In engaging directly with Yanesha people, my aim was to understand their lived experience of climate change and the meaning they make of such experience, gaining access to the community's understanding of the environment. Before getting to the point of being introduced to the communities, I completed an extensive literature research to get to know their history and customs. Few academic authors have dedicated their research to the Yanesha people, while there is no specific demographic information

⁽¹⁰⁾ C. CAMINHA DE SOUZA RIBEIRO, *Ponaseñets: los Yanesha en transformación – Endoeconomia y mercado global*, Espaço Ameríndio, Porto Alegre, 2014, v. 8, n. 2, pp. 127-151.

⁽¹¹⁾ The last available data on the alphabetization of Yanesha communities dates to the 2007. See also: INEI, Censos Nacionales 2007, Resumen Ejecutivo, available at *inei.gob.pe*.

⁽¹²⁾ I. Seidman, Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences, 3rd ed., Teachers College Press, New York, 2006.

about the communities ⁽¹³⁾. The only demographic and anthropologic statistics accessible are those represented by the Peruvian database of Indigenous peoples ⁽¹⁴⁾, the INEI database ⁽¹⁵⁾ and the Oxapampa district website ⁽¹⁶⁾. This lack of information, confirmed by the researcher with whom I have worked in Peru, Mabel Lopez Cruz, constituted a challenge for the determination of the best way of interaction. Therefore, the interview modalities I used were aimed at establishing a human relationship and having a dialogue with open-ended questions, where the Indigenous TK of the environment would be at the centre of our interaction.

For the purposes of the present investigation, it was desirable to get in contact with Yanesha representatives in their day-to-day context. In fact, people's behaviour and narratives become meaningful and understandable when placed in the very context of their lives (17). Of course, this approach presents risks and challenges. For example, I believe that no matter how researchers call themselves – investigators, students, visitors – we are entering delicate ecosystems where people live in a totally different way compared to the societies of the Global North. For this reason, collaborating with

⁽¹³⁾ For example, see R. Smith, Where Our Ancestors Once Tread: Amuesha Territoriality and Sacred Landscape in the Andean Amazon of Central Peru, in C. Gros, MC. Stigler (eds.), Étre Indien dans les Amériques Spoliations et résistance — Mobilisations ethiques et politiques du multiculturalisme, Institut des Ameriques and l'IHEAL-CREDAL l'Université Paris III, Paris, 2006, pp. 69-84.

⁽¹⁴⁾ Base de datos pueblos indígenas originarios, at bapi.cultura.gob.pe.

⁽¹⁵⁾ INEI, Censos nacionales 2017, at *censos2017.inei.gob.pe*. The INEI database does not offer specific information regarding Yanesha people. It is possible, by selecting the filter "por su costrumbres y su antepasados usted se considera» and the filter "región Pasco", where Yanesha communities live, to have the statistics of people who consider themselves as Quechua/Aymara; Amazon native; Other indigenous origin; afroperuvian/afrodescendant; white; mixed; other. According to the INEI database, more than 10,000 individuals in the Pasco region consider themselves as Amazonian native. By applying the filter "lengua con el que aprendiò hablar", the 0.55% of people (485 individuals) living in the region learnt Yanesha as first language.

⁽¹⁶⁾ Municipalidad Provincial de Oxapampa, at peru.gob.pe.

⁽¹⁷⁾ I. SEIDMAN, Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences, loc. cit.

an NGO that has worked for many years in the communities has helped me in establishing a human relationship with the people I got to know. I have shared meals with Yanesha families, which constituted an integrative behaviour. It helped me in building the human relationship and trust I was looking for in my experience in the Amazon.

Access to the Yanesha communities was made possible thanks to Chirapaq, the Peruvian Indigenous NGO that appointed me as Visiting Researcher in October and November 2018. Chirapaq concluded a cooperation agreement with FECONAYA, with the aim of fostering the development of local communities and the empowerment of Yanesha women (18). I joined Mabel in the context of a project geared towards women empowerment, participating in meetings with Yanesha leaders (19). Thus, participants in the research were chosen within the context of this project. Otherwise, the realization of the research would not have been possible, since the area is of problematic access and it would have been extremely difficult to reach the communities alone – meaning, without being introduced by a person they trusted, and without knowing the road and where to find the community leaders.

I have visited communities located in: San Pedro, Santo Domingo, Santa Rosa de Pichanaz, Nueva Aldea, Loma Linda – Laguna, Shiringamazú and its three sectors (San Luis, Progreso and Pueblo Libre), Siete de Junio – Villa America, Santa Rosa de Chuchurras and Buenos Aires. I have interviewed a total of 12 community leaders. Each visit lasted about one and a half hour. I mainly listened in silence during Mabel's work, until I was kindly invited to join the conversation and asked the leaders if they were willing to take part in the investigation. I deemed satisfactory the information gathered from these interviews after the 12th. First, because they constituted a sufficient quantitative sample (few communities of the Palcazu area were not encountered, for example Alto Agarto) (20). Secondly, the answers were

⁽¹⁸⁾ Chirapaq, Chirapaq y el pueblo yanesha ratifican alianza, 2018, available at chirapaq.org.pe.

⁽¹⁹⁾ Chirapaq, Yanesha women revive traditional dyeing with innovative designs, at chirapaq.org.pe.

⁽²⁰⁾ A full list of communities is available on the Oxapampa province website, at *peru. gob.pe.*

quite homogeneous and consistent, and information tended to be repetitive, demonstrating that the impacts of climate change in the area were felt in the same way by different communities.

Interviews/dialogues with open-ended questions followed this pattern: Mabel introduced me to the Yanesha representatives, explaining why I came there, my job at the university and my research areas. After this introduction, I reiterated my research purposes, explained the format of the interviews, how the data would be collected and managed, and informed them about the anonymity of their answers and that the audio files would be deleted once the interviews where transcribed (21). Interviews were lasting 15-20 minutes, depending on the length of their answers. Mabel was sometimes acting as participant in the dialogues. Given her knowledge of the territory and Yanesha customs, I found her intervention appropriate and an important help in framing the dialogue with Yanesha leaders.

