

# APORTES

DE LA COMUNICACIÓN Y LA CULTURA

REVISTA INDEXADA A SCIELO - BOLIVIA

N° 39 - Noviembre 2025 - Santa Cruz de la Sierra - Bolivia



Nº 39  
NÚMERO ESPECIAL

FACULTAD DE HUMANIDADES,  
COMUNICACIÓN Y ARTES

 UPSA  
UNIVERSIDAD PRIVADA DE  
SANTA CRUZ DE LA SIERRA



# APORTES

---

DE LA COMUNICACIÓN Y LA CULTURA

---

**Nº 39. Noviembre 2025. Número especial - Santa Cruz de la Sierra - Bolivia  
Revista indexada a SCIELO - BOLIVIA desde 2018**

**UNIVERSIDAD PRIVADA DE SANTA CRUZ DE LA SIERRA, BOLIVIA**

Facultad de Humanidades, Comunicación y Artes

**RECTORA** Lauren Müller de Pacheco

**Editora Revista APORTES  
de la Comunicación y la Cultura** Mariana Ríos Urquidi

**Editoras Ejecutivas** Beiby Vaca Parada  
Carol M. Gainsborg Rivas  
María Alejandra Peredo Antunovich

**Supervisor Editorial** Roberto Antelo Scott (Universidad Privada de Santa Cruz de la Sierra - Bolivia)

**Directora Emérita** Ingrid Steinbach Méndez (Universidad Privada de Santa Cruz de la Sierra - Bolivia)

**Comité Editorial** Fabiana Chirino Ortiz (Universidad Privada de Santa Cruz de la Sierra - Bolivia)  
Ingrid Steinbach Méndez (Universidad Privada de Santa Cruz de la Sierra - Bolivia)  
Juan Fernando Subirana (Universidad Privada de Santa Cruz de la Sierra - Bolivia)  
Sergio Daga Mérida (Universidad Privada de Santa Cruz de la Sierra - Bolivia)  
Victor Hugo Limpias Ortiz (Universidad Privada de Santa Cruz de la Sierra - Bolivia)  
Carmen Elena Sanabria Salmón (Universidad Autónoma Gabriel René Moreno - Bolivia)  
Jenny Ampuero (Universidad Autónoma Gabriel René Moreno - Bolivia)  
Mercedes Nostas Ardaya (Universidad Autónoma Gabriel René Moreno - Bolivia)  
Erick Torrico Villanueva (Universidad Andina Simón Bolívar - La Paz - Bolivia)  
Marcial Murciano (Universidad Autónoma de Barcelona - España)  
Adriana Monroy Galindo (Universidad Autónoma de Barcelona - España)  
Natalia Chávez Gomes da Silva (Georgetown University - Estados Unidos)  
Sibel Çelik (Dicle University - Turquía)

**Diseño y diagramación** Diego Villarroel Toyama

**Imagen de Portada** Fabiana Añez Leite

**Depósito Legal:** 8-3-56-01

**ISSN:** 2306-8671

**ISSN online:** 2788-8460

**Misión Revista Aportes:** APORTES de la Comunicación y Cultura es un espacio de difusión de conocimiento producto de la investigación y reflexión de temas relacionados a la comunicación, la sociedad y la cultura, desde una perspectiva científica y humanista. El contenido diverso, crítico y analítico de la publicación aportará al conocimiento, discusión y propuesta de solución de problemas de la sociedad.

Los artículos firmados son de exclusiva responsabilidad de los autores y no representan necesariamente la opinión de APORTES ni de la UPSA.

**Universidad Privada de Santa Cruz de la Sierra - UPSA**  
Av. Paraguá y Cuarto Anillo  
Tel.: +591 (3) 346 4000 | Fax: +591 (3) 346 5757  
Apartado Postal N° 2944  
Santa Cruz de la Sierra - Bolivia



# Índice

---

**7** Empowerment of women in the tourism industry: Experiences from Samaipata, Bolivia  
**Iris Viel Lamare / Michelle Bejtja / Emma Munch / Jana Anoma Schick / Matias Meany Kristensen / Abigel Egbe / Jorge Andrés Soliz Villarroel**

**19** Place of encounter: coping with rural gentrification by trusting strangers  
**Anna Myrup / Anna Pedersen / Dominik Ulrich Bischler / Mégane Marie Philippson / Milena Ozernova / Nura Adib Escalé / Valentina Reimers**

**37** Navigating Educational Choices  
**Ellen Sofia Jedvik / Emma Krossmann / Jacob Engström / Natalia Lopez Rivera / Sofie Bank Sørensen / Zhengjie Shen / Andrea Micaela Fries Durán**

**55** Medical pluralism and primary healthcare decisions in Samaipata, Bolivia  
**Leonardo Andersson / Jiyoon Anne Frantzen / Simeon Mascaret-Rappitsch / Taylor Josette Shaw / Erika Meilin Wu / Kassandra Barrero Flores / Juan Antonio Cuba Bruno**

**67** Más allá del diagnóstico médico: Explorar la diabetes en Samaipata  
**Amalie Muir / Bossba Benghongsieila / Elisabeth Tveit Nielsen / Maximilian Steen / Pippa Watson / Ruhama Krupinski / Bruna Letelier**

**81** Risk distribution and vulnerabilities of small-scale farmers in the Florida province of Santa Cruz, Bolivia: An interdisciplinary investigation of climate change and market fluctuations.  
**Amélie Bernard Beeckman / Geraldine Dick / Agustín Müller / Hanna Klak / Leah Skovby Burke / Huizi Sun**



# Presentación

---

El número 39 de la Revista Aportes de la Comunicación y la Cultura, reúne seis artículos científicos que abordan investigaciones realizadas en Samaipata, Bolivia, y sus alrededores el año 2024. Todos los estudios fueron desarrollados como parte del trabajo conjunto entre investigadores locales de la Universidad Privada de Santa Cruz de la Sierra (UPSA) y de la Maestría de Desarrollo Global de la Universidad de Copenhague, Dinamarca. El trabajo es parte de un proyecto anual de cooperación académica entre ambas instituciones y en el presente número se publica una selección de los trabajos realizados. Cada uno de los trabajos ha sido evaluado y revisado por el comité editorial de la Revista, garantizando el rigor académico y la calidad científica que caracterizan a nuestras publicaciones.

Esta edición extraordinaria se suma a la publicación semestral habitual de la Revista, con el propósito de visibilizar y difundir el conocimiento generado a partir de la cooperación académica internacional. Este esfuerzo conjunto no solo fortalece los lazos institucionales entre ambas universidades, sino que también promueve la investigación interdisciplinaria enfocada en contextos locales y en los desafíos globales del desarrollo sostenible. Reunir estas investigaciones en una publicación académica, supone un aporte importante a la divulgación del conocimiento local que requiere de más espacios para compartirse, de tal manera que la información no se olvide en archivos internos de las instituciones. Este número apuesta por lograr este cometido.

El primer artículo, denominado “Empoderamiento de mujeres en la industria del turismo: Experiencias en Samaipata, Bolivia”, presenta una investigación sobre el fenómeno del (des)empoderamiento femenino en la industria del turismo en Bolivia, tomando un estudio de caso en la ciudad de Samaipata y combinándolo con datos a nivel nacional. El artículo explora, a través de un enfoque de métodos mixtos, cómo las normas locales de género, así como los factores sociales y económicos, afectan a la experiencia femenina en el sector turístico. Los autores utilizaron datos de encuestas secundarias, recopilados por el Instituto Nacional de Estadística (INE) y datos de la Red de Soluciones para el Desarrollo Sostenible (SDSN), para ejecutar regresiones transversales y comprender qué impacto tiene el sector turístico en relación a la segregación ocupacional y el empoderamiento económico. Los hallazgos cualitativos corroboraron el descubrimiento.

El segundo artículo presentado, denominado “Lugar de encuentro: afrontando la gentrificación rural a través de la confianza a extraños”, explora los vínculos entre la migración, la confianza y la gentrificación en Samaipata, Bolivia. Con un enfoque mixto, profundiza en la identidad de Samaipata como lugar de encuentro que influye en los patrones de migración, motivada por preferencias de estilo de vida, contribuyendo a los procesos de gentrificación rural. Las conclusiones evidencian que la diversidad étnica de la ciudad hizo que sus habitantes tengan un mayor nivel de confianza generalizada, lo que en parte les ha permitido hacer frente a las implicaciones económicas de la gentrificación mediante acuerdos de reciprocidad y cohesión comunitaria. En cuanto a las implicaciones culturales, los residentes temen que se pierda la identidad cultural de la ciudad.

El tercer artículo, tiene como base el análisis sobre el vínculo entre desigualdad y educación, tomando como punto de partida a diversos estudios que indican que las creencias de los padres son fundamentales en el desempeño en la formación de habilidades y las oportunidades educativas de los niños. “Navegando las elecciones educativas. Un estudio de campo sobre las preferencias parentales en Samaipata, Bolivia”, emplea un enfoque mixto para analizar cuáles son los factores importantes que influyen en la elección escolar de los padres para sus hijos, en los distintos grupos sociales de Samaipata. El estudio identificó cinco atributos clave relacionados con la elección de escuela por parte de los padres para sus hijos: *estilos educativos, materias, gastos, seguridad y alimentación*, y reveló una alta significancia y relación entre el estilo educativo y la seguridad en la elección de escuela.

“Pluralismo médico y decisiones sobre la atención primaria de salud en Samaipata, Bolivia”, es el cuarto artículo que a través de un enfoque multimetódico y la “teoría de campo” de Pierre Bourdieu, examina cómo el pluralismo médico influye en las decisiones de atención primaria. Los hallazgos identifican la falta de infraestructura y recursos para la salud, y la influencia ejercida por profesionales de la salud, como las formas de influencia.

El quinto artículo, denominado “Más allá del diagnóstico médico: explorar la diabetes en Samaipata”, examina cómo las personas que viven con diabetes en Samaipata, Bolivia, afrontan su enfermedad dentro de un sistema de salud pluralista, con la coexistencia y uso simultáneo de diversas prácticas médicas, biomédicas y tradicionales. El experimento de asignación reveló que la población prioriza el gasto en frutas y verduras (34,1%), seguido de medicina alternativa (27,2%) y medicina convencional (16,3%), sin que ningún participante dependa exclusivamente de esta última. Estos hallazgos podrían atribuirse a la percepción de ineeficacia de la medicina convencional, sus limitaciones de accesibilidad y el arraigo cultural de la medicina alternativa en la comunidad.

Finalmente, “Distribución de riesgos y vulnerabilidades de agricultores de pequeña escala en la provincia de Florida, Santa Cruz, Bolivia: una investigación interdisciplinaria sobre el cambio climático y las fluctuaciones del mercado”, analiza la vulnerabilidad de los agricultores y productores de pequeña escala ante el cambio climático y las fluctuaciones del mercado en Florida, en los valles bolivianos. A partir de la exploración de los riesgos, la adaptación y la vulnerabilidad desde las perspectivas de la ecología política y la economía. El análisis confirma un vínculo directo entre la variabilidad climática, la proliferación de plagas y el creciente costo financiero de los agroquímicos, lo que refuerza los ciclos de inseguridad económica.

Agradecemos a los autores que han colaborado con esta edición y esperamos que el material sea de utilidad e interés para los lectores.

Mariana Ríos Urquidi  
Editora Revista Aportes  
[marianarios@upsa.edu.bo](mailto:marianarios@upsa.edu.bo)





# Empowerment of women in the tourism industry: Experiences from Samaipata, Bolivia

---

## Empoderamiento de mujeres en la industria del turismo: Experiencias en Samaipata, Bolivia

---

### Iris Viel Lamare

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: lwq979@alumni.ku.dk

### Michelle Bejtja

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: gck863@alumni.ku.dk

### Emma Munch

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: hdv128@alumni.ku.dk

### Jana Anoma Schick

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: tkh915@alumni.ku.dk

### Matias Meany Kristensen

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: bmv274@alumni.ku.dk

### Abigel Egbe

MSc en Desarrollo Global – Universidad de Copenhague  
Correo: mcz934@alumni.ku.dk

### Jorge Andrés Soliz Villarroel

Estudiante de pregrado de la carrera de Psicología - Universidad Privada de Santa Cruz de la Sierra  
Correo: a2021112349@estudiantes.upsa.edu.bo

Fecha de recepción: 07/04/2025

Fecha de aprobación: 21/10/2025



## Resumen

El siguiente trabajo de investigación ofrece una visión del fenómeno del (des)empoderamiento femenino en la industria del turismo en Bolivia, tomando un estudio de caso en la ciudad de Samaipata y combinándolo con datos a nivel nacional. El documento explorará, a través de un enfoque de métodos mixtos, cómo las normas locales de género, así como los factores sociales y económicos, afectan a la experiencia femenina en el sector turístico. Para ello, ese trabajo se basa en el concepto de empoderamiento de Scheyvens (1999); el enfoque cuantitativo utiliza datos de encuestas secundarias, recopilados por el Instituto Nacional de Estadística (INE), así como datos de la Red de Soluciones para el Desarrollo Sostenible (SDSN), para ejecutar regresiones transversales, con el fin de comprender qué impacto tiene el sector turístico con relación a la segregación ocupacional y el empoderamiento económico. Los hallazgos cualitativos corroboran este descubrimiento, destacando que las mujeres que trabajan en turismo experimentan altos niveles de empoderamiento, así como una mayor autoestima y el fortalecimiento de la autoestima, la autoeficacia y el capital social entre las mujeres directivas y empleadas, fomentando así un sentido de empoderamiento dentro de este grupo demográfico.

## Abstract

The following research paper provides an insight into the phenomenon of female (dis)empowerment in the tourism industry in Bolivia, by conducting a case study in the town of Samaipata and combining it with data at a national level. The paper will explore, through a mixed-methods approach, how local gender norms, as well as social and economic factors, affect the female experience in the tourism sector. To do so, an expansion upon the empowerment framework (Scheyvens, 1999) was realized. The quantitative approach utilizes secondary survey data gathered by the National Institute of Statistics (INE), as well as data from the Sustainable Development Solutions Network (SDSN), to run cross-sectional regressions, to understand what impact the tourism sector has on the relationship between occupational segregation and economic empowerment. The qualitative analysis is based on primary data collected through interviews conducted in Samaipata. The quantitative findings suggest that a large tourism sector is associated with an overall decrease in the tourism gender pay gap, indicating that the tourism industry may increase female economic empowerment. The qualitative findings corroborate this discovery, highlighting that working in the tourism industry empowers women, for instance, increasing their self-esteem and self-efficacy. Based on the findings, gender norms such as machismo also play an important role in shaping female experiences.

## Introduction

Globally, women make up most of the tourism workforce, and the industry is often framed as an instrument for not only the advancement of women but also the development of local economies (Gutierrez & Vafadari, 2023). Recently, the United Nations World Tourism Barometer (UNWTO) Secretary General, Zurab Pololikashvili, praised the industry, calling it a “True champion of gender equality” (UNWTO, 2022).

An argument often used when tourism is highlighted as a driver of gender equality and female empowerment is that it acts as a major source of job creation. It provides job opportunities with relatively low barriers of entry for women, allowing them to shift from more traditional economic sectors such as agriculture (Voumik et al., 2023). A developing tourism sector can offer employment prospects and attract many female workers (UNWTO, 2022).

However, many challenges persist, and women continue to be overrepresented in the lower-paid positions and face the most precarious working conditions with limited options to advance (Jackman, 2022; Ferguson & Alarcón, 2015).

In Bolivia, tourism has become a significant industry and is also driven by a female-dominated workforce, with 76% of all workers being female (Medinaceli, 2022). Despite its growing size and impact on the economy, existing literature on the Bolivian tourism industry is scant; exceptions include, e.g., Peredo & Wurzelmann (2015) and Lima Cortez (2010). This has led us to formulate the following problem statement and research questions.

**Problem statement:** How does the Bolivian tourism industry impact the (dis)empowerment of female workers and business owners?

- How does gendered occupational segregation influence the economic empowerment of women in the tourism sector in Bolivia?
- How do gender norms and networks shape the experiences of women working in Samaipata's tourism industry?
- How does working in the tourism industry influence the self-esteem and self-efficacy of the women in it?

In recent decades, academic scholarship on the intersection between gender and tourism has been growing steadily. These studies have outlined the barriers and challenges that women face in the industry, and how these are inherently tied to gender relations (Baum, 2013; Ferguson, 2011; Ferguson & Alarcón, 2015; Gentry, 2007; Swain, 1995).

Most of the women employed in the industry are found in occupations that are closely linked to either reproductive labor, such as cleaning or cooking, or customer service jobs that play to what is often described as women's "intrinsic" accommodating skills (Baum, 2013; Campos-Soria et al., 2011; Costa et al., 2017; Segovia-Pérez et al., 2021). As Gentry (2007) highlights, the tourism sector and the job opportunities it often provides to women have been criticized for perpetuating very traditional gender norms and commodifying women's domestic abilities. Furthermore, men continue to be disproportionately concentrated in senior and managerial roles, despite the larger share of female workers in the industry (Hutchings et al., 2020). In line with this, findings from Portugal reveal how employer perceptions of worker endowments and attributes that employees should possess are inherently gendered and prevail, even if females do advance to managing positions (Carvalho et al., 2019).

Beyond just job opportunities, Movono & Dahles (2017) argue that tourism has, in part, enabled Fijian women, for example become not only business owners, but also drivers of socio-political change in their communities, in many ways challenging and directly influencing local gender norms.

In a Latin American context, academic attention has been centered on facets of gender roles, labor dynamics, and societal norms within the tourism sector across different regions in Latin America (Duffy et al., 2015; Vandegrift, 2008; Vizcaino-Suárez & Díaz-Carrón, 2019). However, there has been little change in household decision-making, where men continue to be the primary decision-makers.

While there is a growing stream of literature emerging in this field, specifically on the interplay between gender dynamics and the tourism industry, Vizcaino-Suárez & Díaz-Cazrón

(2019) reveal a gap in the current research, with minimal focus on gender discrimination and segregation in this region.

The concept of empowerment has been interpreted and understood in different ways over time. Psychologist Anu Dandona (2015) conceptualizes empowerment as the capacity to exercise autonomous decision-making and affirm control over one's resources (mental, physical, and financial). She emphasizes that empowerment encompasses individuals, organizations, and communities, requiring the cultivation of self-confidence. When it comes to development and women's empowerment, the largest focus has been on their economic empowerment (Chant & Sweetman, 2012; Duflo, 2012). When large development organizations refer to empowerment, they also often frame it within an economic context (see e.g., UNDP, 2024). Friedmann (1992) questions this paradigm, arguing that when looking at empowerment and development, one needs to center the well-being of local populations and their environment, not products and profits. He therefore developed a framework, including psychological, social, and political dimensions of empowerment. Scheyvens (1999) builds upon and extends this framework into the tourism sphere, combining classical notions of economic empowerment with Friedmann's (1992) three dimensions of empowerment.

This paper will take inspiration from and build upon Scheyvens' (1999) framework. While Scheyvens' framework offers a comprehensive view, its broadness poses practical challenges. Therefore, this work aims to elaborate and concretize the economic, psychological, and social dimensions of the framework as follows.

The economic dimension considers empowerment through which opportunities arise and/or additional income is generated due to the tourism sector (Scheyvens, 1999). However, it also takes into consideration that the benefits of economic empowerment are experienced differently among individuals. There is a broad consensus that the development in the tourism sector improves income opportunities for women. Nevertheless, employment opportunities for many female tourist workers are often in low-skilled and low-paid jobs within the industry. While the tourism sector has provided opportunities for women, it does not consistently ensure economic stability and safety. This reality is in part underscored by the issue of the gender pay gap, in which women get paid disproportionately less than men for similar jobs across the globe (Tharenou, 2013).

Gendered segregation has also been theorized as a key factor in decreasing women's salaries in occupations dominated by women (Bergmann, 1974; Zellner, 1972). The pay gap is a widely used measure of gender equality and economic empowerment (OECD, 2012; Reshi & Sudha, 2023), and thus it was chosen to utilize in the analysis to conceptualize female economic (dis)empowerment in relation to occupational segregation in the tourism industry.

Psychological empowerment is connected to high self-esteem, faith in abilities, and optimism about the future (Scheyvens, 1999). Self-esteem broadly refers to an individual's positive judgment of the self. It can be seen as being composed of two distinct dimensions, competencies and worth. Competence refers to the degree to which a person sees themselves as capable and productive. Worth is the degree to which people feel like they are a person of value (Andriani et al., 2022). A woman gains self-esteem by recognizing her ability to control her environment and be competent and successful (Crocker & Major, 1989). Furthermore, a concept connected to self-esteem is self-efficacy. Self-efficacy is the ability to make strategic decisions and feel like you can move and act freely (Andriani et al., 2022). Hence, a psychologically empowered woman in this paper is a woman with high self-efficacy and self-esteem who feels like a capable person of value.

The social dimension of the framework will focus on the concept of social capital. As characterized by Grootaert (1998), social capital is a set of networks, resources, and norms that aid people in ascertaining power and resources. Harpham et al. (2002) further classify social capital into two distinct categories: structural and cognitive. Structural social capital includes networks and roles present within that community, while cognitive social capital accounts for norms, values, and beliefs within that community (Harpaham et al., 2002). Social capital is described as the “missing link” in development, and as such, Saegert et al. (2001) elaborate on the importance of strong social bonds in a community in laying the ground for development.

The *machismo* norms place men in a position of dominance, being considered the heads of households, breadwinners, and decision-makers. Women, on the other hand, are firmly placed in the private sphere where their primary responsibilities are domestic and caregiving tasks (Duffy et al., 2015). Thus, the social dimension of social capital explores how women interact with one another and their relation to gender norms, specifically *machismo*.

The area of research is Samaipata, a town in the region of Santa Cruz, Bolivia, located on the Eastern foothills of the Andes Mountains. Known for its rich cultural heritage, natural landscapes, and mild climate, Samaipata attracts a variety of visitors, local and international alike, seeking adventure and relaxation every year. As a result, the local tourism industry has become a vital component of the local economy. Samaipata's demographic makeup consists of a combination of indigenous and mixed influences, giving visitors a glimpse into Bolivia's rich cultural diversity. Due to its designation as a UNESCO World Heritage Site, its strategic location as a gateway into the Amboro National Park, and the post-COVID tourism boom, the tourism industry in Samaipata has experienced significant growth in recent years. This influx of visitors has not only boosted economic development but has also accelerated change within the local economy and population. Due to this influx of tourism, the lesser-known town has turned into a well-known hub of backpackers and adventure, and has become an appealing destination for foreign migrants relocating to Bolivia from Western nations. Drawn by the allure of affordable living expenses and favorable weather conditions, a diaspora of Europeans and Americans now calls this town home, with its population steadily expanding each year.

## Method

Mixed method, Phenomenological research. Based on the scope of our study, we take advantage of quantitative research methods to gain an overview of the different connections and correlations of labor segregation in the Bolivian workforce.

Moving from the macro (quantitative) to the micro (qualitative) view, we conducted semi-structured interviews, which included expert interviews and life story interviews. The qualitative research approach follows an extended case study design. Characterized by an in-depth, multifaceted investigation of a single phenomenon (Yin, 2018).

## Sample

For our qualitative data collection, we approached employees and owners at tourist sites, hotels, and restaurants to gather insights on the experiences of women working in tourism in Samaipata. Following the interviews, we made use of their network to arrange further interviews; hence, fifteen participants were interviewed, twelve participants were female, and three were male.

## **Instruments**

To explore the relationship between occupational segregation and economic empowerment, it utilized a cross-sectional Ordinary Least Square (OLS) model to first regress occupational segregation on the individual salary levels of male and female workers, and then on three forms of wage gaps.

To gain further insights, it conducted three in-depth, life-story interviews with a minimal interview guide to allow the interviewees to fully share their individual stories and experiences (Faraday & Plummer, 1979). The life story interviews focused on women working in the tourism sector, more precisely, the hospitality sector and activity-based tourism (e.g., tour guides) in Samaipata.

## **Results**

### **Quantitative**

To understand how gendered occupational segregation within the Bolivian tourism industry impacts female economic empowerment, we need to first outline general trends in the Bolivian labor market. Based on the Instituto Nacional de Estadística [INE] (2021) data, occupations continue to be highly segregated by gender. All of Bolivia's regions have relatively highly segregated labor markets. The most segregated labor market is found in Beni, while La Paz is the least. Contrary to most existing literature, our regression results suggest that in Bolivia, occupational segregation is associated with both an increase in female salaries and a decrease in the wage gap.

In terms of individual salaries, we find a highly significant positive association between occupational segregation and salaries. This is the case both with and without our added controls, albeit the control variables do weaken the impact. After controlling for factors such as age, job position, ethnicity, etc., it suggests that if occupational segregation increases by 1%, we expect a little over a 1% increase in both male and female logged salaries. When we change our outcome variable to gender pay gaps instead of individual salaries, we find that at the regional level, increasing occupational segregation leads to an expected minuscule decrease in the wage gap between men and women. However, this relationship is statistically insignificant once we add controls, meaning that we cannot conclude anything indefinitely.

In terms of the impact of the tourism sector on general salaries and the overall wage gap across all occupations, our results suggest that the size of the regional tourism sector has a slight positive impact on the salary level by itself. For the general gender pay gap, we find that the size of the tourism sector has a very minor but decreasing impact on the wage gap on its own, and furthermore, that a larger tourism sector would be expected to increase the strength of the relationship between occupational segregation and a decreasing gender pay gap.

Results show that when occupational segregation increases by 1 percentage point, the pay gap between men and women in tourism decreases by just over 0.01 percentage points, including controls. While the size of the tourism sector by itself does not have any significant impact on the wage gap between male and female tourism workers, our results indicate that, contrary to the impact on the overall gender wage gap, the size of the tourism sector does significantly strengthen the decrease between occupational segregation and the wage gap.

Here, we also find that while an increase in the size of the tourism sector would have a close to minuscule but increasing impact on the female-female gap by itself, the size of the tourism sector strengthens the decreasing association between occupational segregation and the female pay gap.

In sum, the findings indicate that the size of the regional tourism industry by itself has no impact on the male-female map pay gap for tourism employees, and only barely increases the female-female gap between non-tourism and tourism workers. However, the size of the tourism sector at the regional level does seem to strengthen the decreasing association we find between occupational segregation and tourism pay gaps. This mediating impact is much stronger for the male-female gap in the tourism sector than for the gap between female non-tourism and tourism workers.

Based on our results, we would like to highlight two main takeaways: First, there seems to be a positive relationship between gendered occupational segregation and the economic empowerment of women when we look only at salaries, while the overall gender gaps show no clear signs of the same. Second, it is important to note that while the findings contrast most existing literature on the effects of occupational segregation, some studies do find that segregation is not always associated with widening pay gaps and decreasing female salaries.

## **Qualitative**

This paper uses insights into Samaipata's tourism industry and its experiences by women working in the sector. This includes an analysis of the interviews based on the psychological and social dimensions and linking them to the concepts of social capital, self-esteem, and self-efficacy, and the machismo model mentioned in the previous literature (Duffy et al., 2015).

### ***Self-efficacy***

The ability to make strategic decisions and the consciousness that enables women to overcome external barriers is an important aspect of female empowerment, as Andriani et al. (2022) work indicates.

Female business owners in Samaipata expressed that the sense of autonomy and control over their individual timetable gives them a sense of agency. The absence of hierarchical authority encourages their independence and decision-making abilities. The business owners were all outspoken about their independence and seemed self-confident, indicating a link between women's empowerment and women's entrepreneurship, as shown by Andriani et al. (2022). Related, we noticed that most female business owners either had a female role model or were part of a network of fellow business leaders.

In contrast to the experiences of female managers, we observed a lack of confidence among female employees in their ability to perform managerial tasks, which is associated with low self-efficacy (Andriani et al., 2022). If offered, the majority would turn down management positions, expressing concerns about not meeting the requirements, running into conflicts with friends at work, or working around the clock, which connects to an observation by Carvalho et al. (2019) that some organizations preferred men for positions that require greater availability.

### ***Self-esteem***

When conducting the interviews with the female workers in Samaipata, the sources from which some subjects drew their self-esteem were often as closely connected to their womanhood and local gender norms as they were to the rejection of those same norms.

Self-esteem can manifest in various ways across different female owners. In these cases, we come across examples of women with high confidence in their abilities, such as cooking, kindness, consciousness, and housekeeping. Another manner in which women's self-esteem and confidence grow is through financial and/or domestic independence obtained through their work.

A different example of the same sentiment, that being self-esteem and confidence in the workplace through means that aren't tied to traditional gender roles, can also be found when talking about empowerment in the workplace.

Therefore, it becomes apparent that the women in the tourism sector in Samaipata drew their self-esteem and confidence from more than just one source. While some may feel more confident and self-efficacious due to traits and abilities they possess, which are typically attributed to women through local gender norms, others may well get those same feelings from their decline of these gendered attributes, such as increased independence and confidence in managerial abilities.

### ***Cognitive Social Capital***

As proven by different studies, stereotypes continue to play a big role in the professional opportunities available to women (Tabassum & Nayak, 2021). We thereby explored whether gender norms such as machismo are prevalent in Samaipata and shape the decisions and aspirations of women in its tourism industry. When asked about proper management attributes, many female employees mentioned rather masculine features, such as ordering around and delegating tasks. Research demonstrates that women continue to be viewed as less effective leaders, and men are viewed as better suited for decision-making tasks (Dickerson & Taylor, 2000).

These internalized beliefs shape expectations and allow for male attitudes to be intensified as the norm, leading to the reality of women being mainly present in lower-paid service jobs instead of working in management. Past research suggested that women should change their behavior to become 'more like men' to be successful in managerial positions (Hennig & Jardim, 1977). Female attributes were seen as less fit for management because of persistent traditional gender roles, also known as the glass ceiling phenomenon, which is an invisible barrier that women who aim to climb the hierarchical ladder or work in atypical positions face (Carvalho et al., 2019).

### ***Structural Social Capital***

Building on the social capital theory, which views networks as a resource and subject to solidarity and identity, the field research revealed a high desire for interaction and friendship as a reason for their choice of occupation.

Our findings revealed that social connections influence the decisions of women to work in the tourism sector in Samaipata. Corroborating with the social capital theory, statements

about being offered or coming in contact with jobs through social connections emerged repeatedly, showing the positive consequences of sociability and the power of being part of a network in Samaipata.

Hence, on the one side, female workers in Samaipata made use of their network to secure a job. Conversely, their decision to work in the tourism industry was motivated by the social aspects and global reach.

## Conclusion

The exploration of female (dis)empowerment within Samaipata's tourism sector unveils nuances in terms of both challenges and prospects. Our quantitative results reveal that when the tourism industry is large, and women make up most of it, both the pay gap between men and women working in tourism, and the pay gap between women working outside of the tourism industry and those working within it diminish. This indicates that in Bolivia, the tourism industry may, in some cases, be associated with increasing female economic empowerment, but primarily in regions where the tourism sector is already well-developed.

In line with this, our qualitative results also show that the tourism industry empowers many of our interviewed women through improved self-esteem and self-efficacy. Working in the tourism industry expanded their confidence in their abilities and their independence. Networks and friendships were also found to be key motivating factors for women working in the industry, as they not only strengthen their sense of community but also widen their job opportunities. Finally, our findings suggest that gender norms play an important role in shaping female experiences. Economic progress can hurt female empowerment, e.g., time constraints due to having to do both domestic household work and work outside of the house. However, we find that some women gain more self-confidence in doing traditional gendered tasks, while others find strength in defying them. In summary, the study sheds light on how the tourism sector in Samaipata contributes to self-esteem, self-efficacy, and social capital among female business owners and workers, which fosters a sense of empowerment.

## References

Andriani, L., Lal, S. & Kalam, A. A. (2022). Entrepreneurial Activities and Women's Empowerment in Rural India between Microfinance and Social Capital. *Strategic Change*, 31(2), 227-237. <https://doi.org/10.1002/jsc.2492>

Baum, T. (2013). *International Perspectives on Women and Work in Hotels, Catering and Tourism*. <https://hdl.handle.net/1813/87660>

Bergmann, B. R. (1974). Occupational Segregation, Wages, and Profits When Employers Discriminate by Race or Sex. *Eastern Economic Journal*, 1(2), 103-110. <http://www.jstor.org/stable/40315472>

Campos-Soria, J. A., Marchante-Mera, A. & Ropero-García, M. A. (2011). Patterns of Occupational Segregation by Gender in the Hospitality Industry. *International Journal of Hospitality Management*, 30(1), 91-102. <https://doi.org/10.1016/j.ijhm.2010.07.001>

Carvalho, I., Costa, C., Lykke, N. & Torres, A. (2019). Beyond the Glass Ceiling: Gendering Tourism Management. *Annals of Tourism Research*, 75, 79-91. <https://doi.org/10.1016/j.annals.2018.12.022>

Chant, S., & Sweetman, C. (2012). Fixing women or fixing the world? 'Smart economics', efficiency approaches, and gender equality in development. *Gender & Development*, 20(3), 517-529. <https://doi.org/10.1080/13552074.2012.731812>

Costa, C., Bakas, F. E., Breda, Z., Durão, M., Carvalho, I. & Caçador. S. (2017). Gender, Flexibility, and the Ideal Tourism Worker. *Annals of Tourism Research*, 64, 64-75. <https://doi.org/10.1016/j.annals.2017.03.002>

Crocker, J. & Major, B. (1989). Social Stigma and Self-Esteem: The Self-Protective Properties of Stigma. *Psychological Review*, 96, 608-630. <https://doi.org/10.1037/0033-295x.96.4.608>

Dandona, A. (2015). Empowerment of Women: A Conceptual Framework. *International Journal of Indian Psychology*, 2(3). <https://doi.org/10.25215/0203.044>

Dickerson, A. & Taylor, M. A. (2000). Self-Limiting Behavior in Women: Self-Esteem and Self-Efficacy as Predictors. *Group & Organization Management*, 25(2), 191-210. <https://doi.org/10.1177/1059601100252006>

Duffy, L. N., Kline, C. S., Mowatt, R. A. & Chancellor, H. C. (2015). Women in Tourism: Shifting Gender Ideology in the DR. *Annals of Tourism Research*, 52, 72-86. <https://doi.org/10.1016/j.annals.2015.02.017>

Duflo, E. (2012). Women Empowerment and Economic Development. *Journal of Economic Literature*, 50(4), 1051-1079. <https://doi.org/10.1257/jel.50.4.1051>

Faraday, A. & Plummer, K. (1979). Doing Life Histories. *The Sociological Review*, 27(4), 773-798. <https://doi.org/10.1111/j.1467-954X.1979.tb00360.x>

Ferguson, L. (2011). Promoting Gender Equality and Empowering Women? Tourism and the Third Millennium Development Goal. *Current Issues in Tourism*, 14(3), 235-249. <https://doi.org/10.1080/13683500.2011.555522>

Ferguson, L. & Alarcón, D. M. (2015). Gender and Sustainable Tourism: Reflections on Theory and Practice. *Journal of Sustainable Tourism*, 23(3), 401-416. <https://doi.org/10.1080/09669582.2014.957208>

Friedmann, J. (1992). *Empowerment: The Politics of Alternative Development*. John Wiley & Sons.

Gentry, K. M. (2007). Belizean Women and Tourism Work: Opportunity or Impediment? *Annals of Tourism Research*, 34(2), 477-496. <https://doi.org/10.1016/j.annals.2006.11.003>

Grootaert, C. (1998). *Social Capital: The Missing Link? Social Capital Initiative Working Paper*. The World Bank. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/902971468764409654/Social-capital-the-missing-link>

Gutierrez, E. L. M. & Vafadari, K. (2023). Women in Community-Involved Tourism Enterprises: Experiences in the Philippines. *Asia Pacific Viewpoint*, 64(1), 85-97. <https://doi.org/10.1111/apv.12361>

Harpham, T., Grant, E. & Thomas, E. (2002). Measuring Social Capital within Health Surveys: Key Issues. *Health Policy and Planning*, 17(1), 106-111. <https://doi.org/10.1093/heapol/17.1.106>

Hennig, M. & Jardim, A. (1977). *The Managerial Woman*. Anchor Press/Doubleday.

