

## Otavaleños and Cotacacheños: Local Perceptions of Sacred Sites for Farmscape Conservation in Highland Ecuador

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**ABSTRACT** Indigenous communities around the world face pressures from ecotourism practices and conservation. Otavalo, Ecuador, is an example of how local spiritual values can add to the conservation efforts of ecotourism. The Imbakucha watershed includes mountain landscapes with natural and cultural values of numerous indigenous communities where most residents associate their livelihood with iconic, sacred, natural features. Because this region has been conserved with a vibrant artisan economy, it is a well-known cultural landscape in Latin America, and therefore, the increased pressure of globalization affects its preservation as it undergoes a shift from traditional towards contemporary ecotourism practices. We investigate the relationship between the indigenous people and their intangible spiritual environment by local understanding of identity and cultural values, using ethnographic and qualitative research to analyze the influence of spirituality on environmental actions and intersections that reify the native sacred translated into Christianity, to define synchronisms of modernity and the ancestral influence on the Andean culture in the Kichwa Otavalo living in the valley. This study concludes that there is an outlook among indigenous leaders, politicians, researchers, and scholars that a stronger influence of environmental ideals and ecofriendly lifestyles should and can be instilled into the livelihood that exists in indigenous communities to favor sacred sites conservation with development. We recommend the implementation of a sacred site conservation category for the Imbakucha watershed to help with the conservation efforts of local indigenous ecotourism practices.

### INTRODUCTION

Indigenous communities are collectives comprised of people strongly linked to their ancestral culture with a fervent identity for their shared history, environment and community despite forces tending to minimize the “self” and their knowledge (Saldívar 2010). This identity, however, has been compromised over the past decades due to increasing Western influences challenging indigenous values due to dissembling into parochial pride, indexing their ancestral customs and unique environmental features for maintenance of traditional livelihood amidst the hierarchies of modernity and ethnicity (Appadurai 1988; Knapp 1991; Malešević 2011). The effect of Westernized culture pours exogenous stresses into the environment of indigenous communities, altering the relationship between these three farmscape elements of tropical mountains in the

Americas (Sarmiento 2003; Gordon et al. 2010). Furthermore, the determination of “otherness” must describe the essence of the place shared by groups of the same ethnic background but guised in spatialities of political boundaries and access of agrobiodiversity resources (Zimmerer 2006, 2010). As this is an important element in the contestation of conservation territories, the building of identity based on iconic features, metonymic indicators, ecological taboo, and sacredness, care should be exhibited when incorporating spiritual domains in the toolbox of ecotourism to revalue local culture (Ziolkowski et al. 1987; Posey 1999) and the maintenance of Otavalo strong cultural traditions (or *Runa Kawsay*) (Cotacachi 2002; Sarmiento et al. 2008). Understanding indigeneity (Meyer 2011) thus becomes imperative when globalization of agricultural markets and commoditization of indigenous knowledge could mean the final chapter of the long drama of Andean peasantry based on subsistence production (Van der Ploeg 2009) requiring co-opted adaptation measures to stimulate the resilience of Andean societies, such as the *Atawalukuna* of Ecuador (known with the Spanishized name of Otavalo). Sacred mountains have been studied for quite some time (Headly 1847; Bernbaum 1997) and have be-

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come target for innovative conservation approaches emphasizing 'the intangible' in valuing conservation of protected areas (Harmon and Putney 2003). Furthermore, incorporation of sacred mountain landscapes in the conservation toolbox is now required as part of comprehensive best practice management (Hamilton 1993; Schaaf and Lee 2006; Sponsel 2008). Sacred landscape conservation is now an imperative in the mountains of the world amidst globalization, particularly in key valleys of the tropical Andes where indigeneity is confronted with both identity and miscegenation (Crain 1990; Rekom and Go 2006; Huarcaya 2010).

### Reifying Natural Elements and the Sacred

The indigenous peoples of Otavalo and Cotacachi maintain a close spiritual link with the environment (or *Kawsay Sapi*) through several factors that are instilled within their lifestyles and spirituality (Cotacachi 2002). A main component includes their work with the land and the sacred sites that are interconnected with their spirituality (or *Runa Rimay*). They do not analyze the practices that are put into conserving environmental resources (or *Puchuchina*); instead, according to many indigenous citizens, conserving and protecting the environment is incorporated into their lives, as environmental and religious practices (or *Wakaychina*) are known to be indistinguishable.