Finally, the data was managed first by transcribing the interviews. Punctuation was added in order to re-create the verbal material. The next step was paraphrasing and translating concepts into English, by summarizing the words of the participants and labelling the different concepts expressed, for example "climate change effects", "consequences", "governmental actions in relation to the problems expressed". The third step was analysing and exercising judgment about what was significant in the transcripts for the ends of the research. Finally, the data was organized in tables.

The fieldwork in the Amazon has confirmed that Indigenous communities are taking on the burden of climate change consequences despite their environmentally sustainable lifestyles. This study allowed me to outline the present climate change impacts in the area and the significance they have for Yanesha communities. Such study can contribute in the advocacy for Yanesha people's rights, highlighting the need for adaptation and mitigation policies.

⁽²¹⁾ For further information on the interview format, please find a fac-simile in G. Giacomini, *Indigenous peoples and climate change: addressing environmental injustice* (PhD thesis), La Sapienza, Roma, 2020.

3. — The sacred landscape.

Yanesha people have inhabited their ancestral territories since immemorial time. Traditionally, they have been dwelling mainly in the mountainous area of the Palcazu region. However, several communities have been relocated in the "lower" part of the Palcazu Valley due to colonisation and investments in the area (22). At the moment, they inhabit the districts of Chanchamayo (Junín), Oxapampa (Pasco) y Puerto Inca (Huánuco). Even though in traditional colonial literature they are regarded as Amazonian communities, the significant research of the anthropologist Richard Chase Smith has demonstrated that, on the contrary, they are closely related to the Andean cultures. In the documentary RROMUEPATSRO: Mapeando el mundo histórico-cultural de los Yanesha, Perú, Chase Smith and the Chief Espiritu Bautista show, thanks to decades of fieldwork in the ancestral territories, how closely related Yanesha people were to the surrounding territory from the Andes to the Pacific Ocean (23).

The official statistics of the Peruvian government report around 12.000 members as pertaining to the Yanesha community – although around 7000 of them are resident in their ancestral territories (24). Because of the migration to the cities and their closeness with inhabited centres such as Iscozacin, nowadays they are at risk of cultural and linguistic losses in a logic of adaptation to more westernized customs (25). This process of loss of Yanesha culture manifests, for example, with changes in clothing

⁽²²⁾ There are two main inhabited areas in the Palcazu valley, one defined as "lower" – characterized by tropical forests and subtropical transition areas – and the other defined as "higher" – characterised by high altitude subtropical forests. See: C. VALADEAU, *Catégorisation des plantes et des entités étiologiques chez les Yanesha (piémont amazonien du Pérou)*, Bulletin de l'Institut français d'études andines, 41 (2) 2012.

⁽²³⁾ Instituto del Bien Común, RROMUEPATSRO: Mapeando el mundo histórico-cultural de los Yanesha, Perú, 2010, at youtube.com.

⁽²⁴⁾ Ministerio de cultura de Peru – Base de datos pueblos indígenas, at bdpi.cultura.gob.pe.

⁽²⁵⁾ Chirapaq, *El pueblo Yanesha en el tiempo*, Chirapaq Centro de Culturas Indígenas del Peru, 2019.

preferences, relegating the use of the *cushma*, the traditional robe, only in traditional ceremonies and official meetings (26).

According to Chase Smith and Granero, the Yaneshas were related to other ancestral people in the Amazon and Andean area before the arrival of the Spanish⁽²⁷⁾. Such connection was demonstrated through the comparative study between the ancient Yanesha and Andean mythology and tales, and by linguistic studies that witnessed the use of common words in Yanesha and other Andean languages (28). The first ethnographic documents mentioning the Yanesha date back to the 16th century, when the first Christian missions entered the territory⁽²⁹⁾. While the purpose of this paper is not to give a comprehensive historical review of the events that took place in the Yanesha territories which has been extensively documented by the above-mentioned authors – it is important to mention that the Yanesha have not suffered a consistent and systematic dislocation compared to other peoples subject to colonization processes (30). In fact, even if in the Nineteenth century the affluence of European and Andean colonizers provoked the relocation of Yanesha communities towards the Iscozacin and Pachitea basins, they were able to maintain their close cultural relationship and practices with the ancestral territory (31).

The consideration of such complex relationship is paramount if we wish to understand the importance of the sacred territories in Yanesha culture. The multifaceted traditional environmental knowledge, which has been

⁽²⁶⁾ F. Santos-Granero, *Hybrid Bodyscapes A Visual History of Yanesha Patterns of Cultural Change*, Current Anthropology, Vol. 50, No. 4, University of Chicago, 2009.

⁽²⁷⁾ R. Chase Smith, Donde nuestros ancestros tal vez caminaron. Territorialidad y lugares sagrados Amuesha en la Amazonia Andina del Perú central, Être Indien dans les Amériques. Spoliations et résistance – Mobilisations ethniques et politiques du multiculturalisme: une perspective comparative. Coloquio internacional de la Universidad de Paris III – Nueva Sorbona, Organizado por Iheal-Credal, Cec, Opea y Cervepas, December 2004; and F. Santos Granero, Los yanesha, in F. Santos Granero, F. Frederica Barclay (eds.), Guía etnográfica de la Alta Amazonía, Vol. IV, Lima, Smithsonian Tropical Research Institute, IFEA, pp. 159-360.

⁽²⁸⁾ R. Chase Smith, Donde nuestros ancestros tal vez caminaron, loc. cit.

⁽²⁹⁾ F. Santos Granero, Los yanesha, loc. cit.

⁽³⁰⁾ R. Chase Smith, Donde nuestros ancestros tal vez caminaron, loc. cit.