Hutchings, K., Moyle, C., Chai, A., Garofano, N. & Moore, S. (2020). Segregation of Women in Tourism Employment in the APEC Region. *Tourism Management Perspectives*, 34. <https://doi.org/10.1016/j.tmp.2020.100655>

Instituto Nacional de Estadística. (2021). *National Household Survey*. <https://www.ine.gob.bo/index.php/censos-y-banco-de-datos/censos/bases-de-datos-encuestas-sociales/>

Jackman, M. (2022). The Effect of Tourism on Gender Equality in the Labour Market: Help or Hindrance? *Women's Studies International Forum*, 90. <https://doi.org/10.1016/j.wsif.2021.102554>

Lima Cortez, S. (2010). Strategies for the Development of Sustainable Tourism in the Amazon Rainforest of Bolivia. *Worldwide Hospitality and Tourism Themes*, 2(2), 136-143. <https://doi.org/10.1108/17554211011037822>

Medinaceli, A. (July 23, 2022). Can Tourism Contribute to Achieving Gender Equality and Women's Empowerment in Bolivia? *SDSN Bolivia*. <https://sdsnbolivia.org/en/can-tourism-contribute-to-achieving-gender-equality-and-womens-empowerment-in-bolivia/>

Movono, A. & Dahles, H. (2017). Female Empowerment and Tourism: A Focus on Businesses in a Fijian Village. *Asia Pacific Journal of Tourism Research*. <https://doi.org/10.1080/10941665.2017.1308397>

OECD (2012). *Closing the Gender Gap: Act Now*. [https://www.oecd-ilibrary.org/social-issues-migration-health/close-the-gender-gap-now\\_9789264179370-en](https://www.oecd-ilibrary.org/social-issues-migration-health/close-the-gender-gap-now_9789264179370-en)

Peredo, B. & Wurzelmann, S. (2015). Indigenous Tourism and Social Entrepreneurship in the Bolivian Amazon: Lessons from San Miguel Del Bala. *The International Indigenous Policy Journal*, 6(4). <https://doi.org/10.18584/iipj.2015.6.4.5>

Reshi, I. A. & T. Sudha. (2023). The Gender Pay Gap and Its Impact on Women's Economic Empowerment. *Morfai Journal*, 3(1), 9-16. <https://doi.org/10.54443/morfai.v3i1.742>

Saegert, S., Thompson, J. P., & Warren, M. R. (2001). *Social Capital and Poor Communities*. The Multi-City Study of Urban Inequality. Russell Sage Foundation. <https://www.jstor.org/stable/10.7758/9781610444828>

Scheyvens, R. (1999). Ecotourism and the Empowerment of Local Communities. *Tourism Management*, 20(2), 245-249. [https://doi.org/10.1016/S0261-5177\(98\)00069-7](https://doi.org/10.1016/S0261-5177(98)00069-7)

Segovia-Pérez, M., Rubio-Andrade, L., Figueroa-Domecq, C., & De la Fuente-Cabrero, C. (2021). Facilitators and barriers to women's access to top management positions in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism*, 20(3), 442-471. <https://doi.org/10.1080/15332845.2021.1923941>

Swain, M. B. (1995). Gender in tourism. *Annals Of Tourism Research*, 22(2), 247-266. [https://doi.org/10.1016/0160-7383\(94\)00095-6](https://doi.org/10.1016/0160-7383(94)00095-6)

Tabassum, N. & Nayak, B. S. (2021). Gender Stereotypes and Their Impact on Women's Career Progressions from a Managerial Perspective. *IIM Kozhikode Society & Management Review* 10(2), 192-208. <https://doi.org/10.1177/2277975220975513>

Tharenou, P. (2013). The Work of Feminists Is Not Yet Done: The Gender Pay Gap-a Stubborn Anachronism. *Sex Roles*, 68(3), 198-206. <https://doi.org/10.1007/s11199-012-0221-8>

UNDP. (2024). *Unleashing Women's Economic Power*. <https://www.undp.org/unleashing-womens-economic-power>

UNWTO. (2022). New Guidelines Put Women's Empowerment at Heart of Tourism's Restart. <https://www.unwto.org/news/new-guidelines-put-women-s-empowerment-at-heart-of-tourism-s-restart>

Vandegrift, D. (2008). 'This Isn't Paradise-I Work Here': Global Restructuring, the Tourism Industry, and Women Workers in Caribbean Costa Rica. *Gender & Society*, 22(6), 778-798. <https://doi.org/10.1177/0891243208324999>

Vizcaino-Suárez, L. P. & Díaz-Carrón, I. A. (2019). Gender in Tourism Research: Perspectives from Latin America. *Tourism Review*, 74(3), 1-22. <https://doi.org/10.1108/TR-02-2017-0021>

Voumik, L. C., Nafi, S., Majumder, S. C., & Islam, A. (2023). The Impact of Tourism on the Women's Employment in South American and Caribbean Countries. *International Journal of Contemporary Hospitality Management*, 35(9), 3095-3112. <https://doi.org/10.1108/IJCHM-04-2022-0449>

Zellner, H. (1972). Discrimination Against Women, Occupational Segregation, and the Relative Wage. *The American Economic Review*, 62(1/2), 157-160. <http://www.jstor.org/stable/1821537>

# Place of encounter: coping with rural gentrification by trusting strangers

---

## Lugar de encuentro: afrontando la gentrificación rural a través de la confianza a extraños

---

### **Anna Myrup**

MSc in Global Development from the University of Copenhagen.  
Correo: ldj480@alumni.ku.dk

### **Anna Pedersen**

MSc in Global Development from the University of Copenhagen.  
Correo: dnr246@alumni.ku.dk

### **Dominik Ulrich Bischler**

MSc in Global Development from the University of Copenhagen.  
Correo: crq694@alumni.ku.dk

### **Mégane Marie Philippson**

MSc in Global Development from the University of Copenhagen.  
Correo: fsc172@alumni.ku.dk

### **Milena Ozernova**

MSc in Global Development from the University of Copenhagen.  
Correo: rsz123@alumni.ku.dk

### **Nura Adib Escalé**

MSc in Global Development from the University of Copenhagen.  
Correo: zcj309@alumni.ku.dk

### **Valentina Reimers**

Undergraduate Psychology student from Universidad Privada de Santa Cruz de la Sierra.  
Correo: a2022112385@estudiantes.upsa.edu.bo

Fecha de recepción: 17/03/2025

Fecha de aprobación: 27/10/2025

---



## Abstract

This study explores the links between migration, trust, and gentrification in Samaipata, Bolivia. Using a mixed-methods approach, this research delves into Samaipata's identity as a Place of Encounter that influences lifestyle migration patterns, contributing to rural gentrification processes. The study finds that the town's ethnic diversity has led to Samaipateños having a higher level of generalized trust, which partly enabled the residents to cope with the economic implications of gentrification through agreements of reciprocity and community cohesion. Regarding the cultural implications, despite Samaipata's long-standing history of migration, the residents fear that the town's cultural identity will be lost. This raises a crucial question: for how long can Samaipata's trusting culture help residents cope with rural gentrification?

**Keywords:** *Samaipata, trust, culture, gentrification.*

## Resumen

Este estudio explora los vínculos entre la migración, la confianza y la gentrificación en Samaipata, Bolivia. Utilizando un enfoque de métodos mixtos, esta investigación profundiza en la identidad de Samaipata como Lugar de Encuentro que influye en los patrones de migración, motivada por preferencias de estilo de vida, contribuyendo a los procesos de gentrificación rural. El estudio concluye que la diversidad étnica de la ciudad ha hecho que los samaipateños tengan un mayor nivel de confianza generalizada, lo que en parte ha permitido a los residentes hacer frente a las implicaciones económicas de la gentrificación mediante acuerdos de reciprocidad y cohesión comunitaria. En cuanto a las implicaciones culturales, a pesar de la larga historia de migración de Samaipata, los residentes temen que se pierda la identidad cultural de la ciudad. Esto plantea una cuestión crucial: ¿de qué manera la cultura de confianza ayuda a los residentes de Samaipata a hacer frente a la gentrificación?

**Palabras clave:** *Samaipata, confianza, cultura, gentrificación.*

## Introduction

Samaipata, located between the Amazon and the Andes, has long been a place of cultural encounter. The Incas named it 'Sabaypata': "We will stay there to rest", highlighting its historical significance as a welcoming and peaceful place. In the heart of Samaipata - la Plaza Principal - you find an engraved stone with the words: "Samaipata, 400 años integrando culturas (1618-2018)" (Samaipata 400 years integrating cultures).

According to the World Value Survey (2022), only 8% of the total population agrees with the statement that 'most people can be trusted', which shows low levels of generalized trust. In highly diverse societies like Bolivia, a plurinational state formed by multiple ethnicities, trust often remains restricted to close or familiar groups (such as family or one's own ethnic community), while trust toward outsiders or different groups tends to be weaker.

Samaipata has maintained an image of openness and diversity. As stated, Samaipata's magical atmosphere continues to attract people to visit and stay, particularly those driven by the "tranquil" lifestyle. However, when strolling around the streets, you also notice multiple for-sale signs, construction sites, and the "city" noise. Could migration and the shifting cultural landscape be interlinked? Is Samaipata becoming gentrified? Maybe the particularity of the town - seen in

the imaginary of integrating cultures - could play an important role in adapting to the new reality of samaipateños. This leads us to the following problem statement:

**How does the level of generalized trust mitigate the impacts of migration-related gentrification in Samaipata?**

To complement our analysis, we will also investigate the following hypothesized links, based on our literature review:

- The imagination of the place of encounter leads to more lifestyle migration, which is one of the drivers of rural gentrification in Samaipata.
- Samaipata, being a place of encounter - as well as its level of ethnic diversity - leads to a higher level of generalized trust, which helps to cope with the effects of rural gentrification.

## **Theoretical Framework**

### ***Interpersonal Trust***

Trust plays a key role in cooperation between individuals and groups by reducing uncertainty, reinforcing social norms, and facilitating the enforcement of sanctions against undesired behavior (Balliet & Van Lange, 2013). Additionally, studies by Akerlof (1970) and Greif (1993) highlight its positive impact on economic development by mitigating uncertainty and fostering collective action. However, Tabellini (2010) leaves open the question of how differences in trust emerge between regions. In the context of migration and gentrification, ethnic diversity is a crucial factor in understanding the development of trust in a community like Samaipata.

### ***Determinants of Trust: Ethnic Diversity***

Scholars debate the effect of ethnic diversity on trust, with some finding no impact and others suggesting diversity lowers trust (Painter & Flagg, 2020). Ethnic diversity refers to the coexistence of multiple ethnic or cultural groups differing in language, customs, or traditions (Putnam, 2000).

Allport's (1954) contact hypothesis argues that diversity fosters trust within societies by promoting tolerance and cooperation (Putnam, 2000). López (2017) found a positive correlation between immigration-driven diversity and generalized trust.

Its counterpart, the conflict hypothesis, suggests that diversity can reduce trust by fostering prejudice and hostility (Allport, 1954). Putnam (2007) emphasizes that trust develops culturally over time, with societies adapting to diversity in the long run (Painter & Flagg, 2020). The capacity to develop generalized trust is therefore based above all on long-term historical social composition and cultural experiences (Stolle, 2002).

### ***Lifestyle Migration***

Imagination plays a key role in migration, as people rarely move to completely unknown places (Salazar, 2014). The rural idyll- an idealized, peaceful rural life- motivates migration (Solana-Solana, 2010).

Lifestyle migration is driven by the pursuit of a desired way of life rather than career advancement. The motivation might also include affordable housing and an escape from the downsides of urban civilization (Benson, 2012; Salazar, 2014). However, despite seeking the rural idyll, lifestyle migrants may contribute to gentrification, gradually altering the very characteristics that attracted them (Nelson et. al. 2010).

### **Rural Gentrification**

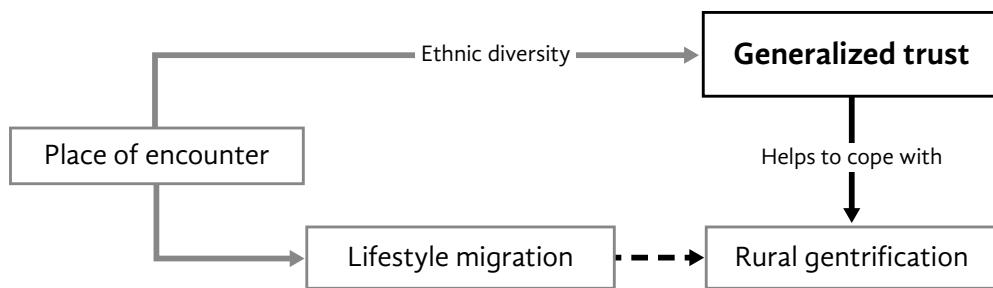
Gentrification refers to the replacement of the working class by the middle class in urban areas, leading to reinvestment, landscape change, and displacement (Guan & Cao, 2020). However, the conceptualization of gentrification needs to be localized to the specific place and community in which it's occurring.

The standard definition of gentrification, focused on economic inequalities, may overlook social, cultural, and historical factors (López-Morales et al., 2021). A more comprehensive definition of (rural) gentrification is presented by Solana-Solana (2010): “(...) gentrification is not only a displacement of social classes and persons, but also brings changes in leisure and retail activities, consumption patterns, and rising housing prices” (p. 508). In the Global South, gentrification also affects rural areas rich in natural resources and biodiversity (Salas, 2021).

### **Proposed Model**

It chose an inductive approach, and therefore it has not based the research on an already set theory. Instead, it proposes the following model based on data and the literature review:

**Figure 1**  
*Proposed theoretical framework*



As portrayed in the literature review, we found that there are gaps in the research on rural gentrification in Latin America, the importance of generalized trust as a coping mechanism for rural gentrification, and the link between lifestyle migration and rural gentrification. Therefore, we propose a model with two hypothesized links:

- a. The imaginary of the Place of Encounter leads to more lifestyle migration, which is one of the drivers of rural gentrification in Samaipata.
- b. Samaipata, being a Place of Encounter - as well as its level of ethnic diversity - leads to a higher level of generalized trust, which helps to cope with the effects of rural gentrification.

The following section will define our central concepts presented in Figure 1.

## Conceptualization

Our analysis begins with the concept of the **Place of Encounter**, describing Samaipata as historically shaped by migration, ethnic diversity, and the imaginary of integrating cultures and rural idyll. A part of Samaipata's imaginary is the rural idyll, an idealized view of rural areas as happier and tranquil (Solana-Solana, 2010).

Secondly, this imaginary drive is what we will call **lifestyle migration**. Migration is driven more by the desire for a fulfilling life in a peaceful rural town than by economic aspirations (Sala-zar, 2014).

Thirdly, it utilizes Solana-Solana's (2010) definition of **rural gentrification**, which, besides the displacement of social classes and persons, also includes changes in consumption patterns, leisure and retail activities, and especially housing prices.

Lastly, **generalized trust** increases the willingness to trust and cooperate with strangers (Stolle, 2002). This more extensive trust is linked to the shared moral values of a community and creates expectations of honest behavior from strangers (Fukuyama, 1995).

## Methodology

In the following section, we will present our methodological approach, including our methods, which consist of both qualitative and quantitative methods. The data was collected within two weeks of field research in Samaipata, Bolivia.

### Mixed Methods

For this report, we have used mixed methods and thereby combined quantitative and qualitative data to address our interdisciplinary research area. In our research, the quantitative part (survey and experiment) and qualitative part (interviews and observation) complement each other, creating a dialogue between the different types of data (Mertens, 2023). This plays into our inductive approach, where, based on a cyclical dialogue between our different observations, we propose a pattern that can create a functioning theory (Flick, 2018).

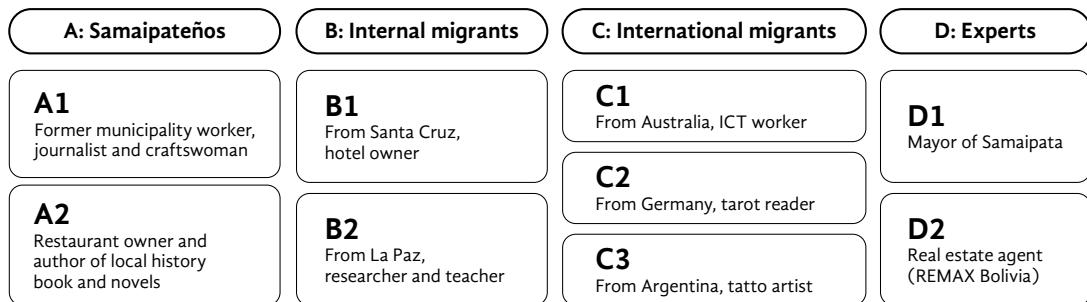
### Ethnographic Fieldwork

As part of our qualitative methods, we have conducted ethnographic fieldwork to gain an understanding of the field site and the ongoing cultural and social processes in Samaipata. We engaged in this practice throughout the fieldwork, especially whenever we noticed a phenomenon related to gentrification, in the form of field notes and pictures. We also went on a trip to Mairana to observe the difference between the two towns.

### Semi-Structured Interview

We conducted nine semi-structured interviews (Brinkmann, 2020) using a flexible guide with around 20 questions focused on experience, aspiration, and gentrification. The guide was adjusted before each interview. To capture diverse perspectives, we interviewed people of different nationalities, jobs, and experiences (Figure 2). Interviews lasted between 45 to 90 minutes, with at least two researchers present.

**Figure 2**  
*An overview of informants*



As the figure above shows, we have interviewed five migrants, both international and internal migrants, as well as two returnees, who were born in Samaipata. For this project, we have defined a migrant as someone who has been living in Samaipata for a minimum of three years.

For our sampling, we used the snowballing method, as one of our informants helped us reach other interview opportunities, who then gave us more contacts (Flick, 2018). Most of our interviews were conducted in Spanish and recorded. Later, they were transcribed and translated into English.

### Survey

We investigated the gentrification process in Samaipata, focusing on housing prices (Nelson et. al, 2010). Lacking secondary data on price developments, we developed a survey where the respondents estimated the house prices 10 years ago, three years ago, today, and in 10 years. Additionally, we included a Likert-scale question about food prices as an indicator of general rising prices.

We conducted the survey one afternoon, gaining a total of 50 participants. Pairs of researchers collecting responses in both the center and periphery of Samaipata. Most questionnaires were filled out by researchers, though we had a QR code.

We used R to analyze housing prices. Considering the standard error, we reported the mean values using a bar plot, as presented in the analysis. We also had an interview with a real estate agent from REMAX Bolivia (Informant D2).

### Experiment

To measure the level of generalized trust in Samaipata, we have conducted a conjoint survey experiment, which generates reliable measures of preferences and estimates causal effects of attributes on hypothetical choices (Bansak et al., 2021)<sup>1</sup>. We measured the level of trust using three scenarios that distinguish between attributes (their proximity of strangers to the community) of strangers who sell cars. Trying to combine the commonly used survey question: Can a person be trusted in general? (Chaudhuri & Gangadharan, 2007), With a regional representative cooperation decision, we came up with these questions:

<sup>1</sup> Our initial experiment had the character of a trust game, but after a pilot-test, we decided to change it as it seemed too complicated and seemed like it measured morality more than trust.

1. Would you buy a used car from a stranger?
2. Would you buy a used car from a stranger who lives in Samaipata?
3. Would you buy a used car from a stranger who recently moved to Samaipata?

We asked 50 people that we randomly approached in Samaipata (experimental group) and Mairana (control group) two out of three questions in a random order and pair of scenarios to minimize possible biases (Cox, 2009). We used the citizens of Mairana as a control group, a neighboring town. As with the survey, it was a criterion that the participants had lived in Samaipata or Mairana for a minimum of three years. To measure the differences between the two groups, we ran a two-sample t-test in R.

### **Analysis and Coding**

Based on our data, we created a coding table. This was based on Attride-Stirling's (2001) thematic network analysis with the notion of global and organizing themes. Based on this coding, we identified three broad categories: migration, gentrification, and trust.

### **Analysis**

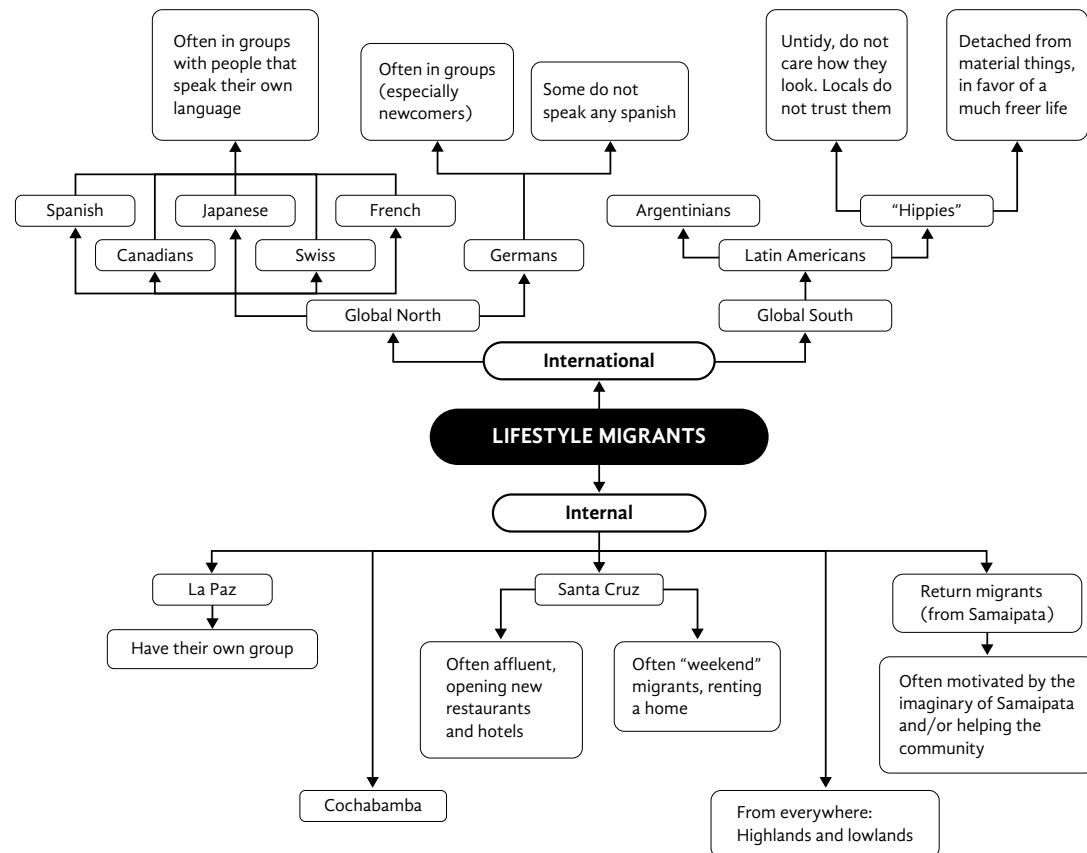
This section will analyze the development of imaginaries and lifestyle migration in Samaipata, explore the formation of its culture of generalized trust, provide an overview of economic and cultural gentrification in the area, and examine how it is interconnected with residents' strategies for coping with the economic and cultural impacts of gentrification.

#### **Samaipata as a Place of Encounter**

In Samaipata, the most prevalent imaginaries have been centered around "*Integrating cultures for 400 years*" and their diversity. According to C1, Samaipata has a large foreign population. Currently, Samaipata has more than 39 different nationalities (D1). The 2012 National Bolivian Census showed both towns had similar Quechua and Aymara populations, but Samaipata had a larger multilingual 170 residents speaking at least one foreign language, in stark contrast to just four individuals in Mairana (Instituto Nacional de Estadística, 2012).

Our interviewees placed the rural idyll around the ideas of "tranquility", "nature", and "climate" (A1, A2, B1, B2, C1, C2, C3). In addition to being a historical Place of Encounter, Samaipata has experienced an increase in both international and internal lifestyle migrants coming from different areas of Bolivia, mainly Santa Cruz (B1, B2, C2). This is shown in Figure 3, in which we map the different groups mentioned by our interviewees:

**Figure 3**  
A mapping of different ethnic communities in Samaipata



The migrants we encountered in Samaipata often possessed other characteristic traits of lifestyle migration, often possessed a higher level of economic and cultural capital, including knowledge of permaculture or education (A1, B2, C1, C3). For them, employment was not the main migration aspiration (A1, C1, C3).

Thus, cultural diversity has become a distinct characteristic of Samaipata, as opposed to other Bolivian towns of similar size. Most of our interviewees view migration as something positive (A2, B1, B2, C1). The contact with people with different cultural backgrounds has been normalized. B2 points out that these different cultures are *"the opposites [that] complement each other. [...] Like the yin and yang."* In Samaipata, significant cultural integration and diversity are both a driver and a product of the imaginary, where local traditions can peacefully coexist with global influences (B2, C1). Some Interviewees expressed a lack of integration and different nationalities keeping to themselves (A1, C3). C3 states that to the local Samaipateño, she will always be an outsider and never completely accepted. Even so, the cultural diversity and integration become an important part of the Samaipateño imaginary, as seen below in the word cloud (Figure 4) (A1, B2, C1, C2, C3).

**Figure 4**  
A word cloud describing a *Samaipateño*



The migrants we encountered in Samaipata often possessed other characteristic traits of lifestyle migration, often possessed a higher level of economic and cultural capital, including knowledge of permaculture or education (A1, B2, C1, C3). For them, employment was not the main migration aspiration (A1, C1, C3).

Thus, cultural diversity has become a distinct characteristic of Samaipata, as opposed to other Bolivian towns of similar size. Most of our interviewees view migration as something positive (A2, B1, B2, C1). The contact with people with different cultural backgrounds has been normalized. B2 points out that these different cultures are "*the opposites [that] complement each other. [...] Like the yin and yang.*" In Samaipata, significant cultural integration and diversity are both a driver and a product of the imaginary, where local traditions can peacefully coexist with global influences (B2, C1). Some Interviewees expressed a lack of integration and different nationalities keeping to themselves (A1, C3). C3 states that to the local Samaipateño, she will always be an outsider and never completely accepted. Even so, the cultural diversity and integration become an important part of the Samaipateño imaginary, as seen below in the word cloud (Figure 4) (A1, B2, C1, C2, C3).

## Generalized trust in Samaipata

**Table 1**  
*Differences in the levels of generalized trust between residents of Samainpata and Mairana*

	Total stranger	Stranger from town	Recently migrated	Stranger from town
T-Statistic	-1.46	-1.86	-1.14	
Mean level of trust SP	0.3 (0.466)	0.706 (0.508)	0.5 (0.507)	
Mean level of trust Mairana	0.147 (0.359)	0.485 (0.462)	0.364 (0.489)	

According to the interviews, to become a Samaipateño, one must take active participation in the community, care for fellow residents, and do their part in strengthening the town's social support networks, but most importantly, love Samaipata (A1, B1). Many people visit Samaipata for tourism, but then they fall in love with the town and the energy and decide to stay. Our interviewees called this phenomenon "Samaitrampa" (C2, C3, D1, D2).

Our experiment found that Samaipata's citizens exhibited higher generalized trust compared to those in Mairana. Table 1 shows that Samaipateños were more likely to trust strangers, such as buying a car, than people in Mairana. The trust towards Samaipatan strangers approached statistical significance with a p-value of 0.067, indicating that Samaipateños are 46% more likely to trust a Samaipatan stranger than a person in Mairana.

Individuals from Samaipata show more trust in strangers, including migrants to their town, compared to those from Mairana or the national average, where only 8.5% of Bolivians trust strangers (Ortiz-Ospina & Roser, 2016). Samaipata's higher ethnic diversity supports the contact hypothesis (Allport, 1954). One interview says: "*Samaipateños [...] have more trust for foreigners instead of being unwelcoming*" (B2). They are used to meeting strangers with different backgrounds, as they "*have grown up with foreigners around*" (C1).

Samaipateños' positive attitude towards migrants can also be linked to Putnam's (2007) distinction between short- and long-term effects of ethnic diversity on generalized trust. The Samaipatan community was able to translate the latest and significant influx of people into higher levels of generalized trust because of their long-existing migration history, and "*up to now, [Samaipateños] have been able to coexist with everyone*" (A2). Over time, Samaipateños have established social mechanisms and forms of solidarity that catalyze the positive effects of ethnic diversity on generalized trust.

The way Samaipateños developed generalized trust towards outgroup individuals - which Putnam (2000) refers to as "bridging" between groups - could be traced back to the overall benevolent and hospitable: the Place of Encounter. Samaipata is seen as a meeting place, where people embrace diversity while respecting and taking care of each other, even if they are strangers. C3 stated that strangers would be able to rely on the people from the town and expect kindness from them too, as "*everyone is going to open some doors for you*", and that a person in distress would be helped out. "*You meet strangers who share and support each other like a family*" (B1).

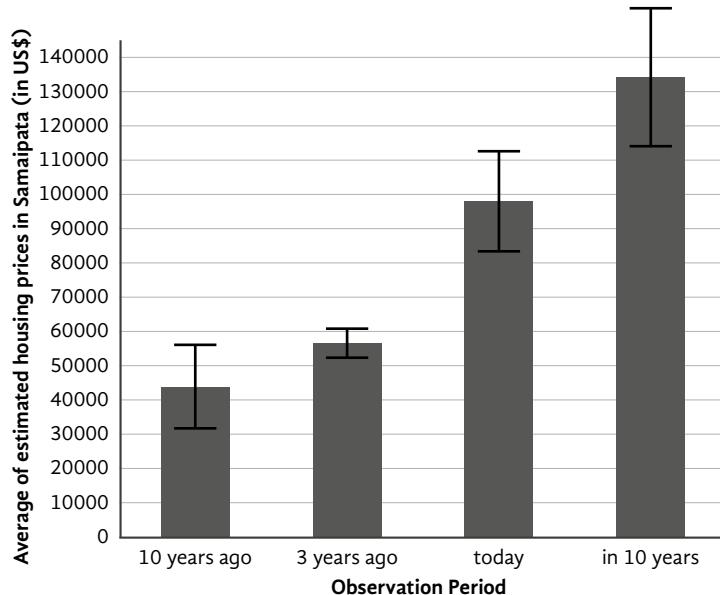
As stated, generalized trust arises when societies commonly agree upon a set of moral values. This can also be applied to Samaipata since most of the interviewees described a similar set of values that characterize the community and "*what makes a Samaipateño*". Samaipateños have community-based punishment mechanisms in place, which help regulate behavior and cooperation. As the Mayor put it: "*Everyone is welcome to Samaipata. As long as there is that respect. And when there is no respect, we also make them respect us*" (D1). He further comments that if someone arrives in Samaipata and causes harm, they will probably not become a part of the community. This shows how local social control operates: by sanctioning or excluding free riders, Samaipateños can trust that harmful behavior will not go unpunished. Such mechanisms reduce uncertainty in interactions and facilitate cooperation among residents and newcomers. A concrete example mentioned in the interviews refers to the so-called "Hippies," who were perceived as taking advantage of the town. *As a result, they are not trusted and are excluded from economic activities, such as work opportunities* (C3).

### Rising prices and rural gentrification

Over the past years, there has been a noticeable transformation in housing prices and land use in Samaipata. This led to land repurposing, such as the opening of businesses (A1, B1, C1, C2). As a result, rural gentrification -for example, as reflected in increasing housing prices- has been largely driven by lifestyle migration. Locals are capitalizing on rising property values by selling land to newcomers.

As presented in Table 2, over the last 10 years, the average housing prices in Samaipata have doubled: from USD 44,040 to USD 98,228 for an average house near the town center. The average annual increase has been 20% indicating gentrification. This could indicate that during and after the pandemic, more people have been drawn to the rural idyll. We have not observed this displacement process in Samaipata among landowners. At the same time, many of our interviewees mentioned that gentrification has had a negative effect on both rent and food prices, which, coupled with the rising USD/Boliviano ratio, has had negative effects on the purchasing power of the local Samaipatan population (C1, C3, A1, A2).

**Figure 5**  
*Average of estimated housing prices in Samaipata*



In Samaipata, “*most of the benefactors are local Samaipatans selling their properties*” (C1). The local real estate office reinforced the idea that locals have been strategically selling their properties at higher prices, stating that “*it's the people from here who have taken advantage of the situation*” (D2). The lifestyle migration influenced housing prices within the old town, as well as the price per square meter of land in the entire Samaipata area (C3, D2). The mayor offered a pragmatic view on property dynamics. He remarked that Samaipateños are more likely to sell property to foreigners as they do not question the prices they are offered (D1). A German migrant also stated that wealthy North Americans drive up property prices because they accept any price. Although this perspective reframes the locals’ relocation as a matter of practicality rather than solely a negative consequence, Samaipateños described the rising prices as a recent phenomenon (A1, A2). “*I think it is one of the most expensive towns in Bolivia. It is too expensive, [which] was not the case before*” (A2).

In Samaipata, while gentrification is becoming the new normal, the influx of foreign currency and investments has caused housing prices, food, and rent to rise. 94% of survey respondents reported food price increases over the last decade, not only on national products, but there’s been an influx of international products as well. Some sectors have seen economic benefits. Despite the economic development, many have struggled to keep up with rising living costs (C3). However, economic inequality has not worsened as expected, likely due to coping mechanisms like sharing food during periods of food scarcity or seeking free accommodation when unable to afford rent (B2, C3).

## Shift in cultural landscape

Samaipata is undergoing a cultural shift. One example is the gastronomy and restaurant industry, which is adapting rapidly, such as increased demand for international and diverse food options (A2, C1). Samaipata's main square has become a hub for international leisure, offering "trendy" restaurants, bars, and jewelry stores. However, residents are rarely seen in such establishments, as they are specifically "*made for gringos [foreigners]*" (C3).

Mairana's town square serves as a community center, with local food stands and markets, while Samaipata has locals selling housing to migrants for tourism-related activities. The appeal of Samaipata became intrinsically tied to "*the fact that [one] can get all the international comforts in a small town*" (C1).

However, this transformation has affected local perceptions, as many feel Samaipata is losing its historical identity. Interviewees were concerned about Samaipata a) losing its "magic" and local culture (A1, A2, B2), b) historic architecture (A1, A2, B2, C1), and c) "sleepy" small town atmosphere as locas flee the chaos of development (C1, D2). One interviewee noted that Samaipatenoños feel displaced by the influx of migrants (A1). They said: "*Samaipata has really grown by leaps and bounds, and personally, that scares me. Not because people come, but because there are no regulations*" (A1). International migrants who feel the lack of regulation leads to the destruction of historic architecture because "*[you] build a house the way you want to build it*" (C1). While global cultural elements have been introduced, they have also eroded Samaipata's traditional charm, creating a tension between progress and preservation.

## Trust and cooperation in Samaipata

Regarding the economic effects of gentrification, such as rising rent and land pricing, we have observed the mitigation mechanisms in the form of "agreements of reciprocity" between landowners and residents. For instance: "*A community has different ways of making things work, like helping each other or caring for other people, like, 'you cannot pay rent, but I have a space, so you can take my house and live there'*" (B2).

Based on trust that enables these agreements of reciprocity, people can acquire goods without paying for them with conventional currency. The local coin "Samai" is used by Samaipatenoños as an informal way to exchange goods and services (B2).

Another example of reciprocal cooperation is the sharing of food, both through gifts and having communal cells in the markets (B2). Simply said: "*Everybody's working together, and we have individual work, but we also have the communal basket*" (B2). Trust, therefore, becomes an essential aspect of Samaipata's economy (B2). In a community where financial resources may become scarce due to price increases, the residents need to rely on their social networks for support. This system of exchange illustrates the community's reliance on trust and cooperation, with its benefits extending to migrants as well.