According to many Kichwa Otavalo, the conservation practices in this area are maintained through the observance and understanding of the ancestral murmur (or *Aya*) that shows the soul ecology, spiritual synchrony or emanating energy found in the Imbakucha basin for conservation practices in their communities (or *Llakta Kawsay*); also, the work of ecologists in this region, the government's Ministry of the Environment, indigenous led parochial and city governance, and the few non-profit agencies in the area are devoted to environmental conservation. Furthermore, the adult indigenous citizens work with the land on a daily basis, tending to their gardens, livestock, and farms. These adults pass their attention to and care for the environment (or *Runa Yachay*), along with the notion of the importance of the environment and the natural resources therein, to their children. This education that is being passed from their ancestors to the younger generations (or *Shina Nin*) is the

important legacy and intergenerational equity of the original people for conserving the environment and the natural resources of the basin. While the majority of Otavaleños and Cotacacheños are Christian (either Catholics or Evangelicals), their religion does not conflict with the spirituality found in their cosmivision (or *Runa Yachay*). This important feature of the Andean culture has been described as Syncretism that helps both Western and original beliefs coexist in the area (Rodríguez 1999). However, important anachronisms have also been pointed out by fundamentalists that cannot admit the sacredness of a tree, or a waterfall (Vásquez-Fuller 1995). In the synchronic approach, this non-formal education, in addition to the Otavalo's environmental non-profit's work with reforestation and education, and the existence of the Cotacachi-Cayapas Ecological Reserve in the Imbabura Province, allow the communities to lead more environmentally-friendly lives while benefiting from the conservation of the Cotacachi-Cayapas Ecological Reserve and the clean water from these protected areas, taken as more than mere spatial features, but spiritual ones.

The original people have great respect for the environment; therefore, they also have reverence for its natural resources, specifically water, which is one of the most important energies of the mountain landscape (or *Urku Ayacuna*). Their esteem for water is derived from their spirituality and the significance of sacred sites in the indigenous culture. This importance for sacred sites comes from the indigenous peoples' ancestors, grandparents, and parents (or *Tinkuy Rimay*) conversations, and the essential rituals of initiation and purification (or *Wuatuna Samay*) associated with their spirituality and the sacred sites. The majority of the sacred sites connected to the spirituality of the Otavalo communities include any location in the Imbakucha basin where water emanates or the telluric murmur can be heard (or *Samay*). This includes streams (or *Wayku*), rivers (or *Yacu*), seepage coves (or *Pukyu*), waterfalls (or *Churru*), lakes (or *Kucha*), ice (or *Kasay*), snow (or *Rasu*) and any other area where a form of water exists (with purifying essence or *Katequil Samay*). However, there are also many sites that are sacred based on their relationship with the natural environment in their territory (or *Llakta*). Objectified elements of the basin become sacred in the building and

maintenance of original mythology. They include the sun (or *inti*), the mountains (or *urku*), trees (or *yura*), and large rocks (or *jatun rumi*). Along with purification rituals, there are also festivals, myths, rites, ceremonies and celebrations that are associated with the sacred sites, most of which are appropriated via oral tradition, ethnoecology, dress code or specific celebrations (Cotacachi 2002).

Because of the importance of water and its association with sacred sites in the Otavalo culture, maintenance and protection of water bodies are extremely important to these communities, particularly in the higher reaches (or *Sacha Allpa*—Andean forests, and *Ugsha Allpa*—Páramos). A lot of energy and time is devoted to conserving the waters in the Imbakucha basin, so that they will be recovered, less contaminated and not depleted.

#### Imbakucha Watershed as Study Case

The watershed of the largest Andean lake of Ecuador, *Imbakucha*, or San Pablo Lake, is lo-

cated in the province of Imbabura in northern Ecuador (see Fig. 1). Here, the Kichwa culture developed two different groups, the Kichwa-Cayampis to the south and the Kichwa-Otavalo to the north of the water body. Within each group, further differentiation is also possible, which creates a milieu of ethnographic and epistemographic oddities that makes Ecuador a rich floricultural, multilingual nation (Moreno and Oberem 1981; Moya 2000). One clear example is presented between the Kichwa Otavalo living near Imbakucha, near the city of Otavalo, hence *Otavaleños*, and those living near Kuikucha, around the city of Cotacachi, hence *Cotacacheños*. This study investigates the existence of sacred sites among the *Otavaleños* and *Cotacacheños* and the conservation efforts among these communities, the Ecuadorian government, non-governmental organizations and other stakeholders.

Otavalo and Cotacachi are typical farmscapes nested in the Northern Andes of Ecuador. They are within thirty miles of each other and share many environmental factors and are located with-

