



# **Cocha Cashu Biological Station**

## **Conservation Education, Capacity Building and Outreach Initiative – EduCashu**

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## List of Acronyms

<b>ACCA</b>	Asociación para la Conservación de la Cuenca Amazónica
<b>ACEER</b>	Amazon Center for Environmental Education and Research
<b>CC</b>	Cocha Cashu
<b>CCBS</b>	Cocha Cashu Biological Station
<b>CREES</b>	London-based NGO with office in Cusco, working in Manu Biosphere Reserve
<b>FZS</b>	Frankfurt Zoological Society
<b>NGO</b>	Non Governmental Organization / Not for Profit Organization
<b>MNP</b>	Manu National Park
<b>SDZG Peru</b>	San Diego Zoo Global Peru
<b>SePeru</b>	Servicios Ecosistémicos Peru
<b>SERNANP</b>	Servicio Nacional de Áreas Naturales Protegidas por el Estado
<b>UGEL</b>	Unidad de Gestión Educativa Local

## **Introduction**

The Cocha Cashu Biological Station (CCBS) is one of the most productive field stations in the scientific world and, without doubt, one of the most studied Neotropical forest sites. Its international renown and importance for understanding and preserving tropical biodiversity is without question. However, this is not necessarily the case at the local, regional and national levels; although we do not have formal data, there is a generalized perception that Peruvians know little about what we do.

The work plan of the 10-year agreement signed between SERNANP and San Diego Zoo Global for the co-management of the Station does not explicitly state the need for investing in the theme of education, outreach and capacity building. Nonetheless, conversations with Manu National Park and with local people in and around the Park have put it at a high priority.

Our role, as perceived by SERNANP and San Diego Zoo Global, is not only to conduct top notch scientific research but also to promote it and to connect the science to our constituency, building on this relationship by broadcasting the findings of our research. We would like to have a more transparent relationship with Manu communities and other stakeholders, as well as increase public awareness of Cocha Cashu's activities and the importance of its role in tropical ecology research, biodiversity conservation and management.

Thus, Cocha Cashu's Conservation Education, Capacity Building and Outreach Initiative has the following vision as its mandate:

### **Vision**

EduCashu is an innovative model for research stations to engage and integrate with local people, the academic community, governmental institutions and the wider society.

## **Methodology**

Having recognized the need to integrate Cocha Cashu better into the local and wider community, in March 2013 we launched a planning initiative to identify key actions to foster conservation education, capacity building and outreach. Luis Ramirez, a Postdoctoral Associate at the San Diego Zoo Global Institute for Conservation Research, working in the Conservation Education department, assisted with the structured decision making process (Gregory et al., 2012). The latter is a formal method for analyzing a problem, by breaking it into components, and helps identify where the impediments to a decision are, to focus effort at the right component.

Thus, we began by defining the possible range of problems leading to Cocha Cashu's failure to integrate. Next, we phrased these as questions and identified possible solutions (alternatives). These were reformulated to develop objectives which in turn were organized into *fundamental* objectives and sub or *mean* objectives. The next stage was to identify measurable attributes for each mean objective, followed by a list of actions, in order of priority, which will help us to achieve each mean objective. This completed the development of the Program. We also identified current and potential stakeholders of the program (Annex 1).

The above process included a full day's workshop on 6th April 2013, to which we invited the following representatives from other organizations working in environmental education in the Manu area, including

Manu Park staff. The idea was that we would learn from their experiences as well as avoid duplication of efforts:

Adeilson Lopez – Instituto Socio Ambiental, Brazil

Carmen Chavez - ACEER

Therany Gonzalez - ACEER

Frank Hajek – SePeru

Carlos Arevalo - SePeru

Luis Ramirez - SDZG

Cesar Flores – SDZG Peru

Jessica Groenendijk – SDZG Peru

Ana Fernandez - MNP

Gladys Lopez– CREES

Frank Ochoa - ACCA

Armando Valdez – Alianza Andes Tropicales

Paulina Conde - FZS

The program actions have been planned until end 2018. At the conclusion of this period we will reassess the program and continue with the next planning cycle of activities.

### **The next steps**

We have already begun the program's implementation with some basic tasks. This includes securing the financial and human resources to carry out the activities, with the latter involving the establishment of strategic alliances with key actors identified during the planning process:

- We are considering hiring at least one additional part-time educator/communicator.
- We will create more opportunities for short-term participation by interns. Two interns are currently assisting with the re-structuring of the Station website and translation of English web texts to Spanish.
- We are designing an electronic Station newsletter, using MailChimp, for the 500 Cocha Cashu contacts
- We have formed productive relationships with SePeru and ACEER and are collaborating on one concrete conservation education project with each: an illustrated, bilingual booklet for the Matsigenka communities in and around Manu (SePeru), and the expansion of the Stroud Water Research Centre Leaf Pack Project in the Manu area (ACEER).
- We are collaborating with the Park on the strengthening and formalizing of their Environmental Education Plan.

## References

Robin Gregory, Lee Failing, Michael Harstone, Graham Long, Tim McDaniels, Dan Ohlson. 2012. Structured Decision Making: A Practical Guide to Environmental Management Choices. Wiley-Blackwell, UK. 295 p.

# **Cocha Cashu's Conservation Education, Capacity Building and Outreach Initiative – EduCashu**

**Fundamental Objective 1:** To increase awareness of, and engagement with, CCBS by key target groups.

*Mean objective I:* To increase engagement with CCBS by key Peruvian government entities, local NGO's and research institutions.