⁽³¹⁾ Ibid.

orally transmitted through the centuries and combines mythology, medicine and rituals, makes the Yaneshas one of the main contributors in witnessing how climate change is impacting their ancestral territories. But before delving into the perceptions of Yanesha people in relation to climate change impacts in the Amazon, it is necessary to understand how Yanesha perceive their sacred landscape, which is completely different from the westernized, positivistic conception of the environment as a mere resource that serves different purposes. In fact, in environmental law and governance forests are usually conceived as providers of "ecosystem services" (32), such as in the case of the highly criticized Reducing Emission from Deforestation and Forest Degradation (REDD) programmes (33). In Indigenous views, forests are much more than an easy way to provide ecosystems services or amass carbon credits. They represent a source of biodiversity and oxygen and they can represent homes, source of food, water and shelter for Indigenous and local communities. Not only are forests crucial for the reproduction of Indigenous peoples' traditional livelihoods, but they are also fundamental for their cultural practices and religious beliefs.

Understanding the narratives that Indigenous communities have developed around the environment is key to appreciating their conception of natural resources, as this is holistically entrenched holistically in their culture and spirituality⁽³⁴⁾. Only after having gained this understanding we can dis-

⁽³²⁾ For an account of the critics to the concept of "ecosystem services", refer to M. Schroter, E. van der Zanden, A.P.E. van Oudenhoven, R.P. Remme, H.M. Serna-Chavez, R.S. de Groot, P. Opdam, *Ecosystem Services as a Contested Concept: A Synthesis of Critique and Counter-Arguments*, Conservation Letters, 7(6), 514-523, 2014.

⁽³³⁾ The question of avoided deforestation as a commodification of forests for carbon credits was reintroduced, after the initial exclusion from the Clean Development Mechanism in favour of afforestation and reforestation measures, by the Coalition for Rainforest Nations. It posed great emphasis on the economic opportunity deriving from the conservation of forests and their proposal was reiterated by various state and non-state actors such as the World Bank Group and Norway. See also: B. Stephan, *Bringing discourse to the market: the commodification of avoided deforestation*, Environmental Politics, 21:4, 621-639, 2012.

⁽³⁴⁾ NJ. Reo, The Importance of Belief Systems in Traditional Ecological Knowledge Initiatives, in The International Indigenous Policy Journal, 2(4), 2011.

cern the different threats that climate change poses for traditionally living communities.

Yaneshas perceive their ancestral lands in a holistic manner, whereas geographical space is understood as a continuum with human beings. For example, in Yanesha traditional medicine, plants that are used to cure illnesses and aches are considered far more than pharmacological objects (35). They are deemed as hidden, invisible human beings embodied in the forms of plants since immemorial times. In Yanesha cosmology, humans were transformed due to the willing of the gods to serve human needs (36). In this sense, human beings and plants are considered as different manifestations of life in a mutually reinforcing relationship (37). Therefore, the medicinal practices in Yanesha culture reflect the interconnection between plants, humans and diseases. These last are interpreted as a manifestation of an etiological agent which has caused the sickness, aimed at creating physical trouble to a specific person (38).

Such deep interconnection with natural elements makes Yanesha's forest management well-known for being totally sustainable and respectful of the environment. This can be clearly explained if we consider that in Yanesha mythology the geographical space is interpreted as a "sacred land-scape" (39). The ancestral territories are embedded with historical and cultural significance, as the geographical space is where ancestors disappeared or hid, becoming natural elements such as mountains and rivers. The Yaneshas still conserve an extensive body of oral literature that narrates the or-

⁽³⁵⁾ C. VALADEAU, J.ALBAN CASTILLO, M. SAUVAINC, A. FRANCIS LORES, G. BOURDY, *The rainbow hurts my skin: Medicinal concepts and plants uses among the Yanesha (Amuesha), an Amazonian Peruvian ethnic group*, in *Journal of Ethnopharmacology*, 127, 2010, pp. 175-192.

⁽³⁶⁾ F.S. Granero, Writing history into the landscape: space, myth, and ritual in contemporary Amazonia, in American Ethnologist, 25 (2), 1998, pp. 128-148.

⁽³⁷⁾ C. VALADEAU, Catégorisation des plantes et des entités étiologiques chez les Yanesha, loc. cit.

⁽³⁸⁾ C. VALADEAU, J.ALBAN CASTILLO, M. SAUVAINC, A. FRANCIS LORES, G. BOURDY, The rainbow hurts my skin: Medicinal concepts and plants uses among the Yanesha (Amuesha), an Amazonian Peruvian ethnic group, loc. cit.

⁽³⁹⁾ F.S. Granero, Writing history into the landscape: space, myth, and ritual in contemporary Amazonia, loc. cit.

igin of the natural landscapes. Such narratives have been documented in the above-mentioned documentary *RROMUEPATSRO: Mapeando el mundo histórico-cultural de los Yanesha*, *Perú*, and in other audio-visual productions distributed by the Instituto del Bien Común⁽⁴⁰⁾.

Since the 1970s, thanks to Geographic Information System (GIS) technology, it has been possible to track and document the geographical sites that, according to the Yanesha mythology, were directly related to their powerful ancestors. For example, it is narrated that the Yanesha ancestor Yato' Pap hid inside a big mountain above the Paucartambo river. It is believed that from there, he still looks after his grandchildren, the shamans (41). The mapping of the Yanesha territory evidenced the existence of more than 2000 geographical, historical and natural resources sites (42). Such georeferencing demonstrates the importance of the landscape and ancestral territories in Yanesha culture. The collective memory of the Yaneshas contributes in renewing the importance of sacred ancestral territories through rituals, songs and narrations, as the traditional iconography is deeply embedded into the Amazonian and Andean landscapes.

This profound reverence for natural and geographical elements is reflected in the traditional management of forests and natural resources typical of the Yanesha people. When visiting the *chacras* ("fields") where Yanesha people grow cocoa, cotton, yuca and other plants, it is almost impossible to realize that the land has been modified by human actions. This is because the ancestral cultivation practices of the Yanesha prescribe a total respect for the natural environment without altering the landscape⁽⁴³⁾. This ancient way of producing food and other resources is nowadays defined as agrofor-

⁽⁴⁰⁾ Instituto del Bien Común, Where Our Ancestors Once Tread Mapping the Historical-Cultural Space of the Yanesha People. A four-part film series, at ethnovisions.net.