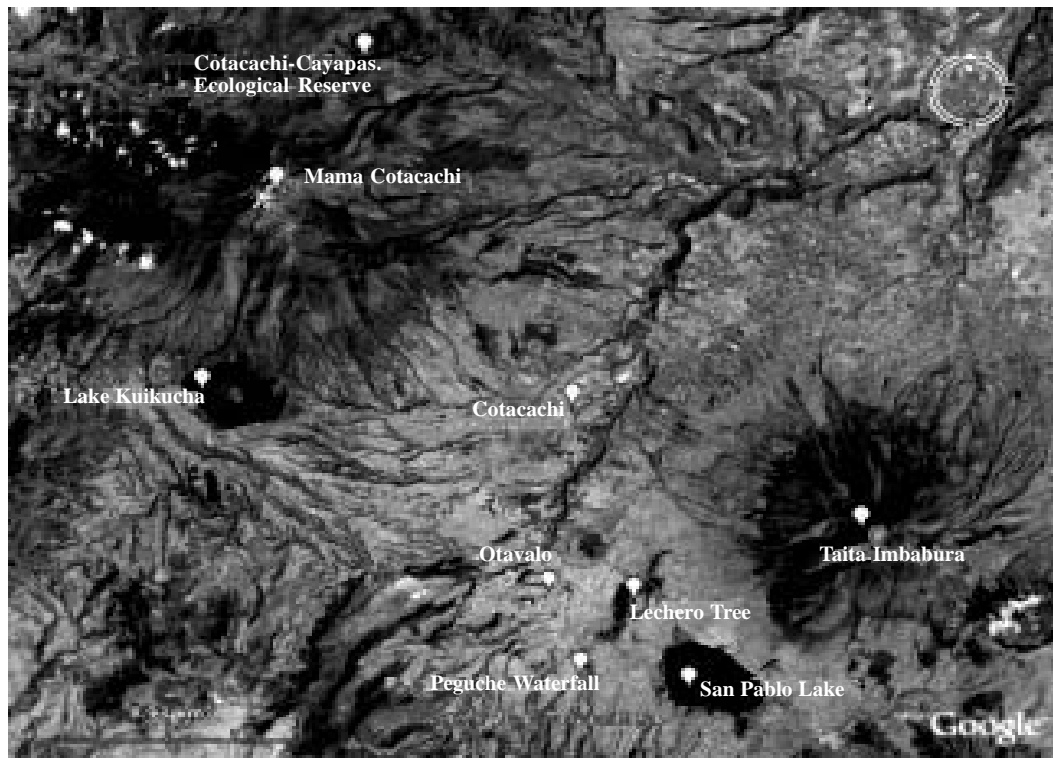


Fig. 1. Map of the study area, showing the location of the urban core and the sacred sites of the Imbakucha basin

in the same ecosystem. Otavalo's sacred sites include *Taita Imbabura*, the Imbabura Volcano (or *Yaya Imbabura*), San Pablo Lake, *pinllupura* or Lechero Tree, the *pukara* of Reyloma, and *churruyacu* or Peguche Waterfall. Cotacachi's sacred sites include *Mama Cotacachi*, or Cotacachi snowpack volcano, and the Cotacachi-Cayapas Ecological Reserve (Ministerio de Turismo del Ecuador 2010).

*Taita Imbabura* is an inactive stratovolcano (see Fig. 2). It stands 4,609 meters above sea level and, at its basin, is San Pablo Lake. The slopes of Imbabura are extremely fertile due to volcanic ash, and the slopes include cloud forests, farmland, and grazing grounds in the highland grasslands or *Páramo*. The local original people utilize much of the farmland and pastureland. The Peguche Waterfall is located in a small park and serves as a main purification site during the *Inti Raymi*, or Festival of the Sun, which is a weeklong celebration held during the summer solstice. The Lechero Tree, a medicine tree, symbolizes life and death and is the conduit of fertility for newlyweds, who must visit the tree together with offerings to insert into its bark. Also, afterbirths, placentas, and non-natal material are deposited at the base of the tree, on top of the *pukara* of Reyloma, the highest point of the Imbakucha landscape (Vásquez-Fuller 1995).

The Cotacachi-Cayapas Ecological Reserve contains approximately 341,925 hectares and comprises the high Andean and subtropical zones. It extends to the western edge of the coastal rain forest in the Esmeraldas coastal region. Because of the size and diversity of ecosystems in the area, there is a large biodiversity within the reserve. The Cotacachi-Cayapas Ecological Reserve contains over two thousand identified flora species, including a variety of shrubs, trees, vines and ferns; five hundred species of birds; dozens of anteaters, deer, fox, ocelots, raccoons, sloths; and many aquatic and amphibian species. At the edge of the reserve in the Imbabura Province lies *Kuikucha*, a 200-meter deep crater lake at the base of *Mama Cotacachi* (see Figs. 2 and 3). There are volcanic domes that emerge from the center of the crater lake (Coloma-Santos 2007). Locals describe the arrangement of Imbakucha basin as formed by their association with cultivation of different environments (or *Allpakuna*), framed by the two big mountains and their spirits (or *Apu Urkucuna*) and the use of altitudinally defined zones including the lacustrine (or *Wampu Allpa*), the piedmont (or *Ura Allpa*), the steep slopeland (or *Jawa Allpa*), the Andean forest coves (or *Sacha Allpa*), the highland grasslands or pajonal (or *Ugsha Allpa*), and the rocky debris of periglacial assembly (or *Rumi Allpa*).

