

The route of guano and the Aji in the articulating axis of the basin of Sama-Peru, during the late regional development and the Inka occupation: preliminary indicators for the knowledge of its economic interaction at the regional level

Abstract

The in archaeological training, ethnohistórica and ethnographic in the river basin of the Sama River, in the Tacna region, it is still not enough, however, what is advanced allows us to have a general framework of the socio-cultural and economic process of the population settlements that occupied and occupy this space during the Late Regional Development and the Inka occupation. There is a need to know more in depth the productive and extractive processes linked to agricultural activity, such as the cultivation of chili and the management of spaces for the extraction of natural resources such as guano and salt - of proven demand in the Sama basin - and the mechanisms of its distribution and commercialization. In the present essay we outline some archaeological and ethnohistorical data, which point out the social and economic importance of the Sama basin, from the littoral to the economically active mountain ranges. We propose a general framework as the beginning of an investigation and future discussion.

Keywords: Sama basin, ethnohistorical, community, seafood

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Introduction

Ethnographic background for sama basin

The river basin of the Sama River is part of the so-called Central-South Andean Area or “Circu m Titicaca”, characterized by its integration. The Area has five regions that despite their differences are linked by solid factors of co-tradition, which makes them common. These are: region circu m -lacustre or circu m T icicaca ; Vallluna region of the eastern range of the Cordillera ; the Puna region ; the coastal desert and the western or Pacific slope l to r ío Tambo between the north and south Loa river valleys. The altiplanic presence in the Western Valleys is confirmed by ethnohistorical sources, highlighting John Murra's¹ thesis of “multi-ethnic control of diverse ecological levels”. However, the phenomenon not only seems to occur from the sixteenth century, as recorded by the Visit of Chuchito of 1567.² It is very probable this model of interaction Coast - altiplano s and m lift at times to s early from the Formative period and most likely from the time Tiwanaku

The Sama river basin has a direct connection to the altiplano through the road network of the Inka Sama - Ilave road, registered by the QHAPAQ ÑAN of the Ministry of Culture of Peru. In this network, the stretch between the sea and the foothills of the Andes - located in the headwaters of the basin - there are various archaeological settlements dating from the archaic to the Inka occupation, in whose productive spaces the demand for the cultivation of chili in the valley and the extraction of island guano on the coast, were of vital importance in

the economic and social dynamics during the Inka period. The Basin is comprised between the geographical coordinates 17° 51 ' and 18° 10 ' of Latitud Sur and 69° 50 ' and 70° 51 ' of Latitud Oeste, occupying part of the current provinces of Tacna and Tarata, of the Department of Tacna. E l thi area defined for study covering the territories located from the Morro Sama on the coast and the lower valley through Sama the Yaras and Sama Inclán until the precordilleranos valleys Tarata to 3,400 m. The basin has an approximate run of 163 K ilometers from its sources to its mouth in the Pacific Ocean.

One of the relevant aspects in Sama is the phenomenon of seasonal migratory movements or systematic occupation of the basin. We know that the Costa-Altiplano relationship is profusely documented,⁴⁻⁷ who have contributed to define the multiple internal and external aspects of this Andean mechanism, framed within the model of exchange, redistribution and reciprocity. The high sectors of Sama such as Tarata, Ticaco, Sitajara, Yabroco and Susapaya, do not escape the model. In times of “reakd”, from June to September, at the conclusion of the May harvest and prepare the ground for the next sowing, he enlisted ban to undertake a series of trips to different parts of the region, for the sole purpose of procuring various products. The activity is carried ban through direct purchase, exchange and the exploitation of resources or direct extraction. Until the seventies in the community of Yabroco - province of Tarata- s and gave this rotating regional micro model, with six routes of long and short journeys made their people in order to access a variety of products “downstream”. These are the itineraries that then worked (source personal interview to the members of the Aquino de Yabroco family, year 1988):