⁽⁴¹⁾ Ibid.

⁽⁴²⁾ R. Chase Smith, Donde nuestros ancestros tal vez caminaron, loc. cit.

⁽⁴³⁾ Visit Pro Naturaleza website for information on Yanesha traditional cultivations, at *pronaturaleza.org*, or watch the documentary *Producción de Cacao en Sistemas Agroforestales en Palcazu, Perú, youtube.com* for a documentary on the sustainable production of cocoa in Yanesha communities.

estry⁽⁴⁴⁾, and it is being promoted in the Palcazu area to contrast the colonial practices of monoculture which have triggered soil degradation and high rates of deforestation⁽⁴⁵⁾.

This complex system of ancient ecological knowledge and the profound relationship that Yanesha people have with their ancestral lands and territory is an element that constantly emerged during my visits to the communities. But if, on the one hand, it is important to promote and encourage ancestral Indigenous practices that contribute to the enhancement of environmental conservation, on the other hand we should be aware of the threats that are endangering the survival of such ancient traditions. Climate change can be considered one such threat, especially for Indigenous communities living in Peru. Therefore, it is important to document the current climate change impacts in the communities. The next section is dedicated to such documentation in traditionally living Yanesha Indigenous communities.

4. — Climate change in the Palcazu: implications for Yanesha communities.

My field research aimed at investigating which impacts of climate change are significant for Yanesha communities, and how they are perceiving such changes from their unique TK perspective (46). The impacts and implications of climate change constitute a manifestation of environmental injustice, because, as demonstrated in the previous section, their lifestyle and livelihoods are environmentally sustainable. In fact, the Yaneshas did not significantly contribute to global greenhouse gas emissions, whilst they are suffering the repercussions of climate change consequences which have negative implications for their everyday life.

⁽⁴⁴⁾ R. Miller, P.K. Nair, Indigenous Agroforestry Systems in Amazonia: From Prehistory to Today, in Agroforestry Systems, 66, 2006.

⁽⁴⁵⁾ For a full account on the deforestation and colonial practices in the Palcazu: Ministerio del Ambiente del Peru, *Análisis económico de las actividades causantes de la deforestación en Pichis-Palcazú*, 2011.

 $^{^{(46)}}$ Please refer back to the "Fieldwork methodology" section.

In the general context, Peru is one of the world's most affected countries in terms of climate change effects: 67% of its environmental disasters are related to its impacts (47). In the first half of 2017, floods and mudslides left a toll of 28,784 victims, 38,382 homes destroyed, and 43,718 hectares of lost crops (48). Peru is globally ranked as the third country at risk of climate change disasters and second in the Latin American ranking (49). In addition, it is the South American country that experiences the highest level of water scarcity: 70% of its population resides in the desertic coastal region where only 2% of water is found (50). In this area, the river runoff is crucial and it is due to the Andes' yearly glacial melt⁽⁵¹⁾. Moreover, Peru is characterized by very high rates of socioenvironmental conflicts, that would likely be mutually reinforced by the climate change impacts described (52). Out of the 169 conflicts reported in December 2017, 120 were of socio-environmental nature (53). For example, in the areas of Challhuahuacho, Haquira, and Mara a state of emergency has been declared since August 2017⁽⁵⁴⁾. Climate change effects are likely to exacerbate this kind of conflicts and those related to the lack of natural resources.

In terms of forests, Peru is the country with the largest area occupied by the Amazon forest after Brazil. But large areas of forest are threatened by ongoing deforestation and soil degradation: in the years 2001-2016, almost 2 million of hectares were lost (55), with the most affected area m being Ucay-

⁽⁴⁷⁾ See generally Peruvian Ministry of the Environment website at minam.gob.pe.

⁽⁴⁸⁾ P. JACQUELIN-ANDERSEN, *The Indigenous World 2018*, International Work Group for Indigenous Affairs, Copenhagen, 2018, p. 166.

⁽⁴⁹⁾ N. BROOKS, W. NEIL ADGER, Country level risk measures of climate-related natural disasters and implications for adaptation to climate change, Tyndall Centre for Climate Change Research, Working Paper 26, January 2003.

⁽⁵⁰⁾ *Ibid*.

⁽⁵¹⁾ Idem.

⁽⁵²⁾ Defensoría del Pueblo. Reporte de Conflictos Sociales No. 168, 2018.

⁽⁵³⁾ P. JACQUELIN-ANDERSEN, The Indigenous World 2018, loc. cit.

⁽⁵⁴⁾ Ibid.

⁽⁵⁵⁾ See generally: Peruvian Ministry of the Environment website at bosques.gob.pe.

ali⁽⁵⁶⁾. Forests in Peru are also devastated by illegal mining, which provokes deforestation and mercury contamination in the soils⁽⁵⁷⁾. Deforestation is one of the leading causes of climate change and if its trends remain unaltered, the consequences will be devastating for both people and the environment.

This section witnesses how climate change is impacting Yanesha communities living in the Amazon forest with data collected on field. During my stay in the Peruvian amazon, I have visited 9 communities and completed a total of 12 interviews – although I prefer to refer to them as "dialogues" – with Yanesha representatives. I was concerned with understanding how communities are coping with climate change and if the government is interested in helping them in the adaptation process.

The dialogues, as outlined in the methodology section, resulted in a free and relaxed process, and I was happy to listen to all they felt comfortable in sharing with me. However, throughout our dialogues I followed a specific pattern based on the following list of questions (58): 1) Is your community perceiving a change in the climate? If yes, since when?; 2) What are the consequences of these changes in your community's life?; 3) Is the quantity of the food you can produce decreasing? 4) Have you registered an increase in the mortality of animals?; 5) Have you registered an increase in illnesses?; 6) How is the community adapting to climate change?; 7) Is the government or the region helping your community?

Each Yanesha representative interviewed has affirmed that the climate and the meteorological conditions have consistently changed in the last ten years. They do not have knowledge about the causes that led to this increase in temperature, but they have a very clear perception of the changes that are occurring in their territories. Their traditional livelihoods are deeply dependent on the regularity of seasons since they rely on agriculture, fishing and breeding.