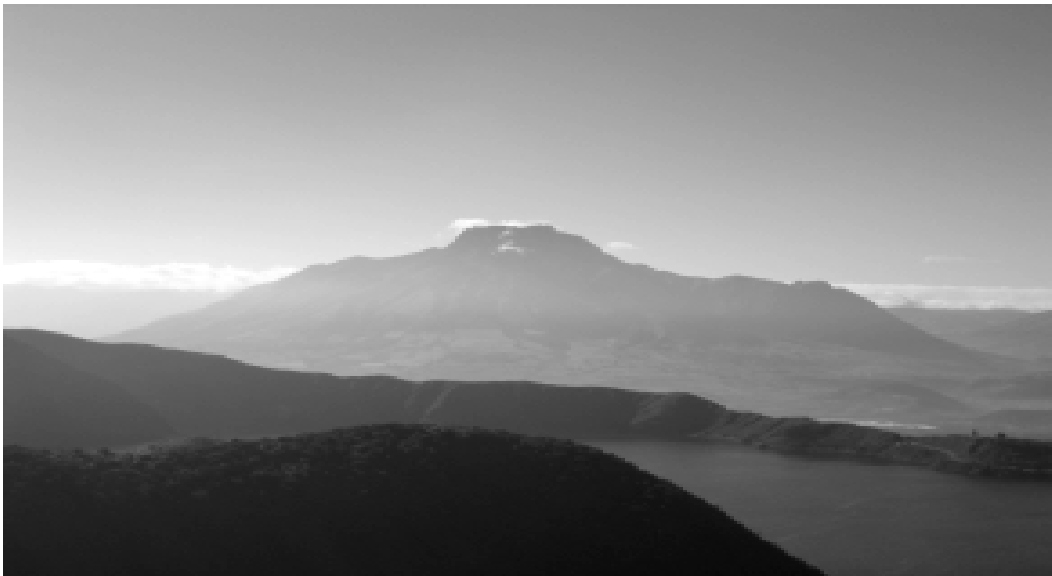


Fig. 2. The Imbabura volcano as seen from the rim of Kuikucha crater lake



Fig. 3. The Cotacachi snowpack volcano as seen from the community of La Calera in Cotacachi, Ecuador

### METHODOLOGY

Research on the topic served as the basis for an Honors Thesis that included ample literature review, hypothesis development and research question elucidation, coupled with field work, local informants, personal experience and longitudinal expert surveys. Over a one-month period in July 2007, field interviews were conducted in and around Otavalo and Cotacachi, with government officials, academics, non-profit employees, and indigenous community members. The field interviews were documented through a video recorder and were completed at offices, homes, and in hotel conference rooms at convenient times for the interviewees. All interviews included identical questions that allowed for responses to be compared. Transcripts were made to ensure fidelity of survey questions and to eliminate dubious translations or interpretation. Data analyses included descriptive statistics and qualitative research that allowed for the limited sample size of 30 random interviews with interviewees who were well-versed in the environmental activities and indigenous communities in Cotacachi and Otavalo, and were used to verify the answers to certain questions. Interviews were conducted with open-ended questionnaires in and around Cotacachi, Otavalo, and Quito. False negative or protest-zero informants were elimi-

nated as out-liers for statistical treatment of  $n=30$  with 1 degree of freedom. Follow up personal questions were made during the following year to update extensive literature on the Otavalo and sacred landscapes in general. Manuscript preparation ensued to verify results and conclusion.

### RESULTS AND DISCUSSION

Because of the persistent relationship between the original people and their natural environment, education about the environment and natural resources will not weaken throughout future generations (Sarmiento et al. 2008). However, this education may not be strong enough to encourage Otavaleños and Cotacacheños to not contaminate and harm the environment through other actions, particularly the secularization of place and the substitution of the Kichwa language by Spanish (Caillavet 1983) and the encroaching market-favored English at present. Furthermore, the government and non-profit agencies will need to continue and increase their bilingual and bicultural work in Kichwa and Spanish on environmental conservation in the Imbabura Province.

The Cotacachi municipal government was led by Auki Tituaña, an indigenous mayor who upholds his standards of spirituality in relation to sacred sites, and, therefore, maintains his be-