The agreements of reciprocity -which are solely enabled by trusting a stranger- are just one example of potential beneficial outcomes of trust that we have witnessed in Samaipata. Other instances of coping with hardships through cooperation and general solidarity can be found on digital platforms such as Facebook. Several people described a WhatsApp group chat with approximately 100 women who support each other, migrant or not. It is described as a space of solidarity and support, where women are welcomed and encouraged to ask for help with whatever they are

struggling with, and community sharing events (“Gratiferias”) (B2, C2, D2). Thus, if you need help, you can rely on the community (B2, C2). Samaipateños also come together to help victims of flooding (B2) or to organize “mingas”, where volunteers repair houses, institutions, or schools (B1). Supposedly, there is less misery and inequality in Samaipata; one will not see anyone asking for money in the street, for instance, because people take care of each other (B2). As a result, agreements of reciprocity, food exchange, and community solidarity groups enable Samaipateños to cope with the adverse impacts of rural gentrification, such as poverty and displacement, that are common in other global regions affected by tourists.

## Discussion

Our analysis show that Samaipata attracts people with its unique “magnetic” atmosphere, rooted in its history, imaginaries of a rural idyll and Place of Encounter (Salazar, 2010; Solana-Solana, 2010), and the availability of international and city comforts (Benson, 2012). These factors motivate lifestyle migration, which is closely linked to tourism and the business opportunities it creates. Samaipata has seen a growth in tourist offices, tours to cultural and natural heritage sites, hotels, and restaurants catering to tourists, mostly owned by international migrants. The expansion of the tourism sector has generated economic opportunities, especially for migrants from Santa Cruz, and has fueled the rural gentrification process in Samaipata (Nelson et al., 2010; López-Morales et al., 2021).

While Samaipata has not yet seen severe consequences of rural gentrification, such as widespread forced displacement, many residents are experiencing negative economic and cultural impacts. The rising costs of food and housing are accompanied by the erosion of traditional culture, influenced by Western trends (Solana-Solana, 2010; Salas, 2021). Long-time Samaipatans are selling their property at high prices and moving to the outskirts of Samaipata because it's cheaper. This shift commercializes town life, giving in to the needs of gentrifiers, making it more appealing to migrants (Nelson et al., 2010).

At the same time, for Samaipateños without land or who rely on agriculture, the impacts of gentrification could be more severe, increasing the risk of vulnerability and marginalization in the future (López-Morales et al., 2021). Those who have sold their properties might face future displacement as property values and living cost rises.

While the history and culture of migration to Samaipata have shaped the town's imaginaries as a rural idyll and Place of Encounter (Putnam, 2007), the ongoing influx of migrants has led to a high level of rural gentrification. This trend has the potential to push residents out of the town center, erode local culture, and transform the town into a place primarily designed for tourists and international migrants, especially since there is a lack of regulation that could preserve the town's identity (Guan & Cao, 2020). Arguably, this transformation can lead to a completely different imaginary, possibly even shattering the rural idyll of the town and challenging its historical culture of integration as Samaipateños might begin to reject the positive idea of migration. Thus, although Samaipateños have managed to navigate the economic impacts of migration-led gentrification so far, the question remains: ¿For how long can the positive imaginary and high level of generalized trust in Samaipata last? ¿Can the residents' coping mechanisms for gentrification be sustained over time if the process of migration continues at the same intensive rate?

## Reflections and Limitations

This study faced limitations in terms of informants. As shown in Figure 2, most of our informants came from similar socio-economic backgrounds: people with 'available' time. When we tried to interview people in the periphery of Samaipata while conducting our quantitative data, most were busy working, limiting our understanding of the full impact of gentrification. Furthermore, by focusing on lifestyle migrants and not including those who migrate for work, we may have missed relevant groups such as indigenous people. As stated in the analysis, based on our data, we don't see any displacement. Even though we have been conscious of having a varied sampling of respondents for the survey, we might have missed some nuances, for example, those Samaipateños who rely heavily on agricultural production.

Related to the generalizability of our findings, we are aware that Samaipata marks a very odd place where a lot of dynamics -culturally, economically, and socially- seem to work differently than elsewhere. That is why we should be cautious about generalizing these findings, as we haven't been able to test our hypothesis of generalized trust as a coping mechanism for gentrification elsewhere.

## Conclusion

So, ¿how does the level of generalized trust mitigate the impacts of migration-related gentrification in Samaipata? The town's high ethnic diversity results from migration based on imaginaries of a Place of Encounter. Rural gentrification in Samaipata, largely driven by lifestyle migrants, is causing massive shifts in the cultural and economic landscape due to emerging financial opportunities and the introduction of diverse cultural values and lifestyle preferences. However, despite the prevailing narrative suggesting that many Samaipateños are benefiting from this development, the gentrification process has already affected numerous residents, particularly in terms of the town's rising cost of living.

We observed several coping mechanisms that mitigate the adverse economic effects of gentrification, such as agreements of reciprocity founded on generalized trust. The higher level of trust offers clues on how Samaipateños might address more severe economic repercussions of gentrification in the future and help partially explain their ability to cope with the rising cost of living in the town. Meanwhile, the negative effects of the lifestyle migration to Samaipata are already noticeable with regard to the town's cultural identity. Despite the continued openness towards foreign influences, Samaipateños increasingly fear losing their cultural identity, and the rapid transformation of the town's community thus presents significant challenges, even for a place like Samaipata, which is accustomed to cultural integration processes.

At the same time, the bond between generalized trust and gentrification highlights a paradox. On one hand, trust allows cooperation and collective coping strategies that relieve economic pressures, strengthening community resilience. On the other hand, the very openness and welcoming attitudes that create generalized trust also facilitate the migration of outsiders into Samaipata and their cultural practices. This dual role of trust reveals both sides of the gentrification of social capital in contexts of rapid change: while it protects against material vulnerabilities, it also exposes the community to challenges in preserving cultural identity and continuity.

## References

Akerlof, G. A. (1970). The market for "lemons": Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3). <https://doi.org/10.2307/1879431>

Allport, G. W. (1954). *The Nature of Prejudice*. Addison-Wesley Publishing Company.

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405. <https://doi.org/10.1177/146879410100100307>

Balliet, D., & Van Lange, P. A. M. (2013). Trust, punishment, and cooperation across 18 societies. *Perspectives on Psychological Science*, 8(4), 363-379. <https://doi.org/10.1177/1745691613488533>

Bansak K., Hainmueller J., Hopkins D. J., Yamamoto, T. (2021). Conjoint Survey Experiments. In Druckman J. N., Green D. P., eds. *Advances in Experimental Political Science*. Cambridge University Press, 19-41. <https://doi.org/10.1017/9781108777919.004>

Benson, M. (2012). How culturally significant imaginings are translated into lifestyle migration. *Journal of Ethnic and Migration Studies*, 38(10), 1681-1696. <https://doi.org/10.1080/1369183x.2012.711067>

Brinkmann, S. (2020). Unstructured and semistructured interviewing. In *The Oxford Handbook of Qualitative Research* (pp. 424-456). Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780190847388.013.22>

Chaudhuri, A., & Gangadharan, L. (2007). An Experimental Analysis of Trust and Trustworthiness. *Southern Economic Journal*, 73(4), 959-985. <http://www.jstor.org/stable/20111937>

Cox, D. R. (2009). Randomization in the Design of Experiments. *International Statistical Review / Revue Internationale de Statistique*, 77(3), 415-429. <http://www.jstor.org/stable/27919766>

Flick, U. (2018). *The SAGE Handbook of Qualitative Data Collection*. SAGE Publications.

Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. Hamish Hamilton.

Greif, A. (1993). Contract enforceability and economic institutions in early trade: The Maghribi traders' coalition. *The American Economic Review*, 83(3), 525-548. <https://www.jstor.org/stable/2117532>

Guan, H., & Cao, H. (2020). Gentrification in the Global South: New insights from Chinese Studies. *Boletín de la Asociación de Geógrafos Españoles*, 87. <https://doi.org/10.21138/bage.3055>

Instituto Nacional de Estadística. (2023, March 17). *Bases de datos de censos*. CENSO BOLIVIA. <https://censo.ine.gob.bo/bases-de-datos-censos-3/>

López Martín, C. S. (2017). *International migration and tourism: determinants of generalized trust in developing countries?* Nijmegen School of Management, Radboud University.

López-Morales, E., Ruiz-Tagle, J., Santos Junior, O. A., Blanco, J., & Salinas Arreortúa, L. (2021). State-led gentrification in three Latin American cities. *Journal of Urban Affairs*, 45(8), 1397-1417. <https://doi.org/10.1080/07352166.2021.1939040>

Mertens, D. M. (2023). *Mixed methods research: Research methods*. Bloomsbury Publishing.

Nelson, P. B., Oberg, A., & Nelson, L. (2010). Rural gentrification and linked migration in the United States. *Journal of Rural Studies*, 26(4), 343-352. <https://doi.org/10.1016/j.jrurstud.2010.06.003>

Ortiz-Ospina, E., & Roser, M. (2016). Trust. *Our World in Data*.

Painter, M. A., II, & Flagg, C. (2020). Trust and white ethnic diversity in small-town Iowa. *The Sociological Quarterly*, 62(2), 234-257. <https://doi.org/10.1080/00380253.2020.1724060>

Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. Simon & Schuster.

Putnam, R. D. (2007). E pluribus unum: Diversity and community in the twenty-first century, the 2006 Johan Skytte Prize Lecture. *Scandinavian Political Studies*, 30(2), 137-174. <https://doi.org/10.1111/j.1467-9477.2007.00176.x>

Salas, M. (2021). *Latin American gentrifications: Tourism, rural development, and community in Ayampe, Ecuador*. <https://www.proquest.com/dissertations-theses/latin-american-gentrifications-tourismrural/docview/2532594357/se-2>

Salazar, N. (2010). *Envisioning Eden*. Berghahn Books. <https://www.degruyter.com/document/doi/10.1515/9781845456610/html>

Salazar, N. B. (2014). Migrating imaginaries of a better life...until paradise finds you. In N. Osbaldiston & M. Benson (Eds.), *Understanding Lifestyle Migration*. Palgrave Macmillan. <http://dx.doi.org/10.1057/9781137328670.0013>

Solana-Solana, M. (2010). Rural gentrification in Catalonia, Spain: A case study of migration, social change, and conflicts in the Empordanet area. *Geoforum*, 41(3), 508-517. <https://doi.org/10.1016/j.geoforum.2010.01.005>

Stolle, D. (2002). Trusting strangers: The concept of generalized trust in perspective. *Österreichische Zeitschrift Für Politikwissenschaft*, 4(2/4), 397-412. [https://profs-polisci.mcgill.ca/stolle/Publications\\_files/trustingstrangers.pdf](https://profs-polisci.mcgill.ca/stolle/Publications_files/trustingstrangers.pdf)

Tabellini, G. (2010). Culture and institutions: Economic development in the regions of Europe. *Journal of the European Economic Association*, 8(4), 677-716. <https://doi.org/10.1111/j.1542-4774.2010.tb00537.x>

World Values Survey Association. (s.f.). *WVS Database*. <https://www.worldvaluessurvey.org/WVSDocumentationWV7.jsp>

# Navigating Educational Choices. A Field Study on Parental Preferences in Samaipata, Bolivia

---

## Navegando las elecciones educativas. Un estudio de campo sobre las preferencias parentales en Samaipata, Bolivia

---

**Ellen Sofia Jedvik**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: Ellen.jedvik@hotmail.com

**Emma Krossmann**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: e-kossmann@web.de

**Jacob Engström**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: Jacob.eng@live.se

**Natalia Lopez Rivera**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: Lopezriveranatalia2001@gmail.com

**Sofie Bank Sørensen**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: Sofie.babk@gmail.com

**Zhengjie Shen**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: jayshen.zj@gmail.com

**Andrea Micaela Fries Durán**

Maestría en Desarrollo Global (MSc), University of Copenhagen.

Correo: andreafliesduran@gmail.com

Fecha de recepción: 17/03/2025

Fecha de aprobación: 30/10/2025

---



## Abstract

Bolivia faces challenges in access to and quality of education, key aspects in the discussion on inequality. In the nexus between inequality and education, multiple studies find that parental beliefs shifting across social groups play a pivotal role in shaping children's skills and educational opportunities. With this as our point of departure, our research focuses on parental preferences within education in Samaipata, Bolivia. Concretely, we provide an answer to the following research question: *What are the important factors influencing parents' choice of school for children across various social groups in Samaipata, Bolivia?* Our research takes a mixed-methods approach, consisting of qualitative semi-structured interviews, a conjoint experiment, and participant observations. We identify and investigate five key attributes regarding parents' choice of school for their children. These are: *education styles, subjects, monthly expenses, security, and food*. Our research revealed a high significance and relation between the attribute's education *style* and *security* for the parents' choice of school. We further analysed our data by structuring our quantitative findings in social groups divided by *gender, income, and place of origin*. Combining these findings with the attributes and Bourdieu's *concepts of capital and social field*, we map the social field of parents in Samaipata. Here, a key finding of our research was the high presence of *social capital* among all social groups except for one. This indicates that *social capital* in the social field of parents in Samaipata is ascribed high *symbolic capital* and is significant for the parents' recognition and acknowledgement. Lastly, through a drawing assignment, we find that the preferences of the parents and the children regarding school choice differ slightly.

**Keywords:** Parental school choice, educational inequality, public and private education, social capital, mixed-methods research, Bolivia.

## Resumen

Bolivia enfrenta desafíos en el acceso y la calidad de la educación, aspectos clave en la discusión sobre la desigualdad. En el vínculo entre desigualdad y educación, múltiples estudios indican que las creencias de los padres, que varían según los grupos socioeconómicos, desempeñan un papel fundamental en la formación de las habilidades y las oportunidades educativas de los niños. Partiendo de esta base, nuestra investigación se enfoca en las preferencias parentales en materia de educación en Samaipata, Bolivia. En concreto, se busca responder a la siguiente pregunta de investigación: *¿Cuáles son los factores importantes que influyen en la elección escolar de los padres para sus hijos, en los distintos grupos sociales de Samaipata, Bolivia?* Esta investigación emplea un enfoque de métodos mixtos, que consiste en entrevistas cualitativas semiestructuradas, un experimento conjunto y observación participante. Se identificaron cinco atributos clave relacionados con la elección de escuela por parte de los padres para sus hijos: *estilos educativos, materias, gastos, seguridad y alimentación*. La investigación reveló una alta significancia y relación entre el estilo educativo y la seguridad en la elección de escuela por parte de los padres. El análisis estructuró los hallazgos cuantitativos en grupos sociales divididos por género, ingresos y lugar de origen. Combinando estos hallazgos con los atributos y los conceptos de Bourdieu sobre capitales y campo social, se mapeó el campo social de los padres en Samaipata. Un hallazgo clave fue la alta presencia de capital social en todos los grupos sociales, excepto uno. Esto indica que el capital social en el campo social de los padres en Samaipata posee un alto capital simbólico y es significativo para el reconocimiento y la aprobación de los padres. Por último, a través de un experimento de dibujo, se encontró que las preferencias de los padres y los hijos con respecto a la elección de escuela difieren ligeramente.

**Palabras claves:** elección escolar parental, desigualdad educativa, educación pública y privada, capital social, investigación de métodos mixtos, Bolivia.

## Introduction

The World Bank Group (2023) declared 2023 the year of inequality, as in most crises, the poorest countries are the most affected. In Latin America and the Caribbean, while most countries saw a decline in poverty, Bolivia recorded an increase: between 2021 and 2023, its poverty rate rose from 15.2% to 16.0%. Additionally, the vulnerable population in Bolivia grew by 0.4 percentage points, while the middle class shrank by 0.7 percentage points during the same period (World Bank Group, 2024). Inequality has many causes and effects, one of the most recurrent being education. Rising educational inequalities are documented worldwide, and studies show parental inputs and beliefs play a key role in shaping children's skills. These beliefs differ across socioeconomic groups, and changing them could help reduce gaps in children's skills and educational inequality (List, 2021). Identifying these beliefs-both individually and within social groups-is the first step toward change.

During the presidency of Evo Morales (2006-2019), basic education was prioritized, leading to significant progress in the fight against illiteracy and the expansion of primary education. Indigenous peoples still have fewer opportunities to access higher education compared to their non- Indigenous counterparts. Public expenditure on education increased substantially, rising from 2.4% of GDP in the early 1990s to between 6.0% and 7.5% since 2006, reaching 8.9% in 2018 (Bertelsmann Stiftung, 2018).

In the thesis of Cronembold (2012), a study was conducted with children aged 7 to 9 on the "g" factor of intelligence (Raven's Progressive Matrices, special scale). The results indicated a significant difference between public and private schools in Bolivia, as the scores obtained by students in public schools were lower than those of students in private schools.

A study on school infrastructure further indicates that access to basic educational services-such as water, electricity, and sanitation-varies considerably between public schools in rural areas and urban schools, which are often private and better equipped (Bojanic et al., 2025). Despite the government's relatively high investment in education-representing 7.29% of the GDP and 16.84% of total national expenditure in 2014-inequalities persist in how these resources are distributed, with rural public schools still facing substantial deficits in infrastructure and quality (Education Profiles, 2024).

We examine this in Samaipata, Bolivia, often called "Samai-trampa"<sup>1</sup> for its ability to captivate visitors. This is a small agricultural community with residents from diverse backgrounds, making it an ideal field site to study factors influencing parental educational preferences across social groups. Since parents can freely choose schools, we believe their preferences strongly shape children's educational opportunities. It is needed to answer the question: *What are the important factors influencing parents' choice of school for children across various social groups in Samaipata, Bolivia?*

For this research, it is relevant to understand the concept of parental educational choice and get a sense of how these choices look around the world. Shiferaw and Kenea (2024) define

---

<sup>1</sup> "Samai-trampa" means "Samai-trap" and is known for being a place that captivates tourists and makes them stay longer than planned.

parental educational choice as “[...] a concept that allows parents to have the freedom to choose the best educational option for their children. It recognizes that not all schools are created equal and that different educational approaches may work better for different students” (p. 21).

According to Maddaus (1990), parental choices often prioritize children's academic performance. However, research shows that low-income families focus more on logistical issues, while high-income families value educational quality (Rohde et al., 2019).

In his study of Saudi Arabia, Alsauidi (2016) found that one of the most important factors for parental educational choice is academic performance. Further, research from the 1990s and onwards has presented different dominant criteria for parental educational choice. Among these are academic quality, school environment, security, location, cost, and children's preferences (Maddaus, 1990). In South Africa, research on middle-class families found security, children's well-being, discipline, and academic curriculum to be crucial factors (Blake & Mestry, 2020).

However, universal claims on educational choices remain debated. Both Alsauidi (2016) and Blake & Mestry (2020) emphasize that school choice depends on the unique social and cultural contexts of each nation.

Thus, the parental educational choices analyzed in our research are specific to Samaipata's cultural setting, though some trends may be universal. Beyond identifying key factors influencing school choice in Samaipata, we also examine how these choices vary across social groups, using Bourdieu's concepts of capital and social fields.

### **Bourdieu**

Bourdieu claims that the social world is a relational space, constituted of autonomous social fields. Social fields are a way to understand and create sub-spaces within the global space. Each social field responds to rules of functioning, which define the relation between the social groups existing in the field (Hilgers & Mangez, 2014). The theory of social fields and groups becomes a method to understand social dynamics. However, all methods require tools for observation processing. As our tool, we adopt Bourdieu's concept of capital: “[...] accumulated labor [...] which, when appropriated on a private, i.e., exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labor” (Bourdieu, 2002, p. 280). According to this perspective, capital extends far beyond financial wealth, and it includes non-material assets that contribute to social status, power, and success.

Bourdieu distinguishes three forms of capital: economic, cultural, and social. Economic capital includes financial resources like money, property, and assets. Cultural capital consists of non-financial resources such as knowledge, education, skills, and cultural tastes. Social capital refers to resources accessed through social networks, including connections, trust, and support. To Bourdieu, everything is relational; what matters most is not the capital itself, but its relationships (Hilgers & Mangez, 2014).

These forms of capital affect social groups differently. Bourdieu states that “Any capital, whatever the form it assumes, exerts symbolic violence as soon as it is recognized [...] and imposes itself as an authority calling for recognition” (Bourdieu, 2013, p. 298). Symbolic violence transforms capital into something more, shaping reputation and recognition (Bourdieu, 2002). Symbolic capital reflects the value assigned to individuals or groups based on economic, cultural, and social capital (Hilgers & Mangez, 2014).

We analyze our data through capitals and their relational effects, identifying patterns in economic, cultural, and social preferences shaped by social factors.

## Methodology

Following Hastrup (2015), it conducted fieldwork to understand complex realities. Using a mixed-methods approach, we integrated qualitative and quantitative data to enhance reliability through triangulation (Frederiksen, 2015).

### Quantitative methodology

For quantitative data, a conjoint experiment, a survey, and a drawing assignment were conducted. The conjoint experiment tested how school attributes influenced parental choice. Stantcheva (2023) describes it as a factorial experiment where participants choose between hypothetical scenarios. We applied this by presenting school profiles to parents in Samaipata.

Each profile had five attributes defined by one of two possible levels, as detailed in *Table 1*.

**Table 1**  
*Attributes and Levels of Conjoint Experiment*

Attribute	Level
Education Styles	1. Learning by repetition: Teachers teach things, and students remember them by repeating them again and again 2. Learning by doing: Students develop their own projects and learn from the resulting experiences
Subjects	1. Main focus on traditional subjects: Math, Language, Literature, History, etc. 2. Focus on both traditional and alternative Subjects: Math, Ceramics, Literature, Theatre, Permaculture, etc.
Monthly expenses per child	1. Below 100 BOB 2. Above 100 BOB
Security measures (closed facility, facemasks, cameras, ...)	1. High 2. Low
Food	1. Breakfast five times a week 2. Breakfast two times a week and lunch three times a week

We created 32 hypothetical school profiles by randomizing attribute levels. Participants selected between two profiles in three rounds, generating 352 observations from 61 participants. We analyzed the data using Stata and collected demographic information through a brief survey, enabling subgroup analysis. To address external validity concerns in conjoint experiments (Stantcheva, 2023), we supplemented statistical results with interviews comparing findings to real experiences.

Additionally, we conducted a visual content analysis of 92 children's drawings (first to sixth grade) to assess school preferences, following Rose (2010) for objective interpretation. This method allowed us to compare parental choices with children's perspectives, uncovering additional factors in school selection. The categorization and coding process provided deeper insights into the educational preferences of parents and children in Samaipata.

## Ethics

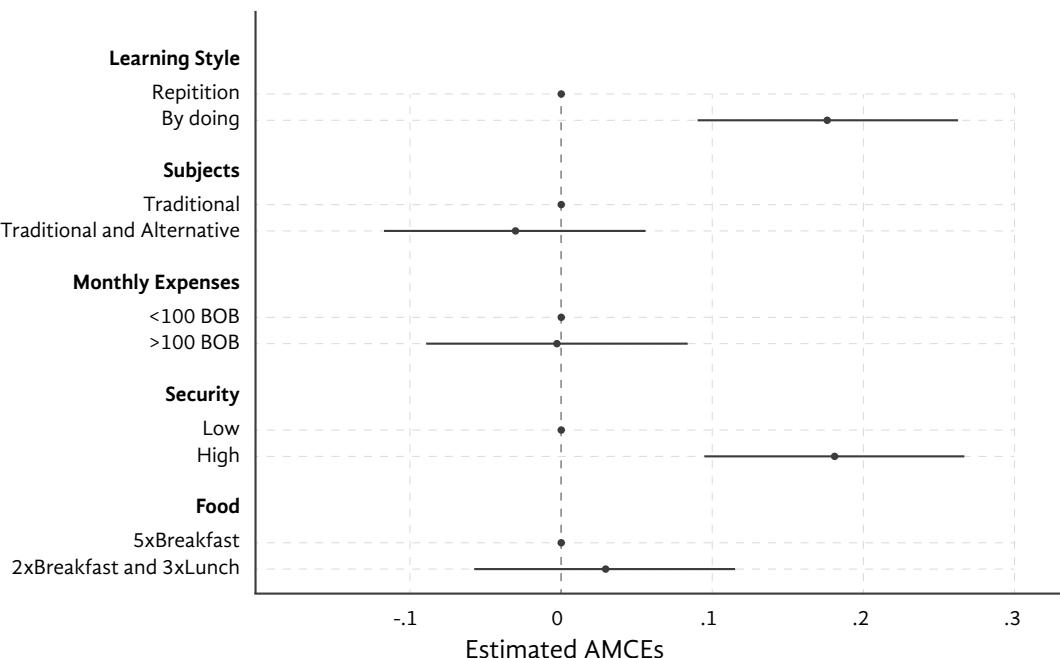
Acknowledging positionality is crucial. As most of the researchers were foreigners, there were limitations such as potential biases or misunderstandings when collecting information. Also, some participants misjudged the purpose of our research. This was particularly notable when we conducted the drawing assignment, where some children thought that we would implement what they drew. It was made clear to participants that the project had no financial support from the city and was solely for academic purposes. Additionally, potential biases were considered in the results analysis section. Another concern was whether our perceived influence biased responses, as participants might have expected positive changes.

Additionally, some respondents struggled with literacy in the conjoint experiment, making comprehension difficult. Future research should offer alternative presentation methods for inclusivity. These ethical concerns were considered in our report, as they could impact findings.

## Results

The next section combines and analyzes qualitative and quantitative results, structured around the five attributes from our conjoint experiment. By merging the statistical preferences for each factor (see Graph 1) with qualitative insights, we seek to identify the factors influencing parental educational choice in Samaipata.

**Figure 1**  
Overall results of the conjoint experiment<sup>2</sup>



<sup>2</sup> Due to the small number of observations, we use 90% confidence intervals.

## **Educational Style**

Previous studies by Maddaus (1990) and Alsauidi (2016) highlight academic quality and educational style as crucial for parents, which was evident in the research in Samaipata, leading us to include educational style in our experiment. Public schools used a teacher-led approach with participation through note-taking and reading, while private schools focused on multiple intelligences and project-based learning, such as the food project at Wawitas Creando.

The experiment showed that parents are 17.67 percentage points (pp) more likely to choose a school with a "learning by doing" style over "learning by repetition", with significance at the 1% level. This preference could be due to the perceived authoritarian nature of repetition, as reflected in critiques of public schools. Initially, we thought public-school parents would prefer repetition, but our observations and results showed that the reality of public schools was more participatory, which could explain the preference for "learning by doing".

Overall, both quantitative and qualitative findings show that educational style is an important factor in parental school choice in Samaipata.

## **Subjects**

We examined parental preferences for subjects, as academic quality is a key factor in school choice (Maddaus, 1990). Schools in Samaipata offer either only traditional subjects (math, languages, history) or both traditional and alternative subjects (permaculture, theatre, ceramics). Public schools provide only traditional subjects, while private schools offer both, making this an important attribute in our experiment.

Our findings show that parents are 3.09 pp less likely to choose a school offering both traditional and alternative subjects over one with only traditional subjects. This reflects the actual enrollment patterns in Samaipata, where more children attend schools with only traditional subjects. Many parents seemed skeptical of alternative subjects, viewing them as unfamiliar and unproven, whereas traditional subjects are seen as reliable. However, some parents, especially those in private schools, valued alternative subjects for fostering creativity and motivation, as one mother noted about her child's enthusiasm for permaculture.

While subjects influence school choice in Samaipata, this factor is less significant than educational style. The weaker quantitative result can be explained by qualitative findings, where a smaller group of parents viewed alternative subjects as beneficial.

## **Monthly Expenses**

In Samaipata, public schools are free but require a small monthly fee of under 100 BOB, while private schools charge over 100 BOB. This difference led us to include monthly expenses in our experiment.

Our results show parents are only 0.27 pp less likely to choose a school with fees above 100 BOB. Some prefer cheaper schools to avoid unnecessary costs, while others associate higher fees with better education. This near-indifference reflects opposing perspectives.

Field research revealed that schools adjust fees to support families. Juan de la Cruz charges 25 BOB per child but caps fees at 50 BOB for larger families. Private schools also offer financial flexibility. Flor de Montaña allows reduced fees in exchange for maintenance work.

Overall, while cost influences school choice, its impact is smaller than expected, likely due to schools' financial adaptability.

### **Security**

Our findings show that parents are 18.11 pp more likely to choose a school with high security measures (e.g., cameras, fences) over one with low security. However, perspectives on security differ between public and private schools. Public schools view security positively, implementing enclosures, cameras, and COVID-19 regulations. In contrast, private schools associate security with a loss of freedom, leading to fewer safety measures. For instance, some private school staff and parents criticized face masks, questioning their impact on children's social interactions.

The results suggest that most respondents, with children in public schools, favor high security, though some opposed strict measures. Overall, security influences school choice in Samaipata, with public school parents preferring high security and private school parents favoring fewer restrictions.

### **Food**

Previous research (Maddaus, 1990) shows that educational choices depend on societal context. In Samaipata, food is a key factor, unlike in most studies. Our field research found that only two of five schools provide food, with parents paying a fee. The public primary school Juan de la Cruz offers breakfast three times and lunch twice a week, emphasizing its necessity for some students. Other schools either provide no food or have long lunch breaks.

To explore this, we included food as an attribute in our experiment, comparing schools offering only breakfast versus a mix of breakfast and lunch. Parents were 2.89 pp more likely to choose mixed food options, though results lacked significance. Discussions revealed mixed opinions, with some seeing lunch as essential, while others preferred children to eat at home. Many also noted that their children preferred breakfast.

Although our quantitative results are weak, qualitative data suggest that food influences school choices in Samaipata.

### **Social Group analysis**

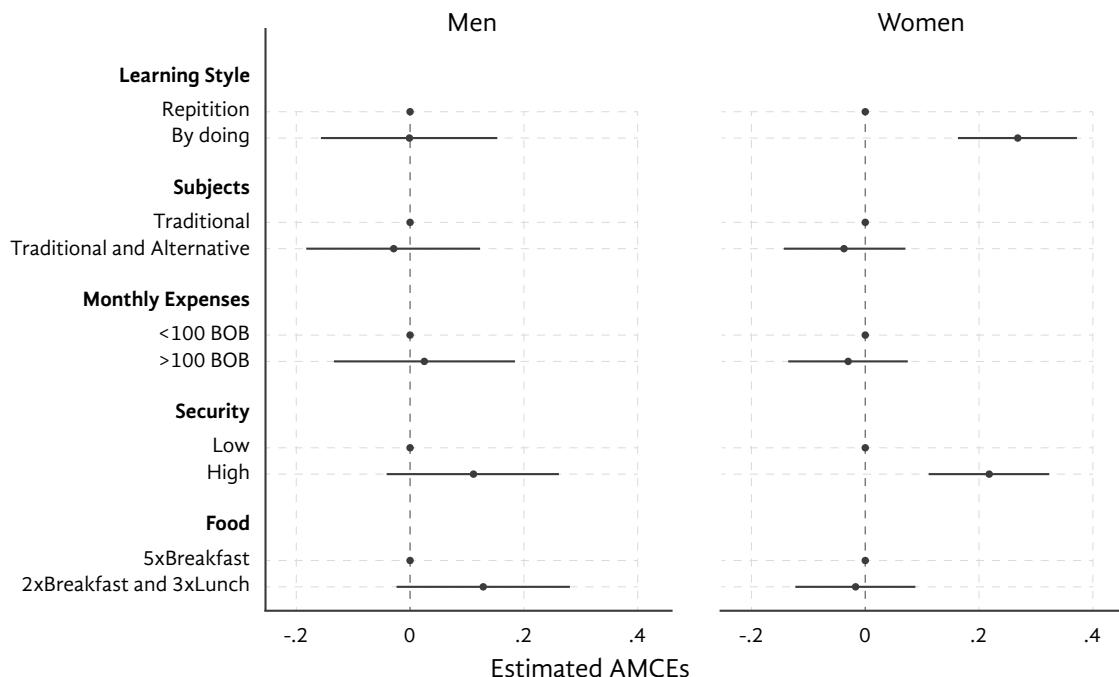
Earlier studies from Alsauidi (2016) and Blake & Mistry (2020) emphasize that educational choices are influenced by the unique contexts of social settings. In this section, we aim to uncover distinctions among social groups and analyse the presence of Bourdieu's three forms of capital within these groups. The analysis is segmented into three subsections based on gender, income, and origin, concluding with a depiction of the social field of parents in Samaipata in terms of cultural, social, and economic capitals (Graph 5).

## Groups based on Gender

Our first social groups are based on gender (65% women, 35% men), which may affect representativeness. However, key differences emerge in education style, security, and food preferences.

**Figure 2**

*Results of the conjoint experiment for social groups of gender<sup>3</sup>*



Our quantitative findings show that women strongly prefer the learning-by-doing approach, while men appear indifferent. The result for women is statistically significant at the 1% level, whereas for men, it is insignificant.

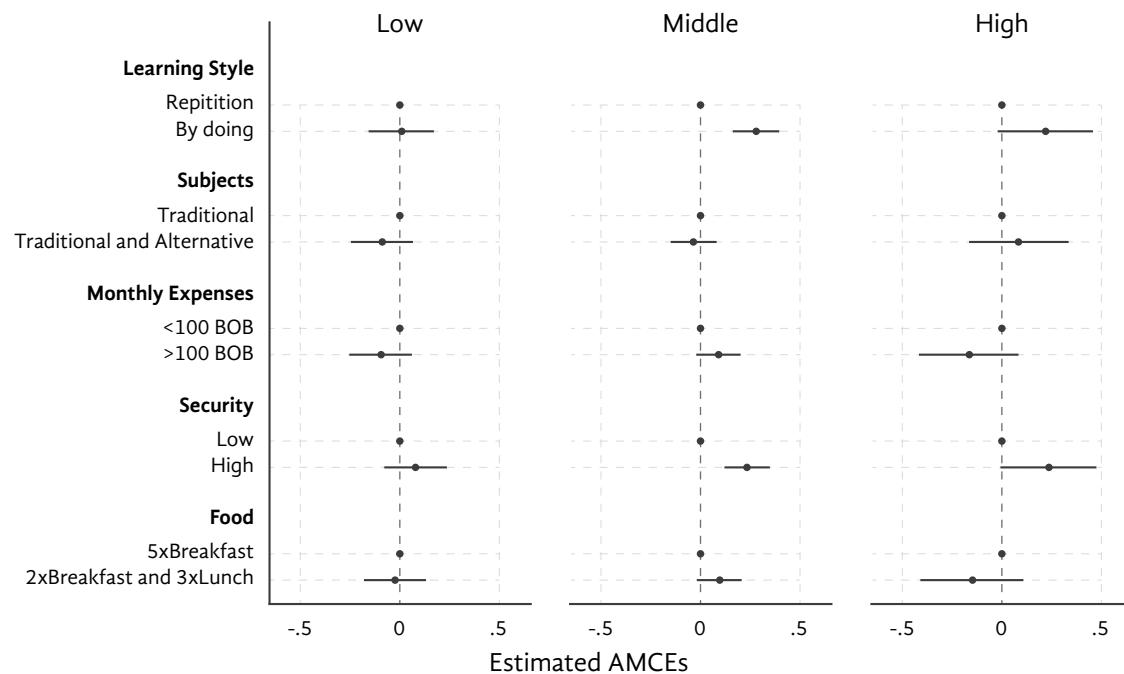
In food preferences, women are 1.88 pp less likely to choose schools offering both meals, while men are 12.82 pp more likely.

## Groups based on Income

Our second group category is based on income with low-, medium-, and high-income groups. Out of the 352 observations, 116 are based on answers of respondents with low income, 188 on answers of respondents with middle income, and 48 on answers of respondents with high income. Here, the attribute of monthly expenses is particularly interesting to analyse (Graph 3)

<sup>3</sup> Due to the small number of observations, we use 90% confidence intervals.

**Figure 3**  
*Results of the conjoint experiment for social groups of income levels<sup>4</sup>*



Regarding monthly expenses, income groups show distinct preferences: low- and high-income families favor schools costing under 100 BOB, while middle-income families prefer those above 100 BOB. This aligns with the arguments in Section 5.3. Low- and high-income groups prioritize cost-effectiveness, avoiding unnecessary premiums for similar education, whereas the middle-income group associates higher costs with better quality.