⁽⁵⁶⁾ P. JACQUELIN-ANDERSEN, The Indigenous World 2018, cit., p. 168.

⁽⁵⁷⁾ Y. Sierra Praeli, *Deforestación por minería ilegal alcanza niveles históricos en Perú*, February 2019, available at *es. mongabay.com*.

⁽⁵⁸⁾ Transcriptions of the interviews are found in G. GIACOMINI, *Indigenous peoples and climate change: addressing environmental injustice*, cit.

Native communities have a clear perception of the changes that are occurring in seasonal patterns, frequency of rain and daytime temperature.

The first effect that they perceive is the increase in temperature during the warm season. They have affirmed that the sun is burning their skins and it is impossible to work in their *chacras* after 11^{am} – while before it was not like this, they could work all day without problems. The diminution of hours worked in the *chacras* has a direct consequence on the production of food, which, of course, is decreasing.

The second climate modification that they perceive is the changing in the rainfall pattern, which causes abrupt temperature changes. They affirmed that when it rains it becomes suddenly cold and people in their communities – especially children – have been suffering many diseases such as high temperature, cough, diarrhoea and cold. They affirmed that before it was not like this and they could better control the appearance of these illnesses. Also, the changes in temperature have been causing illness and death among their livestock which, in turn, has led to a decrease of the food available (mainly poultry and eggs). The increased rainfall causes major troubles in an area that is normally afflicted by floods in the raining season-normally, when rivers grow, it can become impossible to use the road, as it would be flooded; as a result, the area cannot be accessed from Iscozacin or other villages. Their cultivations often get rotten or develop illnesses because of the excessive rain, leading to a further decrease of the food stocks and of the cotton plants available.

Finally, several Yanesha representatives have reported a change in the so-called *indicadores* (indicators). In the Palcazu area and, in general, in the areas where Yanesha communities live, the consideration of seasonal indicators is important when tracking current environmental changes. The characteristics of the different seasons were, until recently, easily acknowledged by the Yaneshas. The two main seasons traditionally recognized in the annual cycle are the dry season (*charo*) and raining season (*huapo*)⁽⁵⁹⁾. However, the

⁽⁵⁹⁾ C. VALADEAU, Cambio ambiental y chamanización de las nuevas prácticas religiosas entre los yánesha (piedemonte peruano), [En línea], 47 (3) | 2018, in Bulletin de l'Institut Français d'Études Andines, 2018.

seasons and the meteorological events are no longer respecting the traditional patterns, while the *indicadores* that determined the different productive activities in the Yanesha communities are changing as well. The indicators are, for example, the singing of certain birds which normally announce the beginning of the dry season, or the animal sounds from the forest which mark the right time for hunting. Such indicators are nowadays not working like before. According to the Yaneshas, it is like the animals are not behaving according to the meteorological seasons (60).

In another part of our conversation, I asked how communities are coping with these changes. Some representatives answered me that they are selecting the plants that better survive the rain, isolating those that caught some illnesses, burying them in deep holes in the ground. Buenos Aires community is currently restoring traditional aquaculture in order to have better access to food.

All people interviewed have affirmed that nobody from the government or the region is helping them to face these changes. Chirapaq, they told, is the only organization that is helping them through small development projects. However, they expressed that there is an ongoing governmental conservation project in the area, which involves them directly. The Forest Programme of the Ministry of the Environment (MINAM) is operative in the Oxapampa province and the Palcazu area since July 2017 (61). The programme aims at conserving forests through the direct involvement of Yanesha Indigenous communities. A total of 293 families located in Alto Iscozacin, Buenos Aires, Santa Rosa de Pichanaz, Shiringamazu y Santa Rosa de Chuchurras are receiving economic incentives (67.800 soles in 2017) for the conservation of 6,780 hectares of forest – which makes 10 soles (around 2 pounds) for an hectare (62). This lack of fair compensation has been criticised by some the Yanesha representatives I interviewed. Although

⁽⁶⁰⁾ *Ibid.*

⁽⁶¹⁾ See Peruvian Forest Programme in Oxapampa Province, available at MINAM website: bosques.gob.pe.

⁽⁶²⁾ Ibid.

the conservation of the forests, respect for nature and preservation of biodiversity is inherent to their culture, some representatives of the Yanesha communities believe that the economic compensation is not adequate ⁽⁶³⁾. In fact, the colonization of the area that occurred after the construction of the road and the contact with villages such as Iscozacin, has brought them new necessities that did not exist before, like buying sugar, salt and clothes. Availability of money is becoming nowadays essential in Yanesha communities, but there are very few opportunities for them to gain it.

The Yanesha people case is not isolated. On the contrary, many Indigenous peoples all over the world, from Antarctica to Australia, are being negatively impacted by climate change. In the worst-case scenario, traditionally living communities are at risk of loss and culture and identity, relocation and food scarcity due to the permanent modification of the environmental conditions (64). The next section interprets this phenomenon in the light of a justice perspective, with the ultimate aim of advancing a possible solution based on participatory and inclusive governance built on a non-anthropological conception of environmental law.

5. — Discussion: decolonizing Indigenous participatory rights in climate governance.

In light of the considerations expressed in the previous sections, Indigenous peoples are increasingly being recognized by international and national law and institutions as extremely vulnerable to climate change impacts, even

 $^{^{(63)}}$ Such compensation is yearly around 10 Peruvian soles for each hectare of forest.