- A. Itinerary 1 Leaving the Community Yabroco at 4: 00 am touching the villages of Sitajara, Challaguaya and Ticaco comes ba n Tarata at 4:00 pm, before continuing through Tarucachi rest, Estique, Apacheta, reaching the Quilla 6:00 pm; there rests ba n, to then undertake the walk all night towards Tacna, arriving at dawn. Takes ba n alpaca wool and charcoal to sell and purchase money acquired n matches, flour, sugar, rice, shoes, hats and other. Return to their community, part of what it acquired ba n exchanged for wool, with alpaqueras communities in the area.
- B. Route 2 This shift directly to the HAC ian town of Coruca (Valle de Sama), with the sole purpose to provide themselves with corn and pepper. Coruca is recognized for its quality of corn and chili, in relation to the other sectors of the Valley. Of Yabroco low ba n potatoes and exchanges the n ba for maize (corn somewhat for both potatoes, a potato quintal two bushels of corn) and pepper.
- C. Itinerary 3 refers to the other route to Tacna, under the very purpose of the journey 1. They left at 4:00 am through the towns of Sitajara, Chaspaya, Tala, reaching Chucatamani rests at 6:00 pm ba n all night and restarts ba n the trip the next day at 4:00 am. After a long day of almost all day, passing through the village of Huacano (dry Creek) at 6:00 pm after a brief rest continued to Tacna, arriving at dawn. Itinerary profitability is that the return goes ba n Chucatamani the community and prove chairs IAN carpentry and furniture (tables, benches and ropes for shovels or other agricultural instruments). Chucatamani community e ra par excellence a craft village and carpenters were the only suppliers of these items in the area n. In addition, buy ba n f r uta dehydrated, deep - rooted tradition of the valley.
- D. Itinerary 4 A short trip to the larger town of Candarave, for purposes of labor supply or purchase everyday items. Candarave (capital of the province that bears the same name) apparently was an important point from pre-Hispanic times, accentuating in the Colony and Republic, since several routes converge on it via the coast-highlands. Arrieraje tradition was very MARCAD to in the area.
- E. Itinerary 5 Route to the Locumba Valley. It takes ba potatoes to exchange with dried fruit, wine and pisco. T he plays ba villages: Yabroco (6:00 am), Susapaya (6:30 am), Gyrate (10:00 am), Quilahuani (2:00 pm) Curibaya (6:00 pm), ba n pernoct all the night and re took the trip the next day at 6 a.m.; ba n passes by Ticapampa, Mirave and reaches ba na Locumba at 6:00 pm
- F. Route 6 Known as the “route of guano” or on the coast and ra one of the longest and most important, so crossing the HAC ian directly following the CH Sama. Yabroco start from 6:00 am to arrive ban Coropuro (V Sama) at 6:00 pm rests ba n all night and at dawn (6:00 am) ba n retakes the trip. Contin workers reported using to paying Yalata where he arrived ba na 6:30 pm; ny ba overnight at dawn ian part toward the Morro de Sama (Litoral), which comes ba n the evening. IAN Tiend their tents and ranches in the headwaters of the beach and let ba n everything ready for the journey the next day.

During two days an intense work of extraction of island guano, seafood, seaweed, fishing activities and the hunting of the sea lion was developed. The example of Yabroco, is a typical case of “rotating mobility” between the coast and the pre-Cordillera de Sama. We observe that an exchange circuit is activated at two levels: vertical and horizontal, the first one that establishes a network of economic contacts, configuring a social harmony that allows it to ensure the

continuity of the “scheme”.⁸ The extraction of island guano in the “Morro de Sama”, through the villages of the headwaters of the Sama Valley, became a right acquired by tradition. The year of 1 , 734 the Corregidor of Arica don José de Ureta, officially recognizes to those of Tarata the free right of the exploitation of the guards of Sama.⁵ Up to 6 0 years, this tradition was periodically to the coast of l “Morro de Sama”. Nowadays this circuit is closed. Rómulo Cúneo Vidal,⁵ among other researchers, recorded the existence of seven great hereditary chiefdoms, grouped between the Tambo River to the north and the Loa River to the south, during the years 1535 and 1825. These cacicazgos were: Tacna, Codpa, Tarata, Ilabaya, Arica, Pica and Tarapacá.⁵ We will only l Tarata chiefdom for reasons of the basin under study:

Cacicazgo de tarata

“Start the overflow of the aylol elements transhumant of the collao towards the valleys lupazas and yungas of the western slope of the mountain range. The chuchitos take the road that leads to the valleys of Lluta and Azapa, through which they will touch the sea in Arica ... those of Ilave, which leads to the Valleys of Ilabaya and Ilo; the Acoras, the one that leads to the Valley of Tacana or Tacna and the Pamatas ... the one that leads to the heights of Tarata and Putina and Valle de Sama ... “ Cúneo, requires us to the Pomata established in Tarata and access Putina and Sama Valley, owners of land producing corn and chili and Guano Morro de Sama were known. When referring to the cacical presence, write: “the truth is that, consulting the documents ... as an element of information ... we find chiefs of the Cacicazgo de Pomata and contemporarily of the “marks” of Tarata Putina and Sama, the Chambillas (Martín, Pedro and Diego) and of 1535- time of the advent of the Spaniards to 1625, in which the aforementioned Chambillas, without ceasing to be caciques of Pomata, ceased to be Tarata, Putina and Sama”

It is plausible that the sectors of Sitajara, Yabroco and Susapaya have been incorporated into the Tarata Cacicazgo, although they do not appear registered or mentioned in the information of Cúneo Vidal, the most reasonable thing is that this has happened; In addition, these sectors are part of the Sama River Watershed, which apparently worked as an indicator for the definition of l chiefdom. The Cacicazgo de Tarata had access to several ecological floors, complementing the resources that it obtained. The “altos de Tarata” were associated with areas of bofedales and small lagoons, which allowed an optimum grazing or rising of camelids. It is assumed activation, for agricultural exercise, the area between the upper valleys (pre mountain valleys) and downstream of the river Sama and similarly the use of the hills. Access to coastal resources was represented by the exploitation of the guards of Morro de Sama. His right was legally recognized in 1734, by the Corregidor of Arica, José de Ureta and ratified in 1736, 1800 and 1806, before different corregidores and governors close to him. Although these guides are currently under State control, the inhabitants of the “altos de Sama” occasionally go to Morro Sama to extract guano (if allowed) and collect cochayuyo seafood and fish. Collaterally take advantage of the resources of hills.

Maria Rostworowski⁹ has been postulated that the basin would Sama emarcad to within the region Colesuyo, comprising the area of the plains and valleys cis-Andean from Camaná to Tarapacá. This Region, according to Rostworowski, of pre-Inca character, would have been formed during the Late Intermediate development, which “... comprised numerous cacicazgos without any hegemony among them: their population was divided into fishermen and peasants, each retaining their own characteristics , exercising a complementarity, with predominance of agricultural groups ... “.⁹ In general, in the

economic sphere there was a complementary productive activity, thanks to the access to several ecological floors. What is not yet clear, are the considerations of political and administrative order, which was enmarcad or territory Sama basin.

Ethnohistoric references for the basin of sama

The visit made to the province of Chucuito by Garcí Ten of San Miguel² in 1567, as a document, marks a milestone of paramount importance in the quest for understanding of social economic, political and Andean world. John Murra,⁴ analyzes this document, which allows him to elaborate his transcendental thesis on the vertical control of ecological floors, by altiplanic ethnic groups. It follows that the Reyno Lupa cay its main headers, they had established a number of settlements in the oasis valleys of western and eastern side of Lake Titicaca. The Valley of Sama is named repeatedly in the visit, as a space of highland multi-ethnic colonies, with the purpose of cultivating selective products, which in height cannot be obtained, such as corn and chili. Diez de San Miguel arrives at the Valle de Sama on October 1, 1567 and takes statements from five Spaniards residing in that valley. Obtains information related to the production, number of tributaries and what they could under reasonable conditions to pay. Consequently, permeable information of the productive capacity of the valley is obtained, making reference to crops of cotton, corn, chili, wheat, which are exchanged for potatoes, wool and camelids with people from the highlands.