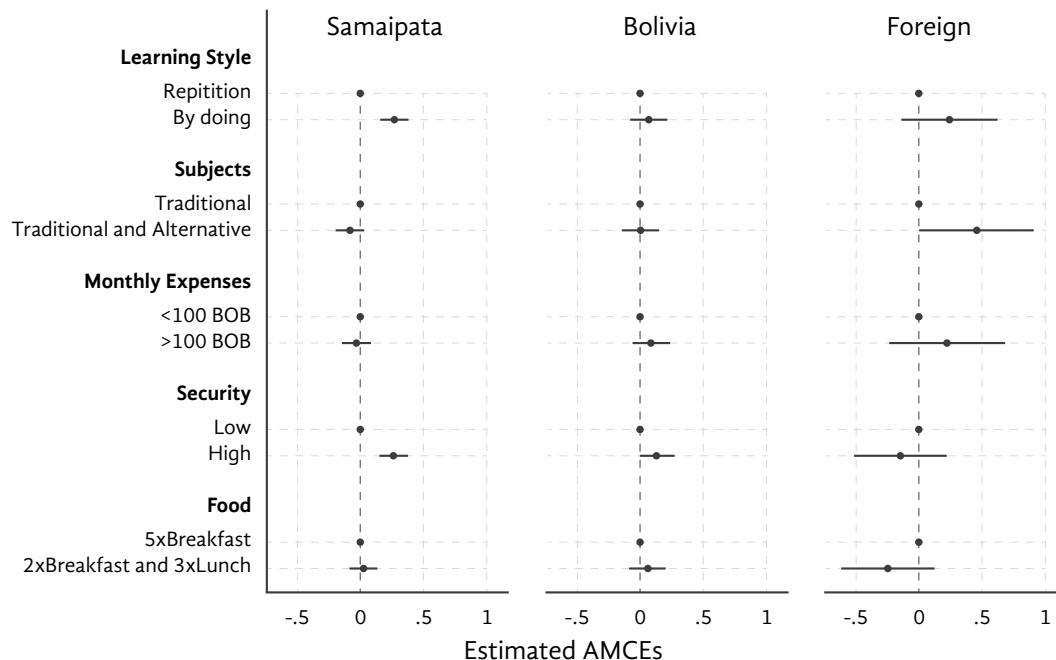
Those willing to pay over 100 BOB may be exchanging economic capital for cultural capital, investing in perceived educational quality. Another explanation lies in symbolic capital: higher tuition can signal wealth and reflect a desire for social recognition. Middle-income families may use economic capital to enhance their status, while high-income families, already possessing symbolic capital, do not need such investment. Low-income families, lacking sufficient economic capital, cannot afford the more expensive school.

### Groups based on Place of Origin

Our final social group category is based on place of origin, divided into parents from Samaipata, from Bolivia (excluding Samaipata), and from outside Bolivia. Among 352 responses, 186 are from Samaipata, 142 from other parts of Bolivia, and 18 from outside the country. As in previous sections, this imbalance may limit comparability, but notable differences still emerge, particularly in educational style, monthly expenses, subjects, and security (Graph 4).

<sup>4</sup> Due to the small number of observations, we use 90% confidence intervals.

**Figure 4**  
*Results of the conjoint experiment for social groups of origin<sup>5</sup>*



Across all subgroups, parents prefer learning by doing, with the strongest preference among Samaipata parents, who are 26.67 pp more likely to choose it over repetition. This suggests that cultural capital shapes their educational preferences.

Regarding expenses, parents from outside Samaipata are more likely to pay more for education. Most children in public schools are from Samaipata or nearby, while private schools mainly enroll children from families abroad. This suggests that non-local parents prioritize cultural capital, while Samaipata parents also consider economic capital (cf. Section 6.2).

Subject preferences also differ. Samaipata parents are 8.45 pp less likely to choose schools offering both traditional and alternative subjects, while parents of the rest of Bolivia show little preference. In contrast, parents from outside Bolivia are 46.2 pp more likely to favor such schools, reflecting social capital, as they tend to follow their social group's educational choices, reinforcing symbolic capital and school separation.

Security preferences vary as well. Samaipata and Bolivian parents prefer high-security schools, whereas parents from outside Bolivia, who mostly choose private schools, are less likely to do so, as they see strict security as limiting children's development.

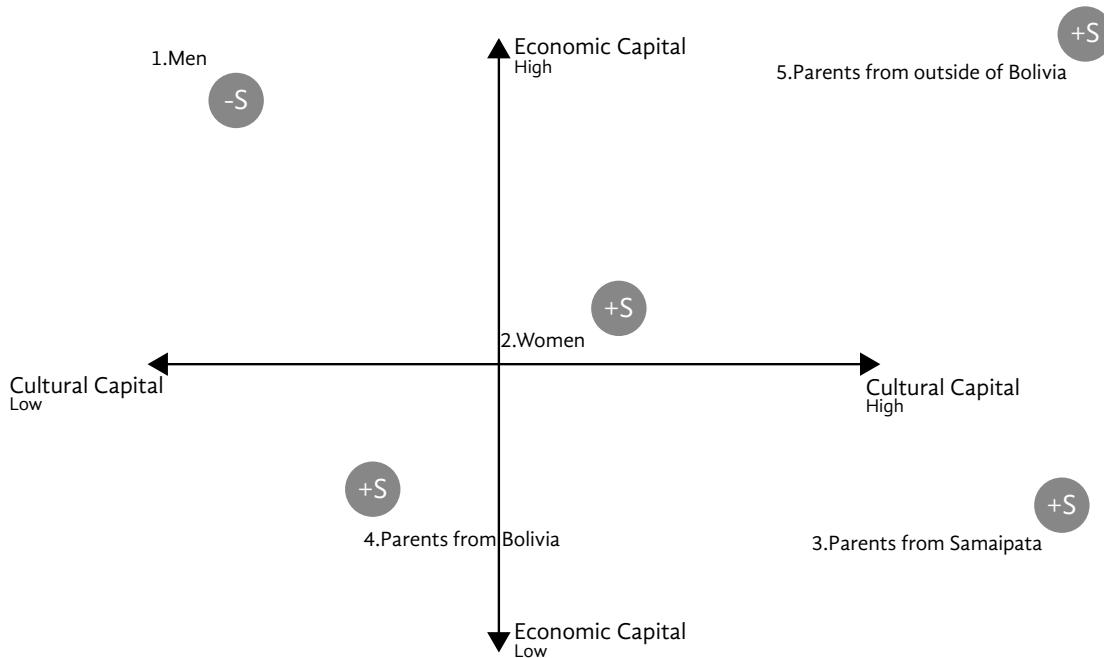
Despite small differences, parents from outside Bolivia often diverge from local parents, likely due to differing cultural capital. While Samaipata's unique setting may create shared values among residents, quantitative findings suggest cultural differences still influence school preferences.

5 Due to the small number of observations, we use 90% confidence intervals.

## Section Summary

Graph 5 is a cross-field representation of our identified social groups within the social field.

**Figure 5**  
*Cross-field representation of the social field<sup>6</sup>*



The graph shows that men in Samaipata attain a relatively low social and cultural capital, while they have a high economic capital. However, women in Samaipata attain a higher social capital than men, while they have a medium cultural capital and economic capital. Looking at places of origin, parents from Samaipata (3) tend to have a lower economic capital, while they obtain a high social and cultural capital. This is similar to parents from Bolivia (4), although these parents have a medium-level cultural capital. Lastly, parents from outside Bolivia (5) have high economic, social, and cultural capital.

## Children's aspirations

The final survey question addressed parents' aspirations for their children, with most choosing continued education (75.4%) or other (14.7%). Among the latter, 66.6% emphasized allowing children to define their own goals. This highlights both the value Samaipata parents place on education and their respect for children's autonomy. While it's unclear if aspirations influence school choices or vice versa, this finding led us to include children's perspectives through a drawing assignment.

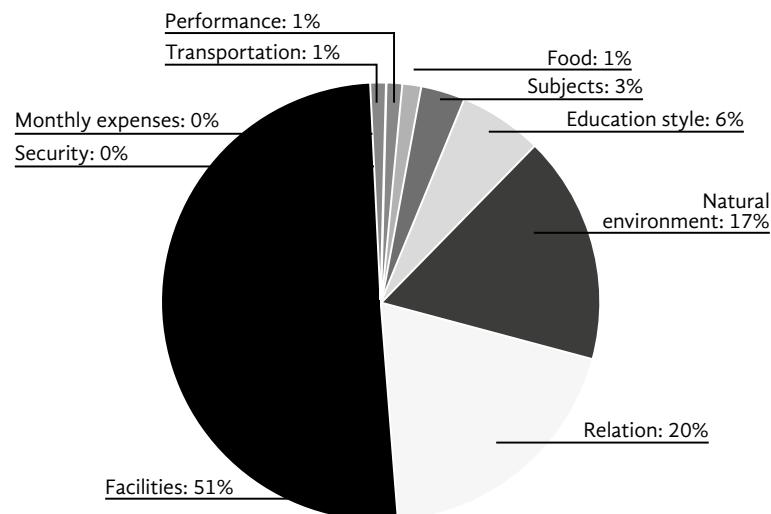
Analysing the attributes depicted in the drawings, we found five more recurring attributes representing the children's wishes in addition to the attributes valued by parents. The results of the drawing assignment can be seen below.

<sup>6</sup> Representation of the relations between the three types of capital of the identified social groups. X-axis: cultural capital low to high. Y-axis: economic capital low to high. S-/+: Social capital low/high

**Figure 5**  
*Results of attributes from drawing assignment*

Attribute	Food	Security	Education style	Subjects	Monthly expense	Natural environment	Facilities	Relation	Performance	Transportation
Total amount	2	0	9	5	0	25	76	29	1	1

**Figure 6**  
*Distribution of attributes from drawing assignment*



Based on this data, children show far less interest in food, security, monthly expenses, education style, and subjects than parents do when it comes to their ideal schools. Instead, physical context, such as facilities and natural environment, becomes the most essential attribute. Relations are another essential attribute for children, which we did not identify as important for parents. However, through our social group analysis, we identified social capital as prominent for all social groups except for one. The children's emphasis on relations further supports this and solidifies social capital in the social field of Samaipata as highly dominant and symbolic.

Taken together, although we see some similarities between the children's and parents' prioritization of attributes, the differences are more prominent. Thus, we conclude that the aspirations of the children are not an important factor influencing parental educational choice in Samaipata.

## Discussion

The findings of this research align partially with existing literature on parental educational choice while revealing contextual specificities unique to Samaipata. Maddaus (1990) and Alsauidi (2016) emphasized that academic performance and educational quality are central to parents' school choices. Consistent with these studies, our results show that educational style—particularly learning by doing—was the most influential factor among Samaipata parents. However, unlike previous research where parents valued academic rigor as a sign of quality, in Samaipata, the preference for participatory methods seems to stem from parents' perception that these approaches foster social interaction and personal development, aspects highly valued in the community.

Similarly, the strong significance of security as a determining factor in our conjoint experiment resonates with Blake and Mestry's (2020) study in South Africa, where safety and discipline were decisive for middle-class families. In Samaipata, security holds symbolic value across social groups, especially among public-school parents, who perceive physical protection and order as indicators of institutional quality.

Contrary to Cronembold's (2012) findings, which reported lower cognitive performance in students from public schools compared to private ones, our results suggest that parents' preferences are not solely driven by perceived academic outcomes. While families recognize differences in infrastructure and resources between public and private institutions (Bojanic et al., 2025), many still prioritize relational, cultural, and emotional factors, particularly the sense of community and trust that public schools provide.

Regarding economic factors, monthly expenses had a limited influence on parental decisions, contrasting with international literature (Rohde et al., 2019; Alsauidi, 2016), which highlights cost as a major determinant. This divergence can be explained by Samaipata's local practices of financial flexibility—such as fee reductions or voluntary work—which mitigate the role of economic capital in educational choice.

The results also reinforce Bourdieu's (2002; 2013) theoretical framework: social and cultural capital were more decisive than economic capital in shaping school preferences. The high symbolic value attributed to social networks—manifested through collective activities like *mingas* and parental cooperation—suggests that education functions as a space for reinforcing social recognition rather than merely pursuing economic advancement. The prominence of women's social capital supports this view, indicating that parental decisions are embedded in local social dynamics where relationships and community trust play a central role.

Finally, while Shiferaw and Kenea (2024) argued that school choice reflects universal parental concerns about fit and quality, our findings confirm Blake and Mestry's (2020) and Alsauidi's (2016) position that cultural context significantly shapes educational preferences. In Samaipata, education is not only a means of mobility but also of belonging—a way to reproduce and negotiate symbolic capital within a tight-knit social field.

## Conclusion

Bourdieu's concept of social capital provides a useful lens for understanding these findings, as it refers to resources gained through social networks, trust, and community support (Bourdieu, 2013). The fieldwork revealed the strong role of social connections in both public and private schools, seen in activities like *mingas* (parent-teacher gatherings) and collective decision-making on schoolbooks. Women's stronger social capital within these communities may explain their more unified preference for educational styles, whereas men, with weaker social ties, show more varied opinions, leading to less significant results. Analyzing these results through Bourdieu's lens highlights how social capital contributes to status, power, and success (Bourdieu, 2013). If women in school communities possess more social capital than men, they may value their children developing strong social skills. Education becomes a means not only to accumulate cultural and economic capital but also to enhance social capital. This may explain their preference for learning-by-doing approaches, which foster social skill development.

Regarding security, both genders prefer high-security schools, with women showing a slightly stronger inclination. From a cultural capital perspective, cultural capital shaped by upbrin-

ging and education may explain this (Bourdieu, 2013). Women, often socialized to take more precautions, might project these concerns onto school choices. Men, having different cultural capital, may not prioritize security to the same extent.

Applying Bourdieu, men prioritize economic capital, favoring school meals for financial benefits. While this was expected for both genders, the trend is stronger in men. Women balance cultural and economic capital, preferring schools serving only breakfast as it aligns with their care-giving role, while also recognizing that providing lunch themselves is costlier. Men's lower involvement in caregiving explains their stronger preference for lunch-providing schools.

This research set out to investigate which factors influence parental educational choice in Samaipata, Bolivia. We also examined how these factors vary in importance across social groups. By employing a mixed-methods approach, we gathered qualitative and quantitative data through interviews, participant observations, a conjoint experiment, and drawings made by children.

First, we found that parents are more likely to choose a school offering learning by doing rather than learning by repetition. Secondly, we found that parents prefer high over low security. Even though education style and security are the most important factors, food, subjects, and monthly expenses were also relevant, but to a lesser extent. This correlates with previous research stating that parents prioritize both education style (quality of instruction) and security over other attributes.

When distinguishing between gender (including men and women), income levels (including high, medium, and low-income earners), and place of origin (including parents from Samaipata, Bolivia, and outside Bolivia), we found that factors differed in prominence between social groups.

Applying Bourdieu's concepts of capital and social field in the analysis of these groups, we discovered how economic, social, and cultural dynamics influence parental educational choices. By mapping the social fields of parents in Samaipata, we observed a high presence of social capital among all social groups except men. This indicates that social capital in the parental social field of Samaipata holds high symbolic capital and is significant for parental recognition and acknowledgement.

Lastly, we also considered children's preferences regarding educational choices. While some similarities emerged between children's and parents' prioritization of attributes, differences were more prominent. Thus, children's aspirations are not a significant factor influencing parental educational choices in Samaipata.

This research is strongly rooted in its contextual setting, making it difficult to generalize the findings to a universal population. Rather than applying these findings to other contexts, future research should focus on replicating similar studies in different settings.

## References

Alsaudi, F. (2016). Reasons influencing selection decision making of parental choice of school. *Journal of Research in Education and Science (IJRES)*, 2(1), 201-211. <https://files.eric.ed.gov/fulltext/EJ1105167.pdf>

Bertelsmann Stiftung. (2018). *BTI 2018 Country Report - Bolivia*. Gütersloh: Bertelsmann Stiftung. <https://www.bti-project.org/en/reports/country-report-BOL-2018.html>

Blake, B. S., & Mestry, R. (2020). Parental decision-making factors for school choice: A South African middle-class perspective. *Educational Management Administration & Leadership*, 48(6), 1046-1062. <https://doi.org/10.1177/1741143219880326>

Bojanic, A. N., Foronda, M., & Jordán, A. (2025). *Infraestructura y resultados educativos en Bolivia. Revista Latinoamericana de Estudios Educativos*, 55(1), 201-238. <https://doi.org/10.48102/rlee.2025.55.1.679>

Bourdieu, P. (2002). The forms of capital. In N. W. Biggart (Ed.), *Readings in economic sociology* (pp. 280-291). Blackwell Publishers Ltd. <https://doi.org/10.1002/9780470755679.ch15>

Bourdieu, P., & Nice, R. (2013). *Distinction: A Social Critique of the Judgement of Taste* (New ed.). Taylor and Francis.

Brinkmann, S. (2015). Interviewet: Samtalen som forskningsmetode. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder: En grundbog* (3rd ed., pp. 29-54). Hans Reitzels Forlag.

Cronembold Lozada, M. C. (2012, September 17). *Baremación del Test Raven en la escala especial* [Tesis de licenciatura, Universidad Privada de Santa Cruz de la Sierra].

Education Profiles. (2024). *Bolivia: Financing for equity*. UNESCO Institute for Statistics. <https://education-profiles.org/latin-america-and-the-caribbean/bolivia/~financing-for-equity>

Frederiksen, M. (2015). Mixed methods-forskning. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder: En grundbog* (3rd ed., pp. 197-217). Hans Reitzels Forlag.

Hastrup, K. (2015). Feltarbejde. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder: En grundbog* (3rd ed., pp. 55-80). Hans Reitzels Forlag.

Hilgers, M., & Mangez, E. (2014). *Bourdieu's theory of social fields: Concepts and applications*. Taylor and Francis. <https://doi.org/10.4324/9781315772493>

List, J. (2021, December 12). *Addressing the roots of educational inequities by shifting parental beliefs*. CEPR. <https://cepr.org/voxeu/columns/addressing-roots-educational-inequities-shifting-parental-beliefs>

Maddaus, J. (1990). Chapter 5: Parental Choice of School: What Parents Think and Do. *Review of Research in Education*, 16(1), 3-42. <https://doi.org/10.3102/0091732X016001267>

Rohde, A. L., Campani, F., Goncalves Oliveira, J. F., Rohde, C., Rocha, T., & Ramal, A. (2019). Parental reasons for school choice in elementary school: A systematic review. *Journal of School Choice*, 13(3), 287-304. <https://doi.org/10.1080/15582159.2019.1643970>

Rose, G. (2010). *Visual methodologies: An introduction to the interpretation of visual material* (3rd ed.). SAGE.

Shiferaw, M., & Kenea, A. (2024). Determinants of parental school choice: A systematic review of the literature. *International Journal of Indonesian Education and Teaching*, 8(1), 20-34. <https://doi.org/10.24071/ijjet.v8i1.7296>

Stantcheva, S. (2023). How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics*, 15(1), 205-234. <https://doi.org/10.1146/annurev-economics-091622-010157>

Szulevics, T. (2015). Deltagerobservation. In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder: En grundbog* (3rd ed., pp. 81-96). Hans Reitzels Forlag.

World Bank Group. (2023, December 18). *2023 in nine charts: A growing inequality*. World Bank. <https://www.worldbank.org/en/news/feature/2023/12/18/2023-in-nine-charts-a-growing-inequality>

World Bank Group. (2024). *Regional poverty and inequality update: Latin America and the Caribbean* (No. 2024/01, Poverty and Inequality Briefs). World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/b8d7eec7-06f7-487d-b06b-ab87832fdc0a/content>



# Medical pluralism and primary healthcare decisions in Samaipata, Bolivia

---

## Pluralismo médico y decisiones sobre la atención primaria de salud en Samaipata, Bolivia

---

### **Leonardo Andersson**

Universidad Grenoble Alpes, (MSc.) Universidad de Copenhague  
Correo: fbp464@alumni.ku.dk

### **Jiyoon Anne Frantzen**

Universidad de Corea, (MSc.) Universidad de Copenhague  
Correo: wsk229@alumni.ku.dk

### **Simeon Mascaret-Rappitsch**

Universidad de Viena, (MSc.) Universidad de Copenhague  
Correo: hkf819@alumni.ku.dk

### **Taylor Josette Shaw**

Universidad de Pittsburg, (MSc.) Universidad de Copenhague  
Correo: qvw523@alumni.ku.dk

### **Erika Meilin Wu**

Universidad de California Santa Barbara, (MSc.) Universidad de Copenhague  
Correo: rxk850@alumni.ku.dk

### **Co-authors:**

#### **Kassandra Barrero Flores**

Universidad Privada de Santa Cruz de la Sierra  
Correo: a2020117762@estudiantes.upsa.edu.bo  
<https://orcid.org/0009-0001-9430-4632>

#### **Juan Antonio Cuba Bruno**

Universidad Privada de Santa Cruz de la Sierra  
Correo: a2023210101@estudiantes.upsa.edu.bo  
<https://orcid.org/0009-0004-1798-5261>

Fecha de recepción: 17/03/2025

Fecha de aprobación: 19/09/2025

---



## Abstract

A division between traditional and biomedical practices has historically characterized Bolivia's medical landscape. However, the election of Evo Morales as the country's first indigenous president marked a shift toward addressing these disparities, aiming to integrate traditional and biomedical practices. In this context, a multi-method approach and Pierre Bourdieu's "field theory" were used to examine how these structural processes influence people's primary healthcare decisions in the city of Samaipata. The study identified two primary ways in which medical pluralism affects primary healthcare decisions: the inadequate health infrastructure and resources, and the influence of healthcare practitioners.

**Keywords:** *Health policy, cultural diversity, wealth, cultural identity, Bolivia.*

## Resumen

El panorama médico de Bolivia ha estado históricamente dividido entre la medicina tradicional y las prácticas biomédicas. Sin embargo, la elección de Evo Morales como el primer presidente indígena en la historia del país marcó un cambio para abordar estas disparidades, con el objetivo de integrar las prácticas tradicionales y biomédicas. En este contexto, se utilizó un enfoque multimedódico y la "teoría de campo" de Pierre Bourdieu para examinar cómo influyen estos procesos estructurales en las decisiones de la población sobre la atención sanitaria primaria en la ciudad de Samaipata. Se encontraron dos formas en las que el pluralismo médico influye en las decisiones de atención primaria: la falta de infraestructura y recursos para la salud y la influencia ejercida por profesionales de la salud.

**Palabras clave:** *Política de la salud, pluralismo cultural, riqueza, identidad cultural, Bolivia.*

## Introduction

Bolivia's historical medical narrative is marked by its indigenous populations' struggle for the recognition of traditional medicine within a healthcare system dominated by Western medicine (hereby referred to as biomedicine). As a result, indigenous healers face an ongoing challenge in asserting the legitimacy and efficacy of their practices, highlighting inequalities in healthcare access and acknowledgment in Bolivia. This division symbolizes a broader cultural and historical split and has been perpetuated by socio-economic status, geographic accessibility, and ethnic diversity, leading to uneven healthcare access.

The election of Evo Morales in 2006 marked a pivotal moment in addressing these disparities in the healthcare system; his government looked for a reform of the system to decolonize health, applying the reformation plan "Para Vivir Bien" (Johnson, 2010). This concept implies living "with dignity", appreciating cultures, spirituality, and community, giving rise to the "salud intercultural" framework, which aims to bridge traditional and biomedical practices through projects such as Salud Familiar Comunitaria Intercultural (SAFCI), based on the principles of social participation, intersectoral cooperation, interculturality, and the idea that healthcare is in all aspects of family and community life (Johnson, 2010). Currently, SAFCI is present in 319 municipalities (Ministerio de Salud y Deportes, 2024). A list of these municipalities was not found, but it is possible to verify its presence in Samaipata for a post of the Health and Sports Ministry about a vaccine program applied in 2017 (Ministerio de Salud y Deportes, 2017). The discourse between traditional medicine and biomedicine has evolved beyond a simple dichotomy, embracing the complexities of medical pluralism, especially in places like Samaipata, Bolivia, where a mosaic of

cultural influences meets. By applying Pierre Bourdieu's theoretical frameworks, this research comes to the following research question: "How does medical pluralism influence people's primary healthcare decisions?".

For this research, the focus will be on four key terms: medical pluralism, traditional medicine (TM from now on), biomedicine (BM from now on), and primary healthcare decisions (PHD from now on). The field of medical pluralism is shaped by diversity in terms of culture, socioeconomic factors, and ideologies of healthcare practitioners that delineate the distribution of healthcare resources and influence individuals' health-seeking behaviors (Khalikova, 2021). In general, this concept of medical pluralism encompasses a broad spectrum of healing practices (Amzat & Razum, 2014), yet, in this research, the focus will be on the two medical traditions of TM and BM, which are the most relevant for the Bolivian context. Firstly, TM is prominently defined by the World Health Organization [WHO] as "the total sum of the knowledge, skills, and practices based on the theories, beliefs, and experiences of indigenous to different cultures" (2023, parr.1). Secondly, BM is generally referred to as scientific Western medicine, as it is the kind of medicine that is associated with experimentation at the laboratory rather than the experience of physicians at the clinic (Gaines, 2008).

In addition, the research was limited to people's primary healthcare decisions (PHD), a concept that was defined in the WHO Declaration of Alma-Ata in 1978 as "the first level of contact of individuals, the family and community with national health" (WHO, 1978, article VI). Following Bourdieu's field theory, PHD would not be a rational choice, but a complex interaction between the habitus, the field, and the different capitals (economic, social, and cultural); habitus is a complex structure that structures behavior through different mechanisms, also it is structured by the field, which is the theoretical place where all actors interact (such as State, companies, people, etc.), and also where the capital is produced, that also shapes the person (Collyer et al., 2015). Either way, capital is not only thought of as the classical material capital, but as three types of capital: the economic capital, which is money, properties, etc., the social capital, represented in the form of recognition, and the cultural capital, which is acquired through life, represented through knowledge (Collyer et al., 2015). In line with this conceptualization of the habitus concept, this research will also look at PHD (habitus) in relation to medical pluralism (field) and the positioning of actors within that field (capital).

## **Methodological design**

This study employed quantitative and qualitative methods to encompass two primary components: community perception and local structures. Quantitative data collection utilized a survey ad hoc administered via Google Forms. To ensure quality, we conducted a pilot survey with a handful of respondents to evaluate the relevance of our questions. Once adjusted, it was administered in teams of two and obtained 61 responses. Qualitative data collection was made through semi-structured interviews with relevant figures from various backgrounds and areas of expertise related to healthcare, concentrated on healthcare practitioners and political stakeholders. For qualitative data analysis, we used an integrated approach of open and closed coding methods. As an initial step, open coding was utilized among a selected number of key interviews to establish a general codebook, which was then applied to the remaining qualitative material using the closed coding method. It is essential to note that due to the limited number of responses, the survey results offer an approximation of the community perception of Samaipata.

## Results

### Medical Pluralism in Samaipata

To analyze medical pluralism as a social field in Samaipata, it is first important to look closer at how the notion of medical pluralism relates to Bourdieu's concept of social fields. This author conceptualizes social fields when writing about the field of television as "a structured social space [...] in which various actors struggle for the transformation or preservation of the field" (Bourdieu, 1998, pp.40-41). However, when using Bourdieu's field theory, human agency inside a social field is not distributed equally. On the contrary, the interplay between the respective social field and power relations positions the individuals unequally throughout the field. Medical pluralism as a field theory in Bourdieu's framework highlights how diverse medical practices coexist and interact within a social field, and the presence and attitudes of the varying practices impact individuals' healthcare choices, practices, and experiences.

In Samaipata, it was observed that BM and TM operate within the same social field of medical pluralism because of the town's unique characteristics of influx of migration and cultural diversity. This is also visible in the survey statistics, where 45% of survey takers indicated that they have ancestors outside of the Florida province, and 14.6% have ancestors who are from outside of Bolivia. Due to this social and cultural fabric, BM is increasingly used by locals as the health infrastructure expands and costs fall, whereas a large influx of alternatively styled foreigners, largely referred to as "hippies" by the local population, brought with them a large inclination to use natural remedies. Based on this, BM or TM cannot be separated into only one subgroup of the population but have to be seen as belonging to the same social field. Understanding medical pluralism as a social field enables an analysis of how structural forces shape its manifestation in Samaipata. This leads the analysis back to Bourdieu's conceptualization of the social field and a focus on the most powerful actors with the greatest agency to affect change in the social field. As a starting point of this analysis, the focus returns to the Salud Intercultural framework as proposed by Bolivia's government, which is arguably the actor with the biggest potential to affect change in the social field of medical pluralism.

While the Salud Intercultural framework holds significant promise in impacting medical pluralism in Bolivia, its effectiveness in enhancing people's access to healthcare and integrating traditional healthcare practices with biomedical practices is far from meeting its potential. Statistics show that from 2011 to 2022, social security coverage for all of Bolivia increased from 31% to 80% (Instituto Nacional de Estadística [INE], 2024). However, there was not as big an increase in the capacity of the healthcare system. From 1997 to 2007, before Morales became president, the number of health care establishments had increased from 2,000 to 3,100. During his 17 years of presidency, the number of clinics and hospitals only increased from 3,100 to 4,000 (INE, 2024). These results reflect that there was an increase in social security compared to other presidential periods, but the infrastructure did not become stronger or increase at the same rate.

Even if nominal health coverage increases, without enough healthcare establishments to support all new registrations under the Sistema Único de Salud (Single Health System or SUS), many individuals are not able to receive proper care. Additionally, healthcare practitioners do not have the time or sufficient resources to support a higher number of potential patients properly and effectively. This is reflected in the survey as 87% of survey participants had heard of SUS, but 60% said that the public healthcare system has not improved since Morales began his presidency. Furthermore, 65% reported that they don't use biomedical resources, such as hospitals or pharmacies. Because many people in this rural town knew about SUS, it is shown that the roll-out

of SUS was quickly done, which aligns with the statistics of a fast increase in individuals covered by SUS nationally. However, the consensus of most survey participants was that not much has changed in the public healthcare system, and there is dissatisfaction towards biomedical services.

Although statistically, more people have increasing social security concerning their healthcare coverage, qualitative research with individuals who are in power within the healthcare structure of Samaipata echoes the lack of infrastructure and resources in the current health system. Through interviews with key stakeholders, insights are gained into the complex dynamics shaping healthcare decision-making in this context. The most powerful interviewee in the field of politics is Dr. Kramer, a direct health advisor to the regional government in Santa Cruz. His perspective underscores the pivotal role of infrastructure and economic resources in delivering quality healthcare:

“Medicine in all parts of the world needs economic resources. A good doctor is not enough. That good doctor needs to have infrastructure to provide care... to give him supplies... We are condemned to failure and unfortunate health policies. In this country, the percentages designated for health are very low.” (M. Kramer, personal communication, 2024)

In this quote, Dr. Kramer emphasizes the critical importance of infrastructure and economic resources in healthcare delivery, which resonates with broader discussions around healthcare access and quality. His assertion that “a good doctor is not enough” highlights the systemic deficiencies that undermine the effectiveness of healthcare services in Samaipata. Despite the dedication and expertise of healthcare professionals, without the necessary support and resources, their ability to provide comprehensive care is severely constrained.

Turning to Samaipata itself, an important local stakeholder is Mr. Herrera, the sub-government official of the province of Florida. His account further elucidates the challenges within the healthcare system, highlighting issues related to hiring management and the instability caused by short-term contracts:

“We, for example, have many problems with human resources. An example of one of the problems is that... we have very good professionals who are hired by the municipality and suddenly, they have one-year contracts, and it is an excellent staff... but they change good professionals and bring us others who start from scratch and are terrible.” (P. Herrera, personal communication, 2024)

Here, Herrera's observation regarding the turnover of healthcare professionals due to contractual issues sheds light on the instability within the healthcare workforce. The frequent rotation of staff not only disrupts continuity of care but also weakens the development of expertise and institutional knowledge within healthcare facilities.

The quotes from Kramer and Herrera highlight the broader structural challenges that individuals face when navigating the healthcare system. It was found that this lack of stability and resources leads individuals to seek alternative healthcare options or delay seeking medical treatment altogether, exacerbating health disparities within the community. Traditional medical practitioners may also be hesitant to recommend that their patients complement their treatment with biomedical interventions due to the perceived limitations and shortcomings of the biomedical system. Given the scarcity of resources and the challenges faced by biomedical healthcare providers, traditional practitioners view BM as a resource reserved for severe cases rather than an integrated component of holistic healthcare. Consequently, patients can be less inclined to consi-

der biomedical interventions, relying instead on traditional and home healing practices that they perceive as more reliable and aligned with their cultural beliefs and practices. This demonstrates a lack of health infrastructure and resources in one aspect that perpetuates the continuous divide in operations where TM and BM operate in separate spheres.

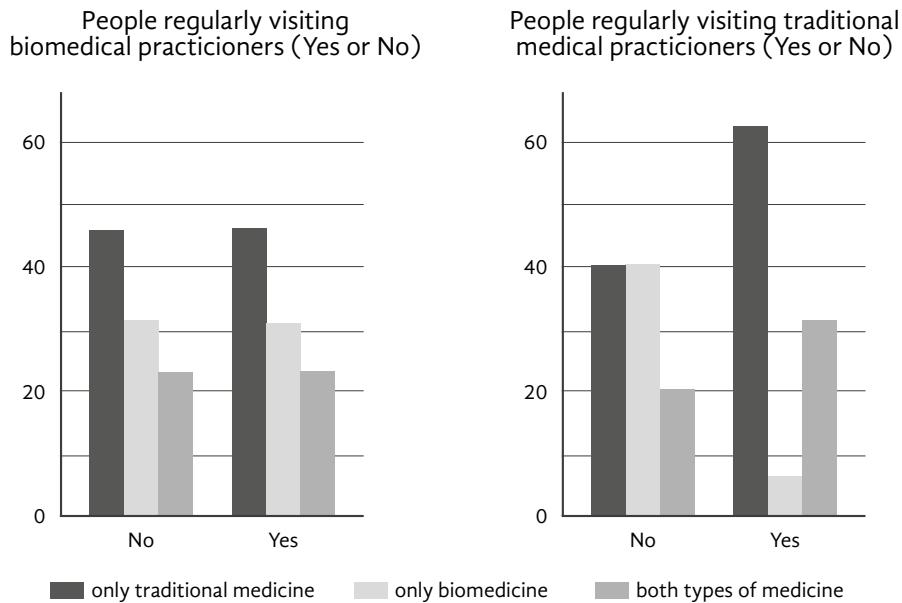
Turning away from the general discussion of medical pluralism towards the narrower subfield of primary healthcare in Samaipata, it is not the local or regional government but healthcare practitioners themselves who constitute the most powerful actors in the field of primary healthcare. This is related to the observation that the government's attempt at shifting the relationship between BM and TM is mostly a discourse and has less direct effects in Samaipata itself. As a consequence, primary healthcare remains largely unregulated by the government. On one hand, TM was mostly practiced through personal knowledge in the form of picking up herbs, for example, as it became visible through informal conversations and open questions while conducting the survey. Samaipata Municipality's head of the health department, Dr. Nova, explains how TM practitioners remain largely unregulated because they are not certified by the government. On the other hand, BM is more dependent on the government in theory. However, the lack of infrastructure results in people not consulting doctors before seeking medication. As medical prescriptions are uncommon, people go directly to pharmacists, where they can get anything from small painkillers to strong antibiotics. This process was observed multiple times when conducting interviews at pharmacies. The encounters witnessed between patients and practitioners were short. The patients mentioned their physical condition, and the pharmacist gave them the medication she or he thought best fit the symptoms without any prescription or further check-up.

Ultimately, it is this arrangement of infrastructure in the social field of medical pluralism that puts the pharmacists and traditional medical practitioners in a powerful position. It is the direct views of these healthcare practitioners on the relationship between BM and TM that have particular power in the relationship between the two subfields of medical pluralism.