⁽⁶⁴⁾ International and national climate litigation cases are progressively being brought by Indigenous peoples before tribunals under these premises. See also: IACmHR. The Arctic Athabaskan Council, Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations of the Rights of Arctic Athabaskan Peoples Resulting from Rapid Arctic Warming and Melting Caused by Emissions of Black Carbon by Canada, 2018; Petition To The Inter-American Commission on Human Rights Seeking Relief From Violations Resulting from Global Warming Caused By Acts and Omissions of the United States, 2005; Un Human Rights Committee, Petition of Torres Strait Islanders to the United Nations Human Rights Committee Alleging Violations Stemming from Australia's Inaction on Climate Change, 2019.

though they contributed in a limited manner to global greenhouse gas emissions ⁽⁶⁵⁾. This vulnerability is due to a variety of particular conditions that draw upon the characteristics of Indigenous peoples' traditional livelihoods such as their special connection and dependence on natural resources ⁽⁶⁶⁾. In relation to climate change, vulnerability is generally understood as an integrated manner that not only takes into account environmental and geographical hazards, but also economic, social and cultural impacts ⁽⁶⁷⁾.

According to the Intergovernmental Panel on Climate Change (IPPC), «[v]ulnerability refers to the propensity of exposed elements such as human beings, their livelihoods, and assets to suffer adverse effects when impacted by hazardous events»⁽⁶⁸⁾. Thus, in considering the physical realities of climate change, we should also rely on the characteristics of the system exposed in order to determine the vulnerability of the people who inhabit such system. In the case here represented, the Yanesha people can be considered vulnerable since climate change is altering at a fast pace the delicate ecosystem of the Amazon, on which they rely for their livelihood.

In addition, as demonstrated in this paper, Indigenous peoples' traditional livelihoods, employment and subsistence are based on the preservation of forests and related natural resources (69).

⁽⁶⁵⁾ United Nations Permanent Forum on Indigenous Issues: *Backgrounder: Climate change and indigenous peoples*, UNPFII, at *un.org*.

⁽⁶⁶⁾ R. MEARNS, A. NORTON (eds.). Social dimensions of climate change: equity and vulnerability in a warming world, New Frontiers of Social Policy, Washington DC, World Bank, 2010, pp. 1-44.

⁽⁶⁷⁾ World Food Programme, Vulnerability Analysis and Mapping: A Tentative Methodology, 2004, at: proventionconsortium.org.

⁽⁶⁸⁾ O.D. CARDONA, M.K. VAN AALST, J.M. BIRKMANN, G. FORDHAM, R. McGREGOR, R.S. PEREZ, E. PULWARTY, L.F. SCHIPPER, B.T. SINH, *Determinants of risk: exposure and vulnerability*, in *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, IPCC, 2012; C.B. FIELD, V. BARROS, T.F. STOCKER, D. QIN, D.J. DOKKEN, K.L. EBI, M.D. MASTRANDREA, K.J. MACH, G.-K. PLATTNER, S.K. ALLEN, M. TIGNOR, P.M. MIDGLEY (eds.), *A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC)*, Cambridge University Press, Cambridge, UK – New York, NY, USA, 2012, pp. 65-108.

⁽⁶⁹⁾ Over 1.6 billion – including more than 2000 indigenous cultures – are dependent on forests for their survivals. See Sustainable Development Goals website, available at *sustainabledevelopment.un.org*.

In the case of the Yanesha people the fieldwork has evidenced that, despite they are engaging in a forest conservation project established by the government, at present they are not receiving any aid to cope with the impacts of climate change that are affecting their lives. This constitutes a relevant example of climate injustice because: on the one hand their TK is considered useful for conservation of forests which, in turns, helps Peru reaching its climate goals, on the other hand, the necessities of the Yanesha people are ignored by governmental institutions, which leaves them to deal with adaptation and mitigation strategies.

If governments tend to rely on Indigenous TK, this does not automatically translate into a valid recognition of the interlinkage between the environment and Indigenous identity – despite the acknowledgement made by international instruments such as the Convention on Biological Diversity (CBD) and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The special, intimate connection between Indigenous peoples and the environment has been largely ignored in the United Nations Framework Convention on Climate Change (UNFCCC) processes (70). Indigenous views and claims have been barely considered in the shaping of international climate change agreements. One need only to think about the indifference within international fora of the statements made in the Anchorage Declaration, the outcome document of the Indigenous Peoples Global Summit on Climate Change (71). Similarly, no international treaty recognizes the importance of the respect for Mother Nature that, for Indigenous peoples, should be at the centre of environmental policies (72).

⁽⁷⁰⁾ Ibid.

⁽⁷¹⁾ Indigenous Peoples Global Summit on Climate Change, *The Anchorage Declaration*, 24 April 2009, at *unfecc.int*.

⁽⁷²⁾ The Anchorage Declaration, adopted at the 2009 Indigenous Summit on Climate Change, contains an appeal to «an immediate end to the destruction and desecration of the elements of life». They also called for a drastic reduction in the emissions (45% compared to the 1990 levels by 2020, and 95% by 2050), and also to recognize the importance of traditional knowledge in the global fight against climate change. Indigenous peoples also called for the instauration of better participation mechanisms in the decision-making bodies of the UNFCCC and for the cease of "false solutions" to climate change that are nega-

The inadequate recognition of the relationship between environment and human capabilities, the perpetration of ecosystems destruction and the related consequences on Indigenous peoples' lives, together with the lack of participation of native communities in climate change governance, are at the core of climate justice issues. The development of a theory of climate justice should then take into consideration the recognition, participation and cooperation with Indigenous peoples and other groups as fundamental to achieve a true global climate governance. The double-sided consideration of Indigenous peoples in climate governance, both as vulnerable collectivities and as holders of valuable TK, should foster practises of democratic and inclusive participation. A theory of climate justice should follow principles of equity in distributing the burdens of climate change adaptation and mitigation costs, freedom of peoples to make choices that maximize their capabilities, rebuilding the damaged historical relationship between global North and South and social and political processes of recognition and participation (73).

At a first glance, it may appear as a positive fact that Indigenous TK, essential in biodiversity conservation, is increasingly being recognized as a key to combat climate change. Native communities' culture, beliefs and religion are indeed deemed relevant factors in environmental protection and therefore could extensively contribute in the development of adaptation strategies. The Paris Agreement⁽⁷⁴⁾ and the Cancun Agreement⁽⁷⁵⁾ recognize the importance of TK systems, customary law and beliefs, which are deeply embedded and connected to the natural environment.

