



Raute Project Proposal Draft – Permit Process

This document was created by the Department of Anthropology of the University of Zurich as part of an “Official Permit” proposal to work with the Raute in Nepal. As explained below, this work is based on scientific research on the Raute lifestyle and all material collected will be shared with the local authorities.

Why study Hunter-gatherers?

Hunting and gathering have been the major occupation of humans for most of our 200,000 years of existence. Only a few populations of hunter-gatherers still exist today (fewer than 50 around the world). While contemporary hunter-gatherers have not stopped adapting to their environment, they live in a similar ecological context to our hunter-gatherer's ancestors, and therefore can offer a window into the adaptive conditions that favoured the evolution of human unique traits such as complex culture and hyper-cooperation. This is why many biological anthropologists focus on the detailed study of hunter-gatherers ecology. However, these populations are under significant threat and need support to survive.

Understanding the structure and needs of the Hunter-gatherers is the starting point to design practical actions to support the resilience of these populations.

Research Background:

Prof Migliano and her students are studying Hunter-gatherers populations in different countries in the world – Congo Brazzaville, Philippines, Papua New-Guinea, Thailand and Malaysia (<https://www.migliano-uzh.com>). All the scientific research is conducted following the criteria and regulations of each Country where it has been developed, and all material produced is shared with the populations and respective government. A great part of the results of these researches are published in high impact scientific magazines as well as in the general media - (<https://www.migliano-uzh.com/publications>).

Currently, many of the results of these scientific researches have been used by Governmental Agencies as basis for the implementation of different policies to benefit their Hunter-gatherers populations.

Philippines, (Agta Health seminar), Identifying diseases and preventing contamination (<https://vimeo.com/394649710>).

Philippines, (Agta Educational Books), Traditional Agta stories book for kids (<https://vimeo.com/327263347>).

Working with the Raute:

Most hunter-gatherers that are still living today live in tropical areas. The Raute are an extraordinary exception of a group that still exist in high altitude mountains. Both their lifestyle and their oral histories can inform us about how humans adapted to extreme environments as hunter-gatherers and how humans expanded out of Africa as hunter-gatherers colonising the whole world.

According to the previous census, there are less than 150 Raute individuals that are still living their traditional lifestyle, and this lifestyle is rapidly changing. As an example, there are reports suggesting that their hunting success rates are declining, compromising their livelihoods.

In spite of the unique ecology and lifestyle of the Raute, very little scientific research has been done to understand their importance in human history and the specific adaptations associated with it.

It is important to highlight that this kind of scientific research can be central to support future projects on the resilience of the Raute groups ensuring that their hunter-gatherer lifestyle is maintained in spite of changes in the outside environments.

The great potential to work with the Raute relies on current tribal and governmental organisation. The Raute already were involved in initiatives with nearly same profile (<https://sgp.undp.org/spacial-itemid-projects-landing-page/spacial-itemid-project-search-results/spacial-itemid-project-detailpage.html?view=projectdetail&id=11332>), and the local government and agencies showed great structure and very accessible to support this kind of project.

Research Permits and Partnership Process

To work with any traditional population, an official research permit must be issued by the governmental agency responsible for that community. This document provides information about the nature of the research to be developed in that community, and the research group must follow them. Each country presents its own procedure that should be followed step by step. Sudarshan Sudebi was chosen as our representative to identify the official requirements and obtain the permits to work with the Raute, following the regulations of Nepali Government.

The terms and duration of the requested research permit will be based on the Nepali regulations. We expect to establish a long term collaboration, since besides the reinforcement of Raute culture, one of the most important outputs of this project is the cultural exchange. Once the permit is approved, we expect to establish partnership with Nepali Universities to bring/send students in Biology and Anthropology to do their Masters and or PhD research.