### **The influence of healthcare practitioners on primary healthcare decisions**

As has been previously discussed, how the social fields impact PHD, the focus now turns to how habitus influences PHD by analyzing the survey results of the general public. From the survey data, it can be seen that biomedical and traditional practitioners do not influence PHD in the same way. Graph 1 compares the PHD (different bar colors) with the type of medical practitioner that people regularly go to (the right graph for traditional practitioners and the left for biomedical practitioners). The x-axis presents people who regularly go or don't go to the corresponding type of practitioner. The y-axis shows the percentage of survey respondents making the corresponding healthcare decisions.

**Figure 1**  
*Relation between regular visits of a healthcare practitioner and PHD*



The results of these graphs show the different levels of influence amongst the types of healthcare practitioners. When looking at the left part of Graph 1, one can see that assisting regularly with a biomedical practitioner is practically unrelated to PHD as both groups of people have the same patterns in PHD. However, turning to the right side, it can be seen that people who regularly go to traditional practitioners make different PHD than those who do not regularly go. Overall, this impact is particularly visible for the PHD of “only using traditional healthcare” (60% instead of 40%) and “only using biomedicine” (6% instead of 40%). Turning away from descriptive statistics, the noticed effects of traditional practitioners can also be seen when conducting a linear regression against the PHD of “only using TM”, as seen in Table 1. In contrast to the weak association between healthcare decisions and biomedical practitioners ( $B= 0.06$ ;  $p= 0.74$ ), traditional practitioners have a clearly stronger association ( $B= 0.3$ ;  $p=0.07$ ). This overall means that people going to traditional practitioners are 30% more likely to only use TM for primary healthcare. Indeed, this association is relatively stable with respect to most control variables; only against the control variables education, religion, and age does the p-value rise to around 0.1.

**Table 1**  
*Regression analysis predicting PHD based on visits of healthcare practitioners.*

	B	SE	p
Regular visits to a TM practitioner	0.299*	(0.068)	<0.1
Regular visits to BM practitioners	0.059	(0.744)	n/s
Food expenses level	-0.223	(0.120)	n/s
Indigenous identity/language	0.047	(0.757)	n/s
Education level	-0.142	(0.396)	n/s
Catholic belief	-0.135	(0.374)	n/s
Age	-0.084	(0.185)	n/s
Constant	0.541	0.000	<0.01
N	47		

Note: \*  $p<0.1$ , \*\*  $p<0.05$ , \*\*\*  $p<0.01$

These results make it possible to theorize that, unlike the biomedical practitioners, the traditional practitioners are able to impact healthcare decisions to a larger extent. Returning to the qualitative results, this non-influence of biomedical practitioners can be explained through the diversity of opinions amongst pharmacists regarding what constitutes the best combination of primary health care. A pharmacist was encountered who had a more skeptical view towards using TM for primary healthcare: "... *I'm not such a believer in traditional medicine...*" (Angelica, personal communication, 2024). However, other biomedical professionals were more open to including TM for primary healthcare. One example is Marvin, a pharmacist with his own establishment in the heart of Samaipata, who shared his view on how to integrate traditional remedies with biomedical ones:

"... What do I prescribe to my patients for medication for stomach pain? If that is the case... a prescription comes to the doctor with an antibiotic for it, which is perfect, but apart from that, for example, I recommend that it be an infusion, that is, a little coca or mint tea, and this makes the patient improve..." (Marvin, personal communication, 2024).

Marvin's practice of integrating herbal tea, natural and herbal remedies with conventional antibiotics and other conventional BM emphasizes the potential for an integrated blending of healthcare practices. This means that at least in some biomedical circles in Samaipata, TM and BM are not viewed as isolated medical paradigms but rather as mutually supportive. However, as this opinion is not shared amongst all BM practitioners, it is yet to be decided which group of BM practitioners will gain more dominance in the future.

Contrarily, the perspective from the TM side has a more homogenous opinion on what constitutes the best form of primary healthcare, which can explain the found correlation between the regular visit of traditional practitioners and PHD. A prominent figure amongst these TM practitioners is Juan Carlos, who is the owner of EcoTao, a well-known local center for traditional medicine. He has an overall skeptical position towards BM: "... *For the large pharmaceutical industry, the business is in the sick. So, for the big pharmaceutical industry, the business is to keep people sick as long as possible...*" (Juan Carlos, personal communication, 2024). This skepticism towards the use of biomedical medication for primary health is directly shared by most of the traditional practitioners encountered in Samaipata. However, Juan Carlos also shared that BM cannot be disregarded because there are "... *situations in which one has an accident, there you cannot say we are going to give him herbal tea. There, he requires a surgery...*" (Juan Carlos, personal communication, 2024). This point of view indicates a clear boundary for BM's role, which is perceived only as essential in severe health crises, reflecting a more targeted approach rather than an integrated approach to health.

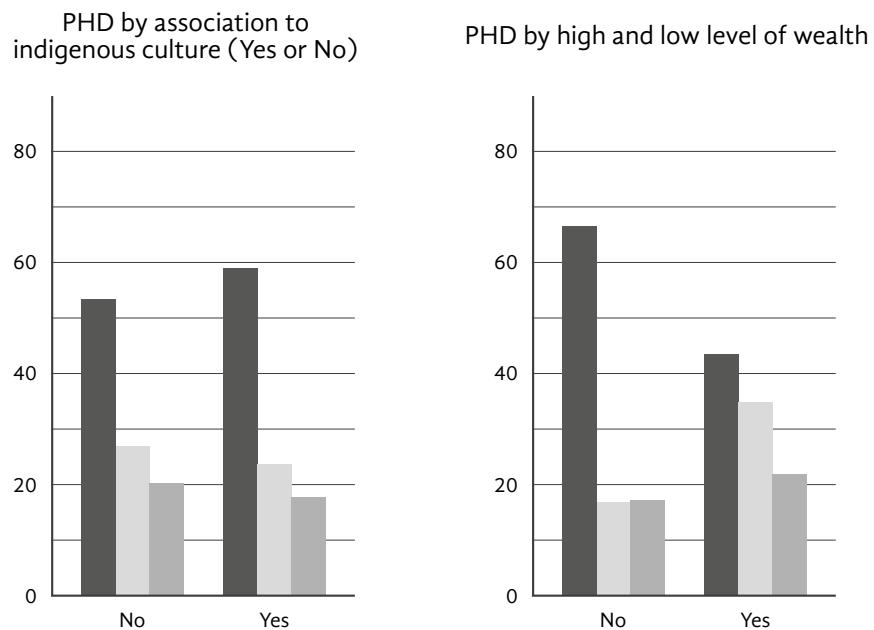
To summarize, the data show that well-positioned powerful actors in the respective social field (in this example, healthcare practitioners) can assert some type of influence on the habitus formation. However, it is seen that the level of homogeneity among the practitioners matters for asserting influence on the population. On one hand, there was no relation between regular visits to biomedical practitioners and PHD, which coincides with the fact that pharmacists in Samaipata have different opinions on what constitutes the ideal type of primary healthcare. On the other hand, there are some statistical relations visible between the regular visit of traditional practitioners and PHD, which connects to the observation that traditional practitioners have a more united opinion when asserting the primacy of herbal medicine.

However, care should be taken not to over exaggerate the extent of power that medical practitioners have on PHD in Samaipata. The data shows people's personal, or family, knowledge is the most used form of healthcare, with 52% of the respondents saying that they regularly use home medicine, in contrast to regular visitors of biomedical (30%) and TM (34%) practitioners. Thus, even though traditional healthcare practitioners hold special influence over their patients, it is important to remember that their patients are a minority of total survey respondents.

### **The influence of various types of capital**

Besides analyzing the influence of medical pluralism with a focus on the most powerful actors of the social field, another important concept in Bourdieu's "field theory" is capital. In order to utilize Bourdieu's notion of capital, it is important to include cultural dimensions in the analysis. Due to the limited scope of this study, the study was narrowed to focus on Bourdieu's various types of capital, specifically economic and cultural capital, and to operationalize it through a few key variables. These variables were selected from the broad list of demographic questions from the survey based on their association with PHD. Firstly, Bourdieu's notion of economic capital refers to distributions in "mercantile exchange," which could be translated as the level of wealth. Therefore, the most relevant was found in the proxy variable level of food expenses. Secondly, the notion of cultural capital, Bourdieu references "the capacity of certain gifted individuals [...] to recognize and appreciate" certain qualities such as well-known references, rules of the game, and the ability to gain the approval of others (Moore, 2012, pp.100-102). Thus, to operationalize cultural capital, the analysis can return to the Medical Pluralism section, where it was seen that the large historical divide in the social field of medical pluralism roots back to the divide between Western and previously present indigenous cultures. This divide is also historically connected to the unequal spread of knowledge, in which indigenous cultures are associated with a greater knowledge of TM. It could be expected that the relevance of cultural capital may express itself through the association between individuals and a particular culture.

To understand the effects of cultural and economic capital on PHD, one can look at Graph 2, which shows that different levels of economic capital create bigger differences in PHD than differences in cultural capital. For example, almost the same percentage of people earn a PHD by only using traditional medicine, independently of either: 1) Their association to indigenous culture (59% percent); or 2) lack of association to indigenous culture (53% percent). On the other hand, 67% percent of people with a low level of wealth make the PHD by only using traditional medicine, compared to 43% percent with a high wealth level. Moving beyond simple descriptive statistics and focusing on linear regressions, economic capital also represents the dominant logic of capital arrangement in the field of medical pluralism, as shown by the following regression table.

**Figure 2***Relation between types of capital and PHD.***Table 2***Regression analysis predicting PHD Based on the type of capital.*

	B	SE	p
Level of food expenses	-0.232	(0.115)	n/s
Indigenous identity/language	0.055	(0.723)	n/s
Education level	-0.134	(0.434)	n/s
Catholic belief	-0.168	(0.263)	n/s
Age	-0.099	(0.112)	n/s
Constant	0.667**	0.000	<0.1
N	47		

Note: \* p&lt;0.1, \*\* p&lt;0.05, \*\*\* p&lt;0.01

The first two regressions in the table above show the relationship between the respective type of capital and PHD without control variables. Here, it can already be seen that PHD has a stronger association with food expenses than with indigenous culture. Food expenses have a stronger correlation coefficient (-0.232 instead of 0.055) and higher statistical significance (p-value of 0.12 instead of 0.72). Turning to the control variables (Education level, Catholic belief, and Age), it can be seen that the strong association between PHD and economic capital is relatively stable with respect to all control variables, education being the strongest influence out of the three control variables ( $B=-0.134$ ), and age the weakest ( $B=-0.099$ ).

Following the results of the data analysis, one of the more surprising findings has been that there is no statistically significant correlation between indigenous culture and PHD amongst the residents of Samaipata; instead, economic capital creates the most significant distinction for PHD. Qualitative observations do agree on this affirmation. Samaipata is far from being a tradi-

tional indigenous society, a strictly ethnically segregated society, or even simply a rural town; it is instead a modern style developing capitalist society, directly exposed to international flows of people, ideas, and goods, with a tourist-oriented “chic” downtown, and diverse foreign communities from various countries. This is in comparison to nearby agricultural towns such as Mairana, where tourism and foreigners play a less central role; interviewees also confirmed this observation. For example, the Medical Director of the Florida Province stressed how unique Samaipata is, as it is the only town in the province that has tourism as the main driver of its local economy (Romero, personal communication, 2024). In conclusion, it is this integration of the various cultural groups of Samaipata that can explain why the driving logic creating the distinction of habit in the field of medical pluralism is now economic and not cultural capital. Despite this observed trend, it would be incorrect to say that cultural capital does not matter any longer in Samaipata at all. For example, it was observed qualitatively that it was common knowledge that European foreign residents of Samaipata possess a much higher level of economic capital. However, due to the small sample size of people speaking a European language besides Spanish (10), it was not possible to test these qualitative observations quantitatively.

## Conclusions

First, the analysis of medical pluralism’s manifestation in Samaipata suggests that influential actors within this social field, exemplified here by healthcare practitioners, wield a discernible influence on PHD (i.e., habitus formation). The degree of consensus among practitioners emerges as a pivotal determinant, whereas the frequency of visits to biomedical practitioners fails to correlate with primary healthcare choices. This is related to the inherent diversity of perspectives among pharmacists in Samaipata, so a statistically significant relationship is seen between regular consultations with traditional healers and primary healthcare decision-making. This aligns with the unified position held by TM practitioners in advocating for herbal remedies.

Second, medical pluralism relates to the lack of health infrastructure and resources, which affects the ongoing divide between TM and BM operations. The data analysis reveals that this ongoing divide statistically manifests itself primarily in the form of economic capital, as opposed to cultural capital. A lack of statistically significant correlation between PHD and cultural or linguistic association with indigenous culture was observed among Samaipata residents. Instead, economic capital emerges as the predominant determinant shaping PHD.

This research opens avenues for further inquiry. Future qualitative studies could delve deeper into specific factors driving individuals' relationships to TM and BM, as well as the efficacy of different healthcare interventions within Samaipata. Future quantitative studies could approach the intersection of TM and BM utilization by individuals, providing insights into the evolving dynamics of medical pluralism in healthcare decision-making processes. Additionally, comparative studies across different regions could elucidate variations in healthcare utilization patterns and the underlying determinants of this. Exploring the role of social networks and interpersonal relationships in shaping healthcare decisions could provide a more comprehensive understanding of the complexities inherent in medical pluralism.

Regardless of the research’s limitations and the suggestions for further inquiry, an attempt can be made to assert practical implications for healthcare policy and service provision in Samaipata based on the findings. Despite statistical data indicating widespread social security coverage, significant deficiencies in healthcare infrastructure and resources can be observed. This calls for targeted interventions to address these gaps, particularly in rural and marginalized communities. Additionally, the pervasive distrust of TM practitioners highlights the need for efforts

to improve the quality of care and rebuild trust among residents. Understanding the influence of economic capital on healthcare decisions emphasizes the importance of ensuring equitable access to healthcare services.

## References

Amzat, J., & Razum, O. (2014). Medical Pluralism: Traditional and Modern Health Care. In *Medical Sociology in Africa* (pp. 131-146). Springer, Cham. [https://doi.org/10.1007/978-3-319-03986-2\\_10](https://doi.org/10.1007/978-3-319-03986-2_10)

Bourdieu, P. (1998). *On Television and Journalism* (P. Parkhurst Ferguson, Trans.). Pluto Press.

Collyer, F. M., Willis, K. F., Franklin, M., Harley, K., & Short, S. D. (2015). Healthcare choice: Bourdieu's capital, habitus, and field. *Current Sociology*, 63(5), 685-699. <https://doi.org/10.1177/0011392115590082>

Gaines, A. D. (2008). Socio-Cultural Construction of Medical Knowledge. In Heggenhougen, H. K. (Ed.), *International Encyclopedia of Public Health* (pp.114-119). <https://dokumen.pub/ethnomedicine-and-tribal-healing-practices-in-india-challenges-and-possibilities-of-recognition-and-integration-9811942854-9789811942853.html>

Instituto Nacional de Estadística. (2024). *Estadísticas Sociales. Salud*. <https://www.ine.gob.bo/index.php/censos-salud/>

Johnson, B. B. (2010). Decolonization and its paradoxes. *Latin American Perspectives*, 37(3), 139-159. <https://doi.org/10.1177/0094582x10366535>

Khalikova, V. (2021). *Medical pluralism*. <https://www.anthroencyclopedia.com>

Ministerio de Salud y Deportes (October 2nd, 2017). *En Samaipata, la Feria de Salud "Por la Ruta del Che" brindó 1.969 atenciones gratuitas y beneficios más a mujeres*. <https://www.minsalud.gob.bo/2736-en-samaipata-feria-de-salud-por-la-ruta-del-che-brindo-1-969-atenciones-gratuitas-y-beneficio-mas-a-mujeres>

Ministerio de Salud y Deportes (June 26th, 2024). *El programa SAFCI-Mi Salud cumple 11 años con casi 40 millones de atenciones en salud en todo el territorio nacional*. <https://www.minsalud.gob.bo/8189-el-programa-safci-mi-salud-cumple-11-anos-con-casi-40-millones-de-atenciones-en-salud-en-todo-el-territorio-nacional>

Moore, R. (2012). Capital. In M. Grenfell (Ed.), *Pierre Bourdieu: Key Concepts* (pp. 100-102), Routledge.

World Health Organization. (1978, 6-12 September). Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR.

World Health Organization. (2023, August 9). *Traditional medicine*. World Health Organization. <https://www.who.int/news-room/questions-and-answers/item/traditional-medicine>.

# Más allá del diagnóstico médico: Explorar la diabetes en Samaipata

---

## Beyond medical diagnosis: Navigating diabetes in Samaipata

---

### **Amalie Muir**

Licenciada en Filosofía, Política y Economía (BSc), Vrije Universiteit Amsterdam.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: ntf174@alumni.ku.dk  
<https://orcid.org/0009-0007-3924-5610>

### **Bossba Benghongsela**

Licenciada en Derecho, Royal University of Law and Economics.  
Licenciada en Relaciones Internacionales (BA), Royal University of Phnom Penh.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: wnz895@alumni.ku.dk  
<https://orcid.org/0009-0003-5462-8936>

### **Elisabeth Tveit Nielsen**

Licenciada en Antropología (BA), University of Copenhagen.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: jng374@alumni.ku.dk

### **Maximilian Steen**

Minor en Pobreza Global y Soluciones Locales, International Institute of Social Studies, Erasmus University Rotterdam.  
Licenciado en Ciencias Aplicadas en Gestión de Desafíos Sociales Internacionales (BASc), Erasmus University Rotterdam.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: lhr772@alumni.ku.dk

### **Pippa Watson**

Licenciada en Desarrollo Global y Migración, Derecho y Justicia Social, Comunicación, Negociación Empresarial y Políticas de Desarrollo Urbano, University of Pennsylvania.  
Licenciada en Geografía (BA), Queen Mary University of London.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: sph912@alumni.ku.dk

### **Ruhama Krupinski**

Licenciada en Ciencias, Economía y Etnología (BSc), Universität Heidelberg.  
Maestría en Desarrollo Global (MSc), University of Copenhagen.  
Correo: jdl835@ku.dk



**Bruna Letelier**

Estudiante de Psicología en la Universidad Privada de Santa Cruz de la Sierra. <https://orcid.org/0009-0002-0957-9701>

Correo: a2021212602@estudiantes.upsa.edu.bo

Fecha de recepción: 17/03/2025

Fecha de aprobación: 21/10/202

---

## Resumen

Esta investigación examina cómo las personas que viven con diabetes en Samaipata, Bolivia, afrontan su enfermedad dentro de un sistema de salud pluralista, con la coexistencia y uso simultáneo de diversas prácticas médicas, biomédicas y tradicionales. Se analizan las narrativas de pacientes y profesionales de la salud, así como experiencias de estigma, redes de apoyo y preferencias de tratamiento. Se adoptó un enfoque de métodos mixtos que incluyó entrevistas con pacientes y personal sanitario, además de un experimento de asignación de recursos. Los resultados evidencian que ambas partes sostienen narrativas de la enfermedad que coexisten en estructuras dominantes y subordinadas, aunque presentan discrepancias. La perspectiva predominante del personal de salud tiende a desestimar las limitaciones en el acceso a la atención y transfiere la responsabilidad del manejo de la enfermedad a los pacientes. Esto promueve la interiorización de narrativas médicas, refuerza el estigma y debilita las redes de apoyo social, con diferencias según el género. El experimento de asignación reveló que la población prioriza el gasto en frutas y verduras (34,1%), seguido de medicina alternativa (27,2%) y medicina convencional (16,3%), sin que ningún participante dependa exclusivamente de esta última. Estos hallazgos podrían atribuirse a la percepción de ineffectividad de la medicina convencional, sus limitaciones de accesibilidad y el arraigo cultural de la medicina alternativa en la comunidad.

**Palabras clave:** *diabetes, pluralismo médico, estigma, preferencias de tratamiento, salud pública.*

## Abstract

This study examines how people living with diabetes in Samaipata, Bolivia, cope with their condition within a pluralistic health system, which is understood as the coexistence and simultaneous use of diverse medical practices, including both biomedical and traditional approaches. It explores the narratives of patients and health professionals, as well as experiences of stigma, social support, and treatment preferences. A mixed-methods approach was employed, combining interviews with patients and health personnel with a resource allocation experiment. The findings show that both groups sustain illness narratives that coexist within dominant and subordinate structures, though with discrepancies. The predominant perspective of health professionals often overlooks limitations in access to care and shifts the responsibility for disease management to patients. This promotes the internalization of medical narratives, reinforces stigma, and weakens social support networks, with gender-based differences. The allocation experiment revealed that participants prioritized spending on fruits and vegetables (34.1%), followed by alternative medicine (27.2%) and conventional medicine (16.3%), with no participant relying exclusively on the latter. These results may be explained by perceptions of the ineffectiveness of conventional medicine, its limited accessibility, and the cultural rootedness of alternative medicine in the community.

**Keywords:** *diabetes, medical pluralism, stigma, treatment preferences, public health.*

## Introducción

La diabetes se ha convertido en una de las epidemias de salud más preocupantes a nivel mundial. En Bolivia, la prevalencia de diabetes era del 5,5% en 2021 y se proyecta que ascenderá al 6,1% en 2030 (IDF Diabetes Atlas, 2024). Este panorama plantea la interrogante sobre si el sistema de salud boliviano está preparado para enfrentar esta crisis en expansión. El acceso a la salud en Bolivia sigue estando vinculado a dinámicas neoliberales de privatización y a un acceso universal reducido. A pesar de los esfuerzos gubernamentales por modificar esta estructura, en el momento de esta investigación, el acceso a la atención sanitaria aún depende en gran medida del empleo formal (Agafitei, 2023). Un estudio de la Organización Mundial de la Salud (OMS, 2019) sobre factores de riesgo de enfermedades no transmisibles en Bolivia reveló que la mayoría de los pacientes con diabetes (62,75%) son trabajadores independientes o dependientes sin acceso garantizado a la seguridad social. Esto sugiere que la mayoría de ellos forman parte del sector informal, donde el acceso al seguro público de salud es limitado.

La estructura sanitaria en Bolivia es predominantemente pluralista, con la coexistencia de diversas prácticas médicas basadas en diferentes cosmovisiones (Gabe et al., 2004). El pluralismo médico se refiere a la coexistencia e interacción de múltiples sistemas médicos, tradiciones curativas y prácticas de salud dentro de una sociedad o comunidad (Baer, 2011). En Samaipata, esta interacción entre distintas tradiciones médicas es particularmente evidente. Un paciente diabético expresó la arraigada creencia en la medicina alternativa en la comunidad: *“Aquí creemos mucho en la medicina natural, porque por la bendición de Dios y la vida, tenemos todo aquí [...]”* (M., entrevista informal, 20 de febrero de 2024). Un médico local también destacó esta creencia al afirmar: *“Hay muchos pacientes que, a pesar de seguir su tratamiento médico, toman, por ejemplo, moringa”* (F., entrevista semiestructurada, 20 de febrero de 2024). Por lo tanto, incorporar una visión más amplia de las narrativas de salud que reconozca la coexistencia de diferentes tradiciones médicas es fundamental para comprender la gestión de la diabetes en esta comunidad.

A pesar de la creciente carga de la diabetes en Bolivia, las investigaciones sobre esta enfermedad se han centrado predominantemente en países de ingresos altos, con algunas excepciones en naciones en desarrollo más grandes (Lieberman, 2004). Los estudios sobre diabetes en Bolivia son escasos y se han enfocado principalmente en la prevalencia de la enfermedad, las necesidades de los afectados y el uso de la medicina tradicional, con una mayor atención a las áreas urbanas (Barceló et al., 2001; Leyns et al., 2021; Pekova et al., 2023). En cuanto a las narrativas de la enfermedad, la literatura existente ha abordado las perspectivas de los sectores más pobres, expandiendo descripciones psicológicas y sociales de la vida con diabetes (Mendenhall et al., 2010). Sin embargo, estas investigaciones han omitido en gran medida las percepciones de los profesionales de la salud. Asimismo, los estudios sobre el estigma asociado a la diabetes han analizado sus efectos en el bienestar psicológico y los resultados clínicos, pero sin vincularlos a contextos específicos (Schabert et al., 2013). Y respecto a las preferencias de tratamiento, aunque existen investigaciones sobre la elección entre medicina tradicional y convencional en América del Sur, pocos estudios han analizado esta dinámica específicamente en pacientes con diabetes (Vandebroek et al., 2008).

En este sentido, la investigación realizada busca abordar esta brecha en el conocimiento, explorando las narrativas de la enfermedad, las experiencias de estigma y las preferencias de tratamiento de personas con diabetes en un contexto rural y localizado en Bolivia. Para ello, se utilizó el concepto de navegación social, entendido como el proceso mediante el cual los individuos se desenvuelven dentro de un entorno incierto y estructurado por restricciones sociales (Vigh, 2009). Este marco permite analizar cómo los pacientes con diabetes ajustan sus prácticas

de tratamiento según sus expectativas sobre su entorno cambiante. Asimismo, se orientó la investigación con la teoría de las narrativas de enfermedad de Mattingly (2005), que sostiene que los pacientes construyen relatos sobre su enfermedad para dotar de sentido a su experiencia y reconstruir su identidad ante la adversidad. Finalmente, se integró la teoría del estigma de Goffman (1963) para analizar cómo la diabetes afecta la vida cotidiana de los pacientes, no solo en términos de discriminación social, sino también en la interiorización de representaciones negativas que influyen en su autoestima y sus decisiones de tratamiento.

En este marco, la creciente prevalencia de la diabetes, combinada con un sistema de salud restringido y pluralista, exige una comprensión más profunda sobre cómo las personas en Samaipata navegan su vida con esta enfermedad. A partir de esta perspectiva, se busca responder tres preguntas clave: (1) ¿Qué disparidades existen entre las narrativas de la enfermedad sostenidas por los profesionales de la salud y las personas con diabetes?; (2) ¿Cómo experimentan las personas el estigma y el apoyo a lo largo de su vida con diabetes?, y (3) ¿Qué tipo de tratamiento prefieren y por qué? Cabe destacar que este estudio no distingue entre la diabetes mellitus tipo I y tipo II en las entrevistas, ya que el objetivo es centrarse en la experiencia individual de los participantes.

## **Método**

### **Muestra**

Se recurrió a un muestreo no probabilístico por conveniencia, mediante el cual se contactó y se seleccionó la muestra, priorizando la diversidad de experiencias y roles dentro del sistema de salud local.

Se optó por un enfoque mixto con el objetivo de obtener una perspectiva multidisciplinaria sobre la diabetes en Samaipata. La muestra cualitativa estuvo conformada por 23 participantes: 14 personas con diagnóstico de diabetes (6 hombres, 8 mujeres) y 9 profesionales de la salud (3 hombres, 6 mujeres), incluyendo médicos, farmacéuticos y curanderos tradicionales.

La muestra cuantitativa incluyó a 58 residentes de Samaipata, quienes participaron en un experimento diseñado para evaluar preferencias de tratamiento y elecciones dietéticas en un escenario hipotético de vida con diabetes.

Adicionalmente, se analizaron datos secundarios provenientes de la Encuesta de Vigilancia de Enfermedades No Transmisibles (NCD, por sus siglas en inglés), realizada por la OMS en 2019, así como estadísticas del año 2023 proporcionadas por el Hospital Florida en Samaipata, sobre la cantidad de personas diagnosticadas y en tratamiento por diabetes en la región.

### **Instrumentos**

Para la recolección de datos cualitativos, se llevaron a cabo entrevistas en profundidad con profesionales de la salud y personas con diabetes. Se utilizaron guías de entrevista semiestructuradas diferenciadas para ambos grupos, organizadas en tres secciones principales: (1) percepción general de la diabetes en la comunidad, (2) evaluación de distintos tratamientos para la enfermedad y (3) desafíos cotidianos enfrentados por las personas con diabetes. En las entrevistas con personas diabéticas, se puso especial énfasis en su experiencia individual con la enfermedad, sus motivaciones para elegir determinados tratamientos, el impacto en su bienestar personal y sus interacciones sociales dentro del hogar y la comunidad.

Además de las entrevistas formales, se realizaron entrevistas informales y observaciones de campo para complementar la comprensión de la experiencia vivida por los participantes. Las citas extraídas de las entrevistas se presentan en este estudio utilizando seudónimos y breves descripciones que resguardan la identidad de los entrevistados.

En cuanto a la recolección de datos cuantitativos, se diseñó un experimento en el que los participantes debían imaginar que vivían con diabetes y distribuir una cantidad de dinero simbólico, representada por caramelos, en diferentes categorías de gasto: medicación convencional, medicina alternativa, frutas y verduras, alimentos procesados y carne. Inicialmente, se otorgaban 10 caramelos, seguidos de una cantidad aleatoria entre 1 y 10 en una ronda adicional de ingresos extra. Este diseño permitió analizar las preferencias de tratamiento y las decisiones dietéticas en función de características sociodemográficas como sexo, edad, nivel educativo y familiaridad con la diabetes.

Para complementar estos hallazgos, se realizó un análisis del conjunto de datos de la NCD y de los registros del Hospital Florida. Estos datos proporcionaron información sobre las características sociodemográficas de los pacientes con diabetes en Bolivia, permitiendo contextualizar los resultados obtenidos en el experimento.

### **Procedimiento**

Para responder a la primera pregunta de investigación sobre las disparidades existentes entre las narrativas de la enfermedad sostenidas por los profesionales de la salud y las personas con diabetes, se analizaron las transcripciones codificadas de las entrevistas con ambos grupos, así como los datos del conjunto NCD y las estadísticas del hospital, con el objetivo de identificar diferencias en la percepción y el manejo de la enfermedad.

La segunda pregunta, sobre la experiencia de los pacientes con el estigma y el apoyo, se abordó principalmente a través de entrevistas formales e informales con personas con diabetes, permitiendo explorar sus vivencias de discriminación, apoyo social y estrategias de afrontamiento en distintos ámbitos de su vida.

Para responder a la tercera pregunta sobre el tipo de tratamiento preferido, se analizaron los datos del experimento sobre asignación de recursos en el contexto de la enfermedad, sin establecer una dicotomía entre medicina convencional y alternativa, sino permitiendo la exploración de distintas combinaciones de tratamientos. Los resultados experimentales fueron complementados con las entrevistas a personas con diabetes para comprender los factores que influyen en sus decisiones terapéuticas.

Dado que este estudio aborda aspectos sensibles de la vida de los participantes, se tomaron en cuenta diversas consideraciones éticas. La posicionalidad de los investigadores representó una limitación para la plena comprensión de las experiencias de los informantes (Gammeltoft, 2010). Se identificaron barreras socioculturales y de género, particularmente en el caso del investigador masculino, quien encontró dificultades para establecer confianza con mujeres diabéticas en comparación con la investigadora boliviana asistente. Para mitigar estas limitaciones, se valoró y utilizó el conocimiento contextual de la investigadora local.

Asimismo, la naturaleza informal del trabajo de campo llevó a obtener el consentimiento de manera oral en la mayoría de los casos. Se reconoció la dificultad de establecer relaciones recíprocas con los participantes, dado que, aunque se les brindó un espacio para compartir sus

experiencias, los investigadores no pudieron ofrecer un impacto tangible a cambio (Navne y Seagal, 2018). No obstante, muchos participantes expresaron su gratitud por el interés en el tema. A pesar de esto, en algunos casos los investigadores percibieron que los participantes se mostraban incómodos al hablar sobre su enfermedad, lo que resaltó la complejidad de explorar experiencias personales en profundidad.

## Resultados

### Narrativas de la enfermedad

Los hallazgos cualitativos evidencian diferencias notables en las narrativas sobre la diabetes entre los profesionales de la salud y las personas que viven con la enfermedad.

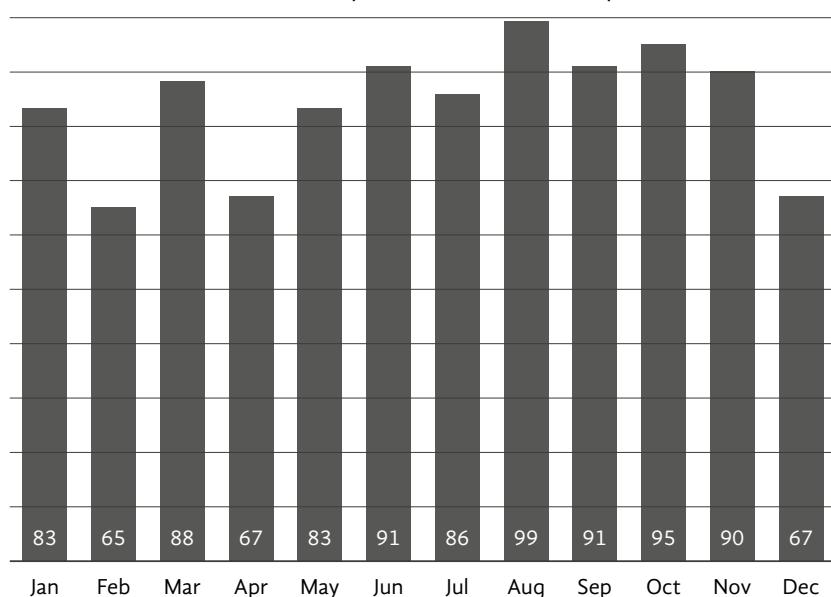
#### Desde la perspectiva de los profesionales de la salud

Los entrevistados describen un entorno sanitario bien equipado, con estanterías repletas de biomedicina, manuales y herramientas diagnósticas, que, sin embargo, se acompaña de una narrativa dominante que atribuye a los pacientes la responsabilidad de gestionar y prevenir su enfermedad. Así, uno de los médicos afirmó: *“No creo que existan desafíos; aunque no hay muchos servicios privados aquí, la gente puede acceder en Santa Cruz. Hay también muchas consultas privadas en Mairana. Pero hay personas que no toman su medicación y luego aparecen pidiendo tratamiento”* (M., entrevista semiestructurada, 20 de febrero de 2024).

La educadora de salud mental entrevistada resalta cómo esta visión se complementa con la idea de que *“el paciente educado no sufre complicaciones”*, reflejando una tendencia a desestimar las limitaciones estructurales del sistema (C., entrevista informal, 16 de febrero de 2024). Además, la fluctuación mensual del número de pacientes diabéticos tratados en el Hospital Florida (Figura 1) indica visitas irregulares de pacientes diabéticos al hospital, lo cual reafirma la opinión de los profesionales sanitarios sobre la falta de seguimiento del tratamiento por parte de los pacientes.

**Figura 1**

Número de pacientes con diabetes tratados por mes en 2023 (Hospital Florida - Samaipata, 2023)



Profesionales, como el asesor del Ministerio de Salud del departamento de Santa Cruz (S., 16 de febrero de 2024), criticaron abiertamente las políticas sanitarias, reconociendo las bajas asignaciones presupuestarias al sector salud. Los datos del Hospital Florida en Samaipata respaldan esta narrativa, mostrando que el 55% de los pacientes diabéticos tiene más de 60 años y alrededor del 90% se desempeñan como trabajadores independientes, dependientes o amas de casa.

### **Desde la perspectiva de los diabéticos**

En contraste, las entrevistas con personas con diabetes revelan una narrativa de acceso marcada por la incertidumbre y el temor a ser descalificados. Un ejemplo es el testimonio de M. (entrevista informal, 23 de febrero de 2024), quien comentó: *“Tenía miedo de que el doctor me dijera que solo podía comer media ración, así que seguí con el tratamiento”*. Esta situación ilustra, a través del concepto del “serious speech act” de Tilley (1990), cómo la posición institucional de los profesionales puede deslegitimar el conocimiento de los pacientes. Asimismo, el relato de A. (entrevista informal, 21 de febrero de 2024), quien detalla su experiencia traumática en el hospital y la transforma en una “batalla individual”, ejemplifica, utilizando la noción de “particularidad” de Bruner (1991), cómo eventos específicos adquieren un significado simbólico en la construcción de su narrativa personal de enfermedad.