Indigenous ways to interact with the ecosystems are unique and they could provide an important added value to climate mitigation. The IPCC has recognised this aspect in its Fifth assessment report, which states that

tively impacting their rights, such as agrofuels and market-based mechanism. See generally: Indigenous Peoples' Global Summit on Climate Change, *The Anchorage Declaration*, 2009.

⁽⁷³⁾ R.E. Dunlap, R. Brulle, *Climate Change and Society: Sociological Perspectives*, Oxford University Press, 2015, pp. 127-163.

⁽⁷⁴⁾ Paris Agreement, Article 5.

⁽⁷⁵⁾ Cancun Agreement, Article 12.

«Indigenous, local, and traditional forms of knowledge are a major resource for adapting to climate change (...). Natural resource dependent communities, including Indigenous peoples, have a long history of adapting to highly variable and changing social and ecological conditions»⁽⁷⁶⁾.

At the moment, Indigenous initiatives for climate change adaptation and biodiversity conservation are being implemented at the national level in a variety of countries, demonstrating that native communities play an essential part in sustainable agricultural practices, food security and inclusive development, such as in the case of the conservation project in the Yanesha reserve⁽⁷⁷⁾.

In addition, preservation of Indigenous TK systems is considered essential because of its positive contribution to sustainable development, since Indigenous communities generally rely on sustainable and traditional management of resources and ecosystems (78). Sustainable harvesting, traditional livestock keeping and fishing, gathering and collecting of fruit and natural medicines are able to minimize the emissions while simultaneously conserving biodiversity (79). Furthermore, it has been proved that granting the

⁽⁷⁶⁾ J. FORD, L. CAMERON, J. RUBIS, M. MAILLET, D. NAKASHIMA, A. WILLOX, T. PEARCE, Including Indigenous Knowledge and Experience in IPCC Assessment Reports, in Nature Climate Change 6, No. 4, 2016, pp. 349-353.

⁽⁷⁷⁾ For example, biodiversity conservation and climate adaptation initiatives are being implemented in the Peruvian Andes where Quechua communities are managing the Potato Park aimed at restoring the region potatoes biodiversity, following their customary laws and knowledge. In South Africa, in 2008, traditional livestock keepers, adopted the Declaration of Livestock Keepers Rights, which recognises the importance of biodiversity conservation for the sustainable use of traditional breeds. Traditional knowledge helped to prevent an environmental disaster in 2004, when Moken people in Myanmar recognized the signs of an incoming tsunami and moved their village to a higher ground, avoiding death. See generally: B. Tobin, Bridging the Nagoya Compliance Gap: the Fundamental Role of Customary Law in the Protection of Indigenous Peoples' Resources and Knowledge Rights, 9/2 Law, Environment and Development Journal, 2013.

⁽⁷⁸⁾ ILO, Indigenous peoples and climate change: from victims to change agents through decent work, International Labour Office, Gender, Equality and Diversity Branch, Geneva, 2017, pp. 23-29.

⁽⁷⁹⁾ *Ibid.*

management of forests to Indigenous peoples by securing their land rights contributes to lowering consistently the GHGs emission levels (80). But this sustainable management is deeply entrenched in their belief system, which endows nature with intrinsic, spiritual rather than economic value.

Although we have instances in international law with instruments that prescribe and facilitate participation of Indigenous peoples, such as the CBD, and in national law, there is a significant difference between the weight of different stakeholders in negotiations. For example, Indigenous peoples' representatives might need to confront States, corporations and other actors in structures that ignore power imbalances that exist within the very decision-making systems (81).

Meaningful participation of Indigenous peoples in climate governance should then be part of a broader decolonization process, which cannot be separated from an actual respect of their right to self-determination, as described by the UNDRIP⁽⁸²⁾, and from the actual control over their territory through instruments such as legal entitlement to ancestral lands and respect of the right to Free Prior and Informed Consent⁽⁸³⁾. Recovery of indigenous right to self-determination and control over their national territories are crucial elements of a decolonization of Indigenous peoples' participatory rights in climate governance.

The recognition of Indigenous TK should never be seen as a utilitarian tool, as a resource to be plundered in order to reach our goals, whether they

⁽⁸⁰⁾ C. Stevens, R. Winterbottom, K. Reytar, et al., Securing rights, combating climate change: how strengthening community forest rights mitigates climate change, Washington DC, World Resources Institute, 2014.

⁽⁸¹⁾ M. Ntona, M. Schroeder, Regulating oceanic imaginaries: the legal construction of space, identities, relations and epistemological hierarchies within marine spatial planning, Maritime study, 2020.

⁽⁸²⁾ Article 3.

⁽⁸³⁾ For an instance, Yanesha communities have been legally entitled to their territories since the 1970s thanks to the efforts of the FECONAYA federation, while they have been protagonists of the FPIC processes "Plan Maestro de la Reserva Comunal El Sira 2015-2019", and "Reserva Comunal Yanesha". See also Ministerio de Cultura de Perù, at consultaprevia.cultura.gob.pe.

are scientific or academic ⁽⁸⁴⁾. A meaningful recognition of Indigenous peoples as relevant stakeholders in climate governance implies a total re-thinking of existing power structures, in a logic of decolonisation and redress of historical injustices ⁽⁸⁵⁾. Engaging in this anti-colonial strategies would mean not only recognizing TK as a way for Indigenous peoples to participate in climate governance, but also to invert the dreadful trend of a new colonisation era in Indigenous territories, represented mainly by certain governmental strategies aimed at dismantling ancestral reserves in the name of mining and development projects ⁽⁸⁶⁾.

Participatory governance, as prescribed by national and international instruments, can only work if, in the negotiating arena, all stakeholders can exert a similar influence. If Indigenous peoples' rights and legal entitlement to their ancestral territories keep being denied by predatory governments and corporations, there cannot be a fair an ethical participation. Therefore, a decolonisation of international practices is needed to avoid the risk of misappropriation of Indigenous TK to serve our climate goals.