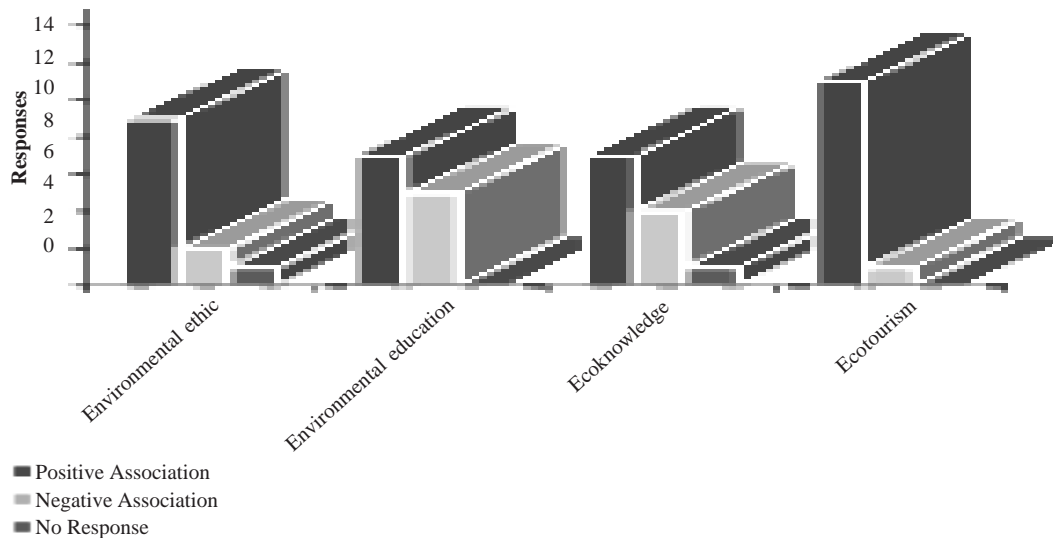


Fig. 4. Cotacacheños' Responses to Environmental Concerns in Cotacachi, Ecuador

liefs on preserving the environment by being a steward (or *Mindu*) of its natural resources. With the viewpoints of original people being forefront in a heavily indigenous-populated area, important factors to the indigenous communities will be held to high esteem, and the aspects of their lives that are important to them will be accomplished and protected. Furthermore, the continuation of ecological tourism will continue to impact the communities in a positive way, but only the inclusion of ethnotourism will continue the preservation of their sacred sites, as long as the sites maintain a level of privacy that will allow the indigenous people to respect their ancestors and these spiritual traditions. Figure 4 shows for the distribution of responses from Cotacacheños pertaining to environmental concerns in Cotacachi, Ecuador.

The local government has accomplished much, with the goal of turning Cotacachi as the 'capital of ecotourism' in the valley. However, more can be done to preserve the land that is already protected and to add more sites and land areas to the list of conserved areas, particularly in scenarios of climate change that constraint *Mama Cotacachi* as the mountain lacking vital glacial water source (Rhoades et al. 2008). While the Cotacachi-Cayapas Ecological Reserve is protected, it has been threatened several times from the logging of locals. More energy must be given to the constant protection of this land, as it has a large impact on the conservation of forests, animals, and waters within the reserve and among

the surrounding communities (Keating 2007).

The question of health, environment and education also came up frequently. Many feel their fellow citizens contaminate the environment too frequently through the use of automobiles. This contamination affects the health of people and the natural environment; with this contamination and poor health, a lower quality of life will come about. With the lowering or abolishment of this contamination, not only will the quality of life be better, but also many of the sacred sites will be cleaner for the purification rituals.

This was particularly evident in interviews in Otavalo, where a vibrant merchant atmosphere fuels the streets and plazas of the town. Mr. Mario Conejo, the indigenous mayor of Otavalo, reminds us of the trading essence of their identity since antiquity, where they produced and sold products throughout the known Andean world, with active and traveling merchants (or *Mind-ala*). Even today, it is not uncommon to find Otavaleños traveling in faraway countries, making them the most recognized indigenous people that have broken frontiers of trade, which helps with remittances and ambassadorial exposure to attract international attention. Because of this flair, more hotels and traditional business services are offered in the town of Otavalo, where educational institutions, souvenir stores and cyber cafes, and the traditional marketplaces known as 'the largest indigenous marketplace in the Andes', are dotted with young people and tourists. Through the information received from