When Pedro de Bilbao resident was questioned about the possibilities of the Valley, he says: "... they make sementes of wheat and corn and chili and have cotton and rams of the earth in great quantity that they rescue with the Indians of the province of Chuchito and Pacaxes and others who bring it to this valley for corn and wheat and chili and for the cotton they pick ..." For Diez de San Miguel, it was important to know Sama's tax capacity, so he asked respect to the witnesses questioned, declaring the following: Witness Juanes de Villamonte (three years of residence) "... they could pay each of them 4 pesos of current silver and that ... the others were in wheat and corn and chili because they have good chácaras And they could also make some clothes because hasten forward to benefit the cotton and these were little and cotton sowings and an i vineyard could pay their tribute.

Witness Juan de Matute (seven years of residence, more or less) "... That they could pay the thousand pesos and nine hundred that they pay in rehearsed silver and fifty dresses of cotton clothes ... one hundred hanegas de maíz ... three hundred baskets of chili ..." Witness Gaspar de Miranda (Four years of residence) "... each Indian three pesos of silver rehearsed because the fruits of the goods that the community has in a chácara that made chili because it is done at little cost and after laying is watered and benefits with two other Indians that if they lack they could make wheat and corn crops because there is a lot of land and water and they could also give the three pesos some food of wheat and corn and benefiting the cotton because they can do a lot of clothing ..."

The archaeological data in the basin of sama and its correlation with the ethnohistoric and ethnographic information

Ethno historical information is important, however when we transfer these events occurred (according visit) for later periods of regional archeology, we face a different reality. Archaeological work

Trimborn,¹⁰ Isabel Flores,³ Catholic University of Arequipa and scans performed by the author since 1984, we "speak" clearly a oblamiento p local coastal groups organized within the valley of Sama and the coast, to activate an agro-maritime economy. Is of fine regional styles of Chiribaya, San Miguel, Little may Gentilar, with a range of time ranging from 900 to 1445 years aC A rqueológicamente, the altiplano presence on the valley with Tiwanaku, on the site of "Sama la Antigua", later the late groups Chilpe (Collao) and Saxamar¹¹ in the sites of "Sama la Antigua", Pampa Julia and Yalata. We can then think, not fully occupied by Lupa c Pacaxes as or rather it was happening a kind of ethnic integration between the people of the Valley (Yungas) and high. What are not clear are the mechanisms that were given to reach agreements or agreements on the occupation of the valley by the altiplano, or if they imposed their force by displacing the Yungas groups and settling in their lands or other productive spaces. During 1970 (January, August and September) and 1972 (May), the German researcher Hermann Trimborn, realiz or some recon oc os dures and excavations at sites p pros ectados earlier by Isabel Flores³ in Sama, as I saw nail, Umapaya and Sama Antigua. In the sites of G ensilar, La Vituña and Umapaya, located in the Lower Valley, the presence of the San Miguel, Pocota and Gentilar ceramic styles is frequent. In Sama La Antigua (Middle Valley), the works reported a very interesting profile, following the excavations of René Santos made in the main mound (whose major structures are attributed to a church of the sixteenth century), which led to the registration ceramic Tiwanaku, Inca and Colonial. Trimborn tells us: "... starting from the cut made in the southwest exterior wall of the church, René Santos arrives at the conclusion: ... the ceramographic analysis extracted from stratigraphic section No. 1 shows that there were up to three occupations: 1st Tiwanacoide (Loreto Viejo -Churajón), 2nd Inca, 2nd Colonial. " Obviously, the material excavated by Professor Neira with the denomination Chullpa or Chilpe is obviously missing ... also with respect to the Inca material it is necessary to differentiate between provincial Inca (Saxamar) and Imperial Inca. On the other hand the total absence of the Arica I and II groups, which in the Lower Sama Valley are in such a large quantity.¹⁰ Raised the observation between both spaces of the Sama, Trimborn analyzes the problem making the reservation for the middle valley, that Sama la Antigua is a site of highland occupation continued until the colony. For the lower valley it suggests an occupation exclusively of regional coastal populations¹⁰ The existing radiocarbon information is profuse and interesting, which in some way is reaffirming preferably a full occupation for later periods (for more information.¹⁰