Recent Peruvian legislation might provide a good example of this inclusive, transparent and effective participatory approach to climate governance. The Peruvian government has approved in April 2018 the Climate Change Framework Act (in Spanish, *Ley Marco sobre Cambio Climático*). This Act has the objective of integrating climate change planification in the three levels of government – legislative, judicial, executive – promoting the inclusion of adaptation and mitigation measures in development planning, investments

⁽⁸⁴⁾ B. Fikret, Sacred Ecology: Traditional Ecological Knowledge and Resource Management, Taylor and Francis, Philadelphia, 1999.

⁽⁸⁵⁾ LR. SIMPSON, Anticolonial Strategies for the Recovery and Maintenance of Indigenous Knowledge, in American Indian Quarterly, 28, No. 3/4, Special Issue: The Recovery of Indigenous Knowledge (Summer-Autumn, 2004), pp. 373-384.

⁽⁸⁶⁾ For instance, see Bolsonaro's politics in the Amazon: L. Ferrante, P. Fearnside, Brazil's new president and 'ruralists' threaten Amazonia's environment, traditional peoples and the global climate, Environmental Conservation, 46(4), 261-263, 2019; or the indiscriminate killing of environmental and human rights defenders: according to the UNEP, 164 environmental defenders were killed in 2018, at unenvironment.org.

and governmental management⁽⁸⁷⁾. It also establishes a multisectoral competence framework, where each public entity at national, subnational and regional level should define and report actions undertaken for adaptation and mitigation⁽⁸⁸⁾.

Indigenous peoples are key actors in this process, as the objective of the Act is to involve and promote capacity building of actors from public and private environment in developing governmental strategies against climate change (89). The Act establishes general requirements for the development and implementation of climate change policies with a particular focus on Indigenous peoples both as agents of change and beneficiaries of adaptation and mitigation funds (90). Indigenous TK and alternative views concerning harmonic development strategies that respect nature should be incorporated into the design and implementation of climate change strategies (91). They are also recognized as important stakeholders in the conservation of forests and in the reduction of emissions derived from forest degradation (92). Inclusion of Indigenous TK and alternative views should be done through a transparent, participative and inclusive process that aims at respecting nature while implementing adaptation and mitigation strategies (93).

A more detailed operationalization of the Act is contained in the Reglamento que aprueba la Ley Marco sobre Cambio Climatico (Regulation approving the Climate Change Law Framework) (94). The Regulation aims at setting norms for the practical application of the Act, among which the obligation for the State to consult with Indigenous peoples according to the International

⁽⁸⁷⁾ See generally MINAM website: minam.gob.pe.

⁽⁸⁸⁾ Ihid.

⁽⁸⁹⁾ Congreso de la Republica, Ley N. 30754, Ley Marco sobre Cambio Climatico, Article 2 section 2.2.

⁽⁹⁰⁾ *Ibid.*

⁽⁹¹⁾ *Ibid.*, Articles 3 and 4.

⁽⁹²⁾ *Ibid.*, Article 17.

⁽⁹³⁾ Ibid., Articles 4 and 17.

⁽⁹⁴⁾ Peruvian Government, Decreto Supremo que aprueba el Reglamento de la Ley Nº 30754, Ley Marco sobre Cambio Climático, at *busquedas.elperuano.pe*.

Labour Convention 169. It contains several norms aimed at regulating the relationship between the State and Indigenous peoples, among which an obligation for the State to guarantee the participation of Indigenous peoples in determining the State's climate policies (95). Furthermore, it recognizes as an "enabling condition" all actions that guarantee the legal entitlement of lands and territories and foster the collective rights of Indigenous peoples (96). The recognition of the interlinkage between the necessity of protecting Indigenous rights to their ancestral lands is paramount in relation to the realization of a meaningful and inclusive governance, as previously stated in this paper. In addition, the Regulation invokes the creation of a Plataforma de pueblos indígenas para enfrentar el cambio climático (Indigenous peoples platform to address climate change) to foster knowledge exchange and to share practices that contribute in the management of climate impacts (97). Finally, it aims at promoting the participation of Indigenous peoples in international and national climate funds (98). This norm is particularly significant as it might be considered as an attempt to redress the problem of the exclusion of Indigenous peoples in negotiations, whereas the excessive state-centred (or corporate-centred) discussion models have prevented a real inclusion of Indigenous views in climate policies.

6. — Concluding remarks.

In practice, a rightful and correct participation of Indigenous peoples in global and local climate governance should take into consideration the essential difference between the Westernized conception of nature as a "resource" and the Indigenous philosophies that see nature as a prima-

⁽⁹⁵⁾ Article 17 "Obligación de garantizar la participación de los pueblos indígenas u originarios".

⁽⁹⁶⁾ Ibid.

⁽⁹⁷⁾ Disposiciones complementarias finales, decima segunda.

⁽⁹⁸⁾ *Ibid.*, decima tercera.

ry life-giver⁽⁹⁹⁾. The enhancement of Indigenous peoples' participatory rights should entail recognition and revaluation of TK, not as a mere instrument to reach climate goals, but as a mean to respect and safeguard Indigenous peoples' culture. However, this is far from being a straightforward and risk-free process. It would need to entail a cognizant and systematic attempt to revalue what has been denigrated and denied for centuries – Indigenous peoples' rights and the validity of their knowledge⁽¹⁰⁰⁾. It involves the challenging of powerful institutions that have systematically dismissed and subjected alternative knowledge to the westernized, positivistic science, in the name of an assimilationist and paternalistic approach to Indigenous cultures⁽¹⁰¹⁾.

⁽⁹⁹⁾ NJ. Reo, The Importance of Belief Systems in Traditional Ecological Knowledge Initiatives, in The International Indigenous Policy Journal, 2(4), 2011.

⁽¹⁰⁰⁾ AW. WAZIYATAWIN, Introduction: Indigenous Knowledge Recovery Is Indigenous Empowerment, in American Indian Quarterly, 28, No. 3/4, 2004: 359-372

⁽¹⁰¹⁾ Ibid.