### **Estigma y apoyo**

La percepción y la experiencia del estigma se manifiestan de forma transversal en las narrativas tanto de profesionales como de pacientes:

#### **Creación del estigma**

Los profesionales de la salud, en particular los de enfoque tradicional, tienden a presentar a los diabéticos como individuos carentes de voluntad o educación para gestionar su enfermedad. Comentarios como: *“Normalmente, la gente espera a enfermarse para cuidarse”*, explica un sanador de medicina alternativa (R., entrevista semiestructurada, 20 de febrero de 2024), junto a observaciones sobre hábitos alimenticios inadecuados, lo que refuerza una imagen negativa que estigmatiza a los pacientes, atribuyéndoles la culpa de su situación.

#### **Influencia del estigma en la vida y el apoyo social**

Los testimonios de pacientes ponen de relieve cómo el estigma afecta sus relaciones interpersonales y su autoestima. Se observó, por ejemplo, que la revelación de la condición, como en el caso de A. (entrevista informal, 21 de febrero de 2024), genera desconfianza y evita la apertura respecto a su enfermedad. La estigmatización también se manifiesta de forma diferenciada según el género: mientras los hombres tienden a expresar su condición con mayor franqueza, las mujeres muestran una actitud más reservada y carecen de redes de apoyo, lo que sugiere una internalización más profunda del estigma (A., entrevista informal, 21 de febrero de 2024; L., entrevista semiestructurada, 26 de febrero de 2024).

#### **Preferencias de tratamiento**

Los resultados del experimento y de las entrevistas permiten identificar patrones en las preferencias terapéuticas de la comunidad:

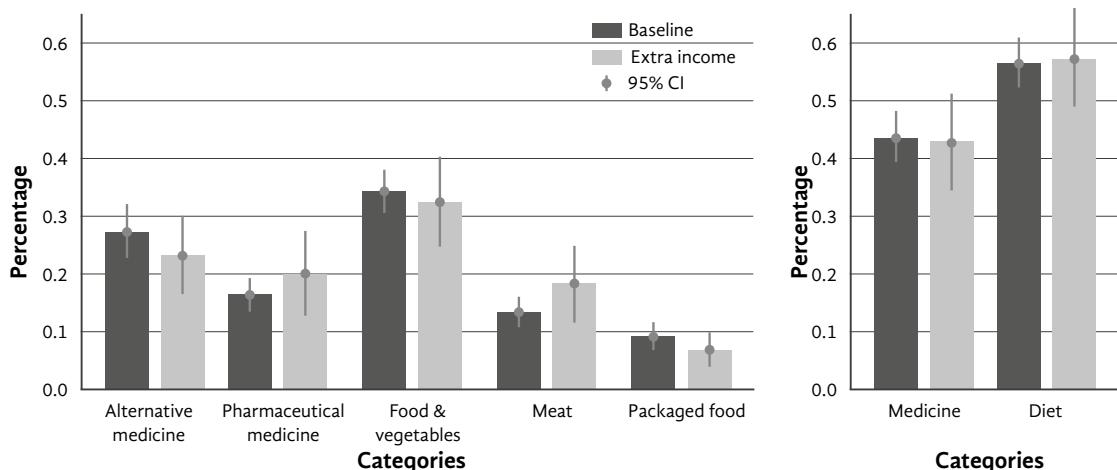
## Preferencias cuantitativas

En el primer escenario experimental, los participantes asignaron, en promedio, el 34,1 % de sus recursos a frutas y verduras y el 27,2 % a medicina alternativa, mientras que la inversión en medicina convencional fue del 16,3 %. Al recibir ingresos adicionales, se observó un ligero cambio hacia una mayor inversión en medicina farmacéutica, aunque la variación no fue estadísticamente significativa (Figura 2). Se evidenciaron diferencias por género y nivel educativo:

- Los hombres tendieron a asignar una mayor proporción a la medicina convencional que las mujeres.
- Personas con educación primaria mostraron una mayor inclinación hacia la medicina alternativa en comparación con aquellas con formación técnica o universitaria, quienes, a su vez, destinaron mayores recursos a frutas y verduras.

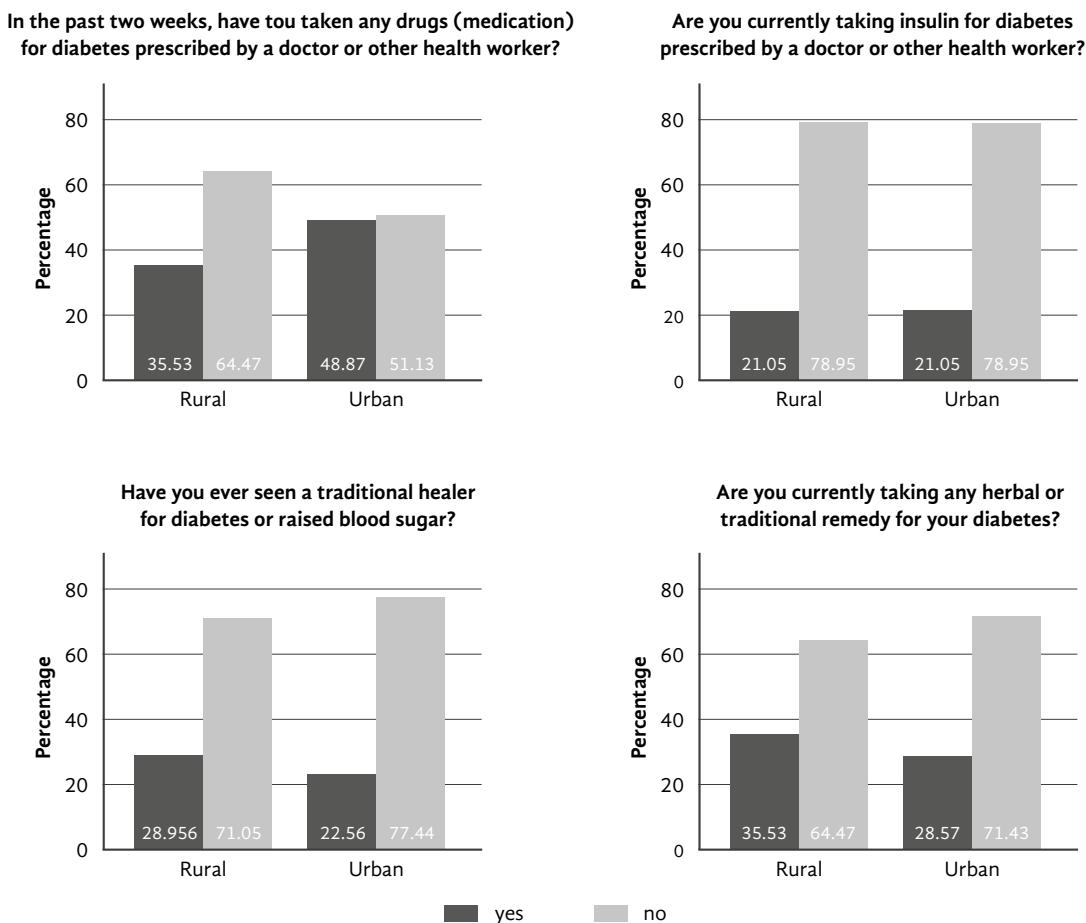
**Figura 2**

Base de referencia vs. asignación de ingresos adicionales en las diferentes cestas de consumo.



Cabe destacar que las preferencias observadas en la asignación de recursos no reflejan de manera íntegra las tendencias sanitarias de las áreas rurales y urbanas de Bolivia. Aunque se encontró cierta coherencia en el uso de la medicina tradicional entre los resultados del experimento y los datos de la NCD, se identificaron diferencias notables en la adopción de medicinas farmacéuticas e insulina (Figura 3).

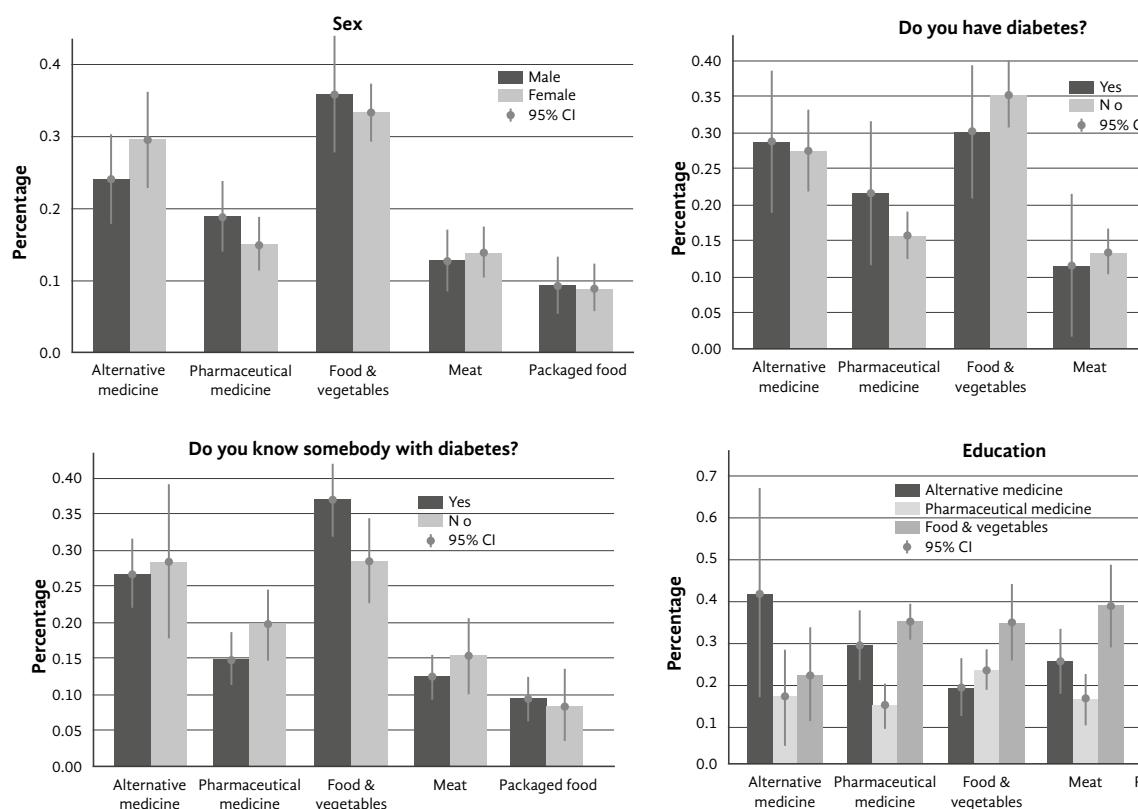
**Figura 3**  
Acceso a tratamientos convencionales y tradicionales (OMS, 2019)



Asimismo, la Figura 4 ilustra los efectos de diversos factores en los resultados del experimento. Se observó que las personas que padecen diabetes tienden, en promedio, a asignar más recursos a tratamientos, especialmente a la medicina farmacéutica, y menos a frutas y verduras, en comparación con quienes no tienen la enfermedad. Aunque estos hallazgos no alcanzaron significación estadística, es posible que ello se deba al reducido tamaño muestral, dado que solo 7 de los 58 participantes tenían diabetes.

**Figura 4**

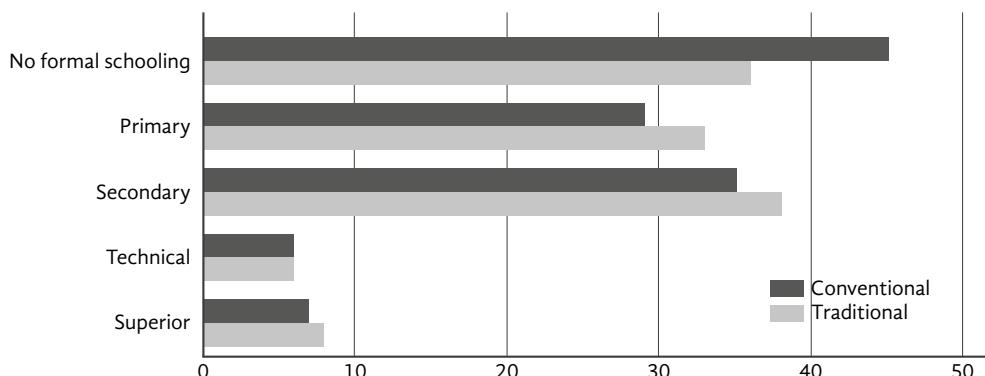
Distribución media durante la primera ronda, destacando la influencia de cuatro atributos en la asignación de los participantes.



Las tendencias experimentales son coincidentes con los datos proporcionados por la OMS. En primer lugar, el acceso a tratamientos tradicionales es más prevalente en áreas rurales, especialmente en aquellas con bajo nivel de escolaridad (Figura 5). En segundo lugar, esta tendencia se invierte a medida que aumenta el nivel educativo de los pacientes. Finalmente, el acceso a tratamientos farmacéuticos varía significativamente según género, zona y nivel educativo, lo que indica que la medicina tradicional resulta más accesible de manera uniforme, independientemente de las características socioeconómicas de los pacientes.

**Figura 5**

Acceso a tratamiento convencional (farmacéutico) y tradicional en zona rural (OMS, 2019)



## Preferencias cualitativas

Las entrevistas revelaron que, si bien las decisiones varían entre el uso exclusivo de tratamientos tradicionales y combinaciones con la medicina convencional, ningún entrevistado dependió únicamente de esta última. La percepción general es que la medicina convencional resulta “ineficaz” y “de poco valor”, mientras que la medicina tradicional se fundamenta en conocimientos culturales arraigados y se percibe como más accesible. La dificultad de acceder a especialistas y las largas esperas para consultas en Santa Cruz de la Sierra, refuerzan la preferencia por tratamientos alternativos, pese a que algunos pacientes reconocen la necesidad de incorporar medicamentos farmacéuticos en ciertos momentos.

## Discusión

Los resultados de este estudio ofrecen una mirada compleja a la experiencia de vivir con diabetes en Samaipata, en la que convergen narrativas divergentes, procesos de estigmatización y patrones de preferencias terapéuticas. Estos hallazgos se presentan en un debate más amplio sobre la manera en que los pacientes y profesionales de la salud construyen y negocian significados en torno a enfermedades crónicas en contextos de pluralismo médico.

En primer lugar, la coexistencia de narrativas diferenciadas entre pacientes y profesionales confirma lo señalado por Mattingly (2005), en cuanto a que las narrativas de enfermedad constituyen marcos de sentido que permiten a los pacientes reconstruir identidad y agencia frente a la adversidad. Mientras que los profesionales entrevistados tendieron a reproducir un discurso biomédico centrado en la responsabilidad individual, minimizando los condicionantes estructurales, los pacientes resignificaron sus experiencias desde vivencias cotidianas y limitaciones de acceso. Esta discrepancia coincide con lo reportado por Mendenhall et al. (2010), quienes hallaron que los sectores más vulnerables elaboran narrativas de enfermedad fuertemente influidas por su contexto social y económico.

En segundo lugar, el papel del estigma aparece como un factor central en la experiencia de las personas con diabetes en Samaipata. Goffman (1963) ya había planteado que el estigma implica procesos de descalificación social que pueden ser internalizados, afectando la autoestima y la disposición al apoyo social. En el estudio realizado, esta dinámica se manifestó con especial intensidad en mujeres, quienes mostraron mayor reserva al hablar de su enfermedad y menor acceso a redes de apoyo. Este hallazgo complementa lo señalado por Browne et al. (2013), quienes identificaron que el estigma asociado a la diabetes tipo 2 se relaciona con sentimientos de culpa y autoatribución de responsabilidad. Además, refuerza la necesidad de considerar la intersección entre género y estigmatización, un aspecto todavía poco explorado en contextos latinoamericanos.

En tercer lugar, las preferencias de tratamiento reveladas tanto en el experimento como en las entrevistas ponen en evidencia el peso del pluralismo médico en Bolivia. Tal como sostiene Baer (2011), la coexistencia de sistemas médicos refleja no solo opciones terapéuticas diversas, sino también estructuras culturales de confianza y legitimidad. En Samaipata, la prioridad otorgada a la medicina alternativa y a las dietas saludables, frente a la menor dependencia de la medicina convencional, coincide con lo reportado por Vandebroek et al. (2008) respecto al uso diferencial de terapias tradicionales y biomédicas en comunidades rurales bolivianas. Al mismo tiempo, la desconfianza hacia la biomedicina y la percepción de ineffectividad refuerzan lo hallado por Leyns et al. (2021), quienes documentaron barreras estructurales y culturales en la atención a pacientes con diabetes en Cochabamba.

Finalmente, los hallazgos dialogan con la literatura sobre el acceso a la salud en Bolivia. Tal como señala Agafitei (2023), la vinculación del acceso sanitario con el empleo formal limita la cobertura efectiva y refuerza la exclusión de pacientes en situación de informalidad laboral. Los datos hospitalarios y las entrevistas muestran que gran parte de las personas con diabetes en Samaipata pertenecen a este sector, lo que contribuye a comprender la preferencia por alternativas más accesibles y culturalmente arraigadas.

## Conclusiones

Esta investigación contribuye a ampliar el conocimiento sobre la diabetes en contextos rurales bolivianos, un campo poco explorado en comparación con estudios en países de ingresos altos (Lieberman, 2004) o en áreas urbanas del propio país (Barceló et al., 2001; Pekova et al., 2023). El aporte principal radica en integrar dimensiones narrativas, estigmatizantes y, de preferencia, terapéuticas en un mismo análisis, mostrando cómo los pacientes viven entre limitaciones estructurales y recursos culturales el manejo de una enfermedad como la diabetes.

Este estudio muestra que el personal de salud en Samaipata tiende a construir narrativas que colocan la responsabilidad en los pacientes, reforzando la idea de que las personas con diabetes son incapaces de manejar su condición, mientras que estas expresan desconfianza hacia el sistema de salud y la medicina convencional. Asimismo, se evidencia que los discursos negativos sobre la enfermedad han contribuido al estigma, el cual se relaciona con percepciones sociales sobre estilos de vida y hábitos alimenticios. Este estigma, además de ser internalizado, genera baja autoestima, deteriora las redes de apoyo social y afecta en mayor escala a las mujeres.

Por otra parte, las preferencias comunitarias hacia la medicina alternativa se explican por su accesibilidad, efectividad percibida y legitimidad cultural, lo que refleja la influencia del pluralismo médico en el manejo de la diabetes en Samaipata. Estos hallazgos subrayan que las experiencias con la enfermedad están profundamente entrelazadas con el tejido social, los relatos culturales y las opciones terapéuticas disponibles.

En definitiva, comprender estas dinámicas permite no solo ampliar el conocimiento sobre el pluralismo médico, sino también señalar la necesidad de investigar las desigualdades estructurales que modelan las preferencias de tratamiento y la estigmatización. Un entendimiento más profundo de estos aspectos podría favorecer mejores resultados en salud, fortalecer la relación médico-paciente, complementar el estudio de las narrativas de enfermedad y aportar a una comprensión más amplia del estigma en la sociedad.

## Referencias

Agafitei, G. A. (2023). The Bolivian universal health system and effective access to healthcare: a diagnosis. *Revista Latinoamericana de Desarrollo Económico*, 39, 95-123. <https://doi.org/10.35319/lajed.202239278>

Baer, H. A. (2011). Medical pluralism: An evolving and contested concept in medical anthropology. En Singer, M., Erickson, P. I., & Abadía-Rivero, C. E. (Eds.), *A Companion to Medical Anthropology* (342-357). Blackwell Publishing Ltd.

Barceló, A., Del Carmen Daroca, M., Ribera, R., Duarte, E., Zapata, A., y Vohra, M. (2001). Diabetes in Bolivia. *Revista Panamericana de Salud Pública*, 10(5), 318-323. <https://doi.org/10.1590/s1020-49892001001100004>

Browne, J. L., Ventura, A., Mosely, K., y Speight, J. (2013). 'I call it the blame and shame disease': a qualitative study about perceptions of social stigma surrounding type 2 diabetes. *BMJ Open*, 3(11), e003384. <https://doi.org/10.1136/bmjopen-2013-003384>

Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry*, 18(1): 1-21. <https://doi.org/10.1086/448619>

Gabe, J., Bury, M., y Elston, M. A. (2004). *Key Concepts in Medical Sociology*. Sage Publications. <https://mtusociology.github.io/assets/files/Key%20Concepts%20in%20Medical%20Sociology.pdf>

Gammeltoft, T. (2010). Intimiteten. Forholdet til den anden. En K. Hastrup (Ed.), *Ind i Verden: En grundbog i antropologisk metode* (pp. 273-296). Hans Reitzels forlag.

Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Penguin Books. <https://cdn.penguin.co.uk/dam-assets/books/9780241548011/9780241548011-sample.pdf>

International Diabetes Federation. (2024). *IDF diabetes atlas: Bolivia (Plurinational State), 2000-2045*. <https://idf.org/our-network/regions-and-members/south-and-central-america/members/bolivia/>

Leyns, C.C., Couvreur, N., Willems, S., y Van Hecke, A. (2021). Needs and resources of people with type 2 diabetes in peri-urban Cochabamba, Bolivia: a people-centred perspective. *International Journal of Equity Health*, 20, 104. <https://doi.org/10.1186/s12939-021-01442-1>

Lieberman, L. S. (2004). Diabetes Mellitus and Medical Anthropology. En C.R. Ember. & M. Ember. (Eds.), *Encyclopedia of Medical Anthropology* (pp. 335-353). Springer. [https://doi.org/10.1007/0-387-29905-X\\_40](https://doi.org/10.1007/0-387-29905-X_40)

Mattingly, C. (2005). Den narrative udvikling i nyere medicinsk antropologi. *Tidsskrift for Forskning i Sygdom og Samfund*, 2(2), 59-72. <https://doi.org/10.7146/tfss.v2i2.460>

Mendenhall, E., Seligman, R., Fernández, A., y Jacobs, E. A. (2010). Speaking through Diabetes. *Medical Anthropology Quarterly*, 24(2), 220-239. <https://doi.org/10.1111/j.1548-1387.2010.01098.x>

Navne, L.E., y Segal, L.B. (2018). Antropologens etiske arbejde: Om at udøve etisk diplomati. En H., Bundgaard, H. O., Mogensen, & C., Rubows (Eds.), *Antropologiske projekter: En grundbog* (pp. 39-54). Samfundsletteratur.

Pekova, L., Žiarovská, J., y Fernández-Cusimamani, E. (2023). Medicinal plants with antidiabetic activity used in the traditional medicine in Bolivia: A review. *Latin American and Caribbean Bulletin of Medicinal and Aromatic Plants*, 22(4), 417-430. <https://doi.org/10.37360/blacpm.23.22.4.31>

Schabert, J., Browne, J.L., Mosely, K., y Speight, J. (2013). Social Stigma in Diabetes. *The Patient* 6(1), 1-10. <https://doi.org/10.1007/s40271-012-0001-0>

Tilley, C. (1990). Michel Foucault: towards an archaeology of archaeology. En C. Tilley (ed.), *Reading Material Culture* (pp. 281-347), Blackwell.

Vandebroek, I., Thomas, E., Sanca, S., Van Damme, P., Van Puyvelde, L. y De Kimpe, N. (2008). Comparison of health conditions treated with traditional and biomedical health care in a Quechua community in rural Bolivia. *Journal of Ethnobiology and Ethnomedicine*, 4(1). <https://doi.org/10.1186/1746-4269-4-1>

Vigh, H. (2009). Motion squared: A second look at the concept of social navigation. *Anthropological Theory*, 9(4), 419-438. <https://doi.org/10.1177/1463499609356044>

World Health Organization. (2019). STEPS survey 2019 - Bolivia (Plurinational State). <https://extranet.who.int/ncdsmicrodata/index.php/catalog/933>

# **Risk distribution and vulnerabilities of small-scale farmers in the Florida province of Santa Cruz, Bolivia: An interdisciplinary investigation of climate change and market fluctuations.**

---

**Distribución de riesgos y vulnerabilidades de agricultores de pequeña escala en la provincia de Florida, Santa Cruz, Bolivia: una investigación interdisciplinaria sobre el cambio climático y las fluctuaciones del mercado.**

---

This article is the result of collaborative work carried out by researchers with a shared background in global development and related fields:

**Amélie Bernard Beeckman**

MA Global Development, University of Copenhagen.

Correo: bernbeecka@yahoo.fr

**Geraldine Dick**

BA Psychology, eighth semester, Universidad Privada de Santa Cruz - UPSA, Bolivia. Member of SDBERA and the Cyberpsychology Research Group, where she contributes to ongoing research projects. She also serves as a facilitator for PEDEM.

Correo: a2022115147@estudiantes.upsa.edu.bo

**Agustín Müller**

MA Global Development, University of Copenhagen.

Correo: agustinnmuller17@gmail.com

**Hanna Klak**

MA Global Development, University of Copenhagen.

Correo: zhn518@alumni.ku.dk

**Leah Skovby Burke**

MA Global Development, University of Copenhagen; MA Journalism student, Aarhus University/ City University London; Freelance journalist.

Correo: leah-burke@hotmail.com



**Huizi Sun**

MA Global Development, University of Copenhagen.

Correo: krx197@alumni.ku.dk

Together, the co-authors contributed to the research design, data collection, and analysis presented in this study, bringing diverse academic and professional perspectives to the investigation of climate change, agricultural vulnerability, and development challenges.

Fecha de recepción: 17/03/2025

Fecha de aprobación: 21/10/2025

---

## **Abstract**

This paper analyzes the vulnerability of small-scale farmers and producers to climate change and market fluctuations in Florida, Bolivia. Exploring risks, adaptation, and vulnerability through political ecology and economic perspectives. The paper emphasizes the crucial role of agriculture in Bolivia and highlights the increasing daily challenges faced by small-scale farmers and producers.

**Keywords:** *Agriculture, vulnerability, small-scale farmers, climate change, risks.*

## **Resumen**

Este artículo analiza la vulnerabilidad de los agricultores y productores de pequeña escala ante el cambio climático y las fluctuaciones del mercado en Florida, en los valles bolivianos. Explora los riesgos, la adaptación y la vulnerabilidad desde las perspectivas de la ecología política y la economía. Además, destaca el papel vital de la agricultura en Bolivia y resalta los crecientes desafíos diarios que enfrentan estos agricultores y productores.

**Palabras clave:** *agricultura, vulnerabilidad, agricultores de pequeña escala, cambio climático, riesgos.*

## **Introduction**

In Bolivia, agriculture is one of the most significant sectors of the economy, contributing 13% to the GDP and accounting for approximately 30% of total employment (The Atlas of Economic Complexity, 2020). Bolivia has been intensely affected by environmental changes, ranging from the extraction of natural resources, deforestation, excessive use of chemicals leading to deteriorating soils, to water contamination and extreme weather changes (IFAD Bolivia, 2023). A big part of the population is exposed to floods and droughts, with around 40% living in flood-prone zones and more than 16% living in drought-prone areas (World Bank Group, 2017). These environmental challenges disproportionately affect sensitive groups, such as small-scale producers, and push marginalized communities beyond their ability to respond adequately (Velarde, 2021).

This study examines how small-scale farmers in Florida, Santa Cruz, are affected by and adapt to changes in climate, markets, and prices. Grounded in the frameworks of political ecology (Bryant & Bailey, 1997; Robbins, 2011; Wisner et al., 2004), political economy (Bernstein, 2017), and risk and vulnerability research (Turner et al., 2003; Cutter et al., 2003), it explores the structural and environmental factors shaping farmers' resilience.

Current agricultural outcomes are highly impacted by extreme weather events, including temperature fluctuations, irregular rainfall, and crop diseases spread by insects (Daga, 2020; Skendžić et al., 2021). Droughts, frosts, and excessive or insufficient rainfall have been shown to severely affect agricultural yields in Bolivia (Daga, 2020). Rising temperatures allow insects to survive through winter, increasing their numbers, spreading invasive species, and accelerating disease transmission in crops (Skendžić et al., 2021).

Building on Morton (2007), which highlights environmental shocks and market volatility as key risks for smallholder farmers, we incorporate Osiemo et al. (2021) to refine the concept: environmental and price risks are understood not only through physical exposure but also through how farmers perceive the threat in terms of severity and controllability, which in turn shape their sense of future security and choice of mitigation strategies.

Farmers with limited resources are particularly vulnerable to poverty traps caused by climate shocks, underscoring the importance of asset availability and local poverty levels in shaping recovery and long-term sustainability (Heltberg et al., 2009; Rahman & Hickey, 2020). Additionally, economic constraints limit farmers' ability to manage new and recurring pests, a challenge that contrasts with findings from Tanzania, where wealthier farmers are more likely to invest in fertilizers to counteract agricultural risks (Heisse & Morimoto, 2023).

When analyzing risk, the focus moves beyond an exposure-focused, hazard-centric view that links vulnerability solely to proximity to natural hazards. Instead, the analysis considers the unequal distribution and intersection of risks, as discussed by Faas (2016). This also involves shifting from policy-oriented perspectives that often apply vulnerability uncritically, prioritizing mitigation over addressing its root causes in climate change (Oliver-Smith 2013; Faas 2016).

Inspired by a political ecological approach, both the natural and socioeconomic risks and vulnerabilities that small-scale farmers face are considered. In their definition of political ecology, Bryant & Bailey (1997) identify how the consequences of environmental change are allocated unequally between different social groups, which has political implications by altering the flexibility and power (to adapt) among actors (Robbins 2011; Wisner et al. 2004).

The PAR model emphasizes that disasters emerge from the interaction of social, political, and economic structures with environmental hazards, which produce uneven levels of risk across groups (Faas, 2016; Wisner et al., 2004). In this framework, risk is understood as the outcome of the hazard itself, combined with the vulnerability of those exposed. This model highlights how social groups face distinct vulnerabilities stemming from varying levels of exposure, influenced by factors such as class and ethnicity (Turner et al., 2003).

Unequal vulnerabilities emerge from long-term social, political, and economic processes that structure human environment relationships, often forcing marginalized groups into hazardous areas with limited coping capacity (Wisner et al., 2004; Faas, 2016). This will therefore allow us to research our problem statement from different levels, emphasizing how they intersect within risk and vulnerability frameworks, two central concerns within political ecology (Wescoat, 2015).

Guided by Marxist theories, Bernstein (2017) emphasizes that political economy revolves around social relations and the dynamics of production and reproduction. Marx further underscored the role of land ownership in shaping class divisions among peasants, as variations in landholdings reinforce economic disparities within rural economies.

Situated within political ecology, this study applies a vulnerability framework to analyze how risks and hazards affect marginalized groups. Turner et al. (2003) define vulnerability as a system's likelihood of harm when exposed to hazards, while Cutter et al. (2003) describe it as a susceptibility to harm (see also Adger, 2006; Faas, 2016). Focusing on vulnerability highlights the unequal impact of disasters on marginalized groups and their capacity to adapt and recover (Faas, 2016). Economic conditions worsen with local and national disruptions, as income shocks and policies threaten wealth, well-being, and smaller market participants (Naude et al., 2012).

The research is structured around two main vulnerability models: the Risk-Hazard (RH) Model, which examines vulnerability based on exposure to hazards, and the Pressure-and-Release (PAR) Model, which considers social, economic, and political factors that shape vulnerability (Turner et al., 2003).

Research has shown that historical processes have created unequal vulnerability conditions intertwined with human-environment relationships (Marino, 2015; Faas, 2016). Marginalized groups are disproportionately affected, as they are more likely to live in hazardous areas with fewer resources to cope (Faas, 2016). By incorporating these perspectives, this study explores risk and vulnerability frameworks within political ecology, emphasizing how environmental and economic risks intersect (Wescoat, 2015).

## Method

This study uses a mixed-methods approach to examine how small-scale farmers in Florida Province, in the Bolivian valleys, navigate climate and market risks. Through fieldwork in Samaipata and Mairana, we conducted interviews, surveys, and ethnographic observations, complemented by statistical and geospatial analysis of secondary data.

### Sample

Around 30 actors were interviewed (W=20, M=10), spanning from officials (n=1), to small farmers (N=7) that owned "small-scale" lands ranging from 0,5 to 3 hectares, "middle-scale" farmers (4 and 6 hectares), and one owned "big-scale" land (30 hectares).

### Instruments

A custom survey was conducted based on the International Handbook of Survey Methodology (De Leeuw et al., 2012) to capture their vulnerabilities and experiences amid broader market trends. The survey included questions on the impact of climate change on market dynamics, complementing insights on climate and price fluctuations. The questions were administered orally. Ethically, we purchased produce from female sellers during our informal interviews as a gesture of gratitude and reciprocity.

The report includes cross-sectional and panel regressions along with graphs depicting changes in price volatility, temperature variations, price indices, and government involvement in agricultural activities. The modeling followed standard quantitative methods focusing on regression analysis, data integration, and the use of aggregated variables (De Mesquita & Fowler, 2021). To highlight changes over time, the report contains several visualization tools, such as maps (Google, n.d.), to represent the geospatial data and evolution of landscapes related to climate change (temperature, changes in the yield of production).

## Procedure

During a two-week fieldwork period in Samaipata and Mairana communities in the Florida Province, Santa Cruz, Bolivia, both qualitative and quantitative methods were used to examine the issue from multiple perspectives. As Mertens (2023) highlights, mixed-methods research is valuable for addressing complex problems. Ethnographic analysis included field observations at farms and markets, participant observation, and both informal and semi-structured interviews (Spradley, 1980). The quantitative analysis was conducted using secondary data from national and regional sources that were analyzed using Excel, SPSS, STATA, AMOS, and QGIS to identify key patterns and correlations. Understanding that people interpret risks in diverse ways (Faas, 2016), we integrated qualitative insights on perceived risks and vulnerabilities.

The procedure involved three key phases: assessing the distribution of risks associated with climate change, analyzing market fluctuations at national and regional levels, and examining adaptation strategies and long-term risk diversification techniques. Interviews were recorded with the consent of the participants. Interviews and informal conversations with farmers and female vendors acted as “conversational realities”, which, according to Brinkmann (2020), offer insights into how the informants experienced, felt, and acted according to their experiences.

## Results

### Part I. Climate change: risks and consequences

In Bolivia, current farmers' agricultural outcomes are highly affected by extreme weather shocks in temperature and rainfall, as well as insects and plant-spread diseases (Daga, 2020; Skendžić et al., 2021). This chapter outlines how climate and weather changes in Mairana, Samaipata, and surrounding areas have increased the vulnerability of small-scale farmers, evident in the heightened frequency and intensity of four key environmental risks: droughts, heavy rains, frosts, and pests.

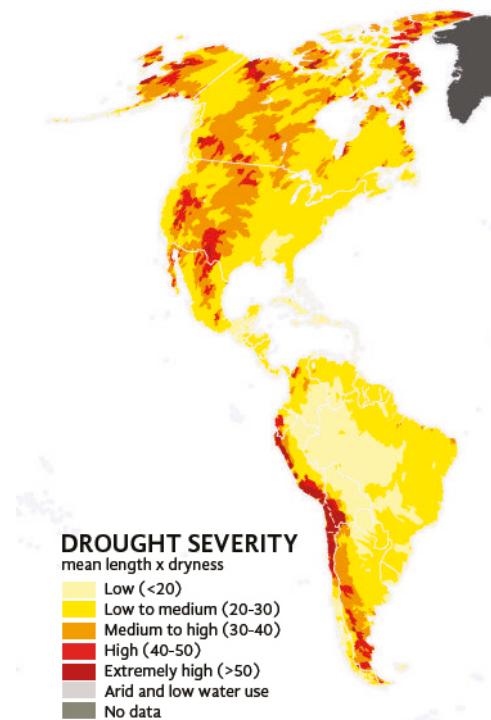
#### *Droughts*

Daga's (2020) research on weather shocks in Bolivia additionally shows that extreme temperatures, too low temperatures, and rainfall changes have significantly harmful effects on farmers' agricultural yields.

Javier, a 21-year-old student, whose small-scale family farm was six hectares in size, discussed the growing climate risk. We met at the Abastito market, where farmers, female vendors, and middlemen trade their goods. In Javier's farm, he noted that, due to drought, they use both natural and pesticide fertilizers, and over the past decade, rising temperatures and intensified, prolonged droughts have made climate change particularly evident.