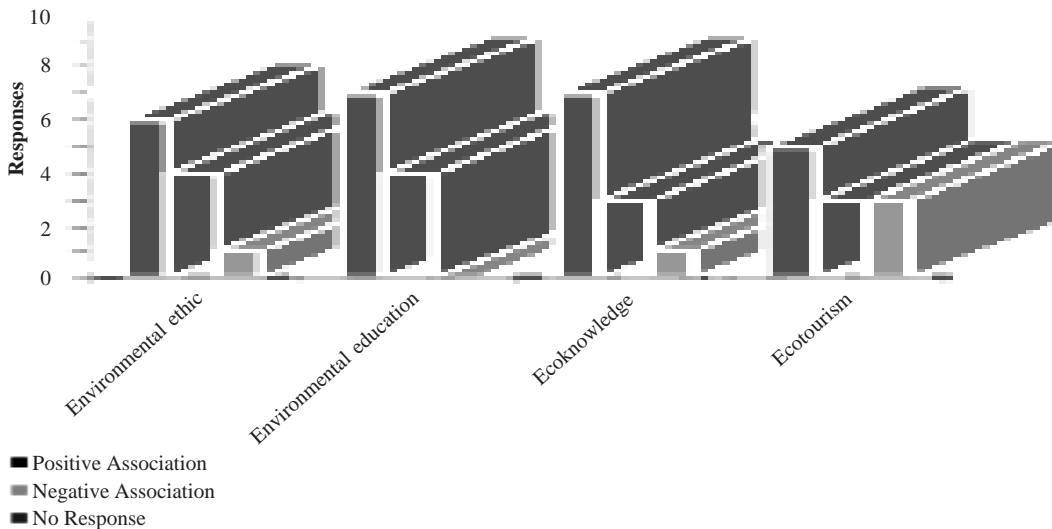


Fig.5: Otavaleños' responses to environmental concerns in Otavalo, Ecuador

the indigenous peoples, many felt that more education was necessary for citizens to realize the importance of protecting natural resources and the environment (see Fig. 5). Because natural resources are important to Otavalo's culture and spirituality, it is vital for a wide-spread educational program on natural resources and conservation, specifically relevant and created for indigenous people and their lifestyles, such as petitions to the gods of the mountains (or *Wakcha Karay*), homage to the Earth (or *Karana Pachamama*), single prayers with presents (or *Wanlla*), or cleansing of purposes (or *Ñawi Maillay*); hence, it is imperative to continue to preserve these areas. In order for a change to come forth, the programs must include the word-language that communities can understand, as compared to Westernized definitions of conservation and preservation side-by-side with vernacular concepts that require social invigoration to be transmitted and traduced. These comprehensive programs should be inclusive of activities for children, youth, adults, and the elderly citizens.

According to Cotacachi (2002) and Sarmiento et al. (2008), sacred sites should be conserved through the government mediation because of their connection to cultural and religious traditions. It is "important to identify those sites in areas that need protection, and respect and conserve them" (Papayanis and Mallarach 2007). By doing this we will, in turn, protect resources that are located in the same areas as the sacred sites. While many indigenous peoples respect

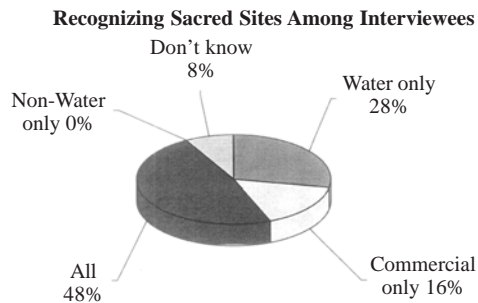


Fig. 6. Distribution of the perceptions of sacred sites among the interviewees

the sites, those who do not show as much reverence toward them contaminate the sites (see Fig. 6 for the distribution of the perceptions of sacred sites among the interviewees). They must take a different approach for preserving cultures and natural resources, such as landscape stewardship or cultural landscape, category V of the World Conservation Union (IUCN).

**Coda**

Through this study, a great deal of information was collected involving the importance of sacred sites in the lives of indigenous citizens in the Imbabura Province in Ecuador. With this information, however, came the realization of the need for more education on environmental conservation and the preservation of sacred sites. More than divergent paths for sacred sites con-

servation between Otavaleños and Cotacacheños, a convergence of relationships that subsist among original people and their natural environment was apparent (Zubritski 1990). However, more research must be conducted on sacred site conservation in relation to spirituality and objectification of landscape features; in addition to the adaptations of *Imbakucha* communities in relation to the ever-changing cultural environment surrounding them, the reifying of landscape attributes should be indexed and formally protected with a Spiritual Park, Protected Landscape, or a designation within the United Nations Educational, Scientific and Cultural Organization (UNESCO) program for Sacred Sites Conservation. A request to include the *Imbakucha* Sacred Landscape should receive governmental approval, particularly after the Ecuadorian oddity to have successfully incorporated the “rights of Earth” (*Pachamama*) within the new constitution (Cárdenas 2010). This will be a prime example of assigning spiritual value and recognition for conservation into the future generations of *Atawalukuna*. In the end, these sacred sites must be protected not only for their environmental value but also for the demonstrable symbolism of respect and significance of intangibles held by many Otavalo in the Imbabura Province.