The inka occupation in sama

After the conquest of the highlands of Titicaca, a fact that probably happens before 1450 through Inka Pachacuti,¹² the Inkas ro n systematic mind occupied territories the Western Valleys, including the inter-Andean and puna zones, incorporating them to the Empire. In the Sama basin, the Inka presence is accentuated, through a series of styles or ceramic variants and several components of direct control such as terraces, administrative centers and kallankas.¹³ The styles are:

- A. E s tilo Chilpe Defined by Percy Dauesberg¹⁴ for the valleys, Oasis and Puna del Norte de Chile. It is an internally decorated pottery (Plates) in black on red, following the tradition of the Kollau altiplánico style.
- B. Kollau-Inca Group Mujica¹² defines as Kollau-Inka, that ceramic that shares Inka stylistic features like Kollau, reflecting a strong miscegenation. While the pasta and cooking techniques are typically altiplánicas, traditional forms and decoration and vice versa.

C. Saxamar Group Style defined by Percy Daueslberg¹⁵ for the Valley of Azapa (Arica-Chile). It is characterized by its forms of compact pasta dishes and uniform cooked red-orange color and oxidant temperature. Internal and external surface engobada, with internal decoration of llamitas in black on red. Marion Tschopick, registers this ceramic group in the Puneño highlands (Chuchito) and defines it as Chuchito Surface, within the group of miscellaneous ceramic Inka Cuzqueño.¹¹ Sa xamar, has many morphological and technological characteristics similar to the group called Chuchito Negro sobre Rojo. Rogger Ravines defines it as Inca - Pacaje.

D. Chuchito Black on Red Group Inka variant defined for the Puna Plateau (Chuchito) by Marion Tschopick (1946: 29 31), characterized to a large extent by internally decorated plates, with naturalist designs of birds, insects, plants, etc.¹¹

E. Chuchito Polychrome Group Inka variant, which uses up to four colors in its decoration (white, black, red and orange), being the orange colored slip, on which has been painted designs of birds, insects, fish, etc. On the inner surface of the plates.¹¹

F. Cusco Group Polychrome B Style defined by Tschopick¹¹ for the South of Lake Titicaca. It is characterized by the frequency of large pitchers, decorated with geometric figures; linear designs, serrated lines, reticulated, vertical and horizontal parallel, ferns, others; painted in black and orange on red slip. There are also circles with internal decoration. In the Sama basin, Trimborn,¹⁰ dates several sites associated with ceramics San Miguel, Pocota and Gentilar; whose average time ranges from 1090 years AD to 1560 years AD.^{11,16} Other early dates such as 330 years BC for the Umapaya site are yet to be reviewed; instead the dated 1750 BC and 1820 years AD, confirm the continuity of cultural occupation at the sites of Sama I saw t nclán and nail.

