

Matsigenka

Synopsis on Resource: Public Good

Arable land among the Matsigenka is a public good (Ostrom 2005: 24). At base the Matsigenka do not have institutions that regulate who can access arable land. Anyone who has been incorporated into a community has the right to access arable land. The only requirement before opening up a new field is that people must state their intent. This practice decreases the probability of clearing a plot of land that someone else was planning to clear. In short, use of arable land does not affect the availability of land for other (subtractability is low) and it is difficult indeed antisocial to attempt to exclude a household from using arable land.

Location:

South America, Peru, Territory centered at 12 degrees S, 73 degrees W

Primary fieldwork was done by Johnson (2003) at the School community of Shima.

Sources:

Johnson, A., 2003. Families of the Forest: The Matsigenka Indians of the Peruvian Amazon. University of California Press, Berkeley.

Baksh, M., 1984. Cultural Ecology and Change of the Machiguenga Indians of the Peruvian Amazon. Ph. D. Dissertation, University of California, Los Angeles.

Many more publications are available on the Matsigenka.

Description Context:

Field Coverage: 1971-1980; most of the description present below comes from Johnson (2003). His fieldwork was primarily undertaken, in conjunction with his wife, from 1971-1973.

The settlements studied were built around government schools. The schools are run by government trained teachers. The teachers were very important men in the local settlements.

The school settlements were relatively recently established when Johnson began his fieldwork. Household mobility over both an annual and interannual time scale were extremely important to household settlement and economic practices. The school settlements served to restrict interannual movement, especially big movements to a certain extent.

Environmental Context:

Population density: 0.03 people/km²

Live at the base on the Andes Mountains just above the foothills. Settlements are concentrated in narrow river valleys surrounded by mountain forests. Rivers are narrow and stream flow changes dramatically between the wet and dry seasons. Flood plains are very fertile with nutrient rich sediments deposited that erode out of the Andes. Forest soils are nutrient poor outside the flood plain.

Rainfall is over 2000 mm/year. Rainfall can fluctuate locally over the entire area that the Matisgenka live. However, in general, this is a wet environment.

Bird and mammal diversity as well as abundance are low in the mountain forests. Mammal abundance decreases with increasing altitude. Settlements are not found above 1800 meters. Above this elevation is the cloud forest. The cloud forest is virtually devoid of mammals, including humans. Thus, the Matsegenka literally live on the boarder of “no man’s land” (Johnson 2003: 23).

Resource: Arable Land

The basic economic unit, at this time, among the Matsigenka was a nuclear family household. Mean household size is 7-8 people. These households are based on a male-female partnership that is economic, spiritual, and reproductive. The interdependence of male-female partners in household subsistence production is a constant source of tension within the family.

Labor is divided by gender. And the separation of male-female tasks is very pronounced. For instance, woman only spend about 1 percent of their time doing tasks on which men spend about 88 percent of their time (Johnson 2003: 75).

Subsistence Resources

The basic subsistence resource for the Matsegenka is garden produce. Matsegenka gardens produce about 20 calories of output for every one calorie of input. Families have about one hectare of land devoted to active garden production each year. Overall, garden produces accounts for about 90% of all calories an average family consumes.

Manioc is the staple crop followed by maize. Maize is planted when gardens are first cleared. This gives manioc, which has a fairly long maturation period, time to begin producing. Gardens are used for about three years, and then abandoned.

Gardens are part of a household’s settlement. Gardens are cleared and planted in circles that radiate out from a structure.

Hunting and gathering make up about 10 percent of an average household’s diet. People obtain about a 75 percent return on their foraging activities” 3 calories gained for every 4 calories expended. Settlement fixation at school communities is playing a large role in wild resource depletion of fish, game, and firewood. People still use resources as if they can still move (Johnson 2003: 62). The movement, in the very recent past, of settlements took pressure of wild resource patches.

Domesticated animals are very rare. Some houses keep chickens or ducks. Larger animals, at this time, were not present.

Wage labor accounted for about 0.2 percent of all time people spent doing things. Labor wages were used to buy tools, such as pots or knives. Although, many of goods were made locally by self-sufficient families.

Land

Land is relatively abundant at the Shima school community (Johnson 2003). Land use for gardening is tied to household settlement. Most households shift their location every four years.

Households shift garden locations prior to shifting their primary residence. Thus, when a household moves their primary residence from one garden area to another, garden produce has already been growing at the new location for a year.

Fallow at the Shima school community is over twenty years. Rules for accessing land are not highly specified. The basic rule is this: Rule #1: before cultivating a patch of land, announce your intent.

When people are about to open up a new garden for production they announce the location where they want to open up a new garden. This announcement is to see if anyone in the community has a competing claim to the location. If not, the garden location is open and use rights to the gardens belong to the household that cleared the land. Once lands return to fallow for a sufficient amount of time, household claims to specific locations wane. At base, land is not a commodity but simply exists. Garden products are the objects that people own and control where they have cleared land for planting.

Resource Scarcity

At the time of recording in the early 1970's settlement fixation began to create wild resource scarcity. In Johnson's (2003) view, the exploitation system is geared toward extracting as much from a given location as possible. Where settlements are constantly shifting and resource patches are given time to recover from perturbations, this strategy works just fine. However, fixation of settlements around school communities leads to a situation where wild produce is continuously overexploited.

This situation does not appear to have had really adverse nutritional affects. According to Johnson (2003), people are health and well fed. The efficiency of garden production really mitigates the adverse affects of overexploiting wild resources.

It should also be noted that some wild resources, such as fish and mammals are more over exploited than other resources around the Shima community. The primary source of protein obtained from foraging is insect larva and it is not clear whether or not these resources decreased in abundance with settlement fixations.

Public Infrastructure

Public infrastructure that facilitates use rights to land is virtually non-existent. In this case, following Ostrom (2005: 24) arable land is more like a public good rather than a common pool resource. In this case, all arable land would fall under the public goods category of resource use.

The institutional arrangements among the Matsigenka do not regulate access to garden land nor do they regulate access to wild resources. Institutions largely regulate where people can obtain mates and how people relate cooperatively.

The kinship system is an egocentric based system. The system is divided into cross-cousin and parallel

cousins. The distinction between cross and parallel cousins is in place and distinguishes who, in your generation is and is not an eligible mate. Cross-cousins are eligible mates, parallel cousins are not. However, this rule is constantly manipulated. And it is very common for parallel cousins to be redefined as cross cousins based on local demographics.

The Matsigenka live in small populations of dispersed households. These households are generally grouped in small hamlets that range from one to four households. Settlements are generally biased toward two intermarrying kin groups. In this situation the availability of a suitable cross-cousin for marriage may be quite rare. And young people often worry about finding appropriate mates.

Public Infrastructure Providers

In this case, public infrastructure providers, regarding access to land, are synonymous with resource users. Again, as noted above there is very little infrastructure devoted to regulating access to arable land.

Robustness:

The production system of the Matsigenka is robust in the face of wild resource scarcity. The farming system easily absorbs decreases in the availability of wild resources and drastic decreases in the efficiency of wild resource exploitation.

One possibility is to track down some more recent descriptions to see how the gardening system has continued to function with settlement fixation, government encouragement to grow cash crops, and population growth.

Historically, the Matsigenka system has been very robust. The Matsigenka faced slave raids from other Amazonian groups and incursions by the Inca. However, the dispersed settlement and shifting cultivation mixed with foraging has a long functional history, despite the evolution of diverse sociopolitical circumstances.

Bibliography

Ostrom, E. 2005. *Understanding Institutional Diversity*. Princeton University Press, Princeton, NJ, USA.