- a. Presentations about CCBS and EduCashu to key groups.
- b. Cooperative agreements with key groups.
- c. Collaboration with other actors to enhance and implement the Manu NP conservation education action plan.

*Mean objective II:* To increase local community engagement with CCBS.

- a. Presentations to key communities within and outside Manu NP
- b. Assess how indigenous people perceive their interactions with CCBS.
- c. Creation of protocols to properly interact with indigenous people on specific areas related to CCBS, incorporating guidelines already being followed by the Park, UGEL, RESOP, and Health Authority.
- d. Intercultural workshop for teachers of the UGEL at CCBS.
- e. Conduct concrete conservation education initiatives e.g. Leaf Pack project and visits by local community children/families to the Station.

*Mean objective III:* To increase engagement with CCBS by Peruvian and international faculties and researchers

- a. Cooperative agreements with universities.
- b. Identify research opportunities for Peruvian faculty.
- c. Collaborate with faculty to develop research case studies that address conservation issues in Manu National Park.
- d. Collaborate with faculty in terms of capacity building, and provide updates on current ecological science.
- e. Promote Cocha Cashu actively at national and international academic conferences.

*Mean objective IV:* To increase awareness of CCBS by general public.

- a. Contact and engage with high profile people who could become CCBS ambassadors.
- b. Outreach to media (TV, press, radio, electronic).
- c. Maintain CC website and Facebook page.
- d. Participate, in collaboration with other actors, in local and regional community events.

**Fundamental Objective 2: To foster understanding between the different actors in Manu, taking into account their cultural diversity.**

*Mean objective I: To develop and enhance personal interaction opportunities with indigenous people to increase intercultural understanding.*

- a. Assess CCBS areas where indigenous people can participate/collaborate.
- b. Create ad-hoc conservation education material for indigenous communities in and around Manu.

*Mean objective II: To promote potential alternative income opportunities for indigenous communities.*

- a. Development of locally made handicrafts.
- b. Employment opportunities at CCBS.
- c. Training and professional development to act as CCBS guides/research assistants.

*Mean objective III: To enhance a meaningful natural and cultural environment for station visitors*

- a. Incorporate indigenous culture as part of visitors' experience
- b. Implement physical examples of local culture in CCBS.
- d. Develop intercultural interpretative trails at CCBS.
- e. Promote the interaction of indigenous people and visitors at CCBS.
- f. Engage with Limonal and Pakitza to improve their infrastructure, capacity and content for visitors.

**Fundamental Objective 3: Increase dissemination, with researcher involvement, of scientific findings generated in CCBS by formal and informal means.**

*Mean objective I: To increase interaction opportunities between CC researchers and Peruvian students, media, the Park, and local communities.*

- a. Involve park rangers as outreach agents.
- b. Create window for interactions in Cusco between CC researchers, Park and NGO staff, tourism guides, Peruvian students.
- c. Invite Cashu Nuts, and ICR, Park, and Peruvian faculty staff as instructors for CC field courses.
- d. Invite CC ambassadors, film crews, journalists, photographers to CCBS.
- e. Invite strategic visitors (SERNANP and local government officials, community leaders, schoolteachers) to CCBS.

*Mean objective II: To increase the dissemination of research, and its implications for conservation and management, generated at CCBS.*

- a. Categorize and distribute research and papers generated at CCBS.
- b. Synthesise research and management implications for Peruvian faculty, the Park, and general public.



- c. Develop discussion forums between researchers and CCBS.

**Fundamental Objective 4: To increase technical capacity of ecology professionals and holders of indigenous knowledge with respect to research and protected areas management.**

*Mean objective I: To maximize the understanding of tropical ecology science and field techniques by top students*

- a. Consolidate annual San Diego Zoo Global Field Course
- b. Develop and/or attract other intensive/long-term field courses.
- c. Develop guidelines to apply for field experiences in CCBS.
- d. Create research/thesis opportunities for undergraduates.

*Mean objective II: To engage locals to participate in CCBS research.*

- a. Identify (with researchers) opportunities to further develop local/indigenous technicians.
- b. Identify opportunities to develop local technicians into instructors of local/indigenous knowledge.

*Mean objective III: To increase collaboration with SERNANP on Park/station management and research.*

- a. Assess the needs of the Park and of local communities to determine if and how we can help answer them through ecological research.
- b. Collaborate with Park to develop a comprehensive monitoring plan.
- c. Complement Park's environmental education program.

*Mean objective IV: To increase understanding by tourist guides of current ecological science, field research, and indigenous cultural diversity.*

- a. Establish communication with guides' associations.
- b. Training and presentations for tourism guides.

*Mean objective V: To maintain and increase park ranger skills to monitor ecological variables and manage sites in tropical flood plains.*

- a. Support SERNANP and the Park with ranger training in areas of CCBS expertise.

## **Annexes**

### **ANNEX 1**

#### **List of stakeholders (not in order of priority)**

- Manu National Park
- Cocha Cashu Biological Station
- Local communities:
  - Salvacion
  - Diamante
  - Boca Manu
  - Isla de los Valles
  - Matsigenka communities
    - Tayacome
    - Yomibato/Cacaotal
    - Maizal
    - Shipetiari
- Casa Matsigenka
- Researchers
- Local health authority
- Education authorities
  - RESOP
  - UGEL
- Non governmental organisations
  - SePeru
  - ACEER
  - CREES
  - FZS
  - Casa de los Niños Indígenas
  - FENAMAD