Social and economic dynamics of sama with the coast and the altiplano

For late intermediate relations Western population's los Valles altiplánicos groups, although they are evident, it has not yet been clarified interacting mechanisms that make full understanding permeable. There is speculation about the hegemony of a highland economic and political control. Rostworowski tells us about it: the situation of the yungas of Colesuyo was very different from that of the other coastal regions of Tahuantinsuyo. The lack of a strong central power in the plains made during the Late Intermediate, the Yungas were subject to the dominance of the Altiplano highland. The Visit of Chuchito is eloquent when reporting the presence of altiplanic settlers (Lupa ca and Pacajes) in Moquegua, Sama and Tarata. John Murra⁴ and Franklin Pease^{6,7} explain convincingly about ancient and accentuated relationship between ethnic groups in the Costa and Sierra. The same Cúneo Vidal⁵ attributes as founders of the valleys of Caplina, Sama and Locumba to Curacas of the different headwaters of the Kingdom Lupa. Etnohistorically Sama sustains a highland presence, which obeyed a macro-regional complementarity of resources in different ecological levels.⁴ The archaeological definition of this phenomenon is still to be discussed. In our study area, the altiplanic presence or its influence can be seen in some features of the funerary architecture and habitat, but they do not indicate a full occupation in the area. Stanisch's¹⁷ approach to a possible "independence" from the phase Estuquía (Moquegua Valley) of the altiplano control seems to be generalized in the inter-Andean valleys of the Department of Tacna and neighboring areas.

In the Inka period through Chuchito is established control of the curacazgos of these valleys, by sending mitimaes or administrators. The guards of the Morro de Sama could have motivated the beginning of the contact, between the inter-Andean agrarian village populations and the yunga s or coastal ones of the Sama. We do not have specific data on this, but the ethnohistorical information tells us that in the colony, the inhabitants of Tarata had access, by tradition, to the exploitation of these guaneras.⁵ Ethnographically, there is information that communities of the "altos de Tarata" maintained their own spaces on the coast between Sama and Locumba. Moreover, it has not been done n archaeological work for the period Inka in the Morro de Sama and around, except the work of Carlos Vela in Los Hornos. It is possible that the Inkas exercised control of the guards of Sama and the exploitation of other resources such as shellfish, fish, cochayuyo and the pastures of the hills. The trace of a paved road that borders the beach of Morro de Sama, of possible Inca date, located by the one signed in 1985, would indicate the importance of the area as an economic resource. The control extends towards the middle valley of Sama; the evidence in Yalata (with Inka Chuchito ceramic N / R, Gordillo 1987) as a site recognized as the aijal del Inka;¹⁸ Pampa Julia and Sama la Antigua,¹⁰ complemented and integrated to the Inka evidence in our study area, tells us about total control at the basin level, taking all the altitudinal resources of the Sama River .

It is in this context that the demand for the extraction of island guano on the coast, was probably under the control of the Inkas, in its stages of exploitation and distribution to agricultural spaces in the headwaters of Sama. The sectors of Yalata, Sama Inclán and Coruca are important producers of chili, characterized, for demanding these products to the "altos de Sama" and probably to the altiplano territories of the Titicaca. In the case of island guano, extracted from the islets of Morro de Sama, it was used in the agriculture of the lower and middle valley and its distribution extended to the agricultural fields (terraces) of the pre-Cordillera valleys of Tarata. From Morro Sama to Tarata there is a network of Inka sites distributed throughout the basin, connected by the stretch of the Inka road of Sama, which is connects from Morro Sama on the coast to Tarata and Susapaya until Ilave arrives at Titicaca. The Inka sites referenced are: Qda de Burros and Los Hornos on the coast; Yalata, Pampa Julia and Sama La Antigua in the middle valley of Sama; Coruca, Coropuro, Putina and Lon d aniza in the sector of Chucatamani and Santa María, Capanique, Kanamarka, Huankarani and Qhile in the headwaters of the province of Tarata. It is a strategic distribution of administrative and Inka control centers associated with the road network of Qapaq Ñan, probably responsible for managing and regulating the production and distribution of chili for consumption and d guano island as organic fertilizer. We are in a first phase of a future study, whose framework, we assume it as a great work hypothesis, where the empirical referents are real and visible.¹⁹⁻²¹

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Conflict of interest

Author declares that there is no conflict of interest.

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