Mariela, another senior small-scale farmer, expressed that the transformation in climate and weather had been pervasive in this same period; she emphasized the need for agrochemicals in response to these changes. She lamented a recent water shortage, worsened by drying rivers from rising temperatures, that impacted her land and crops, reflecting a general rise in environmental hazards in Bolivia. As indicated on Map 1, droughts indeed affect this region.

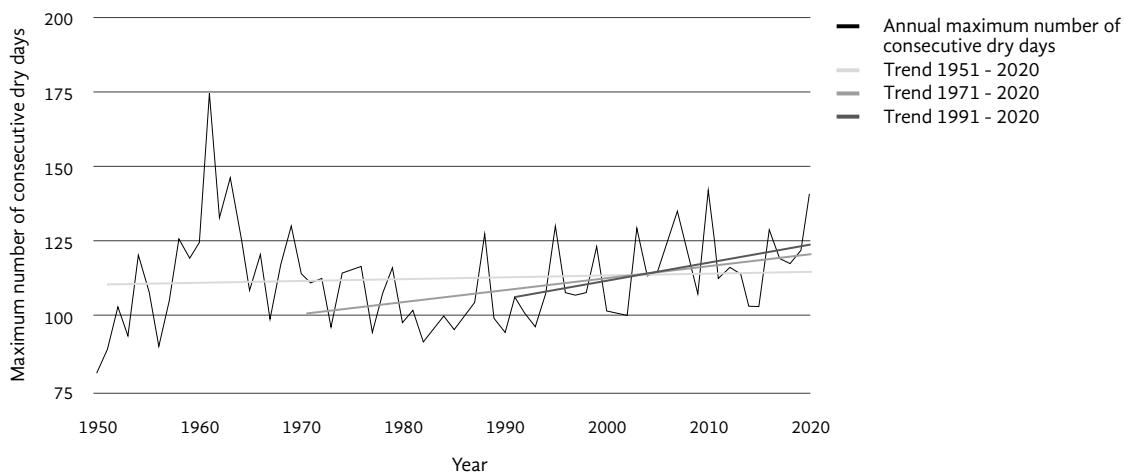
**Figure 1**  
*Drought Severity in the Americas according to Aqueduct Global Maps 2.0.*



Note: Adapted from Aqueduct Global Maps 2.0: Constructing Decision-Relevant Global Water Risk Indicators by F. Gassert, M. Landis, M. Luck, P. Reig, and T. Shiao (2014), World Resources Institute (<https://www.wri.org/data/aqueduct-global-maps-20>).

The number of consecutive dry days is showing a clear upward trend, as illustrated in Figure 2. This indicates that dry spells are becoming longer and more frequent over time, which can have significant implications for water availability, agricultural productivity, and overall ecosystem health.

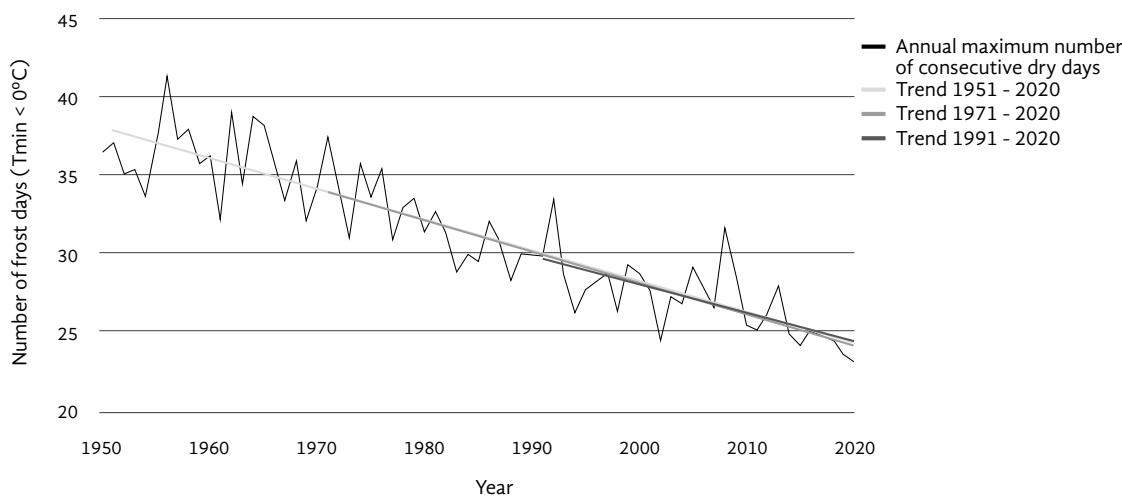
**Figure 2**  
*Maximum number of consecutive dry days Annual Trends with Significance of Trend per Decade, 1951-2020, Bolivia.*



While frost days are steadily decreasing, as shown in Figure 3, this decline points to a gradual warming trend that reduces the frequency of extremely cold events. Such a shift not only alters seasonal patterns but may also influence agricultural cycles, natural vegetation, and the overall resilience of ecosystems that traditionally depend on colder conditions.

**Figure 3**

*Number of Frost Days (Tmin < 0°C) Annual Trends with Significance of Trend per Decade, 1951-2020, Bolivia. Cámara Agropecuaria del Oriente. (s.f.), Ministerio de Culturas de Bolivia. (s.f.).*



A common sign of climate change is shifting surface temperatures aligned with this pattern, confirming field observations.

### **Rains and frosts**

This vulnerability was evident in interviewing Esteban, a 40-year-old small-scale farmer, who lost 1.5 hectares of beans, highlighting a trend of intensified precipitation. "When it rains, it's stronger now", as he said. The surrounding farms also suffered severe crop losses due to the excessive rainfall.

Esteban's farm in the Mairana valleys was hit by frosts, leading to increased agrochemical use. Those trends are also supported by quantitative findings. In the department of Santa Cruz. Figure 4a shows precipitation fluctuating from over 2000mm to 300mm, with an overall decline indicating drought vulnerability, and Figure 4b reveals stable low temperatures but a steady rise in highs above 30°C, suggesting a warming trend that may affect crop viability and water management.

**Figure 4**

Temperature (highest and lowest) and Precipitation annually change, 1984-2022, Santa Cruz, Bolivia. WeatherSpark. (n.d.).



### ***Insects and plant pests***

Javier noted the growing spread of insects and diseases, increasing the need for agrochemicals, which have been used for years but in rising amounts due to pests. Additionally, Elvira also emphasized a surge in plagues as well as the risks of intensified droughts, creating the need to apply agrochemical fertilizers. Rising temperatures help insects survive winter, increasing their numbers, invasive species, and disease spread (Skendžić et al., 2021).

### ***Agrochemicals***

All consulted small-scale farmers increasingly rely on agrochemicals, but the rising costs -Javier noted a surge from 200 to 500 bolivianos- further worsen their vulnerability to climate and economic fluctuations. In global terms, at the time of the research, these amounts are roughly

equivalent to USD 29 and USD 72, respectively, at the current official exchange rate, or as low as USD 16 and USD 40 if calculated using the parallel market rate.

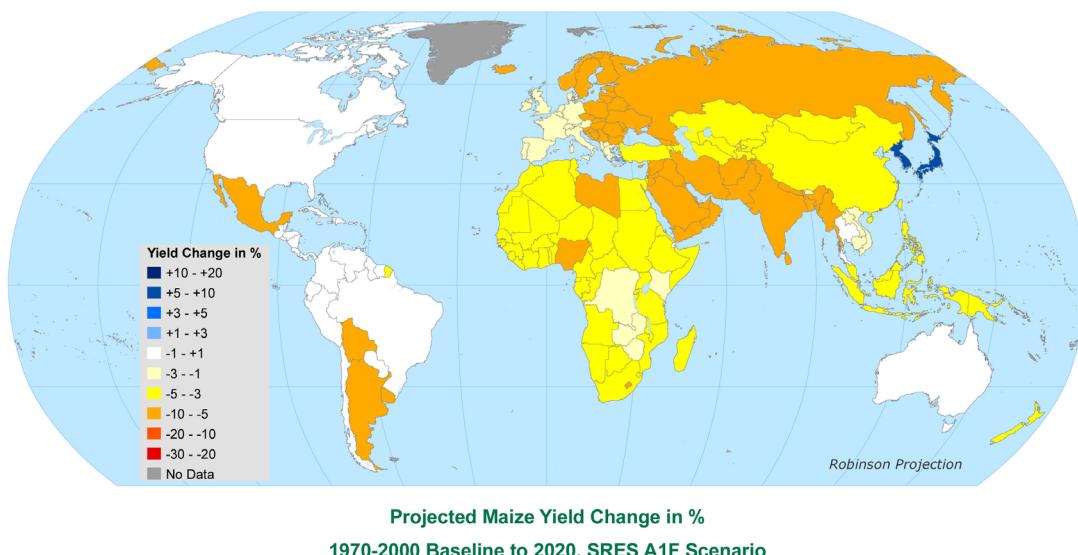
Héctor, another small-scale farmer, notes the necessity of agrochemicals despite rising costs to combat droughts and pests affecting peach production, highlighting the challenges in sustaining family livelihoods. As he expressed, they are “*working for the belly*”. Unequal access to resources creates varying farmer vulnerability to climate risks. While large-scale farms stay profitable with agrochemicals and resources, small-scale farmers face uncertainty.

These cases highlight differences in rural livelihoods and vulnerability, as Turner et al. (2003) say, linking climate vulnerability, poverty, inequality, and institutional services (Eisenack et al., 2014). Poorer actors with limited resources are more prone to poverty traps from climate shocks (Heltberg et al., 2009), underscoring the need to consider asset availability and local poverty in recovery and sustainability analyses (Rahman & Hickey, 2020).

Environmental changes directly affect small-scale farmers' vulnerabilities, as seen in maize production. Figure 5 illustrates the impact of climate change on global food production, projecting a 5-10% decline in Bolivia's maize yield due to adverse environmental trends (Andersen et al., 2023).

**Figure 5**

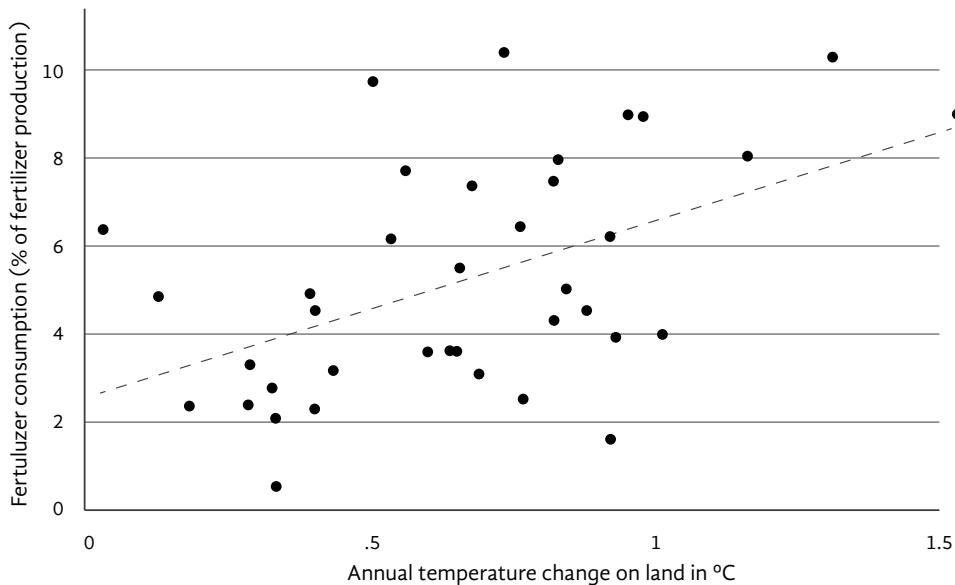
*Effect of Climate Change on Global Food Production: Projected Maize Yield Change in %, 1970-2000 Baseline to 2020, World, Bolivia. (National Aeronautics and Space Administration, n.d.), (National Aeronautics and Space Administration, n.d.)*



Qualitative observations highlight pressure to counter inefficiency and adopt new strategies, leading to increased fertilizer and pesticide use. The graph below shows a correlation between rising temperatures and agrochemical use, revealing an upward trend despite scattered observations.

**Figure 6**

*Correlation between temperature changes and fertilizer consumption, Bolivia, 1984-2022.*



Cross-sectional and panel (Random Effects) regressions show that a 1°C temperature increase leads to a nearly 4% rise in fertilizer consumption ( $p < 0.01$ , Table 1, regression 5). Panel data confirms this with a coefficient of 3.587 (Table 4, regression 5).

**Table 1**

*Cross-sectional regressions on the national level, 1984-2022, Bolivia, part 2. World Bank, Humanitarian Data Exchange (s.f.); Afghanaid (s.f.); Instituto Nacional de Estadística de Bolivia (s.f.).*

Cross-sectional regressions, part 2							
	(1) ln_maize_price	(2) ln_maize_price	(3) ln_maize_price	(4) ln_maize_price	(5) fert_cons	(6) producer_price_index	(7) ln_gdp
fert_cons	0.107*** (4.51)						
ln_pesti_use_per_area		0.431*** (7.40)					
temp_change			0.421* (2.77)		3.986** (3.54)		
cons_price_jan				0.0137*** (11.35)			
carrots_index						-0.594** (-3.44)	
tomatoes_index						0.763*** (5.12)	
agri_index							0.0167*** (16.66)
agri_raw_mat							-0.375*** (-4.98)
_cons	4.690*** (31.93)	5.064*** (104.33)	4.981*** (42.40)	4.455*** (51.61)	2.637** (3.09)	51.12*** (5.26)	8.144*** (46.33)
N	27	27	27	19	38	31	25
t statistics in parentheses							
*p<0.05, **p<0.01, ***p<0.001							

**Table 2**

Panel regressions, on the national level, Random Effects, 1984-2022, Bolivia, part 2. World Bank, Humanitarian Data Exchange (s.f.); Afghanaid (s.f.); Instituto Nacional de Estadística de Bolivia (s.f.).

Panel regressions, random effects, part 2

	(1) ln_maize_price	(2) ln_maize_price	(3) ln_maize_price	(4) ln_maize_price	(5) fert_cons	(6) producer_price_index	(7) ln_gdp
main							
fert_cons	0.107*** (5.35)						
ln_pesti_use_per_area		0.431*** (6.91)					
temp_change			0.421* (1.97)			3.587** (3.14)	
cons_price_jan				0.0137*** (10.18)			
carrots_index						-0.585*** (-4.35)	
tomatoes_index						0.761*** (6.72)	
agri_index							0.0167*** (14.15)
agri_raw_mat							-0.375*** (-4.84)
_cons	4.690*** (38.84)	5.064*** (97.08)	4.981*** (29.98)	4.455*** (45.95)	2.878** (3.29)	50.24*** (6.30)	8.144*** (41.65)
sigma_u	0	0	0	0	0	0	0
_cons	(.)	(.)	(.)	(.)	(.)	(.)	(.)
sigma_e	0.250*** (7.35)	0.216*** (7.35)	0.336*** (7.35)	0.151*** (6.16)	2.180** (8.25)	14.96*** (7.75)	0.0945*** (7.07)
N	27	27	27	19	34	30	25

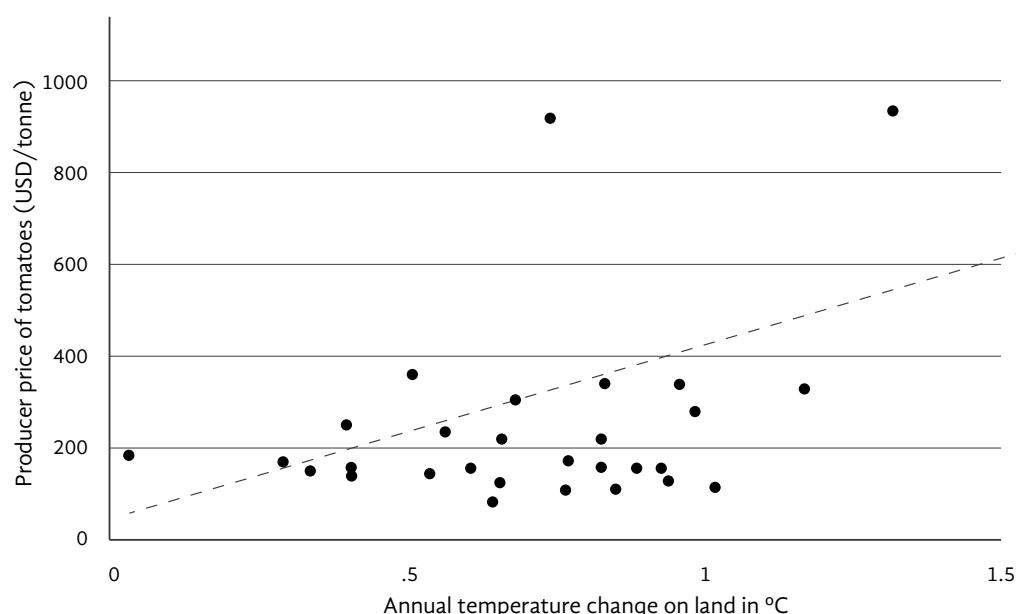
t statistics in parentheses

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

To analyze market imperfections and climate change effects on small-scale farmers, quantitative reflections on the national scale suggest that temperature changes influence prices. Figure 7 shows this trend in tomatoes, though its link to fertilizer and pesticide use remains unclear due to limited data.

**Figure 7**

Correlation between prices of tomatoes and the temperature change, Bolivia, 1984-2022.



This argument is supported by regression results (Tables 2 and 4), showing that a one °C temperature rise increases fertilizer consumption by nearly 4% (3.58% in panel analysis). Panel data also indicates that a one °C increase can raise maize prices by 42.1%, while pesticide use contributes only 0.431% to price growth.

## Part II. Price fluctuations, markets, and loans

This section explores how price fluctuations contribute to the vulnerability of small-scale farmers in Mairana and Samaipata, impacting their livelihoods and prospects alongside environmental risks. The findings suggest that market volatility affects prices, market share participation, and accessibility to loans.

The small actors rely on these financial facilities for their livelihoods, making them vulnerable during market-sensitive periods (Bathfield et al., 2015). The market process involves key actors, including producers, sellers, transporters, and middlemen at Santa Cruz's Abasto market, who set prices after purchasing from farmers. Farmers typically sell their products at either the Abasto market or smaller local markets, often reselling to female vendors. Sales location depends largely on quantity and transportation cost.

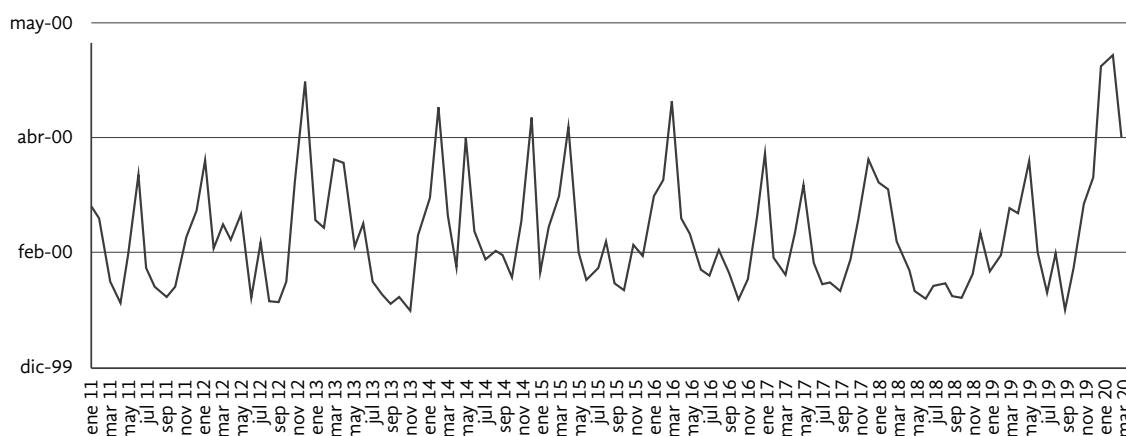
### ***Variation in price***

The insights gathered from interviews with producers highlight the unpredictable nature of price volatility. When multiple trucks with the same product arrive, farmers struggle to predict their income. Their price frustrations highlight their limited control over pricing. While Florida mainly produces maize, other crops like onions, lettuce, and potatoes also face extreme price volatility in Santa Cruz.

Lettuce prices (Figure 8) show massive, inconsistent shocks, suggesting non-seasonal drivers. National price analysis reveals a positive link between price changes and rural income. Panel and cross-sectional regressions indicate that a 1% maize price increase raises income by 1.766%, while a one-unit rise in agricultural imports lowers prices by 32.8%.

**Figure 8**

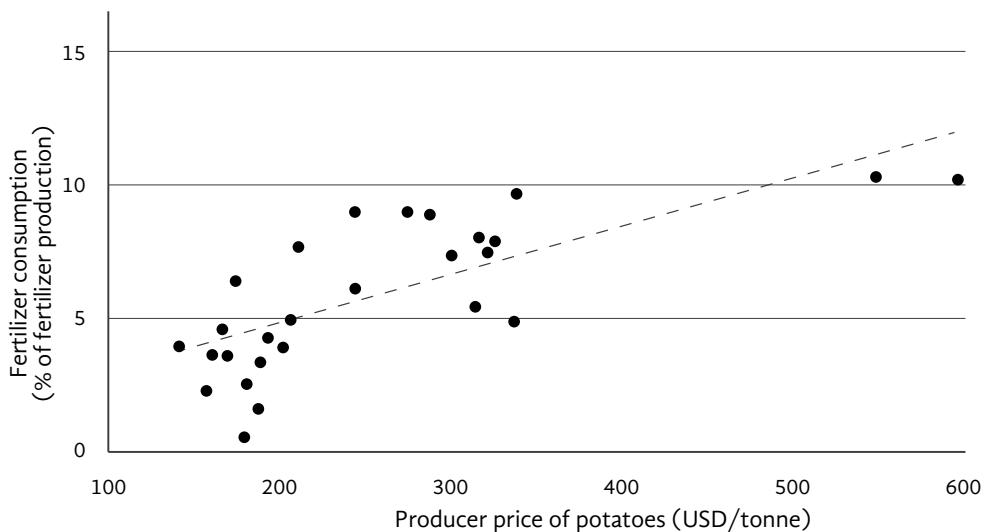
*Prices of lettuce in Santa Cruz (Bs./Basket). Cámara Agropecuaria del Oriente. (s.f.)*



Moreover, an increase in food price inflation (Figure 8; figure 9) leads to a decrease by 1.13% (p-value = 0.05). This top-down pricing and increased competition lead to a potential decrease in farmers' market power and household income insufficiency. To identify patterns in price uncertainty and risk, we analyze time-series data (1984-2020) for corn, tomatoes, and potatoes in Santa Cruz, the region's key market.

**Figure 9**

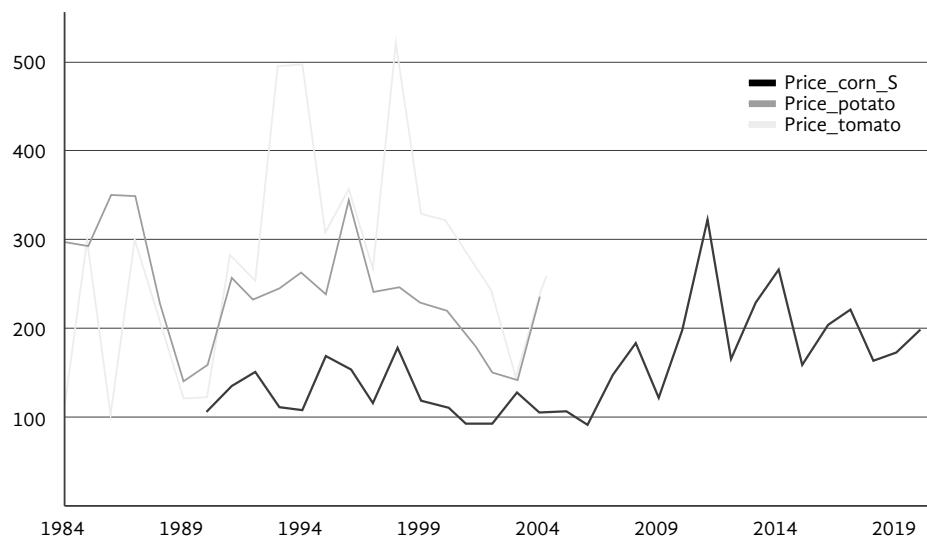
*Correlation between prices of potatoes and fertilizer consumption, Bolivia, 1984-2022.*



Graph 8 indicates an obvious price fluctuation of the three main products: corn prices are highly volatile, peaking at \$500/Hm in 1995 and 2010. Potato prices also vary with a significant peak at \$300/Hm in 2010, while tomato prices have been less volatile, peaking at \$300/Hm in 1995.

**Figure 10**

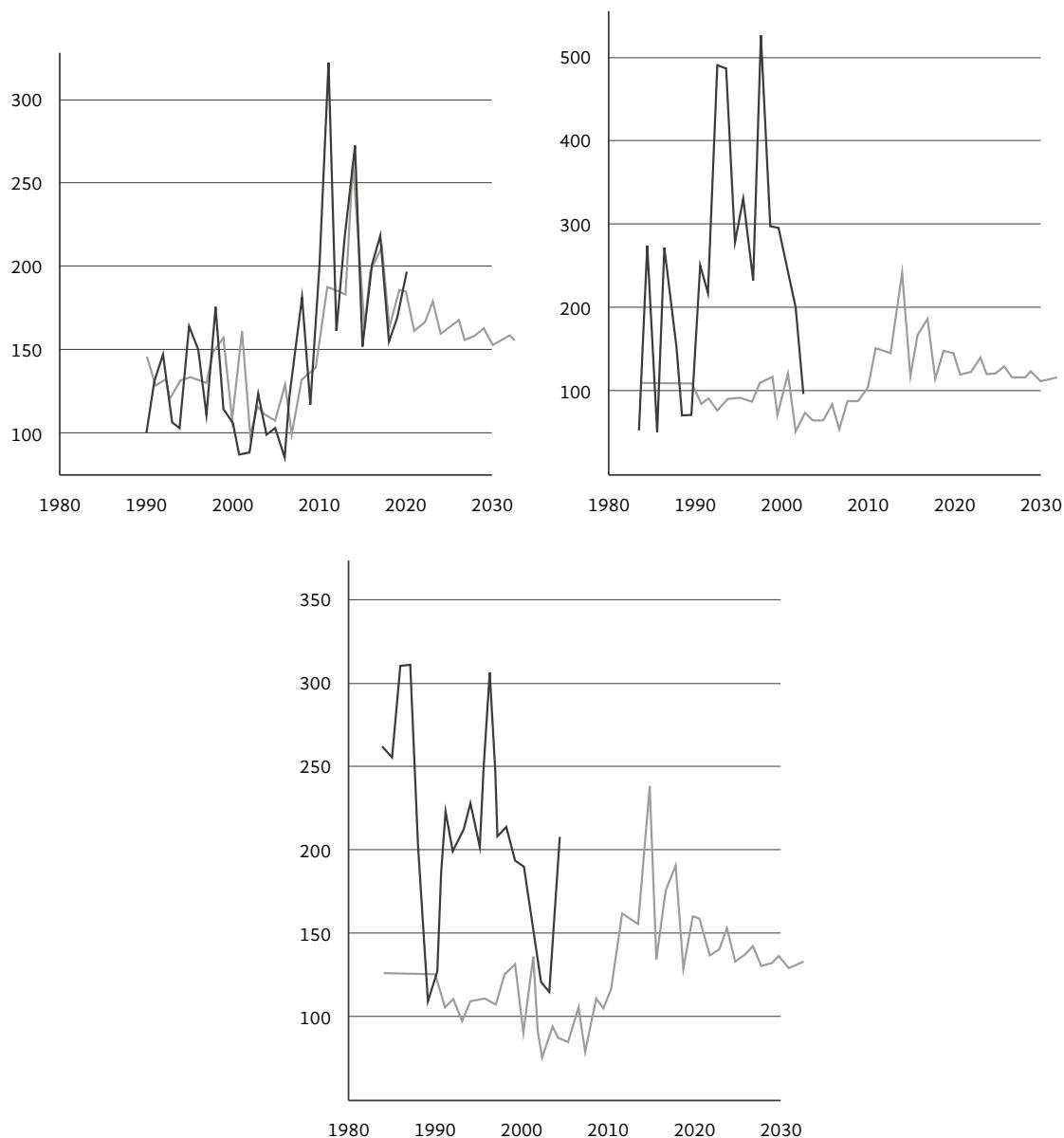
*Price variation of corn, tomato, and potato over time, 1984-2022, Santa Cruz, Bolivia. Cámara Agropecuaria del Oriente. (s.f.)*



It applies three ARIMA (Figure 11) models based on ACF, PACF, and the AIC test. The Portmanteau test for white noise was  $0.440 > 0.05$  (Table 3), after the ex-ante forecast, indicating the rationality of the forecasts. According to figure 11, the historical data (solid line) shows significant volatility, with sharp peaks and troughs. The forecast (dashed line) shows fluctuating prices, continuing the volatile pattern observed in the historical data. However, the amplitude of fluctuations appears to be smaller in the forecast compared to the historical data, suggesting that the model expects less extreme price movements in the future. In this way, the results prove the uncertainties of price to which small-scale farmers are subjected.

**Figure 11**

*Comparison between actual and predicted price of three main products, 1984-2022, Santa Cruz, Bolivia.*

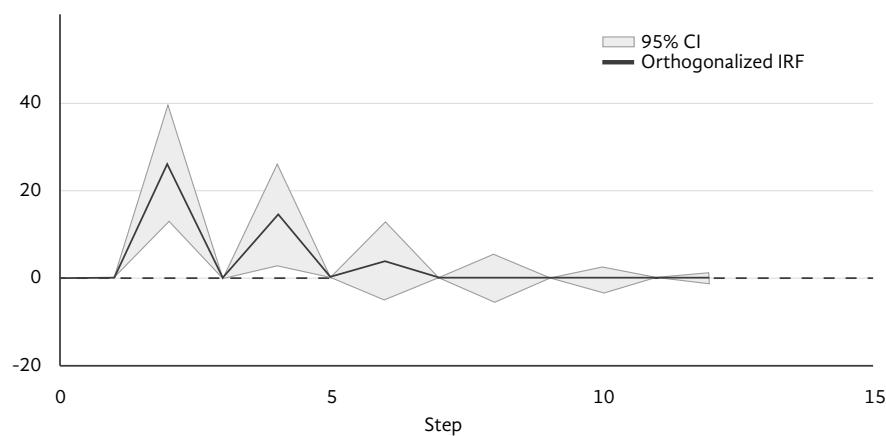


**Table 3**  
*Portmanteau Test for White Noise. (Cámara Agropecuaria del Oriente, s.f.)*

Portmanteau Statistic	7.9374
Prob > chi2 (8)	0.4396

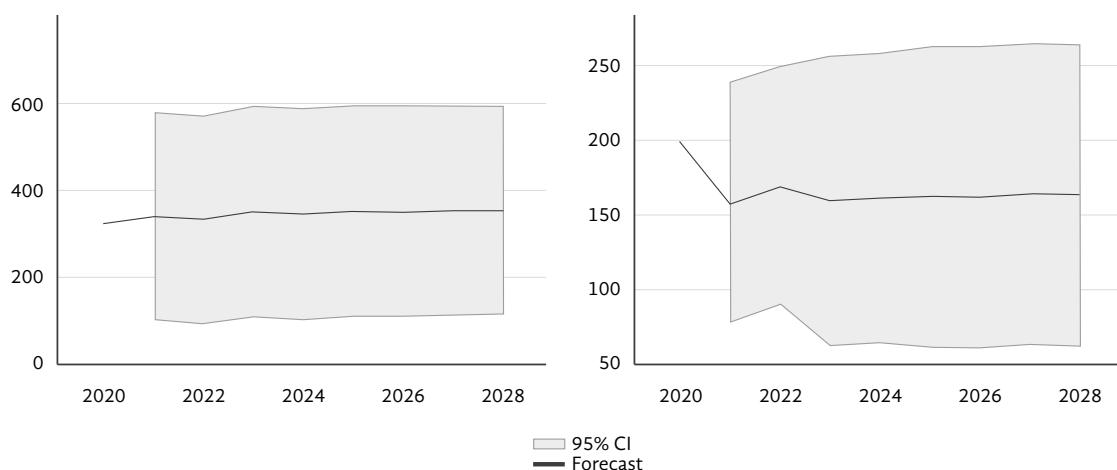
For further analysis, it uses the VAR model to investigate the dynamic relationship between market supply and demand. Taking corn as an example, the past production and price would shape current conditions. Initial price shocks boost production due to profit expectations, but this effect fades over time (see graph below).

**Figure 12**  
*RF results, 1984-2022, Santa Cruz, Bolivia. Cámara Agropecuaria del Oriente. (s.f.), Ministerio de Culturas de Bolivia. (s.f.).*



Five-year forecasts show complex interactions with significant uncertainty from unpredictable factors:

**Figure 13**  
*Forecast the result of the production and price relationship. Cámara Agropecuaria del Oriente. (s.f.), Ministerio de Culturas de Bolivia. (s.f.).*



As small-scale producers cannot produce as much as large-scale ones, it forecasts increased future price challenges for farmers.

This exemplifies a high exposure to price risk with unpredictable variations affecting the profitability of farming for producers. Our interviews echoed similar findings, attributing price oscillations to factors such as severe weather conditions, road blockages, or arbitrary behavior by middlemen. The potential consequence of failing to turn a profit due to price variation poses a threat to producers, with numerous instances recounted of selling goods in Santa Cruz at prices insufficient to cover initial investments.

Female sellers operating in local markets also shared concerns about price fluctuations, complaining about the high prices they pay to suppliers. This pricing discrepancy shifts risk unequally, impacting rural and historically disadvantaged groups, especially peasants and female vendors.

### ***Survey on female sellers***

Female sellers at the markets play a crucial role in the commercialization chain of agricultural products, experiencing firsthand the effects of price fluctuations. The survey, therefore, focuses on the market pricing mechanisms, particularly the negotiation process linking farmers and producers, as you can see in Table 4.

**Table 4**  
*Frequency and percentage of Basic selling information, Survey Analysis, 2024, Samaipata and Mai-rana, Bolivia*

Question	Response category	Frequency	Percentage (%)
Age	Unwilling to tell	1	1.7
	Under 20	2	3.3
	21-30	6	10
	31-40	8	13.3
	41-50	28	46.7
	51-60	4	6.7
	over 60	11	18.3
Selling period	Less than 1 year	6	10
	1-5 years	13	21.7
	6-10 years	17	28.3
	More than 10 years	24	40
Products source	Directly from local farmers	43	71.7
Supplier selection criteria	Distributors from Santa Cruz, Cochabamba, etc.	15	25
	Other	2	3.3
	Price	13	21.7
	Quality of products	35	58.3
	Proximity (Distance)	8	13.3
	Existing relationship/Trust	4	6.7

It outlines basic information responses from market sellers. All respondents are female, and the majority are aged 41-50 (46.7%), with a selling period predominantly between 6-10 years (28.3%). They source their products mainly directly from local farmers (71.7%), and prioritize the quality of products (58.3%) when choosing suppliers.

Table 5 illustrates the detailed descriptive analysis for the Likert-scale questions. Table 6 demonstrates stable reliability and validity, with climate effects and negotiation process Alpha values of 0.801 and 0.606, respectively, both above 0.6. The KMO test result is  $0.832 > 0.7$  with  $p>0.05$ , supporting further analysis.