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#### REFERENCES

- Appadurai A 1988. Putting hierarchy in its place. In: George E Marcus (Ed.): *Rereading Cultural Anthropology*. North Carolina: Duke University Press, pp. 36-49.
- Aragundy J, Ríos XZ 2006. Water quality and human needs in Cotacachi: The Pichavi watershed. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 203-218.
- Barrow E, Pathak N 2005. Conserving “unprotected” protected areas – communities can and do conserve landscapes of all sorts. In: Jessica Brown, Nora Mitchell, Michael Beresford (Eds.): *The Protected Landscape Approach: Linking Nature, Culture and Community*. United Kingdom: IUCN: The World Conservation Union, pp. 65-80.
- Bernbaum E 1997. *Sacred Mountains of the World*. Berkeley: University of California Press.
- Brown J, Mitchell N, Beresford M 2005. Protected landscapes: A conservation approach that links nature, culture, and community. In: Jessica Brown, N Mitchell, M Beresford (Eds.): *The Protected Landscape Approach: Linking Nature, Culture and Community*. United Kingdom: The World Conservation Union, pp. 3-18.
- Cárdenas C 2010. Un Nuevo Concepto Dentro del Derecho Ambiental: “Los Derechos de la Naturaleza”. *Journal of Sustainability Education*, 1: 21.
- Caillavet, Ch 1983. Toponimia Histórica, Arqueología y Formas Pre-Hispánicas de Agricultura en la Región de Otavalo-Ecuador. *Bulletin de l’Institut Français d’études Andines*, 12(3-4): 1-21.
- Coloma-Santos A 2007. Reserva Ecológica Cotacachi-Cayapas. In: Gunther Reck (Ed.). *Guía del Patrimonio de Áreas Naturales Protegidas del Ecuador*. Quito: ECOLAP y MAE, pp. 33-43.
- Cotacachi C 2002. *Etnoecología de Imbakucha*. M.A. Thesis, Unpublished. Ibarra: Catholic University of Ecuador.
- Crain M 1990. The social construction of national identity in highland Ecuador. *Anthropological Quarterly*, 63(1): 43-59.
- Fieweger ME 2007. Papa critica espiritualidad indígena. *INTAG Monthly*, June/July 2007, P. 35.
- Fieweger ME 2007. Una ley minera que protege el agua. *INTAG Monthly*, June/July 2007, P. 27.
- Flora G 2006. Circular migration and community identity: Their relationship to the land. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 271-286.
- Flora JL, Flora CB, Campana F, Bravo MG, Fernández-Baca E 2006. Social capital and advocacy coalitions: Examples of environment issues from Ecuador. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 287-297.
- Gordon B, Sarmiento FO, Russo R, Jones J 2010. Sustainability education in practice: Appropriation of rurality by the global migrants of Costa Rica. *Journal of Sustainability Education*, 1(1): 116-135.
- Hamilton LS (Ed.) 1993. *Ethics, Religion and Biodiversity: Relations Between Conservation and Cultural Values*. Cambridge: White Horse Press.
- Harmon D, Putney A (Eds.) 2003. *The Full Value of Parks*. Lanham: Rowman and Littlefield Publishing Group.
- Headley JT 1847. *The Sacred Mountains*. Illustrated. New York: Baker and Scribner.
- Huarcaya SM 2010. Othering the *Mestizo*: Alterity and