Project Description and Aims

Based on the projects conducted by Professor Migliano's group in other countries and its scientific research line, this project were designed as follow:

- 1-) To understand the problems associated with health, quantifying the main diseases, mortality and fertility rates and looking at ways to improve health related issues.
- 2-) To Understand patterns of migration and interactions using GPSs technology;
- 3-) To map the resource distribution according to seasonality and their patterns of mobility;
- 4-) To Document Raute lifestyle, and understand changes through oral history and ethnographic filming;
- 5-) Quantifying resources (hunting, storage, sales) and patterns of food sharing a food security to identify the future threats to Raute's lifestyle.
- 6-) Liaise with tribal elders, local and central governments as well as local Universities and NGOs to support the future resilience of the Raute based on the collected data analyses.
Based on the permit format we expect to obtain, we are planning to establish long term relationships with tribal leaders, local and central government, Universities and NGOs.
- 7-) Publish the findings in scientific journals (with non-profit aims) to attract attention from other researchers and organisations in the support of Raute's livelihoods.
- 8-) To promote scientific exchange between Nepali Educational Institutes and the University of Zurich, focusing in the establishment of sponsored Masters and PhD courses in the Anthropology area.

Understanding health related problems:

One of the main consequences of the mobile lifestyle of hunter-gatherers is the difficulty from governmental agencies to have a clear assessment of the health associated problems in that population. They are always moving. We plan to have a periodical health assessment of the whole population, four times a year for the whole duration of the project, identifying the main diseases of the Raute people, forms of transmission and ways to prevent them. We will test for intestinal parasites and other infectious diseases such as tuberculosis and other transmissible respiratory diseases as well as indicators such as anemia and white blood cells counts. We will access child nutrition producing growth curves and fertility and mortality rates in the population. We intend to work together with a local team of doctors and nurses, and also training the Raute to identify the main symptoms and treat simple diseases. We will also learn about traditional healing so the traditional

and occidental treatments can be used in combination. After five years of the project we will have a good indication of changes in health and a better understanding of the necessary policies that could be implemented to support their long term health.

Understanding patterns of migration and interactions using GPSs technology:

Another difficulty to work with mobile hunter-gatherers is to identify their patterns of migration and interactions. For example bands separate and come together at different times of the year to go after different resources, and they seldom stay in the same camp for very long. Mapping the Raute movement using GPS technology will allow us to understand for how long they occupy each camp, how often different groups meet each other, when they split into smaller groups, the total area travelled in a year as well as the closest villages to their camps. We have used this same technology with other group of hunter-gatherers which has allowed us to understand their patterns of mobility and interactions, (see video: <https://vimeo.com/315477001>)

Understanding resource distribution according to seasonality and their patterns of mobility:

While the GPS mapping will allow us to understand patterns of migration from one camp to the other, using this same information associated with interviews and filming, will allow us to understand resource distribution, changes between seasons in the hunting and trading activities, and time devoted to each of these activities during the year. We can further differentiate between women and men economic activities, and interactions between households and between the Raute and neighbouring populations.

Video Documentation Raute lifestyle:

Anthropological video documentation has proven to be a great tool for raising awareness worldwide about hunter-gatherer populations, as well as to disseminate concepts among them. Some Governmental Agencies and Universities are using this kind of videos for launching campaigns and projects to support traditional populations in their countries. In order to do that the Department of Anthropology- UZH, relies on its own Video Department. The project expects to have the permit for documenting the day to day life of the Raute, their foraging strategies, oral histories, land and resources use. It is important to highlight that all images will be collected and used according to a previous consent of the individuals involved.

The footage will also be used to produce scientific videos as part of the “media pack” for scientific journals and websites (<https://www.migliano-uzh.com/videos>).

The images and all material produced will also be available (copyrights free), for Governmental use.

Quantifying resources (hunting, storage, sales) and patterns of food security:

One important aspect of food security is to understand how resources from hunting or trade activities are stored and shared between families during different times of the year. Mobile hunter-gatherers normally rely on an extensive network of social support where food and other goods are shared to prevent a few households from going hungry when resources are scarce. We will use camp scans and interviews with all the individuals to map their network of sharing, cooperation and support in different times of the year covering different seasons and economic activities (hunting, gathering, trading, household activities and childcare). This kind of research can help in the designing of more effective actions to fight hunger and possible diseases related to it.

Scientific Exchange and International Educational Programmes:

This project relies on a constant contact with the Raute Peoples. All steps and planned initiatives of it will need local people support and management in different levels. It is expected that the involved people become interested on improving their scientific knowledge in that area. As a form to encourage and support these initiatives, opportunities for Masters and PhD degrees in the Department of Anthropology (UZH), will be offered and sponsored. The candidates shall meet the criteria and conditions of that Institution and Research Group, and will be chosen in a “Yearly Evaluation and Selection Process”.