**Table 5**  
*Descriptive Statistics of two dimensions, Survey Analysis, 2024, Samaipata and Mairana, Bolivia.*

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std.
Perspectives about price stability influenced by climate shock	60	1	5	4.02	1.347
Willingness to buy more sustainable products	60	1	5	3.2	1.117
Perspectives about climate shock	60	1	5	3.42	1.139
Negotiation confidence	60	1	5	2.88	1.236
Perspective of bargaining fair	60	1	4	2.68	0.965
P6 perspective of	60	1	5	3.07	1.133

**Table 6**  
*Reliability and validity test, Survey Analysis, 2024, Samaipata and Mairana, Bolivia.*

Variables	Question number	Cronbach's alpha
Perspective of climate effect	3	0.801
Perspective of negotiation process	3	0.606
KMO		0.832
P		0.001

To define which factors affect the female sellers' perspectives, we apply the One-way ANOVA test (Tables 7, 8, 9). The homogeneity of variances test yielded p-values greater than 0.05 for all three factors ("Selling Experience", "Source of products", and "Supplier Selection Criteria"). ANOVA results indicate significant differences in climate impact perception based on product sourcing and supplier selection criteria, prompting a multiple comparison analysis using Tukey HSD.

**Table 7**  
*Difference of Dimensions in different Selling Experience, 2024, Samaipata and Mairana, Bolivia.*

		Sum of squares	df	Mean square	F	Sig.
climate	Between groups	3.701	3	1.234	1.137	0.342
	Within groups	62.91	58	1.085		
	Total	66.611	61			
price	Between groups	0.652	3	0.217	0.297	0.827
	Within groups	42.402	58	0.731		
	Total	43.054	61			

**Table 8**

*Difference of Dimensions in different sources of products, 2024, Samaipata and Mairana, Bolivia*

		Sum of squares	df	Mean square	F	P	Multiple comparsion
climate	Between groups	7.219	2	3.609	3.585	0.034	1>3 and 2>3
	Within groups	59.393	59	1.007			
	Total	66.611	61				
price	Between groups	0.071	2	0.036	0.049	0.952	
	Within groups	42.983	59	0.729			
	Total	43.054	61				

**Table 9**

*Difference of Dimensions in different supplier selection criteria, 2024, Samaipata and Mairana, Bolivia.*

		Sum of squares	df	Mean square	F	P	Multiple comparsion
climate	Between groups	8.871	3	2.957	2.97	0.039	2>3
	Within groups	57.74	58	0.996			
	Total	66.611	61				
price	Between groups	4.526	3	1.509	2.271	0.09	!>4 and 2>4
	Within groups	38.527	58	0.664			
	Total	43.054	61				

The table shows that sellers sourcing locally express significantly greater concern about climate change's impact on market stability than those purchasing from Santa Cruz ( $t(58) = 0.895$ ,  $p < 0.05$ ,  $d = 0.030$ ) or other regions ( $t(58) = 0.944$ ,  $p < 0.05$ ,  $d = 0.244$ ). Sellers prioritizing quality over producer connections also show higher concern ( $t(58) = 0.076$ ,  $p < 0.05$ ,  $d = 0.020$ ). Additionally, those focused on price ( $t(58) = 0.090$ ,  $p < 0.05$ ,  $d = 0.233$ ) and quality ( $t(58) = 0.099$ ,  $p < 0.05$ ,  $d = 0.225$ ) show greater interest in market price negotiations than those prioritizing proximity.

The results further indicate no significant difference in climate attitudes based on Selling Experience ( $F = 1.137$ ,  $MSE = 62.91$ ,  $r = 0.236$ ,  $p > 0.05$ ) (Table 8). However, the Source of Products significantly affects climate perception ( $F = 3.585$ ,  $MSE = 59.593$ ,  $r = 0.329$ ,  $p = 0.034 < 0.05$ ) (Table 9), though price perception remains unchanged across sources. Supplier Selection Criteria also shows significant variation in climate impact concerns ( $F = 2.957$ ,  $MSE = 57.74$ ,  $r = 0.365$ ,  $p > 0.05$ ) (Table 10), with sellers prioritizing local sourcing or product quality exhibiting greater concern for climate and price negotiations. Given the interplay between supply-demand mechanisms, price fluctuations, and production, the VAR model explores the dynamic relationship between production and price, using corn as an example.

Unit root tests (Table 10) confirm a second-order time lag, with corn price significantly influencing current prices (0.337,  $p < 0.05$ ), while production has a strong impact (0.0234,  $p < 0.001$ ). The IRF graph (Figure 12) indicates that price shocks temporarily boost production before stabilizing. The five-year forecast highlights production-price dynamics but underscores high uncertainty due to market volatility driven by weather and supply-demand fluctuations.

**Table 10***Unit Root Test (Production and price). (Cámara Agropecuaria del Oriente, s.f.)*

Variance	Test method	P Value	Statistics	Conclusion
Production_corn	(0,0,0)	0.0011**	-4.068	stationary
Price_corn	(0,0,0)	0.0142**	--3.315	stationary

t statistics in parentheses

\*p&lt;0.05, \*\*p&lt;0.01, \*\*\*p&lt;0.001

**Uncertainty and loans**

Inadequate compensation for agricultural products places farmers in a precarious position, often leaving them with insufficient resources to sustain their livelihoods. Doña Mariela notes that farmers face tough times, as their agricultural efforts fall short amid widespread uncertainty. Héctor also highlighted the compounding effects of additional workers during harvests. The disparity between farmers' wages and earnings leads to diminished profits to fulfill financial obligations. Javier highlighted that lettuce producers, including himself, earn just 15 bolivianos per large basket, an amount too small to support a living once transportation and agrochemical costs are considered.

Small-scale farmers face economic instability, with rural incomes closely tied to market fluctuations. Cross-sectional and panel regressions (Table 11, p-value = 0.05) show that a 1% rise in the annual price index increases rural income by 2.82%, yet higher agricultural employment reduces household income by 4.23%, highlighting its low profitability.

**Table 11***Cross-sectional regressions on the national level, 1984-2022, Bolivia, part 1. World Bank, Humanitarian Data Exchange (s.f.); Afganaiad (s.f.); Instituto Nacional de Estadística de Bolivia (s.f.).*

Cross-sectional regressions, part 1

	(1) ln_rur_inc	(2) ln_rur_inc	(3) ln_rur_inc	(4) ln_rur_inc	(5) ln_rur_inc	(6) ln_rur_inc	(7) ln_maize_price
an_price_in	0.0282** (3.83)						
fert_cons		0.162* (2.19)					
agri_share_gov_exp			-0.199* (-2.95)				
ln_maize_price				1.766*** (9.74)			
pesti_use_per_area					0.0868 (0.26)		0.254*** (5.43)
water_prod					0.244** (3.06)		
empl_agri						-0.0423 (-1.97)	
agri_land_perc						2.402*** (9.71)	
agri_water_withdrawal						-1.617** (-3.58)	
agri_raw_mat							-1.749*** (-7.46) -0.328* (-2.61)
food_price_inf_jan							-0.0113* (-2.56)
_cons	4.114*** (6.14)	6.743*** (7.44)	-2.893* (-2.96)	3.285*** (13.10)	73.62 (2.01)	8.381*** (30.47)	5.089*** (22.64)
N	17	17	14	16	16	17	18

t statistics in parentheses

\*p&lt;0.05, \*\*p&lt;0.01, \*\*\*p&lt;0.001

Increased competition also threatens small-scale farmers, as a 1% rise in agricultural imports results in a 174.9% decrease in income (Tables 2, 12). Loans play a crucial role in sustaining agricultural operations, with Banco FIE prioritizing investments in irrigation to mitigate climate risks, such as droughts.

**Table 12**

*Panel regressions, on the national level, Random Effects, 1984-2022, Bolivia, part 1. World Bank, Humanitarian Data Exchange (s.f.); Afghanaid (s.f.); Instituto Nacional de Estadística de Bolivia (s.f.).*

Panel regressions, random effects, part 1

	(1) ln_rur_inc	(2) ln_rur_inc	(3) ln_rur_inc	(4) ln_rur_inc	(5) ln_rur_inc	(6) ln_rur_inc	(7) ln_maize_price
main							
an_price_in	0.0267*** (3.42)						
fert_cons		0.162*** (3.44)					
agri_share_gov_exp			-0.199*** (-5.51)				
ln_maize_price				1.766*** (10.24)			
ln_pesti_use_per_area					0.568 (1.65)		
water_prod						0.206*** (4.99)	
empl_agri							-0.0423** (-2.63)
agri_land_perc							2.402*** (11.59)
agri_water_withdrawal							-1.617*** (-3.73)
agri_raw_mat							-1.717*** (-6.07) -0.328** (-3.04)
food_price_inf_jan							-0.0113* (-2.46)
pesti_use_per_area							0.254*** (6.01)
temp_change							
cons_price_jan							
carrots_index							
tomatoes_index							
agri_index							
_cons	4.239*** (5.61)	6.743*** (13.91)	-2.893** (-3.11)	3.478*** (12.90)	73.62* (2.12)	8.287*** (30.25)	5.089*** (23.79)
sigma_u	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
_cons							
sigma_e	0.620*** (5.66)	0.304*** (5.66)	0.251*** (5.29)	0.178*** (5.66)	0.136*** (5.66)	0.449*** (5.66)	0.105*** (6.00)
N	16	16	14	16	16	16	18

t statistics in parentheses

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

Farmers perceive debt as a heavy responsibility and prioritize timely repayment to maintain financial stability. The AMPUAS (Asociación Municipal de Productores Agroecológicos de Samaipata) representative's initiatives to hasten association consolidation to improve credit access for essential agricultural infrastructure highlight the importance of formal credit access and demonstrate farmers' efforts to reduce climate risk. Yet, concerns about the sustainability of using credit emerge, particularly if high repayment rates strain regular expenses.

### **Part III. Adaptation strategies to climate and price volatility**

#### ***Adaptive strategies***

Small-scale farmers, facing constant risks from climate, environmental, and market fluctuations, employ adaptive strategies to mitigate these. In line with Wisner et al. (2004) framework within political ecology, the varying vulnerability levels are contingent upon individuals' capacities to offset losses, influenced by forms of human agency and actions affecting these (Wescoat 2015). Cutter and Corennea (2013) divide capacity into 1) coping capacity, which involves resources and opportunities for communities to endure, absorb, and manage hazards, and 2) adaptive capacity, which involves implementing measures aimed at mitigating risk.

In general terms, farmers are using and combining different strategies to face risk. All of the conventional small-scale farmers consulted increasingly utilized agrochemicals as an adaptive response to climate variability and pest infestations. Another adaptive mechanism identified is access to productive loans and credits from local banks.

These credits, intended to reduce drought vulnerability through irrigation systems, require repayment capacity, limiting access for some farmers. Moreover, loans often also require collateral, such as posting the land as a guarantee, something Javier's family has also done, which can detrimentally enhance vulnerabilities if harvests fail.

Due to the combined effects of agrochemical usage, monoculture farming practices, and climate change, numerous farmers have witnessed soil degradation, exacerbating their susceptibility to droughts. As highlighted by Juan, an agrochemical vendor and large-scale farmer, many small-scale farmers apply pesticides in excessive doses in a misguided attempt to safeguard their crops. This excessive use of agrochemicals reflects a clear interconnection between price risk and environmental risk, and how they are reinforcing each other.

Another strategy adopted is the use of seasonal crop rotation practices, along with the incorporation of natural fertilizers, to maintain soil fertility and nutrition. Some farmers also have animals that are fed with excessive or unsold production to prevent losses. Farmers stated that such adaptive measures play a crucial role in mitigating losses and averting disasters.

#### ***Facing hardships: "Hay que seguir"***

Small-scale farmers' adaptive strategies encompass both environmental and social dimensions, highlighting a constant interplay between vulnerability, power, and agency (Faas, 2016). Many informants emphasized resilience, viewing perseverance as essential for survival amid economic and material hardships. As the Director of Product Development in Samaipata noted, "*It is hard to resist, but farmers usually do.*" Similarly, Elvira stated, "*We have to keep going,*"

and Esteban, facing persistent challenges, expressed resignation: “*What can I do? [...] You have to keep moving forward.*” For many, farming remains their only viable means of livelihood, despite financial struggles.

However, adaptation is becoming increasingly difficult for small-scale farmers due to the rising costs of materials. Relying on the same strategies increases their vulnerability, making it harder to afford improved methods. Many see loans as a solution but struggle with repayment, often feeling they are “*working for the bank*” rather than saving. While farmers actively manage risks, their ability to cope and adapt is shrinking, reducing their agency and action.

This report examines farmers' awareness of economic and environmental conditions, their risk perceptions, and their ability to meet output goals. Adaptation varies based on strategies, exposure, sensitivity, and willingness to respond. Proper assessment clarifies whether risks are imminent or potential, with studies showing a positive link between market access and adaptive capacity.

This process is a result of increased involvement in input and output markets, and with growing demand, employment security. In this case, fully disconnected from the change of climate, which is what highly impacts food prices and consequently farmers' salaries (Skjeflo, 2013).

## Discussion

Our findings align with previous research indicating that extreme climate variations significantly impact agricultural yields in Bolivia (Daga, 2020; Skendžić et al., 2021). As shown in figure 1 and 2, drought frequency is increasing, while frost days are steadily decreasing (Figure 14), reflecting broader climate shifts. These changes pose substantial risks for small-scale farmers, particularly regarding crop viability and water management, as highlighted by the warming trends in figure 4.

Furthermore, interviews revealed a growing dependence on pesticides due to the increasing prevalence of pests, reinforcing Skendžić et al. (2021), who found that rising temperatures contribute to insect survival, invasive species, and disease spread. This exposure to plant pests not only threatens yields but also exacerbates farmers' overall vulnerability, compounding the effects of climate change. Consequently, the intersection of extreme weather events and pest infestations underscores the challenges small-scale farmers face in maintaining agricultural productivity while adapting to evolving environmental conditions.

Unlike Tanzanian studies, where wealthier farmers are more likely to use fertilizers (Heisse & Morimoto, 2023), our interviewees all reported resorting to pesticides as a last measure. Unequal resource access shapes farmers' vulnerability to climate risks: while large-scale farms remain profitable with agrochemicals, small-scale farmers face greater uncertainty. As Turner et al. (2003) highlight, climate vulnerability intersects with poverty, inequality, and institutional services (Eisenack et al., 2014). Poorer farmers, with limited assets, are more susceptible to poverty traps from climate shocks (Heltberg et al., 2009), reinforcing the need to consider economic constraints in adaptation strategies (Rahman & Hickey, 2020).

Qualitative observations further reveal the pressure to counter inefficiencies, pushing farmers toward increased agrochemical reliance. These findings emphasize the challenges small-scale farmers face, where climate change and market constraints limit their ability to adapt effectively. Moving beyond a hazard-focused perspective, we examine the unequal distribution of

risks (Faas, 2016), shifting from mitigation-centered policies to addressing the root causes of vulnerability (Oliver-Smith, 2013; Faas, 2016). Inadequate compensation for agricultural products leaves small-scale farmers financially unstable, struggling to sustain their livelihoods.

Economic vulnerability is evident in market fluctuations affecting rural incomes, with cross-sectional and panel regressions highlighting their impact. Farmers like Doña Mariela and Héctor expressed concerns over financial instability, worsened by additional labor costs during harvests. Javier noted that lettuce producers earn only 15 bolivianos per basket, insufficient to cover transportation and agrochemical expenses. These financial constraints further limit farmers' ability to adapt, reinforcing cycles of poverty and economic insecurity.

Farmers increasingly rely on agrochemicals and loans to counter climate variability and pests. While these strategies offer short-term relief, rising costs make them less sustainable. Many interviewees emphasized resilience, seeing perseverance as essential for survival amid economic hardship. However, adaptation is becoming more challenging as reliance on costly inputs exacerbates vulnerabilities. The growing integration into input and output markets ties agricultural sustainability to market fluctuations. As Skjeflo (2013) notes, climate change and market shifts directly impact food prices and farmers' incomes. Limited bargaining power over product pricing further constrains financial stability. While agrochemicals and credit are crucial mitigation strategies, escalating costs and price volatility highlight the fragility of current adaptation mechanisms.

## Conclusion

This study highlights how climate change and market fluctuations act as dual pressures on Bolivian small-scale farmers, amplifying their vulnerability and reliance on costly, short-term coping strategies such as pesticide use and credit. This analysis confirms a direct link between climate variability, pest proliferation, and the increasing financial burden of agrochemicals, reinforcing cycles of economic insecurity.

The study is limited by its qualitative sample size, which may not fully capture regional variability across Bolivia. Reliance on self-reported interviews introduces potential bias in farmers' perceptions of risk and adaptation strategies, and the integration of ARIMA forecasts is illustrative but requires further validation with longer time-series data.

It is recommended to strengthen institutional support by improving farmers' access to affordable credit, subsidies, and crop insurance schemes, develop targeted extension services focusing on sustainable pest management practices and climate-resilient crops, enhance market regulation to stabilize pricing and improve farmers' bargaining power, reducing reliance on intermediaries and promote collective action through cooperatives, enabling smallholders to share resources and negotiate better terms in input and output markets.

Understanding farmers' vulnerabilities, risk perceptions, and adaptation strategies is crucial for designing long-term resilience policies. By acknowledging the intersection of environmental and economic stressors, policymakers can move beyond hazard-centered approaches toward addressing structural inequalities that shape vulnerability. Supporting small-scale farmers in Bolivia is not only essential for safeguarding livelihoods but also for ensuring national food security in the face of accelerating climate change.

## References

Adger, W. N. (2006). Vulnerability. *Global Environmental Change*, 16(3), 268-281. <https://doi.org/10.1016/j.gloenvcha.2006.02.006>

Afghanaid. (s.f.). *The Food and Agriculture Organization (FAO)*. Afghanaid. <https://www.afghanaid.org.uk/faqs/the-food-and-agriculture-organization-fao>

Andersen, L., Argadoña, F., Sunagua, S., Acebey, D., Inkinen, V., & Malky, A. (2023). *Map of agricultural potential in Bolivia*. <https://sdsnbolivia.org/wp-content/uploads/2024/01/AgriculturalPotentialBolivia.pdf>

Bathfield, B., Gasselin, P., Garcia-Barrios, L., Vandame, R., & Lopez-Ridauro, S. (2015). Understanding the long-term strategies of vulnerable small-scale farmers dealing with market uncertainty. *The Geographical Journal*, 182. <https://doi.org/10.1111/geoj.12142>

Bernstein, H. (2017). Political economy of agrarian change: Some key concepts and questions. *Journal of Sociology*, 17(1). <https://doi.org/10.22363/2313-2272-2017-17-1-7-18>

Brinkmann, S. (2020). "Unstructured and semi-structured interviewing". In *The Oxford Handbook of Qualitative Research*. Oxford University Press. 2nd edition.

Bryant, R., & Baily, S. (1997). *Third world political ecology: An introduction*. Routledge.

Cámara Agropecuaria del Oriente. (s.f.). *Sitio web oficial*. Cámara Agropecuaria del Oriente. <https://cao.org.bo/>

Cámara Agropecuaria del Oriente. (s.f.). *Estadísticas*. Cámara Agropecuaria del Oriente. <https://cao.org.bo/estadisticas/>

Cutter, S. L., Boruff, B. J., & Shirley, W. L. (2003). Social vulnerability to environmental hazards. *Social Science Quarterly*, 84(2), 242-261. <https://www.jstor.org/stable/42955868>

Cutter, S. L., & Corendea, C. (2013). *From social vulnerability to resilience: Measuring progress toward disaster risk reduction [UNU-EHS Research Brief]*. UNU-EHS.

Daga, S. (2020). Weather shocks' impacts on farm-level agricultural outcomes in Bolivia. In *Natural disasters and climate change: Innovative solutions in financial risk management* (pp. 15-40). Springer Nature.

De Mesquita, E. B., & Fowler, A. (2021). *Thinking clearly with data: A guide to quantitative reasoning and analysis*. Princeton University Press.

De Leeuw, E. D., Hox, J., & Dillman, D. (2012). *International handbook of survey methodology*. Routledge.

Eisenack, K., Moser, S. C., Hoffmann, E., Klein, R. J., Oberlack, C., Pechan, A., & Termeer, C. J. (2014). Explaining and overcoming barriers to climate change adaptation. *Nature Climate Change*, 4(10), 867-872. <https://doi.org/10.1038/nclimate2350>

Faas, A. J. (2016). Disaster vulnerability from an anthropological perspective. *Annals of Anthropological Practice*, 40(1), 14-27. <https://doi.org/10.1111/napa.12084>

Gassert, F., Landis, M., Luck, M., Reig, P., & Shiao, T. (2014). *Aqueduct Global Maps 2.0: Constructing Decision-Relevant Global Water Risk Indicators*. World Resources Institute.

Google. (n.d.). Google Earth. <https://www.google.com/earth>

Harvard Growth Lab. (n.d.). *The atlas of economic complexity*. <https://atlas.cid.harvard.edu/countries/31/market-share>

Heisse, C., & Morimoto, R. (2023). Climate vulnerability and fertilizer use-Panel evidence from Tanzanian maize farmers. *Climate and Development*, 15(5), 444-461. <https://doi.org/10.1080/17565529.2023.2206373>

Heltberg, R., Siegel, P. B., & Jorgensen, S. L. (2009). Addressing human vulnerability to climate change: Toward a 'no-regrets' approach. *Global Environmental Change*, 19(1), 89-99. <https://doi.org/10.1016/j.gloenvcha.2008.11.003>

Humanitarian Data Exchange. (s.f.). *Humanitarian Data Exchange*. United Nations Office for the Coordination of Humanitarian Affairs. <https://data.humdata.org/>

IFAD, Bolivia. (n.d.). *IFAD. Investing in rural people*. <https://www.ifad.org/en/web/operations/w/country/bolivia>

Instituto Nacional de Estadística de Bolivia. (s.f.). *Sitio web oficial*. <https://www.ine.gob.bo/>

Marino, E. K. (2015). *Fierce climate, sacred ground: An ethnography of climate change in Shishmaref, Alaska*. University of Alaska Press

Mertens, D. M. (2023). *Mixed methods research: Research methods*. Bloomsbury Publishing.

Ministerio de Culturas de Bolivia. (s.f.). *Bolivia: Agricultural campaign production, according to crops (2012-2022)*. <https://www.minculturas.gob.bo/>

Morton, J. F. (2007). The impact of climate change on smallholder and subsistence agriculture. *Proceedings of the National Academy of Sciences*, 104(50), 19680-19685. <https://doi.org/10.1073/pnas.0701855104>

National Aeronautics and Space Administration. (n.d.). *Earth Observing System Data and Information System (EOSDIS)*. NASA Earthdata. <https://www.earthdata.nasa.gov/about/eosdis/eosdis>

National Aeronautics and Space Administration. (n.d.). *Socioeconomic Data and Applications Center (SEDAC)*. NASA Earthdata. <https://www.earthdata.nasa.gov/centers/sedac-daac>

Naude, W., Santos-Paulino, A., & McGillivray, M. (2012). *Measuring vulnerability in developing countries*. Routledge.

Oliver-Smith, A. (2013). Disaster risk reduction and climate change adaptation: The view from applied anthropology. *Human Organization*, 72(4), 275-282. <https://doi.org/10.17730/humo.72.4.j7u8054266386822>

Osiemo, J., Wambugu, S. K., & Atieno, R. (2021). Farmer perceptions of agricultural risks: Which risk attributes matter most for men and women? *Sustainability*, 13(23), 12978. <https://doi.org/10.3390/su132312978>

Rahman, A., & Hickey, J. (2020). An analytical framework for assessing context-specific rural livelihood vulnerability. *Sustainability*, 12(14), 5654. <https://doi.org/10.3390/su12145654>

Robbins, P. (2011). *Political ecology: A critical introduction* (2nd ed.). John Wiley & Sons, Ltd.

Skjeflo, S. (2013). Measuring household vulnerability to climate change-Why markets matter. *Global Environmental Change*, 6, 3, 1694-1701. <https://doi.org/10.1016/j.gloenvcha.2013.08.011>

Skendžić, S., Zovko, M., Pajač Živković, I., Lešić, V., & Lemić, D. (2021). The impact of climate change on agricultural insect pests. *Insects*, 2(5), 440. <https://doi.org/10.3390/insects12050440>

Spradley, J. (1980). Step two: Doing participant observation. In *Participant observation* (pp. 53-62). Holt, Rinehart & Winston.

Turner, B. L., Kasperson, R. E., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., Eckley, N., Kasperson, J. X., Luers, A., Martello, M. L., Polsky, C., Pulsipher, A., & Velarde, C. (2021). *Contribución de la agricultura familiar campesina indígena a la producción y el consumo de alimentos en Bolivia*. CIPCA.

WeatherSpark. (n.d.). *Climate and average weather year-round in Santa Cruz de la Sierra* <https://www.weatherspark.com/>

Wescoat, J. L. Jr. (2015). Risk, hazards, and vulnerability. In T. A. Perreault, G. Bridge, & J. McCarthy (Eds.), *The Routledge handbook of political ecology* (pp. 23-302). Routledge. <https://doi.org/10.4324/9781315759289>

Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). *At Risk: Natural hazards, people's vulnerability and disasters* (2nd ed.). Routledge.

World Bank Group. (2017). *Resilience or resignation: Facing droughts and floods in rural, poor Bolivia*. <https://climateknowledgeportal.worldbank.org/country/bolivia/vulnerability>





## CRITERIOS PARA LA PRESENTACIÓN DE TRABAJOS A LA REVISTA APORTES

- Los trabajos deben estar relacionados con la investigación y la reflexión en los diferentes campos de la comunicación, la sociedad y la cultura.
- Los trabajos deberán ser originales e inéditos.
- Los trabajos deberán ajustarse a uno de los siguientes formatos y cumplir con sus criterios establecidos:
  - Artículo de investigación científica (de preferencia)
  - Artículos de reflexión (Ensayos)
  - Entrevistas
  - Estudios de casos
  - Artículos cortos (avances de investigación)

## CARACTERÍSTICAS DE LOS TRABAJOS

1. Los artículos deben tener una extensión máxima de 7.000 palabras y mínima de 2.000 palabras.
2. Los trabajos deben incluir un encabezado con la siguiente información:
  - a. Título en español y en inglés
  - b. Nombre y apellidos de la/s persona/s autora/s
  - c. Breve reseña biográfica (extensión máxima de 50 palabras), que indique nacionalidad, último grado académico alcanzado, cargo(s) que actualmente desempeña y nombre de la institución en la que lo hace, correo electrónico.
  - d. Resumen (no debe exceder las 300 palabras) en español y en inglés.
  - e. Palabras claves (máximo seis) en español (preferentemente inscritas en el Tesauro de la UNESCO) y en inglés.
3. En el caso de las reseñas de libros se deberá cumplir con un máximo de 1.500 palabras.
4. Estructura del artículo:

Artículo científico	Ensayo
Título en español	Título en español
Título en inglés	Título en inglés
Nombre autor(a)	Nombre autor(a)
Reseña biográfica, incluido correo electrónico actual	Reseña biográfica, incluido correo electrónico actual
Resumen	Resumen
Abstract	Abstract
Introducción	Introducción
Método	Desarrollo
- Muestra	Conclusiones
- Instrumentos	Bibliografía
- Procedimiento	
Resultados	
Discusión	
Bibliografía	

5. Los artículos deben ser enviados en formato Word y seguir las siguientes pautas:
  - Tipografía Times New Roman, 12 puntos, interlineado sencillo, hoja tamaño carta.
  - El cuerpo central del texto debe ser escrito sin márgenes especiales o sangrías.
  - Deberá dejarse un espacio entre párrafos.
  - El uso de mayúsculas sólo corresponde a nombres propios, inicios de títulos, párrafos o frases después de punto seguido.
  - No debe emplearse subrayado ni negritas en el cuerpo del trabajo, salvo en los títulos.
  - Los títulos deben mantener el color y la tipografía del documento.
6. Las citas textuales deben realizarse en el mismo párrafo, siguiendo el sistema American Psychological Association (APA versión 7), con el formato (Apellido, año: # página), por ejemplo (Alfaro, 2006, p. 84). Y para las paráfrasis, se indicará (Apellido, año). Los cuadros y tablas deberán enumerarse e indicarse las fuentes en el formato (APA versión 7). En el caso de exceder las 40 palabras, la cita debe hacerse en bloque con doble sangría y debe indicarse el (Apellido, año y número de pág.).
7. Las notas aclaratorias se incluirán a pie de página.
8. Las Referencias Bibliográficas deberán presentarse en orden alfabético, debidamente enumeradas y con el siguiente formato:
  - Libros:
    - Libro impreso: Apellido, N. (año). Título del trabajo. Editorial.
    - Libro en línea: Apellido, N. y Apellido, N. (año). Título del libro. Editorial. DOI o URL
    - Libro con editor: Apellido, N. (Ed.). (año). Título del trabajo. Editorial.
    - Capítulo de un libro con editor: Apellido Autor, N. N. (año). Título del capítulo o entrada en N. Apellido Editor (Ed.), Título del libro (xx ed., Vol. xx, pp. xxx–xxx). Editorial.
    - Nº de edición o Volumen: Apellido Autor, N. N. (1994). Título del trabajo. (3<sup>a</sup> ed., Vol. 4). Editorial.
  - Revistas:
    - Sin DOI: Apellido, A., Apellido, B. y Apellido, C. (2019). Título del artículo específico. Título de la Revista, Volumen (número de la revista), número de página inicio - número de página fin. Enlace de recuperación.
    - Con DOI: Apellido, A., Apellido, B. y Apellido, C. (2019). Título del artículo específico. Título de la Revista, Volumen(número de la revista), número de página inicio – numero de pagina fin. <https://doi.org/xx.xxxxxxxxxx>
  - Documentos Electrónicos: Apellido, N. (2019). Título del artículo. <https://url.com>
  - Artículo de prensa:
    - Periódico Impreso: Apellido, N. (fecha de publicación del artículo). Titular del artículo en el periódico. Nombre del periódico en cursiva.
    - Periódico en Línea: Apellido, N. (fecha del periódico). Titular del artículo en el periódico. Nombre del periódico en cursiva. <https://www.direccion.de/recuperacion-para-el-lector/>
  - Tesis y trabajos de grado:
    - Disertaciones/tesis impresas no publicadas recuperadas de la universidad: Apellido, N. (año). Título de la tesis [Tesis de maestría/doctorado no publicada]. Nombre de la Institución Académica.
    - Disertación/tesis publicada recuperada de una base de datos en línea: Apellido, N. (año). Título de la tesis [Tesis de maestría/doctorado, Nombre de la institución que otorgó el título]. Nombre de la base de datos.

Disertación/tesis publicada recuperada del archivo de la universidad o sitio web personal: Apellido, N. (año). Título de la tesis [Tesis de maestría/doctorado Nombre de la institución que otorgó el título]. URL del archivo de la universidad o website personal

- Páginas Web:

Páginas web con contenido estático: Apellido, A., Apellido, B., y Apellido, C. (20 de mayo de 2020). Título del artículo de la página web. Nombre del sitio web. <https://url.com>

Páginas web con actualizaciones frecuentes: Apellido, A., Apellido, B., y Apellido, C. (20 de mayo de 2020). Título del artículo de la página web. Nombre del sitio web. Recuperado el dia mes año de <https://url.com>

Formato especial adentro de una página web: Apellido, A. (03 de agosto de 2020). Título del archivo [Archivo Excel]. Nombre del sitio web. <https://url.com>

- Imágenes:

- Si el trabajo incluyera fotografías, cuadros y/o gráficas, deben enviarse en archivos separados, indicando claramente su ubicación en el interior del texto, de la siguiente manera: Imagen N°, Título. Al pie de la imagen debe indicarse la fuente [Fotografía de Nombre y Apellido del fotógrafo]. (Lugar. Año). Nombre de la colección. Ubicación.
- Las imágenes deben escanearse con una resolución de 300 dpi, en formato de archivos gráficos JPG, GIF o TIF.

- Tablas: Las tablas deben cumplir con los criterios APA 7.

**Número y nombre de la tabla**

**Tabla 1**

*El título debe ser breve, pero claro y explicativo*

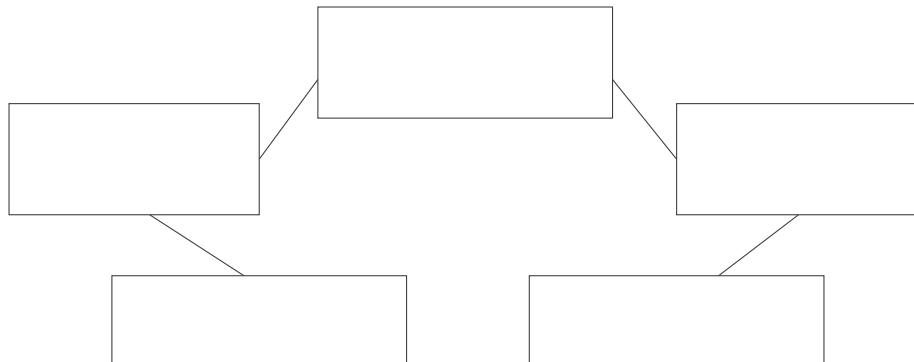
Categoría	Categoría	Categoría	Categoría
Variable 1	xx	xx	xx
Variable 2	xx	xx	xx
Variable 3	xx	xx	xx
Variable 4	xx	xx	xx
Variable 5	xx	xx	xx

**Solamente se ubican estas líneas horizontales**

Hillutet aut ut fugit, optatiam velibusa voluptate aliquost, tem as dita corit, sum nonserum est litiberatist labo. Nem. Ut pore quias dollabo. Ut quam

**Nota de la tabla**

- Figuras: Las figuras deben cumplir con los criterios APA 7.



**Número de figura en cursiva**

*Figura X. Hillutet aut ut fugit, optatiam velibusa voluptate aliquost, tem as dita corit, sum nonserum est litiberatist labo. Nem. Ut poremquias dollabo. Ut quam. Dam tus, Catilin tratimis. Avocrid consuli cionsce rcepserum vesest? Ic rec mus, nequid cure, C. Ommor huis. Labus conce ia? Os conlocxit pertiliissit videm stia etrunce renatin verniri ortelum diem qui sat.*

**Nota de la tabla**

**EVALUACIÓN Y SELECCIÓN**

- El trabajo deberá ser original e inédito.
- Sólo se publican artículos en español, portugués e inglés.
- Los trabajos recibidos serán revisados por la Dirección y Coordinación Editorial de APORTES de la Comunicación y la Cultura, para verificar que cumplen los requisitos formales. Una vez corroborado el cumplimiento de los requisitos establecidos, los trabajos pasarán al Consejo Editorial, para ser evaluados por colaboradores externos bajo la modalidad de evaluación por pares ciegos.
- Los trabajos aprobados por el Consejo Editorial que, por razones de espacio, no puedan ser publicados, quedarán para el número siguiente de la revista.
- Los artículos firmados son de exclusiva responsabilidad de los autores y no representan necesariamente la opinión de APORTES ni de la UPSA.

**Declaración de Conflicto de Intereses y Originalidad de trabajos**

El conflicto de intereses existe cuando un autor (o su institución), revisor o editor tiene una relación financiera o personal que influye inapropiadamente en sus acciones, tanto respecto al tratamiento de datos, diseño de investigación o redacción de resultados de los artículos enviados. Cuando existe una relación entre los autores y alguna entidad privada o pública que puede generar un conflicto de intereses, esta situación deberá ser aclarada en la carta de originalidad y declaración de conflicto de intereses por parte de los autores de los artículos, la cual deberá ser entregada al momento de enviar el artículo a los editores de la Revista.

**CONTACTO**

Colaboraciones y/o consultas pueden ser enviadas a:

Mariana Ríos Urquidi: [marianarios@upsa.edu.bo](mailto:marianarios@upsa.edu.bo)





[www.  
upsa  
.edu.bo](http://www.upsa.edu.bo)

.com  
/BoliviaUPSA

@UPSA  
Bolivia

  
blog.upsa.edu.bo

.com  
/UniversidadUPSA

@UPSA  
Bolivia

UPSA  
Bolivia

Facultad de Humanidades, Comunicación y Artes | Universidad Privada de Santa Cruz de la Sierra - UPSA  
Av. Paraguá y 4to. Anillo | Tel.: +591 (3) 346 4000 | Fax: +591 (3) 346 5757 | [informaciones@upsa.edu.bo](mailto:informaciones@upsa.edu.bo)

Santa Cruz de la Sierra - Bolivia