- indigenous politics in Otavalo, Ecuador. *Latin American and Caribbean Ethnic Studies*, 5(3): 301-315.
- Keating PL 2007. Fire ecology and conservation in the high tropical Andes: Observations from northern Ecuador. *Journal of Latin American Geography*, 6(1): 43-62.
- Knapp G 1991. *Andean Ecology: Adaptive Dynamics in Ecuador*. Boulder: Westview Press.
- Malešević S 2011. Ethnicity in time and space: A conceptual analysis. *Critical Sociology*, 37(1): 67-82.
- Meyer M 2011. Waves of decolonization: Discourses of race and hemispheric citizenship in Cuba, Mexico and the United States. *Ethnohistory*, 58(1): 169-171.
- Ministerio de Turismo del Ecuador 2010. Página oficial. <<http://www.turismo.gob.ec>> (Retrieved December 22, 2010).
- Mitchell N, Brown J, Beresford M 2005. Conclusions – The protected landscape approach: Conservation for a sustainable future. In: Jessica Brown, N Mitchell, M Beresford (Eds.): *The Protected Landscape Approach: Linking Nature, Culture and Community*. United Kingdom: IUCN: The World Conservation Union, pp. 231-244.
- Moreno S, Oberem U 1981. *Contribución a la Etno-historia Ecuatoriana*. Colección Pendoneros 20. Otavalo: Instituto Otavaleño de Antropología. P. 406.
- Moya A 1999. *Ethnos, Atlas Mitológico de los Pueblos Indígenas del Ecuador*. Quito: Proyecto de Educación Bilingüe Intercultural (PEBI).
- Papayanis T, Mallarach JM 2007. *The Sacred Dimension of Protected Areas*. Gland: World Conservation Union.
- Peñafiel M, Tipán M, Nolivos L, Vásquez K 2006. Biological diversity in Cotacachi's Andean forests. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 87-102.
- Piniero MC 2006. Women and homegardens of Cotacachi. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 140-155.
- Posey D 1999. Introduction: Culture and nature –The inextricable link. In: Darrell Posey (Ed.): *Cultural and Spiritual Values of Biodiversity*. London: Southampton Row, pp. 1-18.
- Rekom JV, Go F 2006. Being discovered: A blessing to local identities? *Annals of Tourism Research*, 33(3): 767-784.
- Rhoades RE 2006. Linking sustainability science, community and culture: A research partnership in Cotacachi, Ecuador. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 1-15.
- Rhoades RE 2006. Sustainability science in indigenous communities: Reconciling local and global agendas. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 307-318.
- Rhoades RE, Ríos XZ 2006. Future visioning for the Cotacachi Andes: Scientific models and local perspectives on land use change. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 298-306.
- Rhoades RE, Zapata X, Aragundy J 2008. Mama Cotacachi: Historical, local perceptions, and social impacts of climate change and glacier retreat in the Ecuadorian Andes. In: B Orlove, E Wiegandt, B Luckman (Eds.): *Darkening Peaks: Glacier Retreat, Science and Society*. Berkeley: University of California Press.
- Rodríguez G 1999. *La sabiduría del Kundur: Un ensayo sobre la validez del saber andino*. Co-edición EBI-GTZ. Editorial Abya-Yala: Quito.
- Ruiz-Córdova SS, Duncan BL, Deutsch W, Gómez N 2006. Community-based water monitoring in Cotacachi. In: Robert E Rhoades (Ed.): *Development with Identity: Community, Culture and Sustainability in the Andes*. United Kingdom: CABI Publishing, pp. 236-250.
- Rosales CP 2003. Soy andino y esta es mi magia: la Fiesta del Sol en Cayambe, Ecuador. *Terra Incognita, Monthly*, July-August 2003, P. 24.
- Saldívar MV 2010. From Mexico to Palestine: An occupation of knowledge, a Mestizaje of methods. *American Quarterly*, 62(4): 821-833.
- Sarmiento FO 2003. Protected landscapes in the Andean context: Worshiping the sacred in nature and culture. In: David Harmon, Allen Putney (Eds.): *The Full Value of Parks*. Lanham: Rowman and Littlefield Publishing Group, pp. 239-249.
- Sarmiento FO, Rodríguez G, Argumedo A 2005. Cultural landscapes of the Andes: Indigenous and *colono* culture, traditional knowledge and ethno-ecological heritage. In: Jessica Brown, Nora Mitchell, Michael Beresford (Eds.): *The Protected Landscape Approach: Linking Nature, Culture and Community*. United Kingdom: IUCN: The World Conservation Union, pp. 147-162.
- Sarmiento FO, Cotacachi C, Carter LE. 2008. Sacred Imbakucha: Intangibles in the conservation of cultural landscapes in Ecuador. In: Josep M Mallarach (Ed.): *Cultural and Spiritual Values of Protected Landscapes*. Volume 2 in the series, Protected Landscapes and Seascapes. IUCN and GTZ. Kasparg Verlag, Heidelberg.
- Schaaf T, Lee C (Eds.) 2006. *Conserving Cultural and Biological Diversity: The Role of Sacred Natural Sites and Cultural Landscapes*. Paris: UNESCO-MAB Program.
- Slikkerveer LJ 1999. Ethnoscience, 'TEK' and its application to conservation. In: Darrell A Posey (Ed.): *Cultural and Spiritual Values of Biodiversity*. United Kingdom: Intermediate Technology Publications, pp. 167-259.
- Sponsel LE 2008. Sacred places and biodiversity conservation. In: C J Cleveland (Ed.): *Encyclopedia of Earth*. Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment. From <[http://www.eoearth.org/article/Sacred\\_places\\_and\\_biodiversity\\_conservation](http://www.eoearth.org/article/Sacred_places_and_biodiversity_conservation)> (Retrieved on 9 April, 2011).
- Van der Ploeg JD 2009. *The New Peasantries. Struggles for Autonomy and Sustainability in an Era of Empire and Globalization*. London: Earthscan Publishing.
- Vicuña CA, Torre S 2002. *Imbakucha: Estudios para la Sustentabilidad*. Quito: Indugraf del Ecuador.

- Ziolkowski M, Rohr E, Zubritski Y, Moreno SY, Coba CB, Jaramillo H, Prelorán H 1987. *Ecuador Indígena: Simbolismo y cotidianidad*. Instituto Otavaleño de Antropología. Quito: Abya Yala, P. 133.
- Zimmerer KS 2006. *Globalization and New Geographies of Conservation*. Chicago: The University of Chicago Press.
- Zimmerer KS 2010. Woodlands and agro-biodiversity in irrigation landscapes amidst global change: Bolivia, 1990-2002. *The Professional Geographer*, 62(3): 335-355.
- Zubritski Y 1990. Los estereotipos etno-socio-psicológicos y su papel en las relaciones interétnicas en el área Otavalo-Cotacachi. In: H Barros, H Jaramillo, J Echeverría, Y Zubritski, E Rohr, H Guerrero (Eds.): *Ecuador indígena: Antropología y relaciones interétnicas*. Instituto Otavaleño de Antropología. Quito: Abya Yala, pp